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Accounting Research and Education:
The Challenges and Opportunities of The New Normal During and Post Covid-19

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The Challenges and Opportunities During Covid-19 New Normal

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PREFACE

The 4th International Conference on Accounting Research and Education (iCARE 2021) is the continuation of iCARE 2014, iCARE 2016 and iCARE 2019. This conference is organized by the Faculty of Accountancy, UiTM Perak Branch, Tapah Campus in collaboration with the Accounting Research Institute (ARI), Universitas Indonesia (UI), Univesitas Paramadina and Univesitas Islam Indonesia. This event is held on 7-8 September 2021 via online platform with the theme of “Accounting Research and Education: The Challenges and Opportunities During Covid-19 New Normal”, aims to provide a platform for local and international academicians, professionals and researchers to have intellectual interactions with regard to the current situation relating to accounting education, challenges and advancements relating to the accounting field and other fields related to social sciences. This conference also offers numerous opportunities to gain knowledge, to share technical experiences, to build network with colleagues and to communicate with industry partners.

These proceedings contain 88 research papers in the field of accounting, finance, management, business, educational, sustainability and other which focusing to the theme of the challenges and opportunities during Covid-19 New Normal.

Editors

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TABLE OF CONTENT

No.		Page No
1	Does Board Diversity Boost Corporate Performance in Pharmaceutical Industry? Preliminary Evidence on Pre- and During Pandemic Covid-19 Siti Marlia Shamsudin, Mohd Taufik Mohd Suffian, Liyana Ab. Rahman, Aliana Shazma Amir	10-14
2	Assessing the Effect of Corporate Fraud on Firm Performance: Pre- and During Pandemic Covid-19 Salina Mad, Mohd Taufik Mohd Suffian, Mohd Zulfikri Abd Rashid, Hairul Suhaimi Nahar	15-19
3	Factors Affecting Customer Satisfaction for Online Banking Service in Malaysia Tan Kock Lim, Tan Hong Hooi, Loo Teck Khun, Chiang Tit Yean, Daniel Borer	20-25
4	Board gender diversity and financial reporting quality: Evidence from emerging country Wan Razazila Wan Abdullah, Enny Nurdin Sutan Maruhun, Norzarina Noordin, Naimah Ahmad Yahya	26-31
5	Theory of Planned Behaviour, Personality Trait and Cyberbullying Behavioural Intention on Social Media among Adolescents: Scenario During COVID-19 Movement Control Order (MCO) in Malaysia Mohd Danial Afiq Khamar Tazilah, Che Siti Lazrina Md Lazim, Nur Diyana Ismail	32-39
6	The Effect of Board Characteristics on ESG Score: Malaysian Evidence Sunarti Halid, Radziah Mahmud, Nooriha Mansor, Rahayu Abdul Rahman	40- 44
7	Project Cash Management to Optimize Performance of a Medium Size Construction Company Claudia Djauhary, Ancella Anitawati Hermawan	45-50
8	The Holistic Perspectives in Covid-19 Impact Analysis: Macro Analysis, Organizational Management, Marketing & Consumer Behaviour Handi Risza, Ahmad Azmy, Adrian Wijanarko, Iyus Wiadi, Iin Mayasari	51-59
9	Proposed Environmental Cost Allocation and Reporting: A Case Study of a Regional Public Hospital in Indonesia Nur Fadilah Arsyad, Dwi Hartanti	60-64
10	E-procurement fraud deterrent in the Malaysian public sector Norziaton Ismail Khan, Norwina Mohamad Nor, Mohamad Shahril Isahak	65-74
11	Implementation of the MPERS Framework to private entities in Malaysia: Cause for concern? Wong Kee-Luen, Tanaraj Krishna, Zam Zuriyati Mohamad, Charles Ramendran SPR, Che Siti Lazrina Md Lazim	75-82
12	A Comparison of Students' Performance in Financial Accounting Courses during Face-to-Face vs. Online Examination – An Insight from UiTM Tapah Farah Husna Mohd Fatzel, Noor Saatila Mohd Isa, Norliana Omar, Liyana Ab. Rahman	83-87
13	Relationship Between Audit Committee Expertise and Quality of Indonesian Banking Financial Statement Dimas Luhung Prakoso, Fitriany Fitriany	88-91
14	Competency and Training of Professional Accountant in Malaysia as Attributes towards Compliance of AMLA 2001 Masctah Ahmad Tarmizi, Marina Ibrahim	92-97
15	Disclosure in Integrated Reporting: Indonesia Perspectives Irfana Rahma Dzikria, Lindawati Gani	98-102
16	Understanding Factors Affecting Auditor Independence in Malaysia Through Survey Questionnaires and Interviews Anusyiah Tamil Selvan, Suhaily Shahimi	103-107
17	Cost control and cost reduction in Small and Medium-sized Enterprises during the Covid-19 outbreak in Malaysia Nik Herda Nik Abdullah	108-112
18	The Relationship Between Tax Avoidance and Investment Efficiency in Indonesian Companies Sandy Kuswara, Dahlia Sari	113-117

19	Insight Drivers of Internal Audit Effectiveness in Malaysian Banks Alicia A.Anthony, Suhaily Shahimi	118-123
20	Tax Avoidance and the COVID-19 Pandemic: Evidence from Indonesia Risanto, Yulianti	124-130
21	Proposed Development of Inventory Management Information System Dwi Prasetyo Budi Utomo, Setyo Hari Wijanto	131-136
22	Analysis and Evaluation of ABC Mixed Mutual Fund Portfolio Management Bayu Kusumo Aji, Darminto	137-142
23	The correlation between anxiety and interest in learning among undergraduate students Olivia Ayu Sabrina, Syarifah Fatimah, Lydia Putri Salsabila, Devi Wulandari	143-147
24	Risk Governance Analysis in the Implementation of Credit Restructuring during the Covid-19 Pandemic: Case Study at Bank SHDW Pratikto Listio Wibowo, Ancella Anitawati Hermawan	148-153
25	Audit Regulations vs Challenges: What is the urgency of forensic accounting competency for auditors? Mohamad Mahsun, Nafsiah Mohamed, Sharifah Norzehan, Indrawati Yuhertiana	154-160
26	Exposure COVID-19 Pandemic to Banking Financial Performance in Indonesia Moderated by Earnings Management Hendra Permana Suherman, Elvia R. Shauki, Ph.D	161-166
27	A qualitative investigation on millennial consumer behavior in analyzing motivation, lifestyle, and consumer decision-making during the Covid-19 Pandemic. Iin Mayasari, Handrix Chris Haryanto	167-171
28	Proposed corporate balanced scorecard using circular balanced scorecard approach Winda, Lindawati Gani	172-176
29	Using formative feedback to self-directed learners in the learning of tax online Nor Hamimah Mastor, AHIBS	177-181
30	Evaluation of Implementation and Assessing Maturity Level of Enterprise Risk Management (ERM) in Third-Party Administration (TPA) Company Gati Sabrina Ratnasari, Ancella Anitawati Hermawan	182-186
31	CEO overconfidence: determinants and the impact on firm risk Giovanni Richard Jethro Rajagukguk, Ancella Anitawati Hermawan	187-191
32	Indonesian view: Will technological development change accounting roles? Margaret, Edward Tanujaya	192-196
33	The Effect of Industrial Sector and Corporate Governance Reform on Tax Avoidance Practices in Malaysia Nurfarizan Mazhani Mahmud, Nik Nurul Aswani Nik Kamarudin, Suryani Abdul Raman, Siti Nabilah Mohd Shaari, Amizahanum Adam	197-201
34	The Effect of Tax Amnesty and Other Determinant Variables on Tax Aggressiveness in Indonesia Muhammad Arsalan Khan, Siti Nuryanah	202-206
35	The impact of COVID-19 on MSMEs: Empirical evidence from Indonesia Arief Rahman, Salma Ulfah Nadiyah	207-211
36	Analysis of The Role of Interactivity in Creating Brand Equity Influencer in The Tourism Industry Anansya Ralia and Yeshika Alversia	212-218
37	Potential Implementation of Risk-Based Audit Planning at ABC Hospital Johan Arifin, Dyah Setyaningrum	219-223
38	The Use of Open Educational Resources in Open and Distance Learning: The Learning Experiences of First-Year Undergraduates Accounting Students Noor Saatila Mohd Isa, Norliana Omar, Siti Marlia Shamsuddin, Irda Syahira Khair Anwar	224-228
39	Trend of Gig Economy Among Thai University Students Pichayalak Pichayakul, Traci Morachnick	229-233
40	A Study of Base-lending Rate and Capital Structure for Pre- and Post-Recession in Malaysia Siti Nabilah Mohd Shaari, Nik Nurul Aswani Nik Kamarudin, Suryani Abdul Raman, and Nurfarizan Mazhani Mahmud	234-238
41	Analysis of Hedging: Institutional Logics in Managing the Risk of Fluctuation in Government Debt Exchange Rate Before and During the COVID-19 Pandemic	239-243

	Hartini, Elvia R. Shauki	
42	Do Joint Audit and Accounting Conservatism matter on Firm Performance? Empirical evidence from Egypt Ahmed Naeim Elmashtawy, Mohd Hassan Che Haat, Mohd Nazli Mohd Nor, and Shahnaz Ismail	244-248
43	Analysis the Impact of Merger on Bank Performance in the Long-Term Period in Indonesia: A Case Study from PT Bank CIMB Niaga Tbk and PT Bank OCBC-NISP Tbk Grace Vanda Rianti, Edward Tanujaya	249-253
44	The Influence of Internal and Macroeconomic Factors on Non-Performing Financing of Islamic Rural Banks in Indonesia Rifqi Muhammad, Ainun Jariyah	253-259
45	Thin Capitalization Rule & Corporate Tax Avoidance Strategies Mohamad Jatiardi Fitriantoro, Yulianti	260-264
46	COVID19 Domestic Travel Intention: A model of goal-directed behavior Tiophani Naomi, Gita Gayatri, PhD	265-269
47	Identification of Financial Statement Fraud Using F-Score Analysis Reni Yendrawati, Mahendra Wahyu Pratama, Kumala Hadi	270-274
48	The Effect of Concentration of Ownership and CEO Characteristics on the Disclosure of Sustainable Development Goals (SDGs) Albert Oktavian, Dr. Ratna Wardhani	275-281
49	The Effect of Foreign Ownership on the Potential of a Stock Crash on the 150 Largest Capitalized Stock in Indonesia Stock Exchange Harizan Mukti, Buddi Wibowo	282-285
50	Potential Financial Statement Fraud: Hexagon Fraud Analysis Erna Hidayah, Puteri Amira Syifani	286-290
51	Success Measure of MonsoonSIM for Accounting Students: DeLone and McLean Model Maulidyati Aisyah, Ivan Rukma Arafat	291-296
52	Impact of ESG Certification on Cost of Equity Elsa Natalina Br Sembiring, Ancella Anitawati Hermawan	297-301
53	The impact of sensory brand experience and personal involvement on brand equity: the role of consumer brand engagement Nabila Adelia Putri, Yeshika Alversia	302-319
54	The effect of financial performance, leverage and corporate governance on corporate risk disclosure in pharmaceutical industry Yuni Nustini, Mohd Taufik Mohd Suffian	320-325
55	The Perceived Usefulness of Interactive Video to Improve Student Learning Experience during ODL Norhayati Zamri, Nor Bahiyah Omar, Norul Akma Mansor, Liyana Ab Rahman, Farah Husna Mohd Fatzel	326-330
56	Design Of Accounting Information System Expenditure Cycle With FAST Method (Study Cases at PT. XYZ) Margareta Logen, Siti Nurwahyuningsih Harahap	331-335
57	Factors Influencing Muslim Community's Decision-Making in Monetary Donations through Online-Based FinTech Crowdfunding Platforms Fitrining Tyasmasdanti, Ayu Chairina Laksmi	336-340
58	Risk Management and The Role of Internal Audit in Risk Management in The Financial Intelligence Unit Elisabeth Widyan D.A, Robert Porhas Tobing	341-345
59	Evaluating Students' Motivation in Learning Taxation during Open and Distance Learning (ODL) Fatimah Alwi, Siti Marlia Shamsudin, Norul Akma Mansor	346-350
60	Behavioral Bias and Beginning Investor Decision Making In Share Investment In The Covid-19 Pandemic Agasta Amaliya Khusna, Marfuah	351-356
61	Determinants of Relationship Quality and Customer Loyalty in the Malaysian Airline Industry Jia-Yi Tang, Sie-Bing Ngu	357-364

62	Does Top Management Diversity Increase the Likelihood of Corporate Reputational Risk Awareness? The Case in Indonesia Banking Industry Rumondang Purnamasari Sitohang, Ancella Anitawati Hermawan	365-369
63	The determinants to become a whistleblower among tax officers in central Jakarta DGT regional office Dewi Maulidya and Ataina Hudayati	370-374
64	Determinants of Disclosure of the Province Government's Financial Statements in Indonesia Abriyani Puspaningsih, Ridha Akbar Faruqi	375-380
65	Forensic Accounting in Tracing the Proceeds of Crime in the Indonesian FIU Andini Novita Sari, Ludovicus Sensi W	381-386
66	Managing and reporting of Shari'ah Non-Compliant Income in Malaysian Islamic banks: The bank's key functions perspective Norhanizah Johari, Nawal Kasim, Nor Aishah Mohd Ali, Roshayani Mohd Arshad	387-393
67	Computational Thinking approach to Learning Data Science for Business School Students Mohd Zaidi Abd Rozan	394-398
68	Reputation Management Analysis through Company's Disclosure: A Case Study of Clinical Laboratory Company in Indonesia Natasha Mariska, Ancella Hermawan	399-403
69	The Role of Board of Commissioners and Board of Directors Effectiveness to Reduce the Probability of Financial Distress in Financing Industry Khamia Andini and Ancella Anitawati Hermawan	404-408
70	Strategic Partnership Model in Creating Value: Case Study of Online Education Provider Andiva Liesty Amelia, Evy Rachmawati Chaldun	409-413
71	Student Online Shopping Patterns in Indonesia During the Covid-19 Pandemic Fitriati Akmila, M Fauzan Rasendriya Y	414-419
72	The Effect of Capital Regulation Motives in Earnings Management on Loan Loss Provisions with Type of Ownership as a Moderating Variable (Evidence from Indonesian Banking) Drajat Armono, Niar Nisa Nastiti Amranani	420-426
73	Motivation towards corruption in the time of COVID-19: A survey study of Indonesia Prima Naomi, Iqbal Akbar, Tia Rahmania	427-435
74	Evaluation of the Implementation of Good Public Governance in Local Church (Case Study on Church X) Kumara Adi Maharddhika, Ruddy Koesnadi	436-441
75	Corporate Governance and Pandemic Disclosure: Evidence From Malaysia Nor Bahiyah Omar, Norhayati Zamri, Hani Kalsom Hashim, Rosmawati Haron	442-446
76	Analysis of Financial Transaction Examination Standards in Disclosure of Money Laundering: A Case Study at Indonesian Financial Intelligence Unit Nadya Tri Oktary, Vera Diyanty	447-451
77	Lively Accounting: Combining Flashcards and Augmented Reality in Accounting Education Amir Hakim Osman, Norliana Omar, Mohd Taufik Mohd Suffian, Noor Saatila Mohd Isa, Irdha Syahira Khair Anwar	452-456
78	Factors Influencing Students' Satisfaction and Academic Performance in Open and Distance Learning (ODL) Norhayati Zamri, Nor Bahiyah Omar, Irdha Syahira Khair Anwar, Farah Husna Mohd Fatzel	457-461
79	The Impact of Macro-Environment Factors on Strategic Business Risks in ASEAN Countries During COVID-19 Pandemic Ku Nur Ilyani, Siti Fazilah, Siti Nur Amira, Nabihah	462-468
80	Identifying students' preferred learning materials for online learning during Covid-19 pandemic Amir Hakim Osman, Ahmad Zoolhelmi Alias, Mohd Shatari Abdul Ghaffar, Muhammad Iqbal Mohamed Azhari, Roslan Abd Wahab, Mohd Sofi Puteh	469-473
81	COVID-19 and Movement Control Order (MCO) in Malaysia: Access to Financial and Social Capital for Microenterprise Sustainability Naimah Zaini, Nor Asyiqin Salleh, Maizura Meor Zawawi, Hafidzah Hashim	474-478

82	Disclosure of Takaful Information in Malaysia: Users Perspective Ahmad Zoolhelmi Alias, Mohd Shatari Abd Ghafar, Amir Hakim Osman, Muhammad Iqbal Mohamed Azhari	479-483
83	Impact of behavioural factors on investors' financial decision making in Malaysian stock market Hong Hooi, Tan, Malaysia	484-489
84	The effects of budgetary participation, job satisfaction, and justice on organizational citizenship behavior among lecturers: role of the organizational values of Muhammadiyah Fachrudin K.A., Sholihin, Mahfud., Ritonga, Irwan Taufik, Basuki, Hardo	490-497
85	Bureaucratic corruption in community sport program management: a networking perspective Haryono Pasang Kamase, Irwan Taufiq Ritonga, Rusdi Akbara, Suyanto	498-502
86	The Quality of Accounting Information in the Industrial Sector of ASEAN 5: Before and During the Pandemic Covid-19 Pandemic Retno Yuni Nur Susilowati, Slamet Sugiri	503-509
87	Affect, Multitasking, and Auditor Judgment Suhernita, Supriyadib, Suyanto, Choirunnisa Arifa	510-515
88	CEO Narcissism and Its Impact on Financial Statements: A Literature Review Supeni Anggraeni Mapuasari, Mahfud Sholihin, Slamet Sugiri, Wuri Handayani	516-519

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Does Board Diversity Boost Corporate Performance in Pharmaceutical Industry? Preliminary Evidence on Pre- and During Pandemic Covid-19

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ABSTRACT

Drawing on agency theory, the purpose of the study is to examine the impact of board diversity on the Malaysian Pharmaceutical Listed Companies firm's performance. The data were collected from pharmaceutical companies registered in Bursa Malaysia Berhad from the period 2015 to 2019. The fixed effects model is applied since the data contain observations on different companies' sections across time and cater to the endogeneity problem. After controlling for several firms and board characteristics, we found board diversity has a negative and significant effect on the Pharmaceutical-listed firm performance. The results did not support the agency theory on which corporate governance is seemingly ineffective in enhancing firm performance.

Keywords: pharmaceutical industry, board diversity, performance, return on asset

1. INTRODUCTION

Corporate governance is the system of rules, practices, and processes on how the company should be governed and managed. The past study has revealed the factors that caused the global financial crisis is poor corporate governance arising from a lack of diversity, transparency, and independence (Zabri, Ahmad & Wah, 2016). Good corporate governance will promote transparency, regulate the risks, ethics, norms, reduce the opportunity for corruption and build trust with the investors and public (Detthamrong et al, 2017). The investors and stakeholders also feel confident with well-organized companies, thus promoting good public images that could lead to better performance. Additionally, corporate governance emphasizes the role of the board of directors in delivering the stakeholder's value over the long term, establishing the policies for management, and making decisions on the crucial issue to ensure the survival and sustainability of a company.

Board diversity is vital to increase the greater range of perspectives that require deep insight, challenging ideas as different directors will have their own opinion as they come from diverse personal characteristics, backgrounds, and experiences. Thus, a more open communication environment can be created, resulting in a better decision-making process. The decision made is based on groupthink after the debate and raises challenging questions. The board's effectiveness can be maximized by having gender diversity as more perspectives can be integrated into the board's function. Naciti (2019) suggested that based on agency theory, the managers can monitor optimally by having a diverse board. Nowadays, companies are operating based on the global market or environment. Thus, a good image can be created when a balanced board can be achieved. Having women directors as representatives on the board could lead to a positive corporate image. The public will see the symbolic meaning in terms of gender equality, leading to better company performance.

In the year 2020, the world is shocked by the attack of the Covid-19 pandemic. Many companies are struggling to cope with the effect. For instance, companies have closed by the policy mandate, lack in customer demand, health issues, supply chain disruption, the inability of the owner to pay the expenses, financial distress, and bankruptcy (Hu & Zhang, 2021). The shutdown of economic activities severely impacts the economy; thus, the global recession is inevitable. In Malaysia, there are 13 pharmaceutical companies listed in Bursa Malaysia as of 31 December 2020. During the pandemic, due to increasing demand for medical supply and equipment, commercialization, and collaboration in distributing the Covid-19 vaccine, the pharmaceutical industry is expected to grow better. Hu & Zhang (2021) supported the countries with better healthcare systems has the less adverse effect of Covid-19 on firm performance.

The main objective of this study is to examine the impact of board diversity on firm performance before and during the pandemic of covid-19. The sample is all the public listed pharmaceutical companies in Malaysia from 2015 to 2020 to represent the data before Covid-19 and during Covid-19. Since this study is observational, the random-effect model is used to control the effect of the endogeneity problem. Theoretically, this study builds on the agency theory. Therefore, this study contributes additional knowledge on the relevance of board diversification toward the firm performance before covid-19 and during covid-19. Furthermore, the result from this study is relevant to governments and other institutions involved in creating policies, laws, and regulations for the company's board composition.

2. LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

2.1 BOARD DIVERSITY AND FIRM PERFORMANCE

Jensen & Meckling (1976) stated that agency relations arise when one or more principals pay agents to act on their behalf, delegating the power to make decisions to him. In the ambit of financial management, this relationship arises between self-interested managers and shareholders. Shareholders are supposed to be only concerned with the value of their investment. However, conflict arises when opportunistic managers engage in decision-making and behaviours that tend to benefit directors as controlling would eventually result in a lower quality of reported earnings (Gonzalez & Garcia-Meca, 2014). In Malaysia, the Malaysian Code on Corporate Governance (MCCG) has revised several times, with the latest one was in 2021 with a focus on the board of directors.

In many countries, the diversity in the board composition has become evolving as it will lead to good governance that will positively impact the firm performance. Having diversity on the board is important as the membership on the board will represent the company, and their decision making affects the company and beyond. In Malaysia, board diversity has become part of the requirements for the public listed companies to practice and become one of the ways to enhance corporate governance. Additionally, Song et al. (2020) and Nguyen et al. (2015) found that board diversification affects firm performance. According to Ozdemir (2020), board diversity has a larger impact on firm performance. By having a well diverse board, the discussion will become robust where multiple angles and perspectives can be gathered from the directors. More insights can be developed based on their experiences, backgrounds and skills, and thus effective corporate decision making can be made. In addition, all the board members are encouraged to voice their opinions and viewpoints to create productive board discussions, leading to broader perspectives, improving company performance, and better corporate governance. Hence, this study hypothesized that:

H1: There is a positive relationship between board diversity and Tobin's Q.

H2: There is a positive relationship between board diversity and Return of Asset (ROA).

H3: There is a positive relationship between board diversity and Return on Equity (ROE).

3. METHODOLOGY

This research employs a methodology that was mostly used in previous studies to prove the hypotheses. The methodology is divided into two-part, (1) performance using market and accounting measures and

(2) standard panel data for the regression model. In this research, a random effect model (REM) is used to determine the effect of board diversifications on performance.

3.1 Sample

This research uses data for the pharmaceutical sector in Bursa Malaysia Berhad (BMB) taken from the DataStream Thomson Reuters and annual report. It covers the period of 2015 – 2020 to view the influence of board diversity towards the performance of these companies prior to the pandemic of Covid-19 and one year during the pandemic still around. Initially, there are 13 companies listed under the leisure and hospitality sector in BMB. Total firm observations are 78.

3.2 Variables

The extent of board diversification is based on six measurements. This measurement will give a total maximum index of 9. The summary of variables is shown in Table 1.

Table 1. Description of Variable used in this research

Variables	Operationalization	Formula
Board Diversity (Independent Variable)	Board Size (Bhatt & Bhattacharya, 2017)	<7=0 8-14=1 >15=2
	Board Independence (Bhatt & Bhattacharya, 2017)	<50%=0 50%-75%=1 >75%=2
	Board Meeting (Bhatt & Bhattacharya, 2017)	<4=1 4-8=1 >8=2
	Board Expertise (Garcia-Sanchez et al., 2017)	1=YES; 0=NO
	Female Director (Masulis et al., 2012)	0= Less than 30%female 1=More than 30% female
	Foreign Director (Masulis et al., 2012)	0=No foreign director 1= At least 1 foreign director
Corporate Performance (Dependent Variable)	Tobin's Q (Suffian et al., 2015)	(Market Value of Equity + Total Asset) / Total Asset
	Return on Asset (Suffian et al., 2015)	Net Income / Total Asset
	Return on Equity (Suffian et al., 2015)	Net Income / Shareholders' Equity

4. ANALYSES AND FINDINGS

4.1 Descriptive Statistics

Based on Table 2, the descriptive statistic in this study is consistent with previous studies done by Bhatt & Bhattacharya (2017) and Garcia-Sanchez et al. (2017). The mean for BoardIndex is 3.859, which indicates that most of the pharmaceutical companies in Malaysia comply with the best practice of Malaysian Code on Corporate Governance (MCCG). In addition, most of the companies do not have foreign directors, which also contributed to the average value of the BoardIndex. The data is normally distributed, even though some of it is out of the range of -2 and 2. This is due to the minimal sample of observations used in this study.

4.2 Regression Analysis

This study found a mixed finding based on the regression results. For pooled data, only ROA is negatively significant at 5% (t-value= -2.15). This could be due to the number of low samples, and the effect cannot be determined only for one year. The result indicates that the corporate governance represented by board diversification may deteriorate the firm's performance through return on asset (Ko et al., 2019). Meanwhile, other variables are not significant. Therefore, this study has not supported all hypotheses. For the comparison results between pre and during pandemic Covid-19, this study has

rejected the null hypothesis. This is because the p-value is significant (<0.05) only for ROE. Hence, this study accepts the alternative hypothesis (H_a), which states a mean firm performance score difference between the two groups. The result of the t-test is shown in Table 4.

The results have proved the significant relevancy of Agency Theory in determining the effect of board diversity on firm performance. This demonstrated that the ineffectiveness of corporate governance in enhancing firm performance (Makhlof et al., 2017). This indicates that some companies may not properly carry out corporate governance efficiently and effectively. Therefore, the relevant authorities need to oversee these companies so that the enforcement of corporate governance can be effectively takes place and, in turn, will enhance the firm performance.

5. CONCLUSION

This research found supporting evidence on the effect of board diversity on firm performance, where it is not supported the view of agency theory. From the analysis, board diversification is negatively related to firm performance, indicating ineffective corporate governance in enhancing firm performance. As a result, it would affect the company's reputation, and the trust stakeholders have put in will deteriorate. Further analysis can be done on the influence of board diversity towards firm performance before, during and after the pandemic is over. Future research may also include larger sample taken from all sectors to generalize the findings and forms a better picture of the analysis.

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APPENDICES

Table 2. Descriptive Statistics

	Min	Max	Mean	Std. Dev	Skewness	Kurtosis
BODIndex	1	7	3.858974	1.364907	.4416101	2.396808
TobinsQ	.001921	14.99642	1.804893	2.200443	3.418624	1.875185
ROA	-.2097772	.4007880	.0840868	.0813886	-.1641401	7.537516
ROE	-.4187059	.8316865	.0997019	.1382313	.8165778	1.533489
SIZE	4.907175	7.649827	6.110784	.6428555	.5371628	3.195378
LEV	.001921	.4359176	.1556909	.1258050	.6027652	2.200429
GROWTH	0	.0076151	.0016051	.0018579	1.610284	5.050517
CurrentRatio	.7758663	29.36057	22.37236	6.874469	3.233409	11.63003
AcidTestRatio	.256063	28.02611	20.75254	6.579908	3.237999	11.66039

Table 3. Regression Results on Firm Performance (N=78)

	Tobins Q	ROA	ROE
Constant	-.1130378 (-0.08)***	-.3268846 (-1.90)***	-.2899144 (-1.14)***
BODIndex	-.1222392 (-1.02)	-.0158758 (-2.15)**	-.0075332 (-0.52)
SIZE	.1298745 (0.49)	.0737796 (2.51)**	.055922 (1.25)
LEV	-.2365875 (-0.20)	-.0077483 (-0.12)	-.0259951 (-0.21)
GROWTH	9.995774 (1.21)***	16.12499 (3.50)***	46.16747 (4.96)***
CurrentRatio	.0429398 (0.33)	-.0005907 (-0.10)	0.099233 (0.83)
AcidTestRatio	-.0449205 (-0.33)	.0004782 (0.08)	-.0103608 (-0.83)
Firm Effect	YES	YES	YES
R Squared	.7208	.2507	.3022
Adjusted R Squared	.6972	.1874	.2432
Wald_chi2	183.30	24.05	31.05

***Significant at the 1% level (1-tailed), **Significant at the 5% level (1-tailed), *Significant at the 10% level (1-tailed)

Table 4. T-test for Pre- and During Pandemic Covid-19 (N: Pre=65; During=13)

	Tobin's Q		ROA		ROE	
	Pre	During	Pre	During	Pre	During
Mean	1.611039	2.774162	.0797443	.1057989	.085971	.1688963
Mean Diff.	-1.163122		-.0260546		-.0829252	
Std Error	.1846176	1.177748	.0083239	.0370783	.0128591	.0674122
Std Dev	1.488434	4.24643	.0671093	.1336877	.1036735	.2430581
95% Conf	1.242223	.2080693	.0631155	.0250123	.060282	.0220177
95% Diff.	1.30877		-.0752682		-.1649602	
Interval	1.979855	5.340254	.0963732	.1865856	.1116601	.3157748
Interval Diff.	2.301016		.0231591		-.0008903	
t-stat	.0818		-1.0544		-2.0133	
p-value	-1.7635		.2950		.0476	
Degree of Freedom	76		76		76	

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Assessing The Effect of Corporate Fraud on Firm Performance: Pre- and During Pandemic Covid-19

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ABSTRACT

It will likely to be remembered for year 2017 as a turning point for the Malaysian economy as synchronized economy recovery took place amid political uncertainties, rising geopolitical tension coupled with the slow climb seen in most commodity prices. Despite the infamous financial scandals such as 1MDB and Petrol One Resources Berhad, the performance of Malaysian listed firms was in upward trend. This is worsening during the pandemic Covid-19 which has been hit all over the world. The aim of this study is to determine the effect of fraudulent activities on firm performance of Malaysian listed companies from year 2017 until 2020. Based on the pool effect model, the regression analysis documented a positive significant effect of corporate fraud on the leisure and hospitality sector in Malaysia for both the accounting and market measures. The results not supported the agency theory, which suggests the existence of conflict of interest in the firms. The current findings can be treated as indications to lessen the corporate fraud in enhancing the company's performance by the management and stakeholders.

Keywords: Corporate fraud, firm performance, Covid-19, return on equity

1. INTRODUCTION

Malaysia is a developing country that has always attracted numerous potential investors due to its promising potential. After the financial crisis of 1997, Malaysia's economic growth rate expand steadily at an average of 5.4% since 2010. Despite drastic political changes occurred in 2018, Malaysia is charging forward as one of the biggest gainers and toughest competitor (Nasir & Hashim, 2020) and toward becoming a high-income economy by 2024. Investment has been instrumental in economic growth hence; firm performance will become the centre of attention in investor decisions.

There are several factors could affect firm performance including fraud. The Scandal of 1Malaysia Development Berhad (1MDB), Petrol One Resources, Sime Darby Berhad and Transmile Group Berhad indicated fraud is not a new issue and become among serious corporate problems that receive greater attention in the mass media, which has demoralized investors' confidence (Nasir & Hashim, 2020). According to KPMG Malaysia Fraud, Bribery and Corruption Survey, the number of fraud cases occurred in Malaysia increased nearly double over the past three years (KPMG, 2013).

The pandemic Covid-19 that has been hit around the world has contributed to the huge number of losses in the corporate world. Many of these corporate frauds were rooted in financial frauds (Association of Certified Fraud Examiners, 2020). PricewaterhouseCoopers (PWC)'s Global Economic Crime and Fraud Survey (2020) documented that the accumulated cost of financial crime is USD\$ 42 billion. The on-going fraud scandal of 1MDB has proved that corporate scandals still exist. During the pandemic of

Covid-19, many big companies are facing financial difficulties and some of them have to restructure their companies such as reducing the number of employees and closing down some branches. Therefore, the performance of companies will be affected by this corporate failure.

The aim of this study is to determine the effect of financial distress and fraudulent activities on the firm performance of Malaysian companies in the leisure and hospitality sector from the year 2017 until 2020. The fixed effects model is applied since the data contains observations on different companies' sections across time and to cater the endogeneity problem. We found a negative significant effect of corporate fraud and financial distress on the Malaysian listed firm performance for both the accounting and market measures. The results supported the agency theory, which suggests the existence of conflict of interest in the firms.

The current findings served as indications to the company as they can strengthen their management processes to fight fraud and to improve firm performance. Second, this study will also shed a light on investors in understanding what is happening to the company in which they have largely invested if it caught up with fraud. Finally, on the academic side, this study will contribute towards literature relating corporate fraud to academic researchers studying fraud management in Malaysia.

2.LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

Despite the numerous numbers of mechanisms to mitigate the occurrences of corporate fraud, there are still quite a number of cases occurred especially when the world has still faced the pandemic Covid-19. In Malaysia, most of companies especially in leisure and hospitality sector are facing difficulties to sustain in the industry. Since the first movement control order (MCO 1.0) in mid of March 2020, most companies have to stop their operations. Due to that, they had financial constraints in sustaining their business. Many employees have lost their jobs and became unemployed.

Some hospitality companies such as hotels and tourism companies were among the most victims due to the pandemic. In Malaysia, some top hotels have closed down their operations as they were unable to sustain in the industry. This is not only affected the companies but also the Government of Malaysia as Malaysia was promoting the Year 2020 Visit Malaysia. This research is using the Agency Theory to determine the effect of corporate fraud on firm performance. Past studies have suggested the existence of conflict of interest in the firms with fraudulent activities. In the ambit of financial management, this relationship arises between self-interested managers and shareholders. Shareholders are supposed to be only concerned with the value of their investment. However, conflict arises when opportunistic managers engage in decision-making and behaviors that tend to benefit directors as controlling that would eventually result in a lower quality of reported earnings (Gonzalez & Garcia-Meca, 2014). However, it is contrasted a study by Wang & Demer (2010) where they found the corporate fraud may increase the firm performance. Therefore, this study hypothesized that:

H1: There is a negative relationship between corporate fraud and Tobin's Q.

H2: There is a negative relationship between corporate fraud and Return of Asset (ROA).

H3: There is a negative relationship between corporate fraud and Return on Equity (ROE).

3.METHODOLOGY

This research employs methodology that was mostly used in previous studies to proof the hypotheses. The methodology is separated into three-part, (1) fraud determination using Beneish's Model, (2) performance using market and accounting measures, and (3) pool effect model for the regression model.

Sample

This research uses data for the leisure and hospitality sector in Bursa Malaysia Berhad (BMB) which was taken from the DataStream Thomson Reuters and annual report. It covers the period of 2017 – 2020. This is to view the trend of corporate fraud towards the performance of these companies 3 years prior to the pandemic of Covid-19 and 1 year during the pandemic is still around. Initially, there are 29 companies listed under the leisure and hospitality sector in BMB. The final sample for firm-

observations is 81. This study will be divided into two categories; 1) pre-from 2017 until 2019 and 2) During in 2020.

Variables

The extent of potential fraudulent companies was measured using Beneish M-score Model. As pointed out by Ezrein, Md Salleh, and Ahmad (2016), this model is able to detect 82% of the public listed companies prosecuted for fraudulent financial reporting by the Securities Commission of Malaysia, hence provide evidence that this model is reliable and capable of identifying potential fraudulent companies listed in BMB. This model uses eight financial ratios to detect financial statement fraud which can be explained in Table 1. The summary of variables is shown in Table 1.

The eight variables of Beneish M-score will be calculated using the following formula:

$$M = -4.84 + 0.92*DSRI + 0.528*GMI + 0.404*AQI + 0.892*SGI + 0.115*DEPI - 0.172*SGAI + 4.679*TATA - 0.327*LVGI \quad (1)$$

The M score is the figure derived from the model. M-score of less than -2.22 indicates that a company does not manipulate the financial statement in the accounting period. M-score greater than -2.22 signals that the company will likely be a manipulator. These parameters are calculated from data available in company financial reports. Therefore, using this model, the companies that likely manipulate financial statements can be determined. The score of "1" will be given if the companies had red flags indicating that there are possibility of fraudulent financial statements and "0" if otherwise. SIZE is calculated by the natural logarithm of total assets and GROWTH is measured by company's market value at year-end divided by the book value of total assets or sometimes referred to as market-to-book value (MTB). The regression model in this study is:

$$\text{Performance: } \alpha_0 + \beta_1 \text{Beneish} + \beta_2 \text{SIZE} + \beta_3 \text{GROWTH} + \varepsilon_{it} \quad (2)$$

4.ANALYSES AND FINDINGS

Descriptive Statistics

Based on Table 2, the descriptive statistics in this study is consistent with previous studies done by Gonzalez & Garcia-Meca (2014) and Ezrein et al. (2016). The mean for Beneish is -2.460797, which indicates that the sample of companies in this study does not manipulate the financial statement in the accounting period. While, the data is normally distributed even some of it is out of the range of -2 and 2. This is because the sample of observations is minimal.

Linear Regression

This study found a mixed finding based on the regression results. For pooled data, only ROE is positively significant at 1% (t-value= 2.97). This indicates that the corporate fraud may not be deteriorating the performance of the company through shareholders' equity. Meanwhile, other variables are not significant. Therefore, this study is not supported all hypotheses. For pre- samples, the same result also acquired with a positive significant relationship with ROE at 1% (t-value= 4.45). Hence, not hypotheses are supported. However, during the pandemic, there is no significant results were found. This could be due to the number of samples which is low and the effect cannot be determined only for one year. The result of regression can be seen in Table 3.

The results have proved the insignificant relevancy of Agency Theory in determining the effect of corporate fraud on firm performance. This proved that some companies are not engaged in corporate fraud, hence, they do not deteriorate the firm performance (Wang and Demer, 2010). This can be added to the reports made by the BMB in which some companies in this sector are having financial difficulty or even already went for bankruptcy. That could be one of the reasons in this study which has found an insignificant relationship with performance during the pandemic Covid-19.

5.CONCLUSION

This research found supporting evidence on the effect of corporate fraud on firm performance, where it is not related to the agency theory. When a company is involved in fraudulent activities, it would increase the performance of the company, only through ROE. The finding indicate that the management are engaged with fraudulent activities to increase the financial position of the company prior to the pandemic Covid-19, which in turn will portray a good performance to the stakeholders. This, in turn, would not affect the reputation of the company and the trust stakeholders have put in will not deteriorate. Further analysis can be done on the effect of corporate fraud towards companies during and after the pandemic is over. A larger sample is also required to generalise the findings not only to one sector but to all public listed companies.

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Appendices

Table 1: Description of Variable used in this research

Variables	Operationalisation	Ratio	Formula
Corporate Fraud (Independent Variable)	Beneish M-score (Beneish, 1997,1999)	Days Sales in Receivable Index (DSRI)	$(\text{Net Receivable}_t / \text{Sales}_t) / (\text{Net Receivable}_{t-1} / \text{Sales}_{t-1})$
		Gross Margin Index (GMI)	$[(\text{Sales}_{t-1} - \text{COGS}_{t-1}) / \text{Sales}_{t-1}] / [(\text{Sales}_t - \text{COGS}_t) / \text{Sales}_t]$
		Asset Quality Index (AQI)	$[1 - (\text{Current Asset}_t + \text{PPE}_t) / \text{Total Asset}_t] / [1 - (\text{Current Asset}_{t-1} + \text{PPE}_{t-1}) / \text{Total Asset}_{t-1}]$
		Sales Growth Index (SGI)	$\text{Sales}_t / \text{Sales}_{t-1}$
		Depreciation Index (DEPI)	$[\text{Depreciation}_{t-1} / (\text{Depreciation}_{t-1} + \text{PPE}_{t-1})] / [\text{Depreciation}_t / (\text{Depreciation}_t + \text{PPE}_t)]$

Firm Performance (Dependent Variable)	Sales, General and Administrative Index (SGAI)	$(SGA\ Expenses_t / Sales_t) / (SGA\ Expenses_{t-1} / Sales_{t-1})$
	Total Accruals to Total Asset Index (TATA)	Total Accruals _t / Total Assets _t
	Leverage Index (LEVI)	$[LTD_t + Current\ Liabilities_t] / [Asset_t] / [LTD_{t-1} + CL_{t-1}] / Total\ Asset_{t-1}$
Tobins's Q		(Market Value of Equity + Total Debt) / Total Asset
	Return on Asset	Net Income / Total Asset
	Return on Equity	Net Income / Shareholders' Equity

Table 2: Descriptive Statistics

	Min	Max	Mean	Std. Dev	Skewness	Kurtosis
Beneish	-4.267301	.6830239	-2.460797	.8024001	1.607963	7.224678
TobinsQ	.0003522	2.906427	.4867534	.5824037	2.304168	8.062548
ROA	.0165337	5.247029	.5439257	.8222358	4.196424	21.964
ROE	-3.050011	108.0669	2.259265	10.55693	9.204314	91.37765
SIZE	4.310247	8.007068	5.824701	.8495092	.4981543	2.931115
GROWTH	.0000587	2.202865	.2106615	.4877316	2.432294	8.058973

Table 3: Regression Results on Corporate Fraud

	Pooled	Pre	During
Constant	-1.955887 (-2.79)***	-.281026 (-5.17)***	-.1607307 (-0.85)***
TobinsQ	-.267113 (-0.39)	-.4664326 (-0.81)	-.2579309 (-0.15)
ROA	-.1099054 (-0.91)	-.073733 (-0.92)	1.019492 (0.78)
ROE	.0802568 (2.97)***	.0820168 (4.45)***	-.2266167 (-0.76)
SIZE	-.0418454 (-0.35)	.0336564 (0.718)	-.1389129 (-0.43)
GROWTH	.4281768 (0.51)	.4960728 (0.70)	.6041579 (0.29)
2018	-.3727356 (-1.53)	.0854619 (0.59)	-
2019	-.467493 (-1.97)	.2065347 (0.48)	-
2020	-.9410168 (-.858)	-	-
Firm Effect	YES	YES	YES
Year Effect	YES	YES	-
R Squared	.1695	.3813	.1813
Adjusted R Squared	.0742	.2885	.0999
F-stat	.1079	.0026	0.8713
N	81	57	24

***Significant at the 1% level (1-tailed), **Significant at the 5% level (1-tailed), *Significant at the 10% level (1-tailed)

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Factors Affecting Customer Satisfaction for Online Banking Service in Malaysia

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ABSTRACT

This research proposal is to investigate the relationship between the online service quality dimension (reliability, security & privacy, responsiveness and efficiency) and customer satisfaction. E-SERVQUAL model is applied. This research paper applies a judgement sampling method which also categorizes as non-probability sampling method to collect data from UOWM students who have a bank account and experience of using online banking at least once. The reason for choosing UOWM students is the adoption rate of online banking users still considered low in Malaysia colleges compared to other Asian countries. A sample size of 150 respondents are collected through the questionnaire. The data are collected from respondents will be analyzed through SPSS software, and the results are shown in a form of tables, charts and graphs. The results of the study prove that reliability, security & privacy, responsiveness and efficiency have positive relation on customer satisfaction toward online banking in Malaysia. The results provide significant implications to online banking users as a guide to choose their favorite online bank.

Keywords: customer satisfaction, online banking service, E-SERVQUAL, online service quality

1. INTRODUCTION

Asian Institute of Finance, AIF (2018) stated that the internet banking users in Malaysia have increased quickly thru the growth in internet penetration over the past few years. Polasik and Wisniewski, (2009) mentioned that Malaysia is trying to increase the rate of adoption but there are several Malaysians who are not willing to use it. Based on Figure 1.1, the Official Portal of Bank Negara (2019) also stated that only 51.4% or 15.5 million of people are willing to use online banking services in 2013. Besides, there were 98.2% or 31.8 million people willing to adopt online banking services in 2019. This proves that majority of Malaysians widely accept online banking service.

million	Number of Subscribers			Penetration to population (%)
	Total	Individual	Corporate	
2005	2.6	2.5	0.1	9.8
2006	3.2	3.2	0.0	12.0
2007	4.6	4.5	0.1	16.9
2008	6.2	6.1	0.1	22.5
2009	8.1	8.0	0.2	28.9
2010	9.8	9.6	0.2	34.4
2011	11.9	11.6	0.2	40.9
2012	13.7	13.4	0.2	46.4
2013	15.5	15.2	0.3	51.4
2014	17.6	17.3	0.3	57.5
2015	19.8	19.2	0.6	63.3
2016	22.8	22.0	0.8	72.0
2017	25.5	24.6	0.9	80.6
2018	29.5	28.3	1.2	91.1
2019	31.8	30.5	1.4	98.2

Figure 1.1: Numbers and Percentages of Online Banking Users from year 2005 to 2019

Source: Asian Institute of Finance, AIF (2018)

Numerous researchers have been investigated several factors affecting customer satisfaction. They found that customer satisfaction is one of the main factor for the banks industry to enhance their competitiveness in the banking sector in Malaysia and even in Asia. According to Alsajjan and Dennis (2010); Abu Amar Fauzi and Tatik Suryani, (2019); Hammoud, J., Bizri, R. M., and El Baba, I. (2018), the higher customer satisfaction will help the bank to deal with new customer and maintain its existing customers at the same time. Be that as it may lead the business to failure with the low customer satisfaction. Gerrard and Cunningham, (2005), found that the service quality provided by banking sector is very significant as it is highly correlated with the profit. Based on the various studies that related to the customer attitude and their acceptance of e-banking service, it was pointed out that different key factors may affect customer perspective in the acceptance of e-banking service which may include customer's attitude, motivation level and demographic analysis (Laforet and Li, 2005). In spite of this, there are some researchers who have determined the level of customer satisfaction by examining the dimensions of online banking service quality (Nupur, 2010).

The purpose of this study is to investigate the factors affecting customer satisfaction toward Malaysia online banking service

- i.To investigate the relationship between reliability and customer satisfaction for Malaysia online banking service.
- ii.To investigate the relationship between security & privacy and customer satisfaction toward Malaysia online banking service.
- iii.To investigate the relationship between responsiveness and customer satisfaction toward Malaysia online banking service.
- iv.To t investigate he relationship between efficiency and customer satisfaction toward Malaysia online banking service

2. LITERATURE REVIEW

Customer satisfaction became a famous topic to examine since customer reaction will build the long-term customer relationship, that can lead a business to success in the future (Cheng, Gan, Imrie, and Mansori, 2018; Wongleedee, 2017; Vettrivel, S. C., Rajini, J., and Krishnamoorthy, V. 2019). Influence of internet banking service quality on customer satisfaction. A lot of previous research proved customer satisfaction is very important for service sector. It can be the main measurement of service quality, measured overall customers' satisfaction in many cases. Numerous researchers have emphasized customer satisfaction increase the service quality in banking industry (Raza et al., 2015; Ling et al., 2016). According to Shah Alam and Mohd Yasin (2010), customers with positive attitude and who are satisfied with the service will have the intention of re-use and repurchasing, if the customer with negative attitude will increase the rate of dissatisfaction and against toward certain products and services.

According to Bacetic and Persson (2018); Theresia and Bangun (2017), reliability refers to the aspect of technology functionality of the website, accurately of the service promises made and availability would be the key element. Several studies showed reliability positively related to level of customer satisfaction toward online banking sector (Rajput, 2019; Raza et al., 2015; Bacetic and Persson, 2018; Kemunto et al., 2015). Moreover, Malik and Oberoi (2017) also referred that numerous literatures have figured out that the reliability factor of online banking are the very important dimension for customer satisfaction. The online banking industry faced challenges in providing reliable service while failing to fulfil the promises the company made which will cause them to fail in the era of e-banking service (Sharma, 2012). Reliability has positive impact on customer satisfaction in online banking service.

According to Goh et al. (2016); Aboobucker and Bao, (2018), security and privacy identified as a kind of protection to secure the safety of customer's personal financial information and to avoid hacker violation on customers' privacy. As identified by Jalil, Rahman and Talukder (2014), security and privacy of online banking system are very important dimension in the context of online banking. Bank customers are concerned to conduct financial and non-financial activities which have an impact toward

the customer intention of using online banking (Sharma and Sharma, 2011). Security and privacy have positive impact on customer satisfaction in online banking service.

Responsiveness dimension refers to a service provider to assist and contribute instant service of processing customer's problem as well as respond to them through the website (Stamenkov and Dika, 2015; Sekhar and Vijayan, 2018). Numerous literature highlight responsiveness as a key dimension of online service quality in the banking sector (Goh et al., 2016; Bacetic and Persson, 2018; Kemunto et al., 2015; Dabas and Bajaj, 2019; Iberahim, 2016) stated that through the use of advanced technology, banking industry are allowed to respond promptly to customer in the particular time. Hence, having a great responsive online service quality will increase the customers' satisfaction rate. Responsiveness has positive impact on customer satisfaction in online banking service.

According to Bacetic and Persson (2018), efficiency is the ability for a customer to visit the online web site and input their required information without a lot of effort. Ling et al. (2016) supported that efficiency is considered as a vital dimension which will lead online banking to success. In order to provide an efficient banking service, the banking industry must propose a high quality of online service technology. Because the customer is expected to commit more time if the quality of the banking website is more effective. Efficiency has positive impact on customer satisfaction in online banking service.

Theoretical Framework

Figure 2.1 shown that theoretical framework is based on the e-SERVQUAL created by Parasuraman et al. (2000).

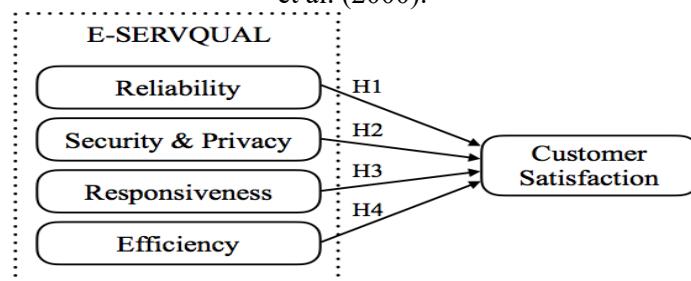


Figure 2.1: Theoretical framework for this research.

Hypothesis has been developed and detailed in Table below

Hypothesis	Hypothesis Statement
H1	Reliability has positive relationship with customer satisfaction in online banking service.
H2	Security and privacy have positive relationship with customer satisfaction in online banking service.
H3	Responsiveness has positive relationship with customer satisfaction in online banking service.
H4	Efficiency has positive relationship with customer satisfaction in online banking service.

3. RESEARCH METHODOLOGY

The target population of this research is a total of 150 responses from UOWM students using online banking service, Malaysia. The reason for choosing UOWM students is the utilisation rate of online banking users considered low in Malaysia colleges as compared to other Asian countries like Singapore, Hong Kong, Japan, etc. (McKinsey & Company, 2014). Respondents who are involved must meet the requirement among which these UOWM students must have a bank account that chosen from 19

Malaysia commercial banks. Besides, the respondents must have the experience of using online banking at least once. According to Fortune Malaysia (2016), there are 19 Malaysia commercial banks that offer e-banking service in Malaysia.

Data collection method is using questionnaire distribution which carried out by using quantitative research method. The questionnaire consists of two section. For Section A of the questionnaire is demographic background questions on the respondents' information and their experience in online banking. Section B is a group of question on independent variable and dependent variable, In this study, the five-point Likert scale is used in the Section B of questionnaire to quantify the respondent's degree of agree or disagree with the five-point rating, which is '5' represents strongly agree to '1' represents strongly disagree (Rajput, 2019; Bacetic and Persson, 2018)

The data analysis includes the five analysis which are descriptive analysis, validity analysis, reliability analysis, correlation analysis and regression analysis. SPSS software tools is used to analyze the result.

Descriptive analysis applied in this study to provide a summary of sample population and data analysis which is easily to understand and interpretation. Validity analysis is measuring the validity of questionnaire in the dimension of SERVQUAL (Bacetic and Persson, 2018). Reliability analysis is to measure the consistency of the result which allow the researcher to know whether the data is reliable or not. SPSS software is used to test the Cronbach's Alpha (α) as an index of reliability. In addition, the value of Cronbach's Alpha (α) ranges between 0 - 1.0. If the result fall between 0.6 to 1.0, it shows the variance is more reliable and below 0.6 shows the result is no reliable (Jahan et al., 2016).

4. RESEARCH FINDINGS

Total number of respondents is 150 respondents. Data on the demographic profile of the respondents were obtained from the questionnaire. Background information of the respondents such as age, gender, nationality, race, education, monthly income, online banking usage frequency, name of bank, type of services used on online banking, and recommendation of online banking service to others will be discussed.

Based on gender, 78 respondents (52.0%) were female while only 72 (48.0%). The distribution of sample numbers by age group. The majority of respondents (64.7%) are in the age group of 20-29 years. Followed by respondents aged <19 years (20.7%), 30-39 years (12.0%) and respondents in the age group of >40 years (2.7%). The distribution of sample number by respondent's race. The majority of respondents (68.7%) are Chinese, (17.3%) are Indian and Malay (14.0%). Based on the sample distribution of race, 146 respondents (97.3%) are Malaysian and the remaining 4 respondents (2.7%) are non-Malaysian. Based on level of education, majority of respondents, namely 47 respondents (31.3%) have a diploma and 42 respondents (28.0%) are degree graduates. Followed by foundation which is a total of 39 respondents (26.0%), certificate 15 respondents (10.0%), and finally Master that is 7 respondents (4.7%). Based on monthly allowance, the distribution of samples based on respondents' monthly allowance, a total of 68 respondents (45.3%) have allowance of RM501-RM1000. This was followed by 29 respondents (19.3%) with an income between RM1001-RM1500, 24 respondents (16.0%), 15 respondents (10.0) have allowance more than RM2001 and finally 14 respondents with allowance of RM501.

The frequency of respondents used online banking in a month. The majority of respondents, namely 73 respondents (48.7%) used about 6-10 times a month while 42 respondents (28.0%) used about 1-5 times per month. Followed by respondents that used online banking over than 10 times per month which is a total of 35 respondents (23.3%).

The frequency of service that were used by respondent using online banking. The majority of respondents, around 53 respondents (35.3%) used online banking for fund transfer while 38 respondents (25.3%) used to download their personal bank transaction. Besides, 29 respondents (19.3%) used online banking for payment of bills, 21 respondents (14.0%) used for checking their account balance and 9 respondents (6.0%) for loan and credit card payment.

Descriptive Analysis Findings found some key descriptive for constructs, mean values, overall averages and frequencies. The mean value of the customer satisfaction is 4.46 which indicates a high level indicating customer satisfaction in online banking is at a high level.

Reliability analysis findings, the values of the Cronbach's alpha coefficient are reliable at customer satisfaction 0.697, security & privacy 0.881, responsiveness 0.860, efficiency 0.878 and reliability 0.742.

Correlation analysis findings have shown the relationship between reliability, 0.571, security and privacy, 0.514, responsiveness, 0.485 and efficiency, 0.619 have significant relationship with the customer satisfaction towards online banking service in Malaysia

Regression Analysis Findings, R^2 indicated the relationship between reliability 0.326, security & privacy, 0.264, responsiveness 0.235, efficiency 0.383 with customer satisfaction toward online banking service in Malaysia with a significant proportion of variance in customer satisfaction.

5. CONCLUSION

This study was conducted to better understand the factors influencing users' satisfaction towards online banking service in Malaysia. It can be used as reference by banks that are offering online banking services. Banks can be effectively formulating techniques to boost users' satisfaction to ease of the use online banking system. Bank customers should be able to switch to online banking services by offering them with free training, encourage them to make payment via online and other related online banking transactions. The bank management need to have a clear and precise understanding for the users on the usage of online banking.

As this study only focuses on the sample size collected from UOWM students and considered not comprehensive to represent the entire college students in Malaysia. Therefore, research is done in extent to other university students so that it can provide different opinion and results if the sample is taken from different college with different age group to get various results.

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Board gender diversity and financial reporting quality: Evidence from emerging country

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ABSTRACT

The monitoring function of the board derived from the agency theory plays a crucial role in mitigating agency problems and monitoring managerial decisions to protect shareholders' interests and to ensure high-quality financial reporting. Most of the previous studies were focused more on board's independence, meeting frequency, size, and financial expertise rather than the side of gender. Moreover, there is a recent growing stream of research on the effects of gender differences that state that the presence of women on board of directors could bring about positive outcomes in firm's performance, corporate monitoring, and oversight. Thus, the purpose of this study is to investigate whether gender diversity of board of directors has a significant impact on the firm's financial reporting quality proxied by earnings management. This study analysed the financial data and qualitative data for the period from 2016 until the latest ones 2020 of Malaysian listed companies, as evidence from emerging countries. The evidence of this study has implications for regulators and policy makers; that the presence of female director will affect management decision and audit quality, therefore gender diversity on board should be further emphasized.

Keywords: agency theory, corporate governance, earnings quality, earnings management, female board

1. INTRODUCTION

The role of corporate governance and financial reporting quality are amongst the most popular issues being investigated by researchers in accounting field. The board of directors is a significant corporate governance mechanism that holds the accountability for leading and directing a business organization and protecting the interests of all stakeholders (Fama & Jensen, 1983; Jensen & Meckling, 2019). The board of directors become the key player for the corporation in ensuring effective corporate governance to reduce information asymmetry, control insiders' opportunism and mitigate managerial incentives in earnings management practices and thus contribute to the integrity of the financial reporting (Chen et al., 2011; Chi et al., 2015; Khalil & Ozkan, 2016; Peasnell et al., 2005). Meanwhile, earnings management (EM) has been defined by Schipper (1989) as a purposeful intervention in the external financial reporting process, with the intent of obtaining some private gain. Meanwhile, Sun & Rath (2008), define EM as managers exercising judgment for the purpose of hiding true performance in order to either influence the stock performance, to benefit from the contractual terms between the firm and managers, or to influence regulatory decisions. Therefore, based on previous literature, EM has been defined as where the managers may use the opportunity to show their firm's best performance through manipulation of the financial reporting. In mitigating EM, the board gender differences as one of the mechanisms have been established in many countries around the world. Nevertheless, until this point in time, there is limited literature concerning the board gender differences in reducing EM activities in Malaysian capital market. Consequently, the objective of this paper is to investigate the relationship between the presence of female directors on corporate board that improves the audit quality of financial reporting among Malaysian public listed companies, particularly in the construction sector.

Consistent with the prior studies, this paper uses accruals earnings management (AEM) as a proxy of earnings quality of financial reporting quality. From the year 2016 to the latest 2020, the study finds that the presence of female director on board has significantly negatively relationship with EM. The remainder of the paper is organized as follows. Section 2 includes previous literature on gender diversity on corporate board and EM and development of research hypotheses. Section 3 elaborates the research design and data methodology. Section 4 present and discussion on the findings and section 5.0 provides the summary and conclusion.

2.LITERATURE REVIEW

2.1Corporate Governance and Earnings Management

Previous research had proved to give understanding on the relationship between gender diversity and financial reporting quality. However, previous studies showed differing conclusions on the relationship between these two variables: it can be either positively correlated or negatively correlated and some studies show questionable results. According to Gull et al., (2018) in their study on a sample of French firms on the relationship between female directors and EM and claimed that female directors deters EM. In addition, Thiruvadi & Huang, (2011), their research in the United States provide evidence that the presence of a female director on the audit committee constrains EM by increasing negative (income-decreasing) discretionary accruals. Similarly, Orazalin, (2020), in their study on public listed companies in Kazakhstan, they found that companies with greater board gender diversity are more effective in constraining EM. On top of that, Arun et al., (2015) found that firms with a higher number of female and independent female directors are adopting restrained EM practices in the UK. Another study by Peni & Vähämaa (2010), the result of their empirical analysis using a sample of firms in the US, provides evidence that firms with female chief financial officers (CFOs) are associated with income-decreasing discretionary accruals, thereby implying that female CFOs are following more conservative EM strategies. Besides, Triki Damak, (2018), found empirical results of a significant negative effect of board women presence on EM level in French context. Using sample companies of European countries Saona et al., (2019) and Kyaw et al., (2015) revealed the benefits of having a balanced board, in terms of gender diversity tends to mitigate EM practices. On the other hand, contrary to the other literature, (Kalantonis et al., 2021) found no significant statistical evidence of the relationship between gender diversity and EM in Greek. According to Al-Shaer & Zaman (2016), diverse board will take a more balanced view and pay greater attention to social responsibility and stakeholder concerns.

2.2 Gender diversity

There are several interrelated reasons on the effect of gender diversity and financial reporting quality. Previous literature has acknowledged that significant gender-based differences exist, for instance, in leadership styles, communicative skills, conservatism, risk averseness, and decision-making. Due these differences and their potential implications for corporate governance, the issue of gender diversity has begun to receive increasing attention in the literature over the past few years. Basically, there are two theories that suggest greater gender diversity may contribute to better board effectiveness: gender theory and agency theory. According to the gender theory perspective, Eagly et al., (1995) suggested that an individual's gender determines his or her behavior. It is suggested by the theory that men and women have normatively expected behavior and that individuals who use strategies that are aligned to their gender tend to be greater perceived by others (Eagly et al., 1995). For example, men are expected to be more assertive and aggressive than women (Terjesen et al., 2016). Meanwhile, from the agency theory perspective, Virtanen (2012) claimed that females are more likely to take active roles on boards of directors than men did. Likewise, Adams & Ferreira (2009) asserted that female directors are more dynamic on corporate boards and have a better attendance records than male directors.

To address the above arguments, this study proposes the following hypotheses:

H1. *There is a significant relationship between female directors on board and financial reporting quality.*

H2. *There is a significant relationship between independent female directors on board and financial reporting quality.*

3.RESEARCH METHODOLOGY

This study examined the latest sample of construction companies that listed on Bursa Malaysia over the period of 2016 - 2020. This study excludes firms with incomplete data. The final sample consists of 425 firm-year observations. Financial data are gathered from Data stream system and data on board of directors are gathered from annual reports of each company that available on the Bursa Malaysia website. Panel data regression analysis is employed in this study.

3.1 Measurement for Dependent Variable: Accruals Earnings Management

In order to examine the level of EM, this study employed a well recognised EM models, Modified Jones Model by Dechow et al., (1995).

$$TACC_{it} = NI_{it} - CFFO_{it} \quad (1)$$

$$NDAC_{it} = \alpha_1 [1/TA_{it-1}] + \beta_1 [(\Delta REV_{it} - \Delta REC_{it})/TA_{it-1}] + \beta_2 PPE_{it}/TA_{it-1} \quad (2)$$

$$TACC_{it}/TA_{it-1} = \alpha_1 [1/TA_{it-1}] + \beta_1 [(\Delta REV_{it} - \Delta REC_{it})/TA_{it-1}] + \beta_2 PPE_{it}/TA_{it-1} + \varepsilon_{it} \quad (3)$$

$$DACC_{it} = \varepsilon_{it} = TACC_{it}TA_{it-1} - NDAC_{it} \quad (4)$$

Where, $DACC_{it}$ is the discretionary accruals in year t, $TACC_{it}$ is the total accruals in year t, $NDAC_{it}$ is the nondiscretionary accruals in year t, TA_{it-1} is the total assets in year t-1, NI_{it} is the net income in year t, $CFFO_{it}$ is the net cash flow from operations in year t, ε_{it} is the error term in year t, and i is the individual firm in year t. The coefficients in equation 2 for each year are applied in equation 3 for each company accordingly. DACC is the error terms in equation 3.

3.2 Measurement for Independent Variables

There are some arguments on the positive association between board diversity with EM, and in contrast other arguments on the negative association. The current study hypothesizes that the presence of female directors on corporate board mitigates EM. To test the hypothesis, we estimate the empirical model presented as follows:

$$AEM = \alpha + \beta_1 BSIZE + \beta_2 BFEMALE + \beta_3 BIND + \beta_4 BINDF + \beta_5 ACB + \beta_6 ACE + \beta_7 BIG4 + \beta_8 TA + \beta_9 BIG4 + \beta_{10} DTE + \beta_{11} ROE + \varepsilon \quad (1)$$

Where:

AEM is Accruals Earnings Management proxy by Discretionary Accruals figure; BFEMALE is the number of female director on boards, BINDFEMALE is the number of female Independence Director on boards, for control variables; BSIZE is the number of directors on boards; BIND is the number of Independence Directors on board, AC is the number of director on Audit Committee, ACE is the number of director on Audit Committee that has expertise, BIG4 is the type of external auditor of the company, FS is the firm size measured by log Total Assets; DTE is debt to equity ratio proxy for debt covenant, ROE is a return on asset proxy for firm performance calculated by dividing net income with total equity.

4.RESULTS AND DISCUSSION

Table 4.1: Descriptive Statistics

	AEM	BSIZE	BF	BIND	BINDF	AC	ACE	BIG4	TA	DTE	ROE
Min	-1.602	4.00	0	0	0	2	0	0	9.206	-19.370	-3.337
Max	1.00	11	3	8	8	2	5	1	16.951	21.179	2.231
Mean	-0.236	6.895	0.7449	3.40	3.40	3.223	1.191	0.275	13.019	0.822	-0.012
Std Dev	0.320	1.466	0.7989	1.009	1.004	0.614	0.580	0.447	01.492	2.162	0.341
Skew	-0.488	0.304	0.836	0.259	0.259	1.551	0.386	1.010	0.185	1.494	-2.773
Kurtosis	2.143	-0.517	0.049	3.891	3.891	2.742	0.257	-0.985	0.73	2.579	2.315

Note:

This table presents the descriptive statistics of all models for a final sample of 445 firm-year observations.

Tables 4.1 present descriptive statistics for all the variables used from the year 2016 - 2020. It includes EM measures, namely, Accruals Earnings Management (AEM) and the board of directors' criteria in terms of female, size, independence, audit committee and expertise. The statistics also report the control variables for auditors and firms' characteristics, such as size, leverage and performance. The mean values of AEM, is -0.236 implies that majority of the firms manage their earnings using income decreasing accruals. These results imply that accrual-based are large in magnitude and trends in some

Malaysian companies, as some managers have motivations to manage corporate earnings upward and downward for purposes, such as, managers compensation and income tax reduction. The results obtained are consistent with the evidence of Arun et al., (2015), Gull et al., (2018), Kyaw et al., (2015) Orazalin, (2020), Saona et al., (2019) and Thiruvadi and Huang (2011). For the skewness and kurtosis, the values must be between -2 and 2. All variables are within this range and considered as normal.

Table 4.2: Pearson Correlation

	AEM	BSIZE	BF	BIND	BINDF	AC	ACE	BIG4	TA	DTE	ROE
AEM	1										
BSIZE	0.091**	1									
BF	-0.044**	0.391***	1								
BIND	0.164***	0.447***	0.229***	1							
BINF	0.073**	0.192***	0.547***	0.308***	1						
AC	0.157***	0.256***	0.092**	0.315**	0.101**	1					
ACE	0.067	0.056	-0.060**	0.027	0.079**	-0.007	1				
BIG4	-0.029	0.155	0.173***	0.116	0.076	-0.125**	0.090	1			
TA	0.149***	0.359***	0.270***	0.331***	0.283***	0.129***	0.140**	0.345***	1		
DTE	0.118**	0.075*	-0.28	0.185***	0.063	0.043	0.070**	0.169***	0.242***	1	
ROE	0.068**	0.058	0.042	0.040	-0.012	0.062	-0.085	-0.076**	0.060***	-0.578	1

Note:

This table shows the results for correlation analysis for all models for a sample of 445 firm-year observations.

***Significant at the 1% level, **Significant at the 5% level, *Significant at the 10% level

Table 4.2 presents the results of pair-wise Pearson correlation parameters with the t-statistic values for all the variables employed in this study. As can be seen in the table, the correlation estimates between AEM and BF and are significant and negative, while its correlation with AEM and BIG4 is negative as well but insignificant. This suggests that there is correlation between EM and the establishment of female director on board could affect the EM activities by firms. For control variables, all variables are correlated with EM.

Table 4.3: Regression results

AEM	
Variables	
Constant	-0.774***
AEM	
BSIZE	0.028
BFEMALE	-1.34**
BIND	0.069
BINDFEMALE	0.079
AC	0.097
ACE	0.045
BIG4	-0.061
TA	0.083
DTE	0.167**
ROE	0.155**
R-square	0.297
Adjusted R-square	0.061
F-statistics	3.232***

Note:

This table shows the model summary of each Earnings Management value for a sample of 345 firm-year observations.

R-square is the regression coefficient determination.

Adjusted R-square is the adjusted regression coefficient determination.

F-statistics is the indication of how much variation is explained by the regression equation.

AEM is Accruals Earnings Management proxy by Discretionary Accruals figure; BFEMALE is the number of female director on boards, BINDFEMALE is the number of female Independence Director on boards, for control variables; BSIZE is the number of directors on boards; BIND is the number of Independence Directors on board, AC is the number of director on Audit Committee, ACE is the number of director on Audit Committee that has expertise, BIG4 is the type of external auditor of the company, FS is the firm size measured by log Total Assets; DTE is debt to equity ratio proxy for debt covenant, ROE is a return on asset proxy for firm performance calculated by dividing net income with total equity.

***Significant at the 1% level, **Significant at the 5% level, *Significant at the 10% level

Table 4.3 presents the results of regression analysis between EM and all the variables measured in this study from the year 2016 to 2020. The results indicate that AEM is negatively related with BFEMALE at 5% significant level which is consistent with Gull et al., (2018), Thiruvadi and Huang, (2011),

Orazalin, 2020), Triki Damak, (2018), Saona et al., 2019), and Kyaw et al., (2015). In addition, there is negative relationship between AEM and BIG4, but it is not significant. Meanwhile, there is no significant relationship between AEM and BINDFEMALE, which is inconsistent with Arun et al. (2015) who found that female independent director restrains EM. Besides, there is no significant relationship between EM and other variables. The results, thus, suggest that having women directors on corporate boards helps to mitigate EM and improve financial reporting quality. Female director becomes one of the factors that help to mitigate EM in Malaysia through accruals EM. The results obtained in this study is consistent with the argument in the gender theory, women are more conservative and unbiased than men in making ethical decisions. Meanwhile, for control variables, DTE and ROE are found to have a significant positive relationship with AEM at 5 % level. The results suggest that the larger the percentage of debt-to-equity ratio and return on equity of a firm, the more tendency to manage their earnings. The adjusted R-squared and adjusted R-squared for this linear regression model are 29.7% and 6.1% respectively. The F-statistics values 3.232 and it is significant at 1% level. The significant value of F-statistics means that the alternative hypothesis is compatible with observed data.

5.CONCLUSION

The objective of this study is to determine the impact of gender on corporate boards, that is having women on board of directors and the financial reporting quality associated with it. Based on the results obtained, it is found that there is a significant negative relationship between female director and the level of EM as a proxy of financial reporting quality. This implies that having female director on corporate board is a good mechanism in mitigating EM in Malaysia. This study sheds further light on the importance of the presence of a female director on corporate board may affect management decisions and financial reporting quality in a positive way. Thus, this study is accepting H1 hypotheses. Meanwhile, control variable firm debt to equity ratio and return on equity are significantly related with EM. Consistent with previous literature, this research contributes to the existing literature that women are more risk averse, cautious, and ethical than men. The findings, therefore, suggest and sheds further light on the importance of having women on corporate boards and the positive outcomes that are associated with it. Therefore, gender diversity on the board should be more strongly emphasized and their presence on the board may further enhance public confidence.

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Theory of Planned Behaviour, Personality Trait and Cyberbullying Behavioural Intention on Social Media among Adolescents: Scenario During COVID-19 Movement Control Order (MCO) in Malaysia

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ABSTRACT

The application of social media in the modern digitalisation has increased the existence of new form of bullying known as cyberbullying. During the pandemic Covid-19 situation and movement control order (MCO) in Malaysia, social media has become the main platform used for cyberbullying followed by mobile phones, online messaging and chatroom. Furthermore, past studies mainly focusing on cyberbullies that involved classmates and teenagers that caused psychological effect such as depression and emotional breakdown. However, few studies have been conducted among adolescents and studies which include personality traits towards cyberbullying using social media is still remain unexplored. Therefore, this study aims to examine the influence of attitude, subjective norms and perceived behavioural control on cyberbullying behavioural intention on social media among adolescents and the mediating effect of empathy between these variables. A total of 217 questionnaires have been collected and analysed through Structural Equation Modeling (SEM) with the use of Partial Least Square approach (PLS) and findings showed that attitude, perceived behavioural control and empathy have a significant effect towards cyberbullying behavioural intention on social media while subjective norm is insignificant. This study shall contribute further understanding on the characteristics of cyberbullies among adolescents by including personality trait of empathy towards cyberbullying intention using social media. In addition, this study shall create further awareness and prevention on cyberbullying behavioural intention among society by strengthening the existing rules and regulations.

Keywords: cyberbullying; theory planned behaviour (TPB); empathy; digitalisation

1. INTRODUCTION

The world of digitalisation nowadays has led the society to communicate with each other by relying upon online networking specifically on social media using smartphones. However, an excessive used on smartphones may increase cyberbullying cases and eventually towards psychological effect among the society. Cyberbullying involved any behaviour performed through electronic or digital media by individuals or groups that repeatedly communicates hostile or aggressive messages intended to inflict harm or discomfort on others (Camerini, Marciano, Carrara & Schulz, 2020). According to Brewer and Kerslake (2015) cyberbullying is a new type of bullying activities due to advancement of digital technology as compared to traditional bullying. In Malaysia, issues on cyberbullying have become a worsening trend whereby almost 70% of the Malaysians are using social media as the platform in bullying others and the cyberbullies are mainly from teenagers and adolescents (IPSOS, 2018). However, the variability in the reported prevalence of experiencing cyberbullying, the prevalence rates suggest that for some adolescents experiencing cyberbullying is a regular occurrence and, as such, it is important to understand the motives behind engaging in cyberbullying behaviours (Steer, Betts, Baguley & Binder, 2020). The impact of cyberbullying can cause serious negative outcomes to the person that being bullied such as traumatised, depression, anxiety, sleeping and eating disorder and even commit suicide (Privitera & Campbell, 2009). Due to the COVID-19 pandemic since early 2020, the Malaysian government has imposed the movement control order (MCO) and the people are required to

stay at home for a long period of time. It is predicted that the trend and reported cases of cyberbullying during the MCO will be increased. This will lead to the increase of cyberbullying cases via WhatsApp, Facebook, Twitter, Instagram and many other downloadable applications (Rashid & Mohamad, 2016; Johanis, Abu Bakar & Ismail, 2019). Past studies mainly focusing on cyberbullying among young generation and students but lack of coverage on adolescents with the element of personality traits as mediating effect. Hence, the objective of this study is to examine the influence of Theory Planned Behaviour (attitude, subjective norm and perceived behavioural control) on cyberbullying behavioural intention using social media among adolescents in Malaysia during the movement control order (MCO) and the personality trait of empathy as the mediating effect. This study shall contribute further understanding on cyberbullying intention among adolescents in Malaysia and the significant effect of TPB with empathy as mediation.

2.Literature Review

2.1 Cyberbullying behavioural Intention on Social Media during MCO in Malaysia

Cyberbullying is most prevalent in the ‘online’ generation, which predominantly consists of children and adolescents (Kowalski, Limber & Agatston, 2012). While technology continues to advance and becomes increasingly available in less developed countries, the number of individuals influenced by cyberbullying is predicted to increase. Rising prevalence of cyberbullying, combined with a paucity of available information and the suggestion that those responsible for adolescent welfare may be ill equipped to address the issue, highlight the importance of investigating the cyberbullying experience (Brewer and Kerslake, 2015). Therefore, cases on cyberbullying in Malaysia among adolescents are expected to be increased during the MCO period due to the increase of use of technology on social media platforms.

2.2 Theory Planned Behaviour (TPB)

TPB was evolved from the Theory of Reasoned Action (TRA) that was proposed by Icek Ajzen in 1985 (Ajzen, 1991). The three belief-based concepts such as attitudes, subjective norms and perceived behaviour control (PBC) are the main factors that an individual’s intention to engage in certain behaviour (Pan & Truong, 2018). According to Jafarkarimi, Saadatdoost, Sim and Hee (2017), victims that are being cyberbullied multiple times via a digital platform will have negative impacts in their life. Therefore, cyberbullying is considered as an unfortunate event that occasionally done and thus be referred to as a behaviour. Hence, in order to predict an individual’s intention towards cyberbullying, TPB can be used as a theory that has higher tendency to predict actual behaviour (Ajzen, 1991).

2.2.1 Attitude (AT)

Attitude towards behaviour emerge from behavioural beliefs that produce a favorable or unfavorable evaluation of certain behaviour (Ajzen, 2013). Attitude depends on individual’s beliefs to act either the feeling is a positive or negative effect toward an object (Fishbein & Ajzen, 1975). Heirman and Walrave (2012) opined that attitude become an important determinant of cyberbullying intention. In their study, adolescents’ attitude was examined to predict their motivation to engage in cyberbullying and revealed that adolescents’ attitude become a vital predictor to perform cyberbullying. Besides that, Panumaporn, Hongsanguansri, Atsariyasing, and Kiatrungrit (2020) stated that bystanders’ attitude can lead to cyberbullying either to join or to ignore it based on their study that revealed 304 participants who were bullies had positive attitude towards cyberbullying intention. Meanwhile, Rashid, Mohamed and Azman (2017) investigated undergraduate students’ which majority of them were internet users that are highly exposed to cyberbullying. They found that undergraduate students’ attitude become the second most important predictor to perpetrate cyberbullying. On the contrary, Jafarkarimi et.al (2017) investigated 96 students in Universiti Teknologi Malaysia by using a scenario-based and revealed that the role of attitude showed insignificant effect towards cyberbullying intention. Furthermore, Lazuras, Barkoukis, Ourda and Tsorbatzoudis (2013) observed that empathy can influence individual’s attitude and decision to engage in cyberbullying directly or indirectly. Therefore, it can be hypothesised that

H1: There is a positive relationship between attitude towards cyberbullying behavioural intention on social media.

2.2.2 Subjective norms (SN)

Subjective norms refer to how people close to us such as families and friends influence our decision making. Ajzen (1991) defined subjective norms as “perceived social pressure to perform or not to perform the behaviour”. Heirman and Walrave (2012) examined the adolescents’ subjective norm to predict their behavioural intention of cyberbullying and found out that subjective norm was less important than attitude due to negative social pressure showed less intention to engage in cyberbullying. Furthermore, Yang, Lu, Chen and Sun (2019) interviewed a group of teenagers to understand how normative factors influence cyberbullying on social networking sites. They concluded that subjective norms have a positive effect on adolescents’ behaviour towards cyberbullying intention. Peer-related environmental factors significantly associated with cyberbullying perpetration and victimization include social standing, popularity, social acceptance, and perceived social presence (Camerini et al., 2020). In contrast to previous study, Rashid, Mohamed and Azman (2017) opined that subjective norm become more important construct to engage in cyberbullying which showed that perceived social pressure influence individual’s intention to perform cyberbullying via cyber space. In addition, Jafarkarimi et al. (2017) explained that subjective norm was the idea of those important people for the individual and their perception about how they evaluate the behaviour. Their study concluded that the effect of subjective norms on cyberbullying intention was significant but suggested that in different circumstances the role of subjective norms can be altered. However, personality trait of empathy can play an important role to influence individual’s decision to engage in cyberbullying directly or indirectly (Lazuras et al., 2013). Therefore, it can be hypothesised that

H2: There is a positive relationship between subjective norm towards cyberbullying behavioural intention on social media.

2.2.3 Perceived Behavioural Control (PBC)

According to Smith (2015), PBC is an extent of which individuals’ confidence level and determination to achieve specific actual behaviour in accordance to the perceived easiness or difficulty of an act to be completed (Smith, 2015). Consequently, the level of confidence emphasised by PBC would be affected due to the opportunity of chances and possessions to perform an action (Anggraini & Siswanto, 2016). Hence, Sasson and Mesc (2016) revealed that PBC has a positive influence on risky online behaviour intention and Festl (2016) revealed that there is a positive influence between PBC and cyberbullying behaviour intention. Hence, the study showed a high level of PBC could lead to higher cyberbullying intention. In contrary, Rashid, Mohamed and Azman (2017) found that PBC was not significantly related to toxic behaviour (e.g., cyberbullying intention). However, PBC does not significantly affect cyberbullying behaviour based on findings conducted by Adekoya (2016). This study was presented without providing any valid reason and justification of the research findings. Hence, it can be hypothesised that

H3: There is a positive relationship between perceived behavioural control towards cyberbullying behavioural intention on social media.

2.3 Personality trait of empathy (E)

Empathy can be defined as sharing another person’s emotional state that involves both an emotional and a cognitive dimension (Eisenberg et.al, 2002). Furthermore, empathy is defined as the ability to understand and share another person’s emotional state or context (Cohen & Strayer, 1996). It also enables a person to validate others’ emotions (Wondra & Ellsworth, 2015) and it seems to have some associations with cyberbullying (Doane, Pearson & Kelley, 2014). According to Cleempunt, Vandebosch, and Pabian (2014), the lower level of emphatic concern could be an important factor of a person participate in cyberbullying behavioural intention and empathy was found to be a significant predictor of cyberbullying perpetration. However, Wigati, Diponegoro and Bashori (2020) found that

empathy was significantly negative roles towards cyberbullying behavioural intention among high school students in Merangin, Jambi. In line with the study from Yuan, Liu and An (2020), showed that empathy has a mediating role towards cyberbullying behaviour intention. Precisely, the result among Chinese Junior High School students showed the empathy skills would be influenced by others factors of cyberbullying behavioural intention. Hence, it can be hypothesised that

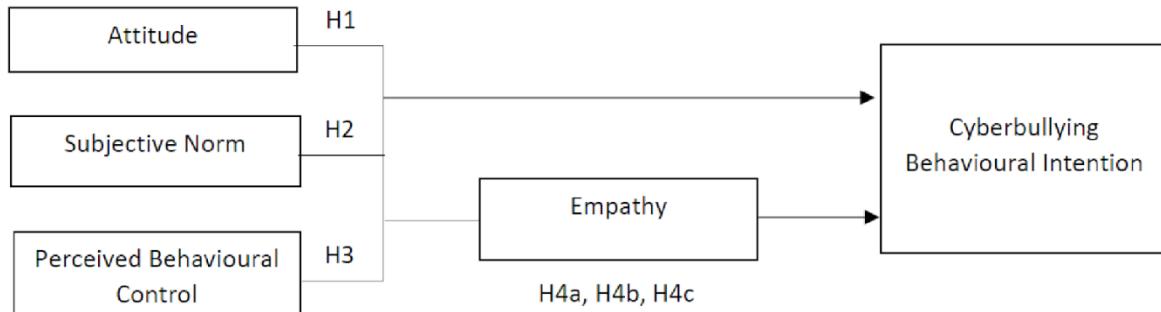
H_{4a} : There is a positive relationship between attitude and empathy towards cyberbullying behavioural intention on social media.

H_{4b} : There is a positive relationship between subjective norms and empathy towards cyberbullying behavioural intention on social media.

H_{4c} : There is a positive relationship between perceived behavioural control and empathy towards cyberbullying behavioural intention on social media.

3.CONCEPTUAL FRAMEWORK

Figure 1. Conceptual Framework



Source: Self-developed for the study

4.Research Methodology

A survey questionnaire was developed for this study and the construction of questionnaire was based on the three main beliefs that highlighted by Ajzen (2013) which are behavioural beliefs (attitude), normative beliefs (subjective norm) and control beliefs (perceived behavioural control) was developed including personality trait of empathy as the mediating effects in this study. This survey is divided into section A on demographic data and Section B on psychometric data using 5-point Likert-type scale between strongly disagree (1) to strongly agree (5). A random and convenient sampling techniques were used for distributing the survey mainly in West Peninsular of Malaysia (Selangor, Penang, Ipoh and Johor Bahru) and a total of 217 out of 230 respondents among adolescents aged between 18 to 45 years old (58 males and 161 females) were successfully collected and usable to conduct this study. According to Sekaran and Bougie (2012), convenience sampling was the most easily accessible respondents to provide the information and therefore, Google form link of the survey questionnaires were sent to respondents via social media platforms. Data collected are being analysed through Structural Equation Modeling (SEM) with the use of Partial Least Square approach (PLS) and the results of study such as R-square values, reliability and structural model tests are provided in the following chapter.

5.DATA ANALYSIS

Table 1 below shows the descriptive results on the demographic background and general information of respondents of this study. Based on these results, it shows that the respondents are spending hours of time at home by accessing the social media platforms i.e., Facebook and Instagram frequently (more than 10 times per day) as their leisure time during the pandemic and MCO. Due to this restriction, majority of the female respondents are having experience of being bullied over the social media.

Table 1. Demographic background

Items	Results
Social media platform	Facebook = 42%; Instagram = 30%; YouTube = 15%
Frequency login to social media	More than 10 times per day = 42%
Purpose of using social media	Leisure time = 45%; News update = 33%; Socialising = 17%
Experienced being cyber bullied	Yes = 87%; No = 13%

Table 2 below highlights on the R-square values which are more than 40% of the variables can be explained to the behavioural intention and empathy.

Table 2. R-square values

	R-square
Behavioural intention	0.461
Empathy	0.563

Furthermore, Cronbach's alpha value for each construct was generated and the results are shown in Table 3 below. From this test, the alpha level that more than 0.9 is considered as excellent reliability, from 0.8 until 0.9 is very good reliability, from 0.7 until 0.8 is considered as good reliability, from 0.6 until 0.7 is considered as moderate reliability, less than 0.6 will be consider as poor reliability (George & Mallery, 2003).

Table 3. Reliability Analysis Result

Variables	Cronbach's Alpha
Attitude (AT)	0.817
Subjective Norm (SN)	0.883
Perceived Behavioural Control (PBC)	0.802
Empathy (E)	0.866
Cyberbullying Behavioural Intention (CBI)	0.888

Table 4. Result of the Structural Model

Variables	Sample Mean (M)	Standard Deviation	T Statistics	P Values	Hypotheses
AT on CBI	0.213	0.08	2.711	0	H_1 Accepted
SN on CBI	0.026	0.045	10.028	0.597	H_2 Rejected
PBC on CBI	0.587	0.08	7.338	0	H_3 Accepted
AT on E towards CBI	0.144	0.054	2.71	0	H_{4a} Accepted
SN on E towards CBI	0.018	0.031	0.528	0.597	H_{4b} Rejected
PBC on E towards CBI	0.401	0.078	5.088	0	H_{4c} Accepted

Based on Table 4 above, it shows the results of relationship between three independent variables on the mediating variable and cyberbullying behavioural intention as the dependent variable for this study. AT and PBC have a significant relationship on CBI ($p < 0.05$) and therefore H_1 and H_3 were accepted. In addition, AT and PBC ($p < 0.05$) have a significant relationship on empathy towards CBI ($p < 0.05$), hence H_{4a} and H_{4c} were accepted. However, insignificant result ($p > 0.05$) was identified for SN on CBI and therefore, H_2 is rejected. Furthermore, the results also shown that SN and E towards CBI is insignificant ($p > 0.05$) and therefore H_{4b} is rejected. Overall, all hypotheses are accepted except for H_2 and H_{4b} are rejected in this study.

6.Discussion and conclusion

There were consistent results identified with the past studies on attitude and PBC. Panumaporn et.al. (2020) stated that bystanders' attitude can lead to cyberbullying had positive attitude towards cyberbullying intention. In addition, Rashid, Mohamed and Azman (2017) also identified that majority of cyberbullied were internet users that are highly exposed to cyberbullying intention. Heirman and Walrave (2012) opined that attitude become an important determinant of cyberbullying intention and revealed that adolescents' attitude become a vital predictor to perform cyberbullying. This can be further supported by Brewer and Kerslake (2015) that adolescents with low levels of self-esteem and empathy were most likely to engage in cyberbullying and suggests that individuals who perpetrate cyberbullying display a similar lack of empathy to traditional bullies. Meanwhile, Sasson and Mesc (2016) revealed that PBC has a positive influence on risky online behaviour intention and Festl (2016) revealed that there is a positive influence between PBC and cyberbullying behaviour intention. Hence, this study includes the role of empathy as the mediating effect between attitude and PBC towards CBI and the results are significant.

However, empathy does not mediate between subjective norm and cyberbullying behavioural intention. The probable reasons are due to the norm of cyberbullies that ignoring the influence of friends and family that lead to insignificant results towards CBI. Furthermore, due to the age factors of the majority respondents range from 18 – 45 years old have made them matured enough to make their own decision making and opinion without interference from others in cyberbullying. This can be further supported by Camerini et.al., (2020) that peer-related environmental factors significantly associated with cyberbullying perpetration and victimization which include social standing, popularity, social acceptance, and perceived social presence. Lastly, due to technological advancement in smartphones and applications, most of the respondents owned social media accounts and the tendency to respond behaviourally towards other unknown users on social media would be more significant and prevalence as compared to close family and friends.

This study shall further contribute on the literature review and understanding on TPB, personality trait of empathy towards CBI. In addition, by having these results, it is expected that the relevant regulatory bodies shall consider to further strengthening the existing rules and regulations with the involvement of various technology and communication key players in curbing the cyberbullying activities. By providing sufficient awareness and information in educating the public, it shall increase the consciousness towards cyberbullying activities among society. Limitation of study on the literature review of personality traits are difficult to be found and the influence of technology application is not being applied in this study to further explore on the cyberbullying behavioural intention. For future studies, it is recommended to include other components of empathy such as cognitive and affective, other personality traits of self-esteem and loneliness as the mediating effect that would give better insight towards CBI. Furthermore, other theories such as Technology Acceptance Model (technologies and social media applications) and Social Cognitive (psychology, education and communication) can be applied to discover the influence of technology applications and psychological effects in studying the behavioural intention of cyberbullying.

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The Effect of Board Characteristics on ESG Score: Malaysian Evidence

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ABSTRACT

This study aims to investigate the relationship between board characteristics and ESG score among Malaysian listed firms. The board characteristics consist of board size, board independence, tenure, and board diversity are examined to influence ESG score. This score is significant for managers and investors who are considering ESG issues in their decision-making process. The study fills a research gap in this area by developing hypotheses based on the agency theory and stakeholder theory and testing them using multiple regressions. The data set includes ESG data for fifty-five (55) firms for the period 2017-2019. The results indicate that board independence is significantly positively associated with ESG score. Other board characteristics, however, is not associated with ESG score. Several control variables, namely firm size, profitability, and leverage have been taken into consideration in the study, and it found that all control variables have a significant impact on ESG scores. This study contributes to the literature on corporate governance and a firm's sustainability by demonstrating that the board characteristics affect the firm's ESG scores.

Keywords: board size; board independence; board tenure; board diversity; ESG score

1. INTRODUCTION

The success of the firm depends on the board of directors, given that they are responsible for approving and overseeing the implementation of strategic goals, the system of governance and creating company culture (Birindelli et al., 2018). In another perspective, investors and stakeholders became more aware of non-financial reporting and cared about financial results and societal expectations; therefore, resource allocation became more complex. Firms are forced to allocate their resources to environmental and social issues and invest for better financial results and growth. Environmental, social and governance (hereafter ESG) is the quantifiable measure of a company's sustainability and societal impact, using metrics that matter to investors. There are three ESG score aspects: environmental, social, and governance in a single score. Each aspect has its indicators to assess the corporate sustainability performance. Using a new measurement that has incorporated three aspects of corporate social responsibility (hereafter CSR), the ESG score can be used by investors as a tool to evaluate corporate sustainability performance more comprehensively (Zuraida et al., 2016). Given the significant impact of ESG on the company's sustainability performance, this study investigates how board attributes; board size, board independence, tenure, and diversity affect the ESG score of Malaysian listed firms.

2. LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

2.1 Size of the Board of Directors

Board size represents the total number of directors' seats in the corporate box. The size of the board has an impact on the independence of the board and the quality of corporate governance. Smaller boards are more effective in decision-making and have more individual responsibility regarding their monitoring obligation (Ahmed et al., 2006). However, due to the lack of diversity, it is less likely that

the board will focus on ESG policy (Bear et al., 2010). On the other hand, larger boards bring in more diversity (gender, expertise, and education), leading to a broader perspective and a thought-out policy (Rao & Tilt, 2016), which positively influences ESG performance. Therefore, the following hypothesis is derived:

Hypothesis 1: There is a positive relationship between the size of the Board and the ESG score.

2. Independence of the Board of Directors

An independent board is an essential mechanism to control managers' actions and ensure shareholders' goals are accomplished. In addition, independent directors often have links with stakeholders, making it easier to attract assets that contribute to a better relationship with stakeholders (Mallin & Michelon, 2011). If the board is well-balanced, the differences in interest give a better chance of providing the right advice for the short and long run of the company (Ismail & Latiff, 2019). The influence of independent directors on sustainability performance is positive in multiple scholars (Zhang et al., 2013), (Shaukat et al., 2016), (Johnson & Greening, 1999). The study of Johnson and Greening (1999) concluded that independent directors act in the long-term interest of shareholders. Considering these divergent views, we propose the following hypothesis:

Hypothesis 2: There is a positive relationship between the independence of the Board of Directors and the ESG score.

3. Board Tenure

Tenure measures the number of years the current CEO has served as the firm's CEO in a year. According to Shiah-Hou dan Cheng (2012), tenure is the length of time a director holds the office of a director in an organization. Existing literature reveals mixed results on tenure diversity; for example, Handajani et al. (2014) contend that longer service of board members lowers the CSR activities. Harjoto et al. (2015) found an insignificant influence of tenure diversity on CSR strength. Hafsi and Turgut (2013) also presented an insignificant relationship between tenure diversity and CSR performance. Therefore, the following hypothesis is proposed:

Hypothesis 3: There is a positive relationship between board tenure and ESG score.

4. Diversity

Researchers are interested in exploring the roles of female directors from various perspectives (Haque, 2017), especially in their involvement in the social and environmental context. Based on Huse and Grethe Solberg (2006), female directors are more involved, diligent, and committed and less self-oriented in making any decision for the company, thus enhancing the effectiveness of the board or its directors. Females are more likely to participate in environmental programs that would enable them to contribute to social, environmental, and sustainable development. Insofar, the following hypothesis was conducted:

Hypothesis 4: There is a positive relationship between the diversity of board members and the ESG score.

3. RESEARCH METHODOLOGY

1. Sample Selection and Data Sources

Data for ESG scores are retrieved from Refinitiv Eikon Datastream. Market participants can use ESG scores as information that incorporates all relevant information about the company's sustainability. We obtained a final sample of 55 listed Malaysian firms, for which data on ESG score was available on the date of analysis. Refinitiv is also used for financial information, while governance data are hand-collected for each firm from the annual governance report.

2. Dependent Variable

To test our hypothesis, we used data on ESG scores (ESG) from Refinitiv to measure ESG performance, commitment, and effectiveness of a company across ten main themes (emissions, environmental product innovation, human rights, shareholders, etc.) based on publicly reported data.

3. Independent Variables

The independent variables include board size, board independence, board tenure, and diversity. This study measures board size (BSIZE) as the total number of board members at the end of the fiscal year (Arayssi et al., 2020), board independence (IND) as the percentage of independent board members (Arayssi et al., 2020), board tenure (BTEN) as the average number of years each board member has been on the board (Khan et al., 2019) and board diversity (DIV) as the percentage of females on the board (Arayssi et al., 2020; Isidro & Sobral, 2015; Valls Martínez et al., 2019)

4. Control Variables

To avoid model misspecification, we control for additional variables that could influence the ESG score. Therefore, the analysis includes several control variables representing the corporate size (SIZE), profitability (PROF), and leverage (LEV).

4. EMPIRICAL RESULTS AND DISCUSSION

1. Regression Analysis

This study used multiple regression analysis to examine the impact of board characteristics on ESG score using the following regression model after controlling for the company size, profitability, and leverage:

$$ESG_{it} = \alpha + \beta_1 BSIZE_{it} + \beta_2 IND_{it} + \beta_3 BTEN_{it} + \beta_4 DIV_{it} + \beta_5 SIZE_{it} + \beta_6 PROF_{it} + \beta_7 LEV_{it} + \varepsilon$$

Table 1. Multiple Regression.

	Coefficients	t Stat	P-value
Intercept	-11.591	-0.928	0.355
BSIZE	0.478	0.864	0.389
IND	0.367	4.130	0.000***
BTEN	-0.265	-1.155	0.250
DIV	0.148	1.587	0.115
SIZE	1.457	3.179	0.002***
PROF	0.349	2.610	0.010***
LEV	0.023	2.230	0.027**
Adj. R sq	0.195		
F value	6.658		

***significant at 0.01 level, ** significant at 0.05 level, * significant at 0.10 level

Table 1 indicates only board independence has a positive and significant relationship with ESG score. Nevertheless, all control variables have a significant impact on the level of ESG score.

5.CONCLUSIONS

The recent global financial crisis has made CSR performance an increasingly critical aspect of firms' business strategy and stakeholder management. Firms are continuously receiving pressure from their stakeholders and must strategically address their ESG concerns to manage the pressures from various stakeholders. Therefore, this study investigated the influence of board characteristics on ESG scores. We relied on the ESG scores released by Refinitiv Eikon Datastream. Using a sample of 55 firms and applying empirical tests, we find that the percentage of independent directors seems to be a substantial factor to explain the ESG score. This variable is statistically significantly and positively associated with

the ESG score. Other board characteristics, however, is not associated with ESG score. In this study, several control variables, namely firm size, profitability, and leverage, have been taken into consideration, and it found that all control variables have a significant impact on ESG scores.

This paper has some limitations. First, the ESG score constructed by Refinitiv Eikon Datastream examining only publicly available information for public listed companies, our theoretical and empirical findings probably be more applicable to public listed companies, as opposed to exclusive ones. Secondly, we analyze board characteristics by considering the board size, independence, board tenure, and diversity. Future studies might be based on other features, such as board background and skills, board-specific skills, board meetings, audit board committees and CSR committees. Yet, the sample size could be extended. Finally, our data is limited to Malaysia only, and further studies should explore the growth of ESG across Asian and other developing countries to integrate the findings of this study and formulate regulatory frameworks that allow better transparency and hence contribute to long-term stakeholder value.

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Project Cash Management to Optimize Performance of a Medium Size Construction Company

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ABSTRACT

Project performance management is crucial in construction industry. One of the successful key factors is to be able to manage project funding. In a medium size construction company, the problem related to project funding management is even more critical since the resources are limited. This can lead into a sustainability problem in the Company. Our study focuses on a medium size construction company which is growing rapidly but facing problem related to its cash flow management and also in its project management. This study used quantitative and qualitative methods to better understand the business process and utilized the three wheels of profit planning to better improve the project funding management. The novelty of this research is relevant for any medium-sized construction companies seeking to increase their project performance to compete in the industry. This research is expected to contributes to the lack of data related to the small-medium size companies and can also give future research insights.

Keywords: construction project; medium-size company; project cash management; project performance; profit plan

1. INTRODUCTION

The prospect of Indonesian construction industry makes it appealing and competitive with approximately 130 thousand construction firms operating their businesses in Indonesia. The Ministry of Public Works and Public Housing (PUPR ministry) is committed to increase the involvement of middle and small-size contractors with medium-size projects. Many of them is able to compete in some medium-size projects but have been faced with problems related to management control and allocation of their limited resources. The tight deadline, delayed payments and administrative aspects in the government projects makes the cost of doing business and project cash management becomes crucial for the Company to optimize their performance in this competitive industry.

The methodology of this study used 3 wheels of profit planning to analyze the Company's resource allocation, internal control, and response to project dynamic situation. The study used quantitative and qualitative analysis by reviewing the company's financial performance, understanding the company's business process and the project dynamic situation. The deep analysis was carried out by gathering data from a forum group discussion to understand the project management process and success factors better. Using the 3 wheels of profit planning will ensure improvements and new ways of responding to the dynamic environment in order that the projects can be developed in a controlled way.

This research aims to identify variables that can help the Company to improve its project cash management. This study tries to bridge between the management control gap and performance evaluation in medium-sized companies. The study also contributes to the insufficient research data of medium-sized companies in construction industry and also elevates the knowledge relating to project management, business process, and management control in a medium-sized construction company.

2. Literature review

1. Project Management

Project have a life cycle and each deliverability to a particular project is unique since, in a way, the nature and condition of the projects differ from each other (Mubarak, 2015). Project management is the discipline of planning, organizing and managing resources to bring about the successful completion of specific project goals and objectives (Vanhoucke, 2013). The Company's internal resources that relate to the project include workforce resources, financial resources and other resources referring to the project works. Construction organizations consider long term non-financial performance criteria such as satisfaction of key stakeholders in terms of quality products and better services, timely delivery of products, cost optimization, better technical support and so forth to measure their performance and lead to sustainability of the organization (Tripathi & Jha, 2018).

2. Management control system

Management control system is a means of gathering and using information to aid and coordinate the process of making planning and control decisions throughout the organization and to guide employee behavior (Bhimani, 2008). Performance measurement and control system purpose is to set direction, make strategic decisions and achieve desired goals (Simons, 2005). The appropriate performance measurement and control system can assist the top management personnel in checking the execution of their business strategy, and help them to correlate the targeted results, as well as the actual results to their strategic goals. The management needs to balance growth, profit and control in developing business strategy. Ten essential knowledges needed by the management in order to deliver a successful project management which are project integration, scope, time (schedule), cost, quality, human resources, communications, risk, procurement and stakeholders (Project Management Institute, 2017).

3. Three Wheels Profit Plan

The knowledge gaining of cash flow management was of greatest importance in the SMEs' success (Wadesango, 2019). Simons et al stated that profit plan is reserved for units that generate profits and are held accountable for both revenues and expenses. The preparation of profit plans and budgets provides information on the economic resources available to the Company and helps managers evaluate the trade-offs related to it. To design a profit plan, we must perform three distinct analysis which are the profit wheel, cash wheel and ROE (Return on Equity) wheel. The foundation of the profit plan is a set of assumptions about the future. The three wheels turn simultaneously. Adjusting or changing any assumptions or number on any of the wheels causes a change in all the other variables. Businesses must focus on collecting cash receipts to improve sales revenue so as to improve profitability of the businesses (Kakuru., 2015). The profit plan provides information on the economic resources available to the Company and helps the management to evaluate the trade-offs facing them (Simons, 2005).

3. Research method

1. Research Framework

This research used mixed methods for the analysis. The qualitative aspects were applied through a forum group discussion and interviews with the key personnel to better understand the Company's business process, while SWOT analysis and review of the financial aspect were carried out by using quantitative analysis. We focused on the 3 wheels of profit planning as a way for the Company to achieve its strategic objectives and optimize its performance. We forecast the operating expenses and calculated the expected profit. We also tested our key assumptions in our profit plan and analyzed the feedback loop from the profit plan and afterwards we performed sensitivity analysis by setting 3 scenarios for the Company (most likely, optimistic and pessimistic scenario).

2. Research Unit Analysis

This research focused on a single unit analysis which is the Company, especially on a medium size construction company engaged in a yearly asset management contract with one of the SOE (State Owned Enterprise). The Company focuses on civil building and building area in the asset management contract. The Company was having problem related to the cash management and it was challenged to improve its limited resources allocation.

4. Results and Discussion

1. Financial Performance

The Company has a yearly revenue between Rp 10 billion and Rp 50 billion. This research focused on their projects in 2019. We obtained the Company's financial statement for the year 2017 – 2019. Based on the data related to the revenue, we noted that there was a huge increase in the revenue in 2019 compared to the previous years. The gross profit related to the SOE project is relatively lower when we compared it to the other projects in the Company. The procurement process plays an important role in the Company as material usage contributes most of the Company's Cost of Goods Sold. The operating expense is mainly related to the payment of remuneration to office staff and the remaining expenses are mainly related to operational activity. The Company's current assets are mainly cash and cash equivalent and account receivables. It was noted that the Company's cash and cash equivalent are decreasing over the years. In 2019, the account receivables contributed 48,49% from their total current assets. As the payment method in the construction industry (especially with the SOE) is sometimes a bit delayed, it is crucial for the Company to analyze their current ratio and focus on project cash management. The Company is financing all their projects using their equity. Currently, they are being conservative by only taking projects that they can finance internally and they are not obtaining any debt. This is quite the contrary with the common practice in the construction industry whereas many of the projects is usually financed by using a combination of equity and debt. The Company is limiting their opportunity of expanding their project in terms of value and aware that this later on can be an obstacle for them to grow in the future. To get a better analysis, we added several ratios as follow:

Table 1. The Company's Cash Conversion Cycle Days

Cash Conversion Cycle Days	2017	2018	2019
Inventory conversion period	0	219	32
Receivable conversion period	134	79	99
Payable conversion period	17	51	5
Cash conversion cycle days	117	248	125

2. SWOT Analysis

The Company's strengths are their strong bond and corporate value which create a very positive working environment. They have a great and loyal customer database which helps them to grow through customer references. Their employees' recruitment is also mainly through employee references (especially for blue collar which is crucially needed). In terms of weaknesses, we noted that the Company do not have proper management control and their performance measurement is focus on only 2 aspects which is the time and quality. The Company do not set financial target and there is no cash project management in place. They are being conservative in taking on projects which slower down their growth since they pass project tender in which they cannot finance internally. When we analyzed the external factors, being involved in SOE project has created a big opportunity for the Company to later on develop their competencies. They will be able to compete in an even bigger scale of projects with their enhance competencies and client portfolio later on. However, with big projects, the Company is faced with the threat to properly manage their cash flow.

3. Three Wheels Profit Plan Analysis

We noted that there is no measurement system that is in line with Company's financial target. The current performance measurement is mainly focus on the other 2 components in the value triangle which is the quality and the time since this is what drives the Company's growth in the past. The Company measure their project financial target using their Bill of Quantities and only does it in the end of project since they are quite slow in collecting the project data. The Company need to develop performance measurement system that incorporated their financial target and also business strategy. Maintaining a proper control over their working capital is crucial for improving their performance. It is noted that the Company slowly begins to invest in updated machinery for their projects. Since project is very dynamic, the capital expenditure needs to be managed properly. Investing in proper accounting system software can help the Company to better and faster gather data needed for performance evaluation. Developing

a proper budget (such as revenue budget per project) will help to manage the progress of their project performance in terms of cost, time and quality. They are being conservative in taking on projects (in terms of capital capacity) so it is crucial for them to manage their cash flow properly. We estimated the level of sales based on data for year 2021 and 2022. The Company's Profit Plan is as follow:

Table 2. The Company's Profit Plan (in IDR million)

Descriptions	2021 F	2022	2022 O	2022 P
Sales	34.131	42.704	63.682	25.965
COGS	25.598	32.028	47.762	19.474
Gross Margin	8.533	10.676	15.920	6.491
Salary & remuneration	321	337	337	337
Depreciation	44	85	85	85
Others	200	238	325	168
Total Operating Expenses	565	660	747	590
Operating Profit	7.968	10.016	15.173	5.901
Others & tax	13	13	13	13
Profit Before Tax	7.955	10.003	15.160	5.888
Income tax	1.989	2.501	3.790	1.472
Net Income	5.966	7.502	11.370	4.416
Descriptions	2021 F	2022	2022 O	2022 P
Assets				
Cash & cash equivalent	2.447	5.995	188	18.131
Account receivables (A/R)	13.652	17.082	25.473	10.386
Inventories	2.496	3.123	4.658	1.899
Other Assets	580	580	580	580
Fixed assets, net	136	136	136	136
Total Assets	19.311	26.916	31.035	31.132
Liabilities				
Account payables (A/P)	408	510	761	310
Other payables	30	30	30	30
Shareholders' Equity	18.873	26.376	30.244	30.792
Total Liabilities & Shareholders' Equity	19.311	26.916	31.035	31.132

We used the actual 2019 financial statement data and also the 2020 actual revenue as our basis for preparing the Profit Wheel. Afterwards, we estimated the level of sales based on data provided by the management for year 2021 and 2022. We forecast the operating expenses and calculated the expected profit. We also test our key assumptions in our profit plan and analyzed the feedback loop from the profit plan. Finally, we performed sensitivity analysis by setting 3 scenarios (most likely, optimistic and pessimistic scenario). In 2019, the Company obtained the interior asset management contract from the SOE. In 2020, the Company obtained interior and exterior management contract from the SOE. We noted that some of the projects (that the tender is already won) is postponed to be realized in 2022. The 2021 figures are forecast figures based on the Company's performance in 2021. In our scenario for 2022 most likely, the revenues consist of 5% increase from the interior asset management contract from year 2020 and we put the tender won in 2021 to be realized in 2022. In 2022 optimistic scenario, the revenues consist of 5% increase from the interior and exterior asset management contract from year 2020 and also the tender won in 2021 to be realized in 2022. In 2022 pessimistic scenario, the revenues consist only 5% increase from the interior asset management contract from year 2020 and assumed that all the tender that is won is cancelled. To complete the profit plans, we added the asset investment plan in relation to investment on long-term productive assets. We also added upgrade on their software to increase data reporting speed and quality. We moved to the next wheel framework which is the Cash Wheel. Forecasting cash and managing cash inflow and outflow throughout the 3 scenarios can help management to choose whether they want to revise their profit plan by reducing growth or add equity to increase their cash reserves. The last part is the ROE (Return on Equity) wheel. This wheel correlate

with the resources put in the Company that will later on utilize to generate more profit (return) for the shareholders. The Company's ROE Wheel is as follow:

Table 3. The Company's ROE Wheel				
Company's ROE Wheel	2021 F	2022	2022 O	2022 P
ROE	31,61%	28,44%	37,60%	14,34%

We compared the Company's projected ROE with the industry benchmark and also shareholders' expectation. We were using 1 from industry benchmark, 1 private company benchmark and 2 from the Company's competitors as benchmark. The other identified competitors are not listed companies. Comparing to our benchmark data, the Company's ROE is high which means the Company considerably effective in using their equity to generate income. In order to grow better, the Company needs to pay attention to its cash flow management. From our 3 wheels analysis, we noted that the Company needs to pay attention on their account receivables collection since it plays a crucial role in their cash flow management. In addition, finding the best alternative material with better pricing can also help to increase their profitability since material contributes significantly in their expenses. Maintaining a conservative level of growth can help the Company to learn on how to manage their cash flow. Considering current practice, if the Company moves forward with larger projects, they will need to consider investing more in equity or leveraging on short term loan to help them finance their projects. Depending on SOE for growth and learning purposes is good for the Company as long as they also take this opportunity to enhance their client portfolios. Considering also their profitability for taking on future projects and consider the project management metrics to analyze their project success.

5. CONCLUSION

Project is very dynamic and changes in the environment can really impact on the risk assessment of each project which contribute to the project management. The Company needs to pay attention on the way control is applied to better aligned their strategy and target, to streamline it into achievable target that can be measured easily and regularly. They need to match their strategy with opportunity by maintaining a strong cash flow management. Variables needed to improve the project cash management are related to the receivables collection and profitability. Maintaining a conservative level of growth and utilizing the Three Wheels of Profit Planning to analyze and adjust the dynamic situation on their plan can help the Company to better adapt and achieve their target. This paper contributes to the lack of data on a medium size construction company. We noted the limitation of our research related to only using one unit of analysis. Suggestion for future studies to add more than just one unit of analysis.

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The Holistic Perspectives in Covid-19 Impact Analysis: Macro Analysis, Organizational Management, Marketing & Consumer Behaviour

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ABSTRACT

This research is a conceptual study that analyses the impact of Covid-19 on organizational management. The tremendous impact of Covid on the economic sector, business, and all aspects of human life. This research looks at the conceptual and applicable aspects of the policy aspects that have been set by the government. All policies are directed at the resilience of the business sector. The approach used is an eclectic approach. This approach uses a variety of aspects to analyse the implications of the Covid 19 pandemic on businesses. This research focuses on a multi-perspective approach to gain a better understanding of macro perspectives, organizational management, marketing, and consumer behaviour. This approach is analysed through literature study. This study discusses each perspective in order to understand business strategies to deal with the Covid-19 pandemic. The results of this research show that there are very serious business challenges facing the Covid-19 pandemic. Businesses must continue to exist and give birth to new innovations during a pandemic. New business sectors will emerge with new opportunities and opportunities.

Keywords: Macro Analysis, Organizational Management, Marketing, Customer Behaviour

1. INTRODUCTION

Since it was announced for the first time by the Wuhan Municipal Health Commission (WMHC), Covid-19 has spread to almost all countries in the world. Until the end of 2020, the number of countries and territories have been confirmed cases of the COVID-19 Virus, as many as 221 (worldometers.info/coronavirus). The purpose of this study is to analyze Covid-19 from a macro perspective, organizational management, marketing, and consumer behavior. This descriptive research is expected to be able to find a picture of the impact of Covid-19 from an eclectic perspective involving a macro perspective, organizational management, marketing, and consumer behavior. The eclectic approach was chosen to help explore information that could help shape the picture of Covid-19's impact to be considered in developing the company's business strategy. This approach is used to look at various aspects to see it integratively (Blavoukos, & Bourantonis 2014; Altar et al, 2010; Shuqin Zhu, 2015). The eclectic approach is pluralistic, inclusive, all-encompassing and comprehensive. This study is trying to fill the gap that there is no previously empirical research that has analyzed the phenomenon of pandemic based on multi- perspectives (eclectic)

The organizational management perspective must be built through governance that can meet the challenges of the new industrial revolution and affect the performance of human capital companies (Mancilha & Pinho, 2021). Organizations must change along with the times and technology. This is fundamental to the organization's ability to digitalize business. Understanding the macro perspective is important in formulating business strategies, because this can help companies to consider better business strategies. Regarding organizational management, companies can prepare policies, strategies and programs to carry out business activities better. Marketing aspects are important to understand

because the spearhead for generating profitability is marketing. Companies need to understand the right strategy during the Covid-19 period in order to be able to offer relevant products or services to consumers as a target market. Aspects of consumer behavior are also analyzed. This takes into account a good understanding of the factors that influence consumers in making a decision to buy a product or service. The existence of a pandemic will create many new things in business. This can be seen from the ability to adapt to new changes. This is the interest of this research taken from three perspectives, namely macroeconomics, marketing, and consumer behavior.

This article will thoroughly discuss organizational management to survive during the Covid 19 pandemic. This study will discuss the conceptual side of macroeconomics, marketing, and consumer behaviour. Conceptually, it will be strengthened in terms of policies that have been carried out by the Indonesian government in enforcing restrictions on community activities. This policy was taken after the Covid-19 pandemic occurred. Small Medium Enterprise (MSME) is a vital object most affected in a pandemic situation. The emergence of new habitual adaptations in work such as Work from Home (WFH) and online shopping. This will show new habits in shopping for consumers who are accustomed to the conventional way. An eclectic approach will be used in a comprehensive discussion. This pandemic condition will have impact thoroughly on the organization life starting from the strategic ones into the tactical ones. Therefore, analyzing the pandemic is not analyzed from one perspective, but by the multi perspectives.

Theoretical Perspective

Every company, whether large, medium, or small, will interact with their environment. Since the environment changes very quickly, the company must be able to adjust to the surrounding environment. The corporate environment (business environment) is a force that influences, both directly and indirectly, the company's performance. Company's environment consist of external and internal environment (Galbreath et al, 2020). This helps to analyze competitive values that can be used as material for consumer heterogeneity information (Wijekoon et al, 2021). The external environment includes demography, economy, nature, politics, social and culture while the internal environment, is a force within the company and can still be controlled by the company. Internal environment influences company competency or performance. Covid-19 pandemic is an external aspect that is a factor influencing organizational activities. Basically, changes including Covid-19 in an organization require time, cost, and strength. To successfully deal with these changes, clear and systematic planning is needed which must be done in stages and broad support from various parties involved in changing an organization. One of concept is known as the force-field model which is classified as a power-based model emphasizing power. This approach is used to analyze competitive and sustainable advantages (Sharma et al, 2018). Risk management anticipation can be identified in detail according to the business context. All business processes can be analyzed through from a small flip chart with business changes. Change occurs because of the emergence of pressures on the organization, individual, or group. Changes can occur due to external factors such as competition or the presence of government and internal company policies, namely changes in vision and mission, human resources and leadership. Changes can also occur by strengthening driving forces and weakening resistance to change.

Organizational Management Perspective

During the Covid 19 pandemic some companies moved their entire work process. The process of moving work is accustomed to from the office, but almost everything starts at home. Employees work from home with all limitations in terms of access to facilities and resources. Most of the employees complain about limited access to technology and equipment that is much more complete if all work is done in the office. This will have an impact on changing work patterns and the process of achieving employee performance (Kramer, 2020). Compensation is one component that is feared to be reduced so that it will interfere with the focus of employees in carrying out work completion. This will have an impact on achieving performance in a comprehensive manner. The implication of Covid-19 makes a business organization have to change its business processes. Changes in thinking, work patterns, habits and speed of adaptation are things that must be passed by all organizational components. This organizational change must be done to anticipate an opportunity and a quick adaptation process by all stakeholders. Future obstacles and challenges must be faced with optimism and high confidence.

Collaboration and cooperation between organizational elements will be the success of crisis management governance (Ceresia, 2020). A positive mindset must be instilled regarding the implications of a new work process. This will have an impact on the resilience and sustainability of the organization's business. Crisis management must exist in organizational governance during the Covid-19 pandemic (Correia, 2020). All organizational components must be responsive to think of new work patterns in accordance with the conditions of Covid-19. Creativity and innovation are components needed to implement new work patterns (Arifin, 2020). This will affect the management of the organization comprehensively. The adaptation and pace of new work patterns must be consistently applied to organizational management during the Covid-19 pandemic.

Physical restrictions during the COVID-19 period force employees to do work from their homes. This is regulated in Jakarta Special Capital Governor Regulation Number 33 Year 2020 Article 9 Paragraph 2. The term Work from Home (WFH) finally becomes trending. This terminology is actually not a new concept in organizations. In the concept of human resources, the concept of Work From Home (WFH) is known as telecommuting. This is the use of personal computers, networks, and other communication technologies to do work at home which was originally done at work (Mathis et al, 2015). The COVID pandemic have made people move to working from home (Bolisani et al., 2020). In implementing the Large-Scale Social Restrictions (LSSR) regulations, telecommuting must be carried out by all companies. At first the concept of telecommuting was one of the tools to provide flexible working schedules to companies, now telecommuting is becoming a survival mode for organizations to keep doing activities as usual. The readiness of the organization become a crucial factor. Telecommunications infrastructure must be provided to support job. Organization must invest in digital infrastructure. Management needs to give commitment to all stakeholders during pandemic work process. Digitalization of work is one thing that must be done to start working from home (Savic, 2020; Papouli, 2020).

Macro Economics Perspective

The Covid-19 pandemic has significantly disrupted economic activity and the global financial system. The evolution of the disease and its economic impact is highly uncertain, which makes it difficult for policymakers to formulate an appropriate macroeconomic policy response (McKibbin and Fernando, 2020). Global Purchasing Manager Index (PMI) shows the manufacturing sector and world services contracted at a very low level, the stock price index of advanced economies (advanced economies) and developing (emerging markets) fell sharply, global oil prices represented by WTI and Brent, freefall to the lowest number in history.

The economic fallout from the pandemic has affected certain industrial sectors of the economy and certain population groups disparately and could risk continued labor dislocations as a result of lingering high levels of unemployment not experienced since the occurrence of a major crisis known as the great depression in 1930 (Jackson, 2021). Almost all countries make policies that provide substantial fiscal support for handling this epidemic and preventing economic and financial crises in each country. The fiscal support will be in the form of improved medical facilities and equipment, tax incentives and credit relaxation for businesses, especially Small Medium Enterprise (SMEs), and in the form of direct assistance to the exposed public. The fiscal support varies from 0.7% to 10% of the country's GDP. The response of each country shows that the conditions are extraordinary. Around 193 countries have anticipated the threat of recession and financial system stability, by issuing a total stimulus of around \$ 8 trillion, or almost equivalent to 10 percent of global GDP in Figure 1. Covid-19 began to have a significant influence on the community and business world in Indonesia. Many industries are no longer able to operate, factories are closed, and the Small Medium Enterprise (SMEs) and informal sectors are no longer able to run their businesses. This causes poverty and unemployment rates to be ascertained to increase sharply. Macroeconomic conditions also showed a significant economic slowdown, even starting to show the phase of an economic recession, with a negative rate of economic growth. The 2020 state budget has experienced significant changes; macroeconomic assumptions can no longer be used as a reference.

Indonesia's economic growth in the third quarter of 2020 experienced a significant contraction (Badan Pusat Statistik, 2020). Based on BPS data, the national economy in quarter III-2020 compared to quarter III-2019 grew by -3.49 percent (y-on-y), slowing down compared to the achievements of quarter III-2019 of 5.02. From the production side, the highest growth was achieved by Health Services and Social Activities at 15.33 percent; and Information and Communication 10.61 percent. There has been a shift in the Indonesian economy, where in the third quarter of 2020, health and information sectors grew better than other business fields, it can be said that this is a sector that is in line with the ongoing conditions of the Large-Scale Social Restrictions (LSSR).

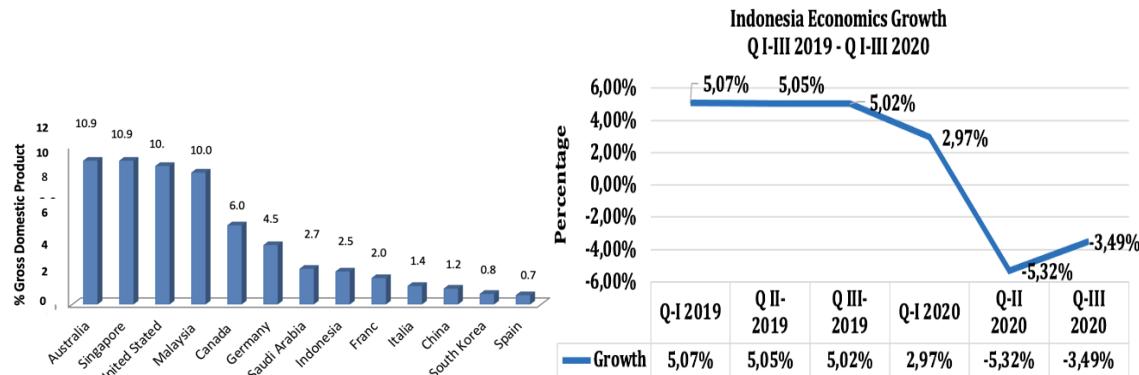


Figure 1.
Comparison of Fiscal Support in Facing Covid-19.

Figure 2.
Indonesian Economic Growth Q1-III 2019 -Q1-3-2021

Likewise with a variety of other macroeconomic indicators, for example inflation, three months, the rupiah exchange rate, oil lifting, oil prices, as well as poverty and unemployment welfare indicators will experience a fairly deep contraction. National macroeconomic indicators, in addition to being influenced by internal factors (domestic) are also influenced by external factors (foreign). The level of fluctuation cannot be fully controlled by the Government. The economic crisis has caused global economic growth is predicted to experience a recession of -2.2 percent (BI, 2020). The development of the global economy shows the risk of a major global recession. This was reflected in the contraction in manufacturing, services, and consumer confidence and resulted in a contraction in world trade volume and falling commodity and oil prices. BI predicts new growth projections will rise again by 5.2 percent in 2021. National economic growth in the third quarter of 2020 was minus 3.49 percent (yoy), far below the same period in 2019 of 5.02 percent. Under the Government scenario, economic growth is in the range of minus 2 percent to 0.1 percent until the end of 2020. All economic indicators and the 2020 State Budget are in a very depressed condition. In fact, it is predicted that economic conditions will be at their lowest point in the second quarter of 2020, given the full implementation of the Large-Scale Social Restrictions (LSSR) and Work From Home (WFH) policies in that period. From data on sector in quarter III-2020, almost all sectors experienced a decline. The biggest decrease experienced by the transportation sector was only able to grow around 16.70 percent, the trade sector by 5.03 percent, mining by around 4.28 percent and the construction sector by 4.52 percent. Whereas under normal conditions, prior to Covid-19, in the same period last year (quarter III-2019), these sectors could grow above 5 percent. Most of the affected sectors are labor-intensive intensive or using a large enough workforce. Neither does the poverty rate, Indonesia will also experience a significant increase in the number of poverties, with many layoffs and the non-functioning of the Small Medium Enterprise (SMEs) and informal sectors, it is estimated that the number of poor and vulnerable people will be even greater in 2020. Though the Government has struggled very hard to be able to reduce poverty levels in the single digit rate or for the first time in history reached 9.22 percent in 2019. Based on the Economic Outlook delivered, the poverty rate will increase by around 2 million people or in other words the poverty rate is predicted to reach 9.7-10.2 percent in.

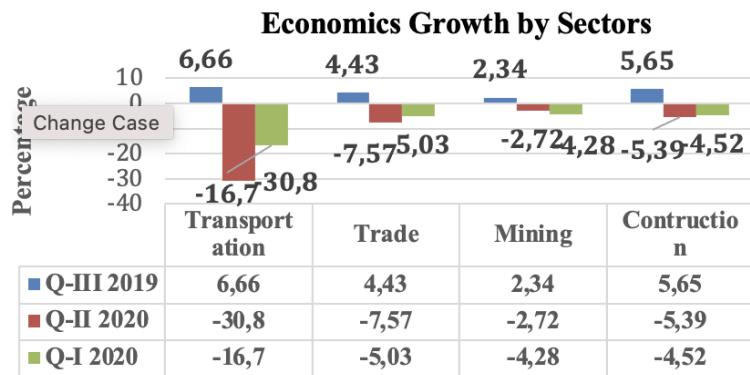


Figure III. Graph Economic Growth by Sector Q III 2019 – QII-III 2020

Marketing Perspective

The development of marketing strategies is based on analysis of consumers (customers), competition and the strength of the external environment as an input strategy (management of company resources). The company certainly manages internal resources. The company's Input Strategy (external and internal) will be promoted into strategies that can adapt to environmental changes, especially one of the business functions, namely Marketing needs to modify the marketing mix strategy to match the changes in order to achieve competitive advantage. At present the world is faced with a pandemic condition where the spread of the Covid-19 virus which cannot be dammed up again, began to spread from mainland China in January 2010, then in February it spread to Italy, in March 2020 WHO classifies Covid-19 as an epidemic a pandemic that spread to other parts of the world caused by human transmission that made contact, traveled or traveled within and outside the country, a widespread outbreak occurred in April Covid-19 and spread globally. This condition is called the "Black Swan" Event. (Stalenis, 2020). The next phase, which is called the Lockdown phase or by the term The Great Lockdown, at this stage all countries impose restrictions on social distancing, and as a result of this impact the global economy is expected to enter a deep recession.

The pandemic condition that we are dealing with certainly affects the overall social life in the business world both the formal sector and the informal sector, where with social restrictions-imposed panic on both the suppliers, producers of goods and services and consumers. This panic phase occurred in less than a month when the public got the issue of lockdown so that all consumer goods available on the market were bought out by some financially capable people and speculators who hoarded their goods to get higher prices, panic also occurred in the supplier side of the input material and the producer producing the consumer goods. The second phase is the phase of surrender or acceptance of the situation at this stage, the panic does not happen again. Businessman or producer triggers production and some speculators to maintain a high bargaining position with a maximum price will be achieved, but with social restrictions resulting in a weaker bargaining position consumers are more rational and efficient in consuming, because they assume that this pandemic situation will not run fast passed but will continue for a long time. In this new normal situation, companies and the business world in general need to make a breakthrough and an efficient and targeted business approach, especially on the marketing function in order to increase sales and consumption of the people. The appropriate marketing strategy and business concept is expected to change behavior in the community in new normal situations. Marketing strategies using the marketing mix must be adapted to the conditions of the era of change, changes in people's buying behavior now and, in the future, must always be equipped with an understanding of Entrepreneurial marketing and entrepreneurship marketing concepts. Companies and entrepreneurs need to do formulated marketing, where companies and entrepreneurs are expected to provide new ways of marketing goods and services so that according to the needs and desires of consumers there is a new normal situation.

The concept of competition faced during Covid-19 underwent significant changes, especially for companies engaged in services, manufacturing and retail traders (retail) that are directly related to

consumers, a strategy that supports especially in this situation as stated by McKiernan (1997) which identifies into four strategic approaches, including: the prescriptive approach (called the deliberate or planned approach); learning approach (the emergent or learning); the competitive positioning approach; and the resource, competency and capability approach (the resource, competence, and capability approach). This approach is in line with current conditions, where companies will learn past strategies (past) from being learning to implement future strategies in achieving competitive advantage.

Understanding the marketing mix strategy is specific to the level of managers in the company in dealing with a pandemic situation and can choose which elements in the marketing mix will separately achieve high market share and profitability. However, in its implementation the selection of a separate marketing mix is not in line with the elements in the marketing mix that are inseparable such as product, price, place (distribution) and promotion. The marketing mix can be defined as strategies, distribution, promotion, and pricing aimed at generating and executing exchanges for the attainment of the target market (Thabit & Raewf, 2018; Bekh, 2016). Companies must maximize the marketing mix wisely in managing the budget (Isoraite, 2016). The company's operations must be effective and in alignment with all elements of the marketing mix. In this case the company must always find and place a management formula that places advertising in its place in the company, where the combination of product, price, promotion and distribution methods becomes a unity in the holistic marketing management. Sales and delivery aspects are the parts of the company that can bring value to consumers. Kotler and Keller, (2016) explain the definition of marketing management as the art and science of selecting target markets and obtaining, storing and growing customers through creating, delivering and communicating superior customer value.

Relaxing social restrictions on Large-Scale Social Restrictions (LSRR) that will be imposed by the government certainly get a fresh breeze in the goods and services business sector, with the new normal era after the Covid-19 pandemic, of course companies and business sectors must always compile plans and strategies and breakthroughs out of the box with the era this new normal. The new experience of companies and business people in the pandemic period is a valuable lesson learns where companies plan new strategies by maximizing the use of online networks. The company's strategy is very much needed through a strategic approach including the prescriptive approach (called the deliberate or planned approach); companies must plan strategies that are measurable with external situations experienced to develop short-term and long-term strategies by collaborating and using the network online owned by the company. The second strategy is, the learning approach (the emergent or learning), this strategy the company pays attention to supplier behavior and buying behavior that uses the company's online network to make valuable learning in this pandemic situation by developing an input strategy with efficient and effective management of available resources. The third approach is the competitive positioning approach with efficient resource management that will produce core competency in the industry so that it becomes superior in competing and placing the company's competitive position. This fourth approach is the approach of resources, competencies and abilities (the resource, competence, and capability approach), as explained in the previous approach the use and empowerment of company resources efficiently and effectively will make the company become competent in the face of competition, especially in the utilization online networks to be more oriented to the use of e-commerce businesses to gain competitive advantage.

Consumer Behavior Perspective

Product features will become consumer value. Kotler (2016) defines consumer value as a balance or trade-off felt by consumers. This is also related to the benefits and costs obtained for a product or service (Andreassen et al., 2016). Previous research has examined the typology of consumer value with a number of elements including aspects of utilization, hedonism, efficiency, acquisition, and transactions functional, social, emotional and conditional aspects (Sheth, 1991); aspects of social or emotional value, utilitarian value, economic value (Li et al., 2012); aspects of functional value, economic value, emotional value, social value (Floh et al., 2014), aspects of quality value, economic value, novelty value, emotional value, social value, knowledge value (Prebensen & Xie, 2017). All processes of marketing products during the pandemic era can be done through online shopping. Online shopping

is a shopping activity using the internet. This makes it easy for consumers to shop without leaving the house. Advances in banking technology and other infrastructure make it easy for consumers to shop easily. Ruiz-Molina et al. (2017) argues that corporate innovation can facilitate service to consumers in online transactions because this can create consumer loyalty.

Public health precautions involve lockdown policy, social distancing policy, and stay-at-home orders. These conditions have resulted in changes in daily routines of citizens all over the world. Covid-19 is an aspect of the external environment that influences consumer decision making. Based on consumer behavior models, aspects of the external environment are factors that influence consumer decision making even though it does not directly affect behavior. That is, the external environment is a stimulation received by the five senses of consumers through the process of perception. This perception will later influence the formation of consumer attitudes that can ultimately shape consumer behavior. Covid-19 pandemic inevitably has influenced consumer behavior including the decision-making process (Shin & Kim, 2020; Meixner & Katt, 2021). The discussion of consumer behavior related to the impact of Covid-19 can include changes in attitudes and values. This change in attitude includes brand loyalty, reinforcement of consumer values, the use of unused products, mutual reminders of the good. Social capital is a characteristic of social organization includes community involvement, normal reciprocity, and trust in others by facilitating cooperation for mutual benefit (Shiell et al, 2018). This theory is correlated with inputs, outputs, social and economic processes (Gannon & Roberts, 2020). This social orientation is in the form of values related to physical consequences, psychological well-being, social relationships, and environmental consciousness. In addition, according to Survey Yuswohadi et al. (2020), the Covid-19 pandemic has changed attitudes and created new values for consumers in general. Consumer activities that were carried out outside were all carried out at home. This starts with work, shopping, learning or fulfilling daily needs. This trend has become a lifestyle that influences current patterns of consumer behaviour. Santisi et al. (2014) argues that lifestyle can influence decision making. In consumer behavior, the focus is on lifestyle orientation, which is to stay home, return to cultural values, use of technology and strengthen social capital. Changes in attitudes and values indicate that consumers have confidence in something that ultimately believes that doing something about something new will produce certain consequences. This consequence is certainly considered as something that brings positive benefits both to the consumer and the surrounding environment.

Conclusion

Changes from external factors can have a large impact on the organization. In the current pandemic, the government issued regulations that limit physical contact while at work. The physical restrictions aim to reduce the spread of Covid-19. In Jakarta, the regulation addressing physical contact is stipulated by Governor Regulation. This regulation stated that restricting physical contact requires employees in the organization to do telecommuting work. Telecommuting work requires adequate infrastructure. Infrastructure is hardware and software must be the basic needs of employees while working in telecommuting (Regulation of the Governor of The Special Region of Jakarta Number 33 of 2020)

For some industries that work in the pandemic, workplace hygiene is not only a fulfillment of the regulations that are regulated in the Jakarta Capital City Special Governor Regulation Number 33 of 2020 concerning PSBB or Large-Scale Social Restrictions. But this has become a basic employee need. When the need for health is met, employee productivity will not be interrupted in carrying out the work. Covid-19 teaches a lot of learning for companies, business people and consumers during the Indonesian-style Large-Scale Social Restrictions (PSBB). The marketing strategy and the company strategy by formulating 4 stages in responding to these external changes need to be implemented into a corporate formulation strategy. Company policy in developing marketing strategies with marketing mix needs to be implemented well, this is to increase competitiveness in the industry in increasing competitive advantage. The company always teaches consumers new ways of buying after the Covid-19 pandemic.

This study has contributed that the Covid pandemic has made changes in the perspectives of leadership-the way they manage the organization, the corporate strategy crafting, human resource management, digital transformation, business ethics, consumers relationship management and business pattern

changes. The results of this study contribute that the COVID-19 pandemic is not a frightening specter for the business world. This study provides a recommendation that the COVID-19 pandemic should be the initiation of a new form of business. The emergence of new opportunities is a challenge for all business sectors. Small Medium Enterprise (MSME) must carry out the process of digitizing and increasing business scale in the form of online shopping. Working from home will become a habit that will always be applied by the company. Consumer behavior will change according to new forms of business. Although the intensity of work has become more limited during the Covid 19 pandemic. The limitations of this study have not been discussed from the microeconomic aspect. Research can be done holistically in terms of microeconomics, new business opportunities, and online payment transactions. The systematic literature review method can be used in discussing organizational management during the Covid 19 pandemic. The use of statistical methods can be applied to predict relationships between variables. The use of variables such as purchasing decisions on new business implications

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Government Regulation

Regulation of the Governor of the Special Capital Region of Jakarta Number 33 of 2020

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Proposed Environmental Cost Allocation and Reporting: a Case Study of a Regional Public Hospital in Indonesia

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ABSTRACT

As a health service unit, hospitals produce waste from their operational activities. Good waste management can be done by applying environmental management accounting through the allocation of environmental costs. At the Regional Public Hospital (RSUD) X, there is no environmental cost report available because the hospital does not allocate these costs. This can lead to planning and decision-making errors, particularly in waste management in hospitals. Therefore, this study aims to propose a suggestion for the allocation and reporting of hospital environmental costs. Employing a qualitative approach, the study involved data in the form of observation results, interviews, and document study. The analyzed documents involved documents of the environmental costs in 2019 and 2020. All data were analyzed by content analysis. The results showed that the hospital environmental costs increased in 2020 due to increased costs caused by COVID-19 waste management activities. Meanwhile, the largest group of environmental costs at RSUD X is the group of internal failure environmental costs. This shows that environmental cost management in RSUD X is still less effective. For effective environmental cost management, hospitals should invest in environmental prevention costs and environmental detection costs.

Keywords: Covid-19; environmental cost reporting; environmental management accounting; hospital; internal failure cost.

1. INTRODUCTION

Environmental issues have grown to be a public concern for the last twenty years. The higher the economic growth, the more sustainable environmental damage will be (Deegan, 2017). In Indonesia, environmental damage occurs mainly due to waste generated from industrial operations. As industrial actors, companies must not solely focus on generating the most optimal profits possible, but they also need to take into account the aspect of environment conservation (Khoirina, 2016). That said, the environmental problem is one of the serious problems that require preventive action through good environmental management (Basuki & Irwanda, 2018). In this regard, the application of environmental management can refer to the concept of green accounting, or better known as Environmental Management Accounting (EMA).

One of the organizations that require to carry out environmental management accounting is hospital, as an actor in the health service sector. In Indonesia, medical waste originating from health facilities is still uncontrollably abundant. The volume of the waste comes from 2,820 hospitals and 9,884 health centers, with a waste output of 290 tons per day. (Public Relation of UGM, 2019). In this regard, according to data from the Ministry of Environment on Proper reports from 2014 to 2015, seven hospitals from 21 entities were indicated to have neglected the environmental aspect and were included in the black list category. The black category is a category imposed on companies that have been negligent in managing the environment, leading to pollution and other damage, up to violating the applying laws (Ministry of Environment, 2015).

Regional Public Hospital X (hereinafter referred to as Hospital X) is a hospital unit in Gorontalo Province, Indonesia. As a health service unit, Hospital X produces medical and non-medical waste that can harm the environment; if not managed properly, such waste will negatively impact the environment. The environmental problem that occurs in Hospital X lies in the fact that there is no information about environmental costs and their allocation that leads to the unavailability of environmental cost reports. This is potential to cause planning and decision-making errors, particularly in the aspect of waste management in Hospital X. A research by Ashari & Anggoro (2021) at the Public Hospital of Malang Raya highlights that environmental cost management with the application of green accounting has a positive effect to the hospital success.

Several quantitative studies have discussed the outcomes of the implementation of EMA. A study reports that EMA is an essential factor in a company. In line with that, a study by Qian, Horisch, and Schaltegger (2018) shows that the EMA has a significant influence on carbon management and quality disclosure in United States, Germany, and Australia. Further, there is research that indicates how EMA can improve the environmental performance of an organization (Appiah, Donghui, Majumder, & Monaheng, 2020). One form of EMA application is the measurement by environmental cost accounting (Qian et al., 2018). Environmental costs refer to the costs incurred due to a poor environment and low product quality. Environmental costs are divided into four types, i.e., (a) environmental prevention costs; (b) environmental detection costs; (c) internal failure costs; and (d) external failure costs (Hansen, Mowen, & Guan, 2009).

2. RESEARCH METHODOLOGY

The study employed a qualitative method with a case study approach. This present research was single case research, which means that the study only focused on the cases in a single unit of organization, in this case, Hospital X.

The analyzed data involved primary data in the form of interviews and observations, as well as secondary data that consisted of supporting documents. The interview was conducted with three informants, i.e., Head of Financial Division, Head of Accounting Sub-division, and Head of Sanitation Sub-division. The researcher conducted the observation by observing the activities related to environmental management, involving waste and other residual management that required costs, and was recorded at the report of environmental cost. The next data was a document consisting of a review of the costs of the Sanitation Divison in 2019 and 2020, reports on the realization of the 2019 and 2020 hospital budgets, as well as other supporting documents such as standard operating procedures or waste management flow at Hospital X.

3. RESEARCH FINDING

Based on interviews and analysis of supporting documents in the form of review of the sanitation division, the accountability report of the Head of the Sanitation Sub-division, the budget realization report for the Financial Division, the classification of environmental costs, and environmental cost reports at RSUD X as based on the theory by Hansen Mowen (2009) are as follows:

Table 1. Proposed Environmental Cost Report for Hospital X on 2019

Environmental Cost	Amount	% Total Environmental Cost
Prevention Cost		
Trash bin procurement cost	Rp 18.107.600	4%
Safety Box cost	Rp -	0%
Nuisance animals control cost	Rp 500.000	0%
Waste control equipments maintenance Cost	Rp 23.682.425	5%
Water pipeline and pump maintenance Cost	Rp 19.165.885	4%
Total Prevention Cost	Rp 61.455.910	13%
Detection Cost		
Clean water sample detection cost	Rp 7.200.000	1,6%

Wastewater sample detection cost	Rp	13.462.000	2,9%
Food and beverages sample detection cost	Rp	10.800.000	2,3%
R.O water detection cost	Rp	2.809.000	0,6%
Sanitation staff wage cost	Rp	105.600.000	22,9%
Total Detection Cost	Rp	139.871.000	30,4%
Internal Failure Cost			
Waste management staff wage cost	Rp	54.000.000	11,7%
Cleaning equipment and cleaning materials cost	Rp	44.658.500	9,7%
Machine depreciation (Autoclave) cost	Rp	11.523.000	2,5%
Wastewater treatment installation pump depreciation cost	Rp	1.301.853	0,3%
Hazardous and toxic waste management service cost (Third party)	Rp	58.500.000	12,7%
Hazardous and toxic waste management material cost	Rp	48.356.000	10,5%
Incinerator fuel cost	Rp	12.510.000	2,7%
Wastewater treatment installation submersible pump cost	Rp	28.145.000	6,1%
Total of Internal Failure Cost	Rp	258.994.353	56,3%
External Failure Cost			
Compensation cost	Rp	-	0,0%
Total of External Failure Cost	Rp	-	0,0%
TOTAL	Rp	460.321.263	100%

Source: RSUD X.

As indicated in Table 1, the highest environmental cost in 2019 is the sanitation staff wage cost, with a total of Rp. 105,600,000, while the smallest cost is nuisance animal control cost at Rp500,000.

Table 2. Proposed Environmental Cost Report for Hospital X on 2020

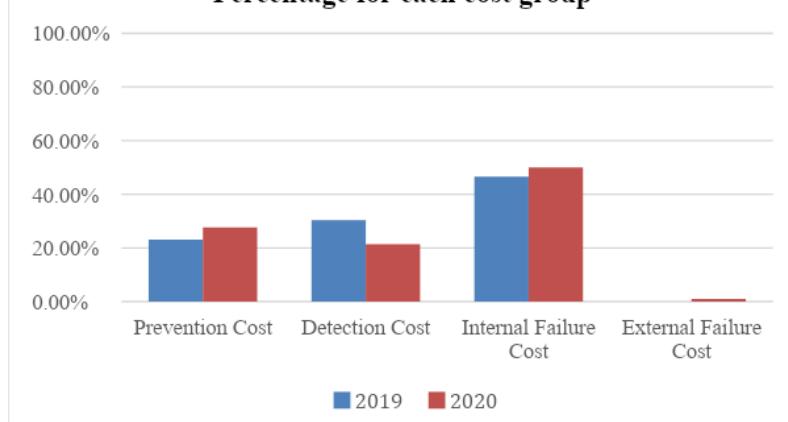
Environmental Cost	Amount	% Total Environmental Cost
Prevention Cost		
Trash bin procurement cost	Rp 2.284.902	0,4%
Safety Box cost	Rp -	0,0%
Nuisance animals control cost	Rp -	0,0%
Waste control equipments maintenance Cost	Rp 30.809.500	5,7%
Water pipeline and pump maintenance Cost	Rp 38.714.000	7,1%
Total Prevention Cost	Rp 71.808.402	13,2%
Detection Cost		
Clean water sample detection cost	Rp 8.262.000	1,5%
Wastewater sample detection cost	Rp -	-
Food and beverages sample detection cost	Rp -	-
R.O water detection cost	Rp 2.140.000	0,4%
Sanitation staff wage cost	Rp 105.600.000	19,4%
Total Detection Cost	Rp 116.002.000	21,4%
Internal Failure Cost		
Waste management staff wage cost	Rp 60.900.000	11,2%

Cleaning equipment and cleaning materials cost	Rp	78.301.075	14,4%
Machine depreciation (Autoclave) cost	Rp	11.523.000	2,1%
Wastewater treatment installation pump depreciation cost	Rp	1.301.853	0,2%
Hazardous and toxic waste management service cost (Third party)	Rp	115.000.000	21,2%
Hazardous and toxic waste management material cost	Rp	53.969.125	9,9%
Incinerator fuel cost	Rp	3.880.000	0,7%
Wastewater treatment installation submersible pump cost	Rp	25.087.500	4,6%
Total of Internal Failure Cost	Rp	349.962.553	64,4%
External Failure Cost			
Compensation cost	Rp	5.500.000	1,0%
Total of External Failure Cost	Rp	5.500.000	1,0%
TOTAL	Rp	543.272.955	100,0%

Source: RSUD X.

In contrast to Table 1, Table 2 shows the environmental cost report for RSUD X in 2020, with the highest cost being the cost of B3 waste treatment services (third parties) and the smallest being the depreciation charge for the Wastewater treatment installation pump. Moreover, each group of environmental costs in 2019 and 2020 is compared, as illustrated in Chart 1.

Chart 1. Comparison of Percentage of Environmental Cost Group for Hospital X
Percentage for each cost group



Source: Hospital X

From Chart 1, it is concluded that there was a decrease in environmental detection costs in 2020, while an increase occurs in prevention costs, internal failure costs, and external failure costs in 2020. The increase in the group of internal and external failure costs is supposedly due to the increase in waste management activities caused by the addition of waste from COVID-19 patients.

4. CONCLUSION

The trend of environmental costs for Hospital X shows an increase in prevention costs, internal failure costs, and external failure costs, while a decrease is shown in detection costs in 2020. The increase in internal failure costs in 2020 is due to the increase in costs caused by Covid-19 waste management activities. All in all, Hospital X should perform the classification and reporting of environmental costs

to provide benefits in decision making, e.g., investing in prevention costs and environmental detection costs.

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E-procurement fraud deterrent in the Malaysian public sector

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ABSTRACT

The adoption of e-procurement in the government procurement process is assumed to provide accountability and transparency. It could mitigate fraud and corruption by decreasing the chances at every level of the procurement system by using information communication technology. Hence, the purpose of this study is to examine the relationship between information quality, system quality, service quality and transparency, and e-procurement fraud deterrent in the Malaysian public sector. Primary data was collected through the distribution of the questionnaire. A total of 300 samples were selected from the Ministry of Higher Education. Two hundred and twenty-seven (271) respondents responded to the questionnaire, which then is used for the analysis. Statistical tests such as descriptive analysis, correlation and regression analyses were conducted to answer the research questions of the study. The findings from the analysis show that system quality, service quality and transparency have a significant positive relationship with e-procurement fraud deterrent. However, there is no significant relationship between information quality and e-procurement fraud deterrent. This study gives a holistic picture of the impact of information quality, system quality, service quality, transparency, and e-procurement fraud deterrent as well as the important insight of e-procurement to deter fraud in the public sector.

Keywords: E-procurement; Fraud Deterrent; Government Procurement; Procurement System

1. INTRODUCTION

Public procurement has been identified as one of the government's activities most vulnerable to collusion, corruption, manipulation and fraud. During the Combating Procurement Fraud in the Public and Private Sectors Forum 2017, Tan Sri Ambrin Buang (Former Chief Auditor General) stated that procurement fraud has been committed by those inside and outside in the organisation starting from bid ringing during the pre-contract award phase to false invoicing in the post-contract award phase. Based on Caulfield (2014) findings, fraud in public procurement became a burden to the government because of massive public spending and ineffectively managed among various public organisations. Moreover, PWC's Global Economic Crime Survey (2018) listed common types of fraud that occurred in the public sector included identity fraud, the forgery of falsification of records, the unauthorised access and release of information, unauthorised or inappropriate use of information technology, fraudulent expenditure claims, payroll fraud, procurement fraud and also theft (cash, consumables and intangible asset).

As mentioned by Nuepane et al. (2014), many developed countries have concentrated on the implementation of an e-procurement system as a key tool to combat fraud by opening the competition to the public in government procurement processes. The implementation of an e-procurement system is a tool to improve the effectiveness and efficiency of the traditional procurement process (Neupane et al. 2014). As stated by p and Kim (2015), the implementation of this system can reduce the opportunity of fraudulent activities in the government area. They suggested the governments promote and implement the e-procurement system to deter several fraud issues like monopoly power of government and information asymmetry.

Even though e-procurement has brought many positive effects, practices of fraud still occur in the implementation of e-procurement. Huda et al. (2017) stated that the risks of fraud arise in the e-procurement due to lack of transparency, limited access to information and the lack of accountability and control at each phase. As explained by Aditya et al. (2017), lack of transparency and accountability opened more opportunities to the user including public officials and vendors to ignore the rule for corruption purposes. The function of the e-procurement system is designed for users to understand the process, to manage the procurement process and to be free from fraud but not otherwise. Public procurement is one of the key areas where the public sector and the private sector interact financially which could lead to fraudulent activity, cronyism, favouritism as well as outright bribery. In the context of public procurement, some of the fraud activities in Malaysia are associated with the entrenched power of political and economic institutions in the distribution of public resources. This kind of policy of distribution of public funds opens for opportunities for fraud and corruption rent-seeking activities, political patronage, cronyism and favouritism (Gomez et al., 2013; Sundram and Hui, 2010).

Although the implementation of e-procurement improved the transparency of the procurement process, fraudsters were still able to exploit the limitations of the system, and this in turn still allowed for corrupt practices to occur. Hence, the costs of fraud passed on to society in the form of increased customer inconvenience, opportunity costs, unnecessarily high prices for goods and services as well as criminal activities funded by fraudulent gains. Therefore, based on the issues highlighted above it is important for this research to be carried out to examine the relationship between information quality, system quality, service quality and transparency, and e-procurement fraud deterrent in the Malaysian public sector.

2. LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

In the context of this study, information quality refers to the perception that the output generated by e-procurement generate information based on dimension highlighted by Nelson et al. (2005) which is the accurate, complete, up-to-date and right format. When people feel that an information system is useful to them, the chances that they will utilize that system will be higher. Based on Zhou (2013b) poor information content quality may decrease users' satisfaction as they anticipate getting quality information from using e-procurement systems. Hence, if the information system is vague, erroneous, or incomplete, it will arouse doubts in the user's mind about the reliability of that particular information system and possible harmful opportunistic behaviours, thus, reducing the intention to use. On the contrary, an information system that provides high content quality will increase the intention of users to engage in the services provided. Thus, this study focused on the use of the system that predicted the success of the e-procurement system when it could improve the accuracy, completeness and consistency of information which leads to the deterrent of fraud via e-procurement. Hence, it is posited that:

H1: There is a positive relationship between information quality and e-procurement fraud deterrent in the Malaysian public sector.

In the e-procurement system, Kusuma and Pramunita (2011) state that users tend to refuse to use the system because of its risk and untrustworthiness. In the context of the user-developed application, there is proof that system performance is influenced by system quality (McGill et al., 2003). Guimaraes et al. (2009) emphasize that system quality elements rely on the characteristics necessary to the system as well as on the stakeholder's view. The system risk has a negative influence on behaviour certainty and trust. Kassim et al. (2012) find a significant positive relationship between system quality and trust. A study on information technology artefacts by Vance et al. (2008) reveals that the perception of system quality has a significant positive influence on the user's trust. Belkhamza and Wafa (2009) argue that in an online environment, perceive system risk has a negative influence on behaviour certainty and trust. In this study, if the procurement officer perceived that the system is flexible, reliable, fast and accessible as well as increase user satisfaction, it would give the result of transparency of the outcome from the e-procurement system towards the public. It would give a positive perception from the public that the procurement officer does his/her work properly and portrays a good image to the government as the e-procurement system can deter fraud. Hence, based on the above arguments it is posited that:

H2: There is a positive relationship between system quality and e-procurement fraud deterrent in the Malaysian public sector

Service quality refers to the quality support provided by the system provider (Delone and McLean, 2003). Gorla et al. (2010) hypothesized that information technology quality represented by system, service, and information has a positive impact on organizations. The results revealed that service quality had the highest impact on organizational performance followed by information quality, then system quality. In the research of enterprise applications' effectiveness, Lai (2006) concluded that improving service quality positively influenced user satisfaction. According to Jang (2010), service quality had a significant effect on individual performance through usage and user satisfaction with the e-procurement system. As mentioned by Ogoe (2016), procurement and quality service are positive and directly related due to the fact that quality service is dependent on procurement operation. In this study, service quality is described as the level of responsiveness and assurance provided by the service providers to the officials in helping to make their tasks free from fraud activities when using e-procurement. The availability of support for government users will determine the transparency of the e-procurement system. The officers will use the system in a proper manner and give the output without any interference of the ambiguity and vagueness that give negative perception from the public. Hence it is suggested that:

H3: There is a positive relationship between service quality and e-procurement fraud deterrent in the Malaysian public sector.

Talero (2001) emphasises the transparency benefits as e-procurement can be a major contributor to the anti-corruption campaigns of the government and suggested that effective transparency in public procurement depends on the timeliness, quality, and accessibility of procurement information. Hasan (2000) argued that to prevent acts of fraud is by improving organizational culture, especially in the field of transparency. Dwiyanto (2012) stated that transparency becomes an important dimension of change because transparency will facilitate the users of services and civil society to monitor the course of implementation of public service. In line with Dwiyanto's (2012) reiteration, it shows that transparency in the bureaucracy may have implications on the decline in the level of corruption within the bureaucracy. Beth (2007) believed that lack of transparency and accountability is recognised as a major threat to integrity in public procurement. The good governance approach should apply elements of good governance, particularly transparency and accountability. In terms of public procurement, it is to prevent corruption and to review the whole procurement cycle. This includes from needs assessment to contract management and focus on policy and practice, rather than regulations when possible. The use of online technology for government procurement (e-procurement) aims to reduce face-to-face interactions and, thus, increase market transparency, build trust, and limit fraud and corruption (Neupane et al., 2014; Vaidya et al., 2006). Transparency and openness are core principles of public procurement and transparency which are widely recognised as a foundation of good governance (Parigi et al., 2004). Lack of transparency creates opportunities for public officials such as government officers and politicians to abuse their positions of authority for private gain. Hence, based on the discussion, the following hypothesis is offered:

H4: There is a positive relationship between transparency and e-procurement fraud deterrent in the Malaysian public sector.

3. RESEARCH METHOD

1. Data Collection

The study used a questionnaires survey for data collection. The Ministry of Higher Education which consists of three departments namely the Department of Higher Education, Department of Polytechnic Education and Department of Community College Education was chosen as a sample for this study. The questionnaires were distributed to 300 public servants under the Ministry of Higher Education. However, 227 were returned and usable. The respondents comprised of top-level management, middle-level management and support staff. The middle-level management and support staff respondents were selected since they are directly involved in the operation of the e-procurement system. Meanwhile, the selection of top-level management as respondents seemed to be appropriate since they possess the overall knowledge of the organisation's operation and make strategic decision-making. The questionnaires survey was divided into six sections. All questions in Part A would require the respondents to answer regarding the demographic profile themselves without disclosing any personal or private information. Questions in Section B to Section E (information quality, system quality, service quality and transparency) and Section F (e-procurement fraud deterrent) would require the respondent to rate based on a five-point Likert scale with 0 to 5: "1" indicates strongly disagree while "5" indicates strongly agree.

4. RESULTS AND DISCUSSION

1. Demographic Analysis

This section provides descriptive analyses of the demographic characteristic of the respondents. The total number of respondents for this study is 227. About 31.3% or 71 respondents aged between 21 to 31 years followed by 46.3% or 105 respondents aged between 31 to 40 years. Then, 41 to 50 years old respondents are about 20.3% or 46 and the rest of the total respondents aged between 51 to 60 years which is 5 or 2.2% of the respondents. Out of 227 respondents, 102 or 44.9% are male, while 125 or 55.1% are female. The positions of respondents in the procurement department is about 45.4% are from the support group whilst 50.7% are from middle management, while 4.0% are from top management. Based on the frequency of the length of respondents' services, about 63 or 27.8% of respondents worked less than 1 year followed by 105 or 46.3% of respondents who had worked between one and ten years. Then, about 22.9 % or 52 of respondents had experienced at least 10 to 20 years and 3.1% or 7 of the respondents worked for more than 20 years.

Table 1. Demographic analyses

	Frequency	Per cent
21 to 30 years	71	31.3
31 to 40 years	105	46.3
41 to 50 years	46	20.3
51 to 60 years	5	2.2
Male	102	44.9
Female	125	55.1
Support Staff	103	45.4
Middle –level Management	115	50.7
Top-level Management	9	4.0
Less than 1 year	63	27.8
1 to 10 years	105	46.3
10 to 20 years	52	22.9
More than 20 years	7	3.1

2. Descriptive Statistics

Table 2 shows the descriptive statistics of the dependent variable namely e-procurement fraud deterrent based on the results of the questionnaire. The highest mean score goes to question 9, '*Complexity of e-procurement system at all three levels (the pre-contract, contract and post-contract phase)*' where the mean score is 3.09, mainly slightly greater than 3.00. This finding implies that on average, the respondents agreed that the e-procurement fraud deterrent is reducing the complexity of the e-procurement system at all three levels. The lowest mean score goes to question 3, '*Proper guidelines and policies regarding the e-procurement system process are properly distributed to the public*' where the mean score is 1.90, mainly lower than 3.00. This finding implies that on average, the respondents agreed that the e-procurement fraud deterrent is reduced when proper guidelines and policies regarding the e-procurement system process are properly distributed to the public.

Table 2. E-procurement Fraud Deterrent

No.	Questions	Means	Std. Deviation
1.	There is still lacking effective prevention tools for e-procurement systems that involve officers and suppliers/contractors	2.28	1.137
2.	The e-procurement system decision-making process involved or influenced by management and supplier relationship	2.43	1.064
3.	Proper guidelines and policies regarding the e-procurement system process are properly distributed to the public	1.90	0.687
4.	The Output information of the e-procurement system can be easily manipulated by the e-procurement officer.	2.00	0.836
5.	Price and items posted in the e-procurement system catalogue is not the same as offered to the user	1.99	0.890
6.	Revealing information to contractors during the bidding/contracts process	1.98	0.846
7.	Additional technical requirement on e-procurement tends to cause difficulties to the user	2.52	1.110
8.	No specific officer in charge to monitor the e-procurement system in terms of information system	2.05	0.855
9.	The complexity of the e-procurement system at all three-level (the pre-contract, contract and post-contract phase)	3.09	1.228

Table 3 shows the descriptive statistics of the independent variable information quality. The highest mean score is for question 3, '*Information of e-procurement system is easy to understand*' where the mean score is 4.51, mainly greater than 3.00. This finding implies that on average, the respondents agreed that information quality ensures the information provided in e-procurement is easy to understand. The lowest mean score goes to question 8, '*E-procurement system allows easy searching for suppliers or items*' where the mean score is 4.24, mainly greater than 3.00. This finding implies that on average, the respondents agreed that information quality not only benefits the procurement officer but also the supplier when the e-procurement system allows easy searching for any information related.

Table 3. Information Quality

No.	Questions	Means	Std. Deviation
1.	Information on the e-procurement system is accurate	4.50	0.889
2.	Information on the e-procurement system is complete.	4.42	0.774
3.	Information on the e-procurement system is easy to understand	4.51	0.879
4.	Information on the e-procurement system is relevant to my task	4.43	0.825
5.	Information on the e-procurement system is secure.	4.41	0.834
6.	E-procurement system has a relevant number of suppliers registered	4.36	0.782
7.	E-procurement system has the relevant number of catalogues uploaded for users	4.31	1.031

8.	An E-procurement system allows easy searching for suppliers or items.	4.24	0.989
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Table 4 shows system quality with the highest mean score goes to question 3, '*E-procurement system is adaptable with the latest information technology*' where the mean score response of the question is 4.53, mainly greater than 3.00. This finding implies that on average, the respondents agreed that the e-procurement system is advanced from another system by adapting to the latest information technology. The lowest mean score goes to question 4, '*The commands used to interact with the e-procurement system is not user-friendly*' where the mean score is 4.00, mainly slightly greater than 3.00. On average, the respondents agreed to the system quality provided that the command used to interact with the e-procurement system is user-friendly.

Table 4. System Quality

No	Questions	Means	Std. Deviation
1.	It is convenient to use an e-procurement system.	4.43	0.901
2.	The operation of the e-procurement system is reliable.	4.38	0.861
3.	E-procurement system is adaptable with the latest information technology.	4.53	0.766
4.	The commands used to interact with the e-procurement system is not user-friendly.	4.00	0.823
5.	The response and feedback of the e-procurement system are fast.	4.45	0.922
6.	E-procurement system is capable of processing complex orders.	4.30	0.935
7.	An E-procurement system can ensure the right goods and services are delivered accordingly.	4.40	0.888
8.	An E-procurement system can ensure that orders arrive on time.	4.33	0.800

Table 5 shows the descriptive statistics of the independent variable service quality based on the results of the questionnaire. The highest mean score is for question 1, '*The software of e-procurement system in use is always up-to-date*' where the mean score is 4.52, mainly greater than 3.00. This finding implies that on average, the respondents agreed that service quality provides information that is always up-to-date for the e-procurement system. The lowest mean score is for question 6, '*E-procurement system allows easy navigation through the process*' where the mean score is 4.27, mainly greater than 3.00. This finding implies that on average, the respondents agreed that service quality benefited the e-procurement system when it allows easy navigation through the process.

Table 5. Service Quality

No.	Questions	Means	Std. Deviation
1.	The software of the e-procurement system in use is always up-to-date	4.52	0.838
2.	The system provider of the e-procurement system responds quickly to any requests	4.31	0.997
3.	There is little possibility for the user to have difficulties when using an e-procurement system	4.45	0.983
4.	E-procurement system provides customized operation	4.37	0.859
5.	E-procurement system has an online supporting service that answers frequently asked questions	4.45	0.868
6.	E-procurement system allows easy navigation through the process	4.27	0.909
7.	E-procurement system is available at all times	4.44	0.887

Table 6 shows the descriptive statistics of the independent variable transparency based on the results of the questionnaire. The highest mean score goes to question number 1, ‘*Adequate prevention tools are in place to prevent procurement fraud in e-procurement system by the procurement officers and suppliers/contractors*’ where the mean score is 4.61, mainly greater than 3.00. This finding implies that on average, the respondents agreed that transparency is a vital item in e-procurement by providing adequate prevention tools to avoid fraud from the user. The lowest mean score is for question 6, ‘*Clear and comprehensive documents of e-procurement system are disclosed in standard form and made available to the public*’ where the mean is 4.34, mainly greater than 3.00. This finding implies that on average, transparency of e-procurement is practised when all documents are clearly and comprehensively following standard disclosure and available to the public.

Table 6. Transparency

No.	Questions	Means	Std. Deviation
1.	Adequate prevention tools are in place to prevent e-procurement fraud in the e-procurement system by the procurement officers and suppliers/contractors	4.61	0.765
2.	E-procurement system decision-making process is independent of any influence and transparent	4.44	0.836
3.	Policy and guidelines regarding e-procurement system are easily accessible by the public	4.57	0.881
4.	All written records of the e-procurement system are made available to the general public	4.47	0.832
5.	Summaries of information about e-procurement systems are usually disclosed	4.58	0.791
6.	Clear and comprehensive documents of the e-procurement system are disclosed in standard form and made available to the public	4.34	0.875
7.	Complete and adequate records of e-procurement system activities are kept by the department.	4.41	0.790
8.	Adequate review on e-procurement officers’ conduct by the superior/top management	4.37	0.869
Officers involved in the e-procurement process here to professional conduct and ethical principles		4.44	0.847

4.3 Pearson’s Correlation Analysis

Pearson Correlation analysis is a measurement of the strength of a linear association between two variables. In this study, correlation analysis was conducted to examine the strength of association between all independent variables namely information quality, system quality, service quality and transparency, and dependent variable namely e-procurement fraud deterrent. The findings of correlation analysis were presented in Table 10. It shows that the value of the correlation coefficient between e-procurement fraud deterrent and information quality (0.699), system quality (0.753), service quality (0.747) and transparency (0.739) are highly correlated and significant.

Table 10: Pearson's Correlation Analysis

Variables	E-pro	IQ	SQ	SVQ	Trans
E-pro	1				
IQ	0.699**	1			
SQ	0.753**	0.878**	1		
SVQ	0.747**	0.889**	0.922**	1	
Trans	0.739**	0.848**	0.915**	0.890**	1

**Correlation is significant at the 0.01 level (1-tailed).

Note: IQ (Information Quality), SQ (System Quality), SVQ (Service Quality), TRANS (Transparency), E_PFD (e-procurement fraud deterrent)

4.3 Multiple Regression Analysis

The results in Table 8 shows the coefficients of the multiple regression analysis. The beta value represents the strength of the relationship between e-procurement fraud deterrent and information quality, system quality, service quality and transparency. The independent variable with a level of significance (*p*-value) value less than 5% can make a significant contribution to the predicted value of the dependent variable. System quality has a *p*-value of 0.041 and is significant at a *p*<0.05 significance level. Hence, it indicates a positive significant relationship between system quality and e-procurement fraud deterrent which supported hypothesis H2. The result of this study is consistent with Lin (2006) that explained system quality as one of the effects of users' involvements in the virtual community and provides significantly influence to users while dealing with the online system. Whereas, Chiu et al. (2007) highlighted that system quality is significantly affected the respondents' use of online e-learning via user satisfaction. While if the procurement officer perceived that the system is flexible, reliable, fast and accessible as well as increase user satisfaction, it would lead to positive perception and eventually will deter e-procurement fraud.

Table 8. E-Procurement Fraud Regression Model

Variables	Standardized Coefficients	Beta	t	Sig. (P-Value)
(Constant)			30.390	0.000
IQ	-0.029		-0.29	0.772
SQ	-0.276		-2.054	0.041 **
SVQ	-0.268		-2.142	0.033 **
TRANS	-0.223		-1.989	0.048 **
GENDER	-0.023		-0.518	0.605
POSITION	-0.025		-0.554	0.580
R ²		0.593		
Adjusted R ²		0.586		
F-value		80.843		
p-value		0.000		

p*<0.10; *p*<0.05; ****p*<0.01

Note: IQ (Information Quality), SQ (System Quality), SVQ (Service Quality), Trans (Transparency), E_PFD (e-procurement fraud deterrent), GEN (Gender), POST (Position of Officer)

Subsequently, services quality has a *p*-value of 0.033 and is significant at a *p*<0.05 significance level. Hence, it indicates a positive significant relationship between services quality and e-procurement fraud deterrent, hence hypothesis (H3) is supported. The result of this study is consistent with Gorla et al. (2010) that service quality had the highest impact on organizational performance followed by information quality, then system quality. As stated by Chung et al., (2008), in information system

success, service quality is incorporated as a dimension by giving the importance of information system support, especially in the e-commerce environment where customer service is crucial. The level of responsiveness and assurance provided by government officials when using the e-procurement system has managed directly to deter e-procurement fraud. Moreover, transparency has a *p*-value of 0.048 and is significant at a *p*<0.05 significance level. Thus, it indicates a positive and significant relationship between transparency and e-procurement fraud deterrent, hence this supports hypothesis H4. The result of this study is consistent with Beth (2007), that is a lack of transparency will be recognized as a major threat to integrity in public procurement. While, Hui et al. (2011) critiqued that if the procurement officer has the chance for abuse and manipulation of the procurement process, it would also be reduced whenever the transparency of the process is increased. As a result, many countries had adapted the level of transparency of the procurement procedure to protect the sensitivity of the information as well as the specificity and value of the public procurement. In contrast, information quality has a *p*-value of 0.772 which indicates no significant relationship between information quality and e-procurement fraud deterrent, hence hypothesis (H1) is not supported. Concerning the control variables, there is no significant relationship between gender, the position of officer and e-procurement fraud deterrent in the Malaysian public sector.

5. CONCLUSION

E-procurement has provided a platform to improve public service delivery and offered the quality of interactions among the public community and business key players by implementing an interactive online environment. Moreover, it aims to transform the traditional manual procurement system by using the internet-based practice procurement to procure goods and services from various suppliers via electronic. With the support and full commitment from the government for implementing an e-procurement system, the issues of fraud in public procurement could be deterred. Ensuring e-procurement is “free” from fraud requires further investment in terms of infrastructure of the system, competency of the procurement officer, stability of the system and also effectiveness mechanisms like governance and internal control from the government. Based on this matter, the responsibility of the government in providing public knowledge and understanding the public procurement process to improve on government decision making processes and accountability is vital to achieve good governance through e-procurement. The main reason for the implementation of an e-procurement system is to create openness, availability and accessibility of procurement information to the public that increases the flow of public information, increase trust and satisfaction, and better accountability. It increases involvement among the users in government procurement which leads to reducing the chances of risk of corruption. Thus, using e-procurement to deter fraud in public procurement is one of the anti-corruption tools that governments established as their strategic management. The ability of e-procurement to eradicate fraud is due to the function of the inter-organizational system which automates the entire part of the procurement process to improve efficiency, quality and transparency in government procurement.

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Implementation of the MPERS Framework to private entities in Malaysia: Cause for concern?

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ABSTRACT

This paper investigates how professional accountants (PA) perceive the adoption of Malaysian Private Entities Reporting Standards (MPERS) to guide the preparation of financial statements and related reports in private entities in Malaysia. The objectives are to identify the desirable features, the undesirable features, and the challenges the three sub-groups of accountants face with the adoption of MPERS. Data were collected using a survey questionnaire and 392 valid responses were received. The data collected were entered into statistical computer software (SPSS v.20) and subject to statistical analyses. It was found that accountants are particularly concerned with the challenges of MPERS during the implementation process, such as insufficient guidance given, the availability of training and educational programmes to elevate the knowledge and skills of applying MPERS, and also limited coverage of MPERS in the university curriculum. It was also found that professional accountants in public practice (PAPPs) perceive challenges and desirable features of MPERS differently from professional accountants in business (PAIBs). While both PAPPs and PAIBs were concerned about insufficient guidance and the availability of training programmes, PAPPs regarded updating the previous accounting system to the new MPERS system as a significant challenge. PAIBs remain concerned about the limited coverage of MPERS in the teaching curriculum. As for desirable features, PAPPs had a high regard for the quality of MPERS financial reports, while PAIBs preferred the reliability of MPERS-based financial statements. This notable difference leads to discussions of "stewardship reporting" and the "usefulness for decisions" of financial reports. Finally, it was found that the accountants were not concerned about the undesirable features as these could be managed with appropriate interventions and should not cause any concern to the related stakeholders.

Keywords: accounting standards, adoption, MPERS, professional accountants, public practice.

1.0 INTRODUCTION

When the International Accounting Standards Board (IASB) issued the financial reporting standards for small and medium enterprises (SMEs) in July 2009, the debate on Big-GAAP versus Small-GAAP was practically resolved (Tan, 2017). The debate was about whether accounting standards should be applied equally to large and small business entities. In February 2014, the MPERS Framework for SMEs was endorsed as a standard for application by private entities. MPERS is a self-contained standard that comes in 35 sections covering all the relevant areas for financial reporting by private entities. IASB took the stand that SMEs have no public accountability and thus should not be subjected to the full requirements of the International Accounting Standards (IASs) and International Financial Reporting Standards (IFRSs) issued for public entities. The argument was to reduce the burden of producing information that is not likely to be of interest to the stakeholders of SMEs (IASB, 2009).

To allow time for the transition to MPERS, private entities were given a choice:

- a. To adopt the MFRSs used by public entities; or

- b. By 1 January 2016, to make the mandatory transition to MPERS. (The previous PERS Framework was withdrawn from 1 January 2016.)

In addition, the MPERS Framework provided for “undue costs or effort” exception in many areas that required the more complex fair value measurement, allowing private entities the option to apply the less complex cost measurement model. Another exemption is that private entities have the option to adopt MFRS 139 *Financial Instruments: Recognition and Measurement* instead of Section 11 and 12 of MPERS (Tan, 2017). Both of these are measures to encourage the adoption of MPERS by private entities. The driving forces are the benefits to the private entities of using the MPERS Framework of accounting standards. The restraining forces are the resistant elements that attempt to delay the adoption by SMEs of MPERS. Therefore, our research questions are:

1. What are the desirable features private entities can reap by adopting and applying MPERS in the preparation of their financial statements and reports?
2. What are the undesirable features that are required to be mitigated to motivate full adoption of MPERS by private entities?
3. What are the challenges private entities face when in adopting the MPERS financial reporting framework for preparing financial statements?

To be more comprehensive this study will seek the answers from three categories of accountants, namely, professional accountants in public practice (PAPPs), also known as public accountants; professional accountants in business and commerce (PAIBs); and accountants in academia (accounting educators).

2.0 LITERATURE REVIEW

The primary purpose of financial reporting is to provide information to aid economic decisions made by shareholders and investors in capital markets. The lack of regulations in the early days of financial reporting was due to limited separation of ownership and management in business entities. However, from the 1930s onwards, there was increased separation of ownership and management, making it necessary to regulate financial reporting and disclosures (Deegan & Unerman, 2011).

Regulation of accounting practices and financial reporting is a relatively recent phenomenon. As financial statements and reports will be used by shareholders and investors to make important financial decisions and in order they can be relied upon, published financial statements and disclosures should be subject to regulation. It is thought that regulation through accounting standards can promote consistency in the preparation of financial statements and reports and also ensure that they are being interpreted in the same manner every time by the interested users (CIMA, 2015).

At a later date, MASB noted that the accounting standards for application by private entities were not complete and initiated efforts to convert the IFRS for SMEs into a set of accounting standards to be applied by Malaysian private entities when preparing their financial statements and reports (Ng, 2015). In August 2013, MASB issued MASB ED77 “MPERS which is based on IASB’s IFRS for SMEs. In February 2014, the MPERS Framework was endorsed as a standard for application by private entities. By 1 January 2016, private entities in Malaysia had to make a mandatory transition to the MPERS Framework. The MPERS Framework was put in place and this brought the private entity reporting on a par with the current global financial reporting. Thus, financial statements and reports prepared by private entities took a quantum leap in that the focus shifted from the traditional stewardship reporting to that of providing relevant accounting information that is useful to external users in making economic decisions.

There are many reasons for adopting MPERS, a collective and uniform set of accounting standards which makes it possible to compare financial reporting between companies. This is an important objective of regulations for accounting standards. MPERS reporting also facilitates comparison across industries and countries, thus promoting cross-border investment and stock market incorporation (Lee & Fargher, 2010). There are also intangible advantages of applying MPERS when preparing financial statements and reports. Early MPERS adopters may gain from a reduction in capital costs and market liquidity changes (Florou & Pope, 2012). In addition, the undesirable features include additional reporting costs, and the transitional cost incurred when applying a new standard (Christenson, Lee and

Walker, 2008). Common transitional costs include software and systems changes, additional external audit costs, training of staff, additional external data costs, and costs arising from changes such as renegotiating debt agreements. These undesirable features have increased the degree of resistance of accounting practitioners to the adoption of MPERS.

Moving to the new MPERS Framework presents several challenges for the regulators, the preparers of financial statements, the external auditors and also the implementation consultants. The first challenge is to consider the improvements that are required to be made to the computer systems of hardware and software applications. Next in the list is the transitional workload requirements of the accounting staff of the business entities (AICPA, 2011). The external auditors need to consider whether their professional staff have the requisite skills and expertise to effect the conversion from PERS to MPERS. Other concerns include whether MPERS will be continuously changing and whether accounting experts can keep up with the changing standard.

The three groups of accountants most affected by the adoption and application of MPERS are those in public practice, in business and commerce, and in academia. The professional accountants in public practice (PAPPs) are engaged in accountancy firms, providing services such as external auditing, accounting, taxation, costing and management accounting, and provision of secretarial services under the Companies Act 2016. Some accountants in small and medium practices (SMPs) even provide bookkeeping services to their clients, who are normally SMEs. The professional accountants in business (PAIBs) are diverse, working in commerce, industry, financial services, educational institutions, and the public and not-for-profit sectors. They support their organizations in a wide range of job functions, including keeping the accounts, preparing financial statements and reports, management accounting and reports and also stakeholder communication. The academics responsible for educating the next generation of accountants are also an important group contributing to the accounting profession. They are teaching staff engaged in universities and higher educational institutions, equipping students with adequate knowledge, skills and competence in professional accountancy (MIA, 2020).

In Malaysia, private entities, enterprises and private limited companies rely heavily on accounting practitioners to prepare financial statements and reports (Ghio & Verona, 2015). Many of these private entities outsource the preparation of financial statements and financial reports to PAPPs, due to their own lack of knowledge and competence in complying with accounting standards, particularly MPERS (Dorasamy et al., 2010). Nor do they maintain appropriate records and or understand financial analysis based on financial statements, and are therefore unable to appreciate the value of accounting and financial reporting standards for monitoring and decision making (Dorasamy et al., 2010). Therefore, the transition from PERS to MPERS provided great business opportunities to the accountants in public practice especially the SMPs. However, these public accountants require adequate preparation to equip themselves with the requisite skills and expertise before embarking on preparing the first set of financials according to the MPERS Framework. Once armed with the required knowledge and competence in applying MPERS, the accountants in public practice are likely to be pro-MPERS.

However, not all private entities will outsource the accounting function. Many medium-sized entities have their own finance and accounting departments, staffed by professional financial and management accountants. For these PAIBs, education, training and preparation are important factors for efficient transition to the MPERS Framework. As the MPERS standards are principle-based in many instances they require professional judgement in the preparation of financial statements using MPERS. This will definitely be a challenge, considering PAIBs' preference for "uncertainty avoidance". In addition, they may have to take a critical look at their accounting policies and consider whether they are in line with the MPERS Framework. Given the challenges faced by these company accountants, they are likely to be sceptical of the real benefits of adopting the MPERS Framework.

The primary objective of accountants in academia (accounting educators) is to educate, train and develop accounting students into ethical, knowledgeable and competent professionals. These accounting educators are aware of the pressures exerted by employers and private entities to design and deliver relevant accounting curricula, so that their graduates can acquire the necessary and appropriate

skills and competencies. The MPERS Framework is relatively new and the accounting curriculum should be up-dated. Accounting educators should also be involved with professional life-long learning, through education and training programmes to update practising accountants with new knowledge and understanding, in this case related to MPERS. Therefore, accountants in academia are likely to agree with the adoption of MPERS.

3.0 RESEARCH METHODOLOGY

The main objective of this study is to examine the perception of three accounting sub-groups in Malaysia, using a quantitative method with primary data collected by a structured questionnaire (Wong, McMurray, Meunjohn, and Teh, 2021). The three accounting sub-groups are accountants in public practice, accountants in SMEs, and accounting educators. The author has special permission to distribute questionnaires during 12 MPERS training sessions conducted by the Malaysian Institute of Accountants (MIA) in various locations in Malaysia. The participants of these training sessions were mostly PAPPs and PAIBs. Survey data from accounting educators was collected using a mixture of on-site and on-line surveys. Contact details of accounting lecturers were identified from the staff directories of ten selected universities. The questionnaires were sent to targeted respondents via emails (Krishna, Ramendran, & Mohamad, 2020).

Data were collected on desirable and undesirable features of MPERS and also on the challenges expected in implementing MPERS. The items on desirable features are:

- MPERS-based financial statements are reliable (Reliable).
- MPERS-based financial statements are comparable (Comparable).
- MPERS has higher quality of financial reporting than PERS (Higher Quality).
- MPERS provides credibility and thus increases shareholders' trust (Provides Credibility).
- MPERS makes access to global markets easier than PERS (Access to Global Market).
- MPERS makes external financing easier (External Financing).

The items on undesirable features are:

- Lack of detail, room for subjective interpretation (Lack of detail and Subjective). Not yet fully accepted globally (Not accepted globally).
- Too complicated for the needs of Malaysian SMEs (Too complicated).
- Cost of conversion from PERS to MPERS outweighs its benefits (High conversion cost).
- Time consuming (Time consuming).
- Influenced by political intervention from developed countries (Influenced by developed countries).

The items on challenges from MPERS implementation are:

- Managing public perception of changes in presentation of financial statements (Managing public perception).
- Educating financial staff and management on change process (Educating financial staff).
- Insufficient guidance on first-time application (Insufficient guidance).
- Limited coverage of MPERS in university curriculum (Limited coverage in curriculum).
- Updating the accounting process due to MPERS implementation (Updating the accounting process).
- Updating the accounting information systems due to MPERS implementation (Updating the accounting information systems).

A total of 392 usable responses were collected and categorized into the three groups, PAPPs, PAIBs and accounting educators. The data collected were entered into statistical computer software (SPSS v.20) and subject to statistical analyses.

4.0 DATA ANALYSIS

A 61.2% (240) of the respondents were female and 38.8% (152) male. As far as the level of MPERS knowledge was concerned, 47.2% (185) of the respondents acknowledged that they had an average level, 35.2% (138) good knowledge and only 3.3% (13) excellent knowledge. Only 14.3% (56) of the respondents had poor to no knowledge of MPERS.

Table 1 tabulates the means and standard deviations and shows the descriptive statistics of the participants. From the descriptive statistics, we can deduce the general perception of the accountants toward implementation of MPERS in their accounting environment.

Table 1: Descriptive Statistics of Desirable Features, Undesirable Features and Challenges

	Desirable Features	Mean	SD
DF1	MPERS-based financial statements are reliable.	3.74	0.844
DF2	MPERS-based financial statements are comparable.	3.73	0.842
DF3	MPERS has higher quality of financial reporting than PERS.	3.74	0.919
DF4	MPERS provides credibility and increases shareholders' trust.	3.60	0.935
DF5	MPERS makes access to global markets easier than PERS.	3.60	0.819
DF6	MPERS makes external financing easier.	3.69	0.878
	TOTAL AVERAGE	3.69	0.741
	Undesirable Features		
UF1	Lack of details creating room for subjective interpretation.	3.23	1.027
UF2	Not yet fully accepted globally.	3.36	0.928
UF3	Too complicated for the needs of Malaysian SMEs.	3.21	0.996
UF4	Cost of conversion from PERS to MPERS outweighs its benefits.	3.27	0.984
UF5	Time consuming	3.53	1.024
UF6	Influenced by political intervention from developed countries	3.20	1.026
	TOTAL AVERAGE	3.30	0.784
	Challenges		
CH1	Managing public perception of changes in presentation of financial statements.	3.64	0.849
CH2	Educating financial staff and management on change process.	3.83	0.888
CH3	Insufficient guidance on first-time application.	3.86	0.890
CH4	Limited coverage of MPERS in university curriculum.	3.81	0.863
CH5	Updating the accounting process due to MPERS implementation.	3.78	0.870
CH6	Updating the accounting information systems due to MPERS implementation.	3.78	0.908
	TOTAL AVERAGE	3.78	0.731

Based on the descriptive statistics presented in Table 1, the total average of Challenges appears to have the highest mean (3.78 ± 0.731), followed by Desirable Features (3.69 ± 0.741) and Undesirable Features the lowest (3.30 ± 0.784). This shows that for the accountants as a whole, challenges arising from the implementation of MPERS in the accountants' workplace are of the greatest concern. The factor of least concern, Undesirable Features, may be seen as temporary, and overcome through various interventions and fact finding before implementing MPERS. The total average for Desirable Features is relatively high. Desirable features appear to be the driving force of the implementation of MPERS in the Malaysian accounting practice. These features also cancel out some of the undesirable features. For Desirable Features, the three items that score the highest means are:

1. DF1 MPERS-based financial statements are reliable (3.74 ± 0.844).
2. DF3 MPERS has higher quality of financial reporting than PERS (3.74 ± 0.919).
3. DF2 MPERS-based financial statements are comparable (3.73 ± 0.842).

The results indicate that most accountants view that financial statements based on MPERS are reliable and of high quality and can be trusted. Furthermore, MPERS-based financial statements are comparable and fulfil the four enhancing qualitative characteristics of comparability, verifiability, timeliness and

understandability. Thus, Malaysian accountants understand that MPERS fulfils the basic qualitative characteristics of financial reporting; the desirable features are therefore essential. For Undesirable Features, the three items with the highest means are:

1. UF5 Time consuming (3.53 ± 1.024).
2. UF2 Not yet fully accepted globally (3.36 ± 0.928).
3. UF4 Cost of conversion from PERS to MPERS outweighs its benefits (3.27 ± 0.984).

The respondents gave lower scores for Undesirable Features than for Desirable Features and Challenges to MPERS adoption. Even the highest mean score, for UF5 Time consuming, is only 3.53 ± 1.024 , lower than any scores for items of Desirable Features and Challenges. This indicates that the undesirable features can largely be ignored, especially given MASB's approach when canvassing for MPERS adoption.

As for Challenges, the three items with the highest means are:

1. CH3 Insufficient guidance on first-time application (3.86 ± 0.890).
2. CH2 Educating financial staff and management on change process (3.83 ± 0.888).
3. CH4 Limited coverage of MPERS in university curriculum (3.81 ± 0.863).

It was surprising that the respondents perceived these three items as the challenges of most concern. CH3 Insufficient guidance should not be a problem, given the long due process period involving setting up a Working Group (WG), preparing Discussion Papers (DP), finalizing DPs into Exposure Drafts (ED) for public comments, and holding round table discussions. This lasted almost three years before the issuance of MPERS in February 2014, which would only become mandatory in January 2016. CH2 Educating the financial staff should not be a hurdle, as for professional accountants on the MIA's register, training and education is part of Continuous Professional Enhancement (CPE) requirements. CH4 Limited coverage of MPERS in university curriculum is also not a difficult challenge, requiring only collaboration between the industry players and academia to increase the coverage of MPERS in curriculum design.

4.1 Comparative studies between sub-groups

The latest membership statistics provided by the MIA Registry as at 31 December 2020 show that out of 37,113 MIA members, two-thirds (24,357; 65.63%) are engaged in Commerce and Industry as professional accountants in business (PAIB). The second largest sub-group (8,469; 22.82%) is Professional Accountants in Public Practice (PAPP). The third sub-group works in the public sector (3,396; 9.15%), but only 891 (2.40%) members teach accountancy in universities and colleges. Therefore, the two main sub-groups are PAPPs and PAIBs, and it is deemed adequate and appropriate to identify and examine the differences and similarities between these two groups.

For the PAPPs, the total average mean scores for Desirable Features, Undesirable Features, and Challenges are 3.67, 3.24, and 3.79 respectively. Challenges has the highest mean score, followed by Desirable and then Undesirable Features. For the PAIBs, the total average scores is, Challenges (mean=3.84), Desirable Features (mean=3.61), and Undesirable Features (mean=3.34). This indicates that both groups have the same perception of the adoption and implementation of MPERS in their accounting systems. Both are most concerned about the challenges MPERS has brought to the accounting and auditing environment, and they agree that the desirable features of MPERS far outweigh the undesirable features. The undesirable features could be overcome with a proper understanding of MPERS and its underlying advantages.

According to PAPPs, the three most important challenges are CH3 Insufficient guidance on first application (mean=3.90), followed by CH2 Educating financial staff and management on the change process (mean=3.85) and CH5 Updating the accounting process for MPERS adoption (mean=3.80). All these three challenges involve change, which is manageable. CH3 Insufficient guidance can be overcome by information searches with the regulatory authorities, CH2 Educating financial staff by sending staff to training workshops and seminars, and CH5 Updating the accounting process by acquiring the services of accounting software vendors. Nevertheless, all these challenges require substantial investment that can be re-couped from providing revenue services to the clients. In fact,

from the entrepreneurial perspective, these challenges could be seen as business opportunities to provide quality and up-to-date services to their clients.

4.2 Regression Models of PAPPs and PAIBs

In Regression Model 1 for PAPPs, $R=0.368$ and $R^2=0.135$ and only two factors are found to significantly influence the adoption of MPERS: Desirable Features and Challenges; Undesirable Features are not significant. This means that the two significant factors, namely Desirable Features and Challenges can only explain 13.5% of the variance in adoption of MPERS, which is considered as relatively low. Nevertheless, Model 1 can be expressed as:

$$\text{ADOPT MPERS} = C + 0.171\text{DESIRABLES} + 0.293\text{CHALLENGES} + \varepsilon$$

Of the two factors, Challenges ($\beta=0.326$, $p=0.000$) has more influence over MPERS adoption than Desirable Features ($\beta=0.197$, $p=0.005$). Thus, to motivate and encourage PAPPs, MASB as the standard setters should provide more guidance on the implementation of MPERS in private entities. Training programs should be made readily available to educate financial staff as private entities migrate from PERS to the MPERS accounting framework.

Model 2 is the regression model for PAIBs. $R=0.556$ and $R^2=0.310$, and the model has only one significant factor, Desirable Features. As far as PAIBs are concerned, Undesirable Features and Challenges are not significant factors and could be ignored. Desirable Features alone can explain 31.0% of the variance in adoption of MPERS. The three desirable features that motivate PAIBs to adopt MPERS are that MPERS-based financial statements are reliable, comparable and could engender high-quality financial reporting. Model 2 can be expressed as:

$$\text{ADOPT MPERS} = C + 0.583\text{DESIRABLES} + \varepsilon$$

According to the regression analysis for Model 2, PAIBs believe that reliable and comparable financial reporting could motivate the implementation of MPERS by private entities. In considering the trade-off between the relevance and reliability of financial reporting, MPERS introduced a new feature called “undue cost or effort” to ease the application of certain requirements.

5.0 CONCLUSION

Accountants are most concerned about the challenges that the MPERS framework brings, and particularly the insufficient guidance given by the regulatory authorities, the training and development opportunities to educate their staff, and the limited coverage of MPERS in the teaching curriculum. To the PAPPs, the challenges of implementing MPERS remain the area with which they are most concerned. Apart from insufficient guidance, and lack of training and development opportunities, they are also very concerned about the investment needed to upgrade their computer systems to accommodate the changes brought in under the MPERS framework. The PAIBs are most concerned about the challenges of insufficient guidance, insufficient educational facilities for their staff, and limited teaching of MPERS in colleges and universities.

As far as desirable features are concerned, both PAPPs and PAIBs perceive the same ones as desirable, although the order of importance is different. While PAPPs like the ability of MPERS to engender high-quality financial reporting, PAIBs prefer its ability to engender financial statements that are reliable. This difference in opinion suggests two schools of thought: decision usefulness and stewardship reporting. Investors and creditors have complained about the lack of usefulness of financial statements for making resource allocation decisions. PAPPs are of the opinion that as far as possible financial reporting based on MPERS is of high quality and should contain both fundamental and enhancing qualitative characteristics in the financial statements prepared and presented. PAIBs acting as stewards for shareholders must not forget the interest of the company owners over their personal interests (Zeff, 2013). Stewardship reporting is aligned to preparing financial statements that are reliable and where measurements of assets and liabilities are based on cost and not on fair value. Based on regression analysis, to PAPPs, the two significant factors that motivate the mandatory adoption of MPERS are Challenges, and then Desirable Features. This is understandable as the challenges from MPERS

conversion are, in the eyes of the public practitioners, business opportunities. For PAIBs, only the Desirable Features are significant, motivating company accountants to adopt the MPERS framework.

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A Comparison of Students' Performance in Financial Accounting Courses during Face-to-Face vs. Online Examination – An Insight from UiTM Tapah

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ABSTRACT

Due to the major shift in the educational delivery mode from face-to-face to online learning for the past year following the Covid-19 pandemic, it has now become essential for a comparison of the learning outcomes. This is especially true to ensure students are able to perform well even with different learning platforms. This descriptive study aims to compare the students' performance in various financial accounting courses based on the grades achieved during face-to-face and online examinations. A dataset of two prime semesters is utilised which includes the results of the last face-to-face final examination held in 2019 and the most recent online examination conducted in full in 2020. The results indicate a mixed picture, with a combination of an increase, a decrease, and no clear pattern in the performance of different financial accounting courses during online examination. However, a significantly better performance can be seen outweighing the others, especially in the overall GPA scored. This finding could be used by the management of universities in determining the appropriate learning or teaching mechanisms that suit accounting courses during online learning. Future research may explore on the factors influencing the favourable outcomes in online examination as compared to face-to-face.

Keywords: accountancy; Covid-19; education; learning; outcomes

1. INTRODUCTION

The sudden outbreak of the COVID-19 pandemic has wreaked havoc all around the globe. In Malaysia, this has led the Malaysian government to commence the first Movement Control Order (MCO) on 18 March 2020 (Elengoe, 2020). As of today, Malaysia is still conducting the MCO as a measure to curb the virus from spreading worse. This results in most sectors to shift operation from face-to-face to online. Education being among the most affected industries. Open and Distance Learning (ODL) has been in practice ever since to ensure the continuity of the teaching and learning process. It is undeniable that ODL offered huge advantages due to its flexibility, accessibility, affordability, and life-based education opportunities. Despite its numerous benefits, there are few drawbacks of ODL that may hinder students from achieving good academic performance. Sundarasen, Chinna, Kamaludin, Nurunnabi, Mohammad Baloch, Khosaim, Abid Hossain, and Sukayt (2020) revealed that students faced problems in terms of internet stability, network coverage, and compatibility of the devices used. Besides that, students feel distracted because they need to juggle between house chores and concurrently attending online classes. Students also tend to feel alienated because there is no physical and social interaction with the lecturer and team members to perform course assessment. This situation leads to poor self-confidence, increases procrastination and trigger anxiety and fear to achieve good performance for the course enrolled (Allam, Hassan, Mohideen, Ramalan, & Kamal, 2020).

The sudden shift away from classrooms has also dragged the exam to be conducted online. It is believed that different learning and exam format would yield different results in terms of students' performance and the performance of a particular subject itself (Hughes & Lyons, 2017). Therefore, the present study

aims to compare the students' performance in various financial accounting courses based on the grades achieved during face-to-face and online examinations. This study is timely important for the management of universities in determining students' performance and thus come up with the appropriate learning or teaching mechanisms that suit accounting courses during online learning.

2. LITERATURE REVIEW

Researchers currently have emphasized on examining the outcomes of online courses, which is in line with the increased enrolment rate in online learning. Many prior studies have documented evidence that students tend to perform differently under online and face-to-face modes of instructions.

Previous academic analysis suggested that students receiving the face-to-face instructions will obtain better examination grades than those in the online learning assessments. Sohn and Romal (2009) proved that students' performance in the face-to-face mode outperformed in the final exam than online mode since online mode requires more effective design and proper management in the course assessment. In another study, Faidley (2018) compared students' outcomes in Principles of Accounting courses which were delivered in two methods of instruction, consistently revealed that students accomplished significantly better final course grade in face-to-face classes than online. Generally, online students ordinarily had trouble to understand the subject matter in detail and feel uneasy to digest the basic course information which resulted in the lower grade in exams compared to face-to-face students. From different point of view, Krasodomska and Godawska (2020) revealed that students' engagement in online learning had a positive effect on their final performance. In a study investigating self-regulated learning strategies in an online learning environment and academic achievement at a public university, students who used more self-regulated learning strategies such as structuring their learning environment, setting goals, managing their time wisely and conducting self-evaluations had better academic performance(Barnard-Brak, Paton & Lan, 2021) McCarthy, Kusaila and Grasso (2019) proved in their study that Intermediate Accounting III and Auditing students in the online modes significantly outperformed compared to students in the face-to-face mode, which suggests a favourable support for the acceptability of online accounting education. Indirectly, the results display positive assessments of students' engagement and adaptation to online teaching and learning.

Meanwhile, other studies conducted a comparison between the students' performance in online learning and face to face learning disclosed that there was no statistically significant difference in grade-based students' performance between instructional modes of learning (Aly, 2016; El Said, 2021). Rich and Dereshiwsky (2011) also indicated that there were no significant differences in terms of students' performance among undergraduate accounting courses between face-to-face and online modes. It can be summarized that course instruction is more crucial for students' learning than the type of delivery and instructors should put more efforts on the quality of designing and developing courses' contents.

Therefore, the objective of the present study is to provide an additional insight from UiTM Campus Tapah for a comparison of a grade-based performance, particularly for financial accounting courses during face-to-face and online examination format.

3. RESEARCH METHODOLOGY

3.1 Research population and rationale

This study focuses on the main program offered by Faculty of Accountancy in Universiti Teknologi MARA (UiTM), Perak Branch, namely Diploma in Accountancy (AC110). This study included a total number of 1,547 students for face-to-face learning, while 1,520 students for online distance learning. Data is taken internally from Students Information Management System (SIMS). Two semesters are chosen for comparison which are the second semester of year 2019 (20194) that represents the data during face-to-face examination. As for ODL data, this study focuses on the second semester of year 2020 (20204). This study chose to scrutinize the second semester for both years as the students' intake is larger in number, making the data bigger and more reliable. Other than that, second semester of year 2020 students were the first batch in which the online learning and online final assessments in UiTM were conducted in its entirety. This study chose to evaluate the performance of all Financial Accounting

and Reporting courses, subsequently coded as FAR courses, offered in AC110. The rationale behind it is mainly because these are the core and technical papers of the program. Apart from that, other reason is due to the nature of the courses where students need to prepare the financial statements of companies that involve specific accounting formats, treatments, and calculations in deriving to the figures to be reported. Unlike most other courses where the students' understanding can simply be tested using multiple choice questions, true/false or short essay formats, FAR courses require a deep understanding of the subject to enable them to successfully prepare the statements. Thus, it is fair to conclude that the grades and results of these FAR courses achieved by the students are reliable to be used as a measure of performance. In getting unbiased results, each of the FAR courses included in this study were taught by the same group of instructors for both methods of learning.

3.2 Data Analysis

Simple descriptive analysis is used to find the limelight of findings for this study. Although this analysis on its own will not allow this study to predict the future outcomes or explain the answer to the question of why the findings are as such, but it will organize the data so that it is ready for further analysis in the future.

4. RESULTS AND DISCUSSION

4.1 Descriptive Analysis

Table 1: Descriptive Analysis

	F2F		ODL	
	f	%	f	%
FAR110	527	27%	380	19%
FAR160	63	3.20%	44	2.20%
FAR210	464	23.70%	525	26.30%
FAR270	85	4.30%	98	4.90%
FAR320	408	20.90%	473	23.70%
FAR340	408	20.90%	477	23.90%
	1547	100%	1524	100%

f = Frequency

Table 1 shows the descriptive analysis of frequency and percentage of students enrolled in FAR courses for Diploma in Accountancy (AC110) for both semesters of face-to-face and online distance learning. There was a total of 1547 students enrolled in FAR courses during face-to-face semester, while for online semester, there was 1524 students involved. FAR320 and FAR340 courses were offered to the same batch of students, thus they were only counted once.

Table 2: Comparison based on grades of courses.

	Courses' Grade-based Comparison Summary from Face-to-Face to Online Learning													
	A				C				D				Overall	
	+	A	A-	B+	B	B-	C+	C	-	+	D	E	F	
FAR110	↓	↓		↑	↑	↑	↑	↑	-	-	↑	↑	↓	Poorer
FAR160	↑	*	↑	↓	↑	↑	↓	↓	-	-	↑	-	-	Unclear
FAR210	↑	↑	*	↑	↓	*	*	*	-	↓	↓	↓	-	Better
FAR270	-	-	↓	*	↓	↑	↑	↑	-	↓	↓	↑	-	Poorer
FAR320	↓	↑	↑	↓	↓	↓	↑	↑	-	-	-	-	-	Unclear
FAR340	↑	*	*	↓	↓	*	↓	↓	-	-	-	-	-	Better

Top	Middle	Low	Poor
<i>* = Significant difference of more than 10%</i>			
<i>No difference in percentage</i>			

Table 2 shows the comparison summary of the grades for FAR courses between the two different examination methods. The comparison is relevant as both platforms cover the same syllabus and learning modules for each course. For FAR110, there is a significant decrease in the A+ and A scorers in the online examination as compared to the face-to-face method. This basically caused the distribution of the scorers of other grades appear higher. The case is different with FAR160, where there is an increase in the number of students who get an A+, A-, B and B- in the online examination. The data distribution is balanced by the decrease in the number of grade A, B+ and C+ achievers. In short, there is no clear pattern in the performance of FAR160 during online exam in comparison with the face-to-face exam. As for FAR210, the graph of significantly better performance during online examination is crystal clear, where there is a drastic increase in the percentages of students who scored A+, A, A- and B+.

On the other hand, FAR270 recorded a poorer performance during online examination as compared to face-to-face method. This is visible when there is no difference in the percentages of A+ and A performers, the decrease in the percentages of A-, B+, and B performers and an increase of percentages in B-, C+, C and E graders. Next is FAR320, there is also a mixed pattern on the performance during online exam, where there is an increase in the number of A and A- as well as C+ and C scorers. This has caused the distribution of the other graders decrease in number. Lastly for FAR340, better performance during online examination is in light. This can be seen through a significant increase in the percentages of A+, A and A- achievers.

From the above results, there are mixed findings between online distance learning and face-to-face grades for each of the FAR courses. This is aligned with Hughes and Lyons (2017) in their study, where they found different findings of performance when four studies demonstrated a significant improvement in test scores using online learning compared to face-to-face traditional learning, while four showed no significant difference and three demonstrated mixed results. However, to look at the positive view, online distance learning does provide a significant increase in exam grades as found in previous studies (Tan, Yue, and Fu, 2017; Betihavas, Bridgman, Kornhaber and Cross, 2016).

Table 3: Comparison of Students' GPA for Both Methods of Learning

	F2F	ODL
3.50 and above	49%	67%
3.00 - 3.49	33%	24%
2.5 - 2.99	14%	6%
2.00 - 2.49	3%	2%
Below 2.00	1%	1%

F2F: Face-to-Face Learning; ODL: Online Distance Learning

Shown in Table 3 above is the comparison of the students' grade point average (GPA) during both face-to-face and online examinations. There is a significant rise in the percentage of students who acquired a 3.50 and above pointer in the semester of online assessment as compared to the face-to-face semester. The increase is considerably high, from 49% to 67%. When this study compares the performance of students in term of GPA apart from individual FAR courses in both methods of learning, it has seen a roughly better performance during online distance learning in comparison to the traditional physical learning. Thus, it is fair to conclude that students perform much better during online distance learning than in face-to-face learning since more than half of them obtained 3.5 and above in pointer.

Overall, all categories of students, whether they are top, middle, or low performers are benefiting from the shift of the examination platform. This is evident in the data distribution for the other GPA groups, where the percentages are reduced in the online examination compared to the face-to-face examination, following the sharp increase in the first GPA group.

5. CONCLUSION & RECOMMENDATION

Presently, the condition of Covid-19 pandemic crisis can still be considered high. Every part of the country's system is taking the best action to at least cope with this situation, and Ministry of Higher Education is at no exception. No one has the information of how long this pandemic will remain, thus online distance learning and examination will need to be implemented for a longer period. With online distance learning moving into the long term, experts say the mental, emotional, and academic impacts of that shift are likely to be challenging. Narad and Abdullah (2016) concluded that the students' academic performance determines academic institutions' success and failure. Therefore, continuous upgrades and improvements to this online distance learning mechanism need to be actively examined to not merely getting a better academic performance among the students, but most importantly to suit the new environment and ensure that the outcomes are of a high quality. To achieve such quality academic performance, many aspects and factors will have to be considered. Future research may focus on the factors that influence the improved performance in online distance learning. Other than that, this study can also be expanded to include the data from other accounting program offered by the faculty, which is Diploma in Accounting Information System (AC120) as well as the data from other accounting-related papers, such as costing, taxation, and audit to strengthen the conclusion within the accounting field.

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Relationship Between Audit Committee Expertise and Quality of Indonesian Banking Financial Statement

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ABSTRACT

This study aims to determine the relationship between the expertise of the audit committee and the quality of Indonesia Banking Financial Reports. This observation was carried out at Banks listed on the Indonesia Stock Exchange, with the year of observation between 2012 and 2019. Using the robust fixed-effect model at the firm level, the results show that the expertise of the audit committee can mitigate income increasing practices of management that making low or negative loan loss provision discretion to increase their net income. This result in line with the agency theory.

Keywords: agency theory; audit committee; bank; discretion of loan loss provision; financial quality.

1. INTRODUCTION

The financial sector is the sector with the highest market capitalization in Indonesia, mostly dominated by banks (Otoritas Jasa Keuangan, 2021). For this reason, maintaining the financial health of the Bank is necessary (Baron, Verner, & Xiong, 2020) to maintain the stability of the Indonesian economy. Banking has inherent risks in its business processes, namely credit risk. The credit risk can be detected earlier if the bank maintains the quality of its financial statements. Accounting standards in Indonesia stipulate that business entities that have financial assets must provide an allowance for losses if there are indications of impairment in their financial assets (Dewan Standar Akuntansi Keuangan, 2010). Impairment of value requires the bank to establish a loan loss provision. In determining the value of loan loss provision, management have to make an estimate. In this estimation process, management has the discretion. It can provide space for management to take opportunistic actions to manipulate financial statements (Fonseca & Gonzalez, 2008).

Loan loss provision provides an interesting context for researchers who want to study the implications of management discretion in the banking industry because it is a significant account in the banking industry (Kanagaretnam, Krishnan, & Lobo, 2010). Based on POJK No. 55/POJK.04/2015, audit committee are parties who are given the authority to ensure quality bank financial reports.

In previous studies in United States, the expertise of the audit committee itself was associated with increasing the quality of financial reports (Choi, 2018). However, different results may occur in Indonesia because law enforcement in the United States is more stringent than in Indonesia. For this reason, this study wants to see how the relationship between expertise in accounting and/or auditing and the quality of banking financial reports in Indonesia.

2. LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

Agency theory is a theory that studies the design of contracts that motivate rational agents to act in the interests of the principal, even though there is a conflict of interest between the agent and the principal (Scott & Scott, 2015). In the banking industry in Indonesia, there is a relationship between principal and agent because there is a separation between ownership and management. The owner of the bank acts as the principal and the management acts as the agent. In an agency relationship, if both parties act to maximize their satisfaction, it is possible that the agent does not always act in the interests of the principal. This can create agency problems. To overcome this, the principal can set appropriate incentives for the agent and incur oversight costs to limit the activities that deviate from the agent (Jensen & Meckling, 1976).

Oversight costs designed to limit the opportunistic activities of the agents may include appointing people on the board of commissioners to oversee management. The commissioner then formed a special committee, one of which was the audit committee (Puat Nelson & Devi, 2013). The audit committee based on POJK regulation No. 55/POJK.04/2015 assigned to ensure the quality of financial reports. In contrast to the commissioners who have a role in strategic oversight, the audit committee focuses more on the role of ensuring the quality of financial reports. Sharma, Sharma, and Ananthanarayanan (2011) found that companies that implement good audit committee member selection practices can reduce earnings management.

HYPOTHESIS DEVELOPMENT

Based on agency theory, the audit committee functions to ensure the quality of financial reports. The audit committee is a special committee formed by the board of commissioners (Puat Nelson & Devi, 2013) to overcome agency problems by ensuring the quality of financial reports. Be'dard, Chtourou, and Courteau (2004) found that aggressive earnings management is negatively related to the financial expertise of audit committee members. Based on previous study, the second hypothesis in this study is as follows:

H1 : There is a positive relationship between audit committee expertise in accounting and/or auditing and the quality of banking financial reports in Indonesia.

3. RESEARCH METHODOLOGY

Empirical testing to test hypotheses 1 refers to Bratten, Causholli, and Omer (2019) and (Kanagaretnam et al., 2010) using the following equation:

$$DL_{it} = \beta_0 + \beta_1(LPM_{it}) + \beta_2(KAExpert_{it}) + \beta_3(LPM_{it} \times KAExpert_{it}) + \beta_4(SizeKAP_{it}) + \beta_5(CRT1_{it}) + \beta_6(Loss_{it}) + \beta_7(L_{it-1}) + \beta_8(Tahun_{it}) + \varepsilon(1)$$

DL_{it}	:	Discretion portion of loan loss provision
LPM_{it}	:	Dummy variable, value 1 if bank are in the bottom quartile of total sample in term of income before loan loss provision and tax
$KAExpert_{it}$:	Expertise in accounting and/or auditing
$SizeKAP_{it}$:	Dummy variable, value 1 if the bank is audited by Big 4
$CRT1_{it}$:	Capital Ratio Tier 1
$Loss_{it}$:	Dummy variable, value 1 if the bank suffers a loss before loan loss provision and tax
L_{it-1}	:	Loan loss provision _{t-1}
Tahun	:	Control over the year

The research object is a non-Islamic commercial bank listed on the Indonesia Stock Exchange. The observation period is from 2012 to 2019 using balance panel.

4. RESULT

Regression analysis was used to test the hypothesis in this study. The results of the regression on model 1 can be seen in table 1. The results of this regression have met the classical assumption test using robust treatment to overcome the problem of heteroscedasticity.

Table 1. Regression Result Model 1.

Variabel	Prediction	Coefficient	Prob.
LPM _{it}	-	-0.0107	0.010***
KAExpert _{it}	+	-0.0028	0.287
LPM _{it} ×KAExpert _{it}	+	0.0120	0.004***
SizeKAP _{it}	+	0.0024	0.399
CRT1 _{it}	+	0.0264	0.036**
LOSS _{it}	+	-0.0020	0.691
L _{it-1}	-	0.0930	0.199
Tahun _{it}	+/-	-0.0002	0.300
Konstanta		-0.0037	0.125
N	280		
Adjusted R ²	0.1361		
Prob (F-Statistic)	0.0000		

Information:

DL_{it}: Discretion portion of loan loss provision; LPM_{it}: Dummy variable, value 1 if bank are in the bottom quartile of total sample in term of income before loan loss provision and tax; KAExpert_{it}: Expertise in accounting and/or auditing; SizeKAP_{it}: Dummy variable, value 1 if the bank is audited by Big 4; CRT1_{it}: Capital Ratio Tier 1; LOSS_{it}: Dummy variable, value 1 if the bank suffers a loss before loan loss provision and tax; L_{it-1}: Loan loss provision_{t-1}; Tahun: control over the year.

...significant at $\alpha = 1\%$; ..significant at $\alpha = 5\%$; .significant at $\alpha = 10\%$

Source: Stata data processing, 2021

The value of β_3 in table 1 is positive and significant, thus the results of testing the hypothesis are accepted. Moderation between audit committee expertise in accounting and/or auditing variables with low pre-managed income variables can reduce the negative effect of low pre-managed income variables on discretionary loan loss provision. So that there is a positive relationship between the expertise of the audit committee in accounting and/or auditing area and the quality of financial reports. This is following the results of Choi (2018) research which found that the financial expertise of audit committee members in the banking industry is positively related to timely recognition of credit allowance charges.

5. DISCUSSION AND CONCLUSIONS

The results of the moderation between low pre-managed earning and audit committee expertise in accounting and/or auditing indicate that the moderation is positively related with discretionary loan loss provision, this indicates that audit committee expertise in accounting and/or auditing can mitigate the income increasing practice carried out by management because banks that supervised by audit committee that have expertise in accounting and/or auditing cannot reduce the loan loss provision to increase bank's net income when banks record low income before loan loss provision and tax. That phenomena occurs, because audit committee expertise in accounting and/or auditing can detect earnings management practices carried out by bank management.

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Competency and Training of Professional Accountant in Malaysia as Attributes towards Compliance of AMLA 2001

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ABSTRACT

Money laundering offences have become important issues worldwide. Within the accounting fraternity, discussions have involved an important issue related to the low level of compliance by professional accountants towards the anti-money laundering regime in Malaysia. In the context of this study, anti-money laundering regime refers to both the legislative requirements of the Anti-Money Laundering, Anti-Terrorism Financing and Proceeds of Unlawful Activities Act 2001 (AMLA 2001) and the international standards requirements of the Financial Action Task Force (FATF). Since the introduction of AMLA 2001, professional accountants (includes auditors, tax consultants and practicing accountants) have been named as a reporting institution. As a reporting institution, professional accountants are required to implement compliance programs and to submit related suspicious transaction reports. Three compliance programs named by the anti-money laundering regime are namely “Know your customers or KYC”, “Clients due Diligent CDD” and “Record keeping”. This study was undertaken to examine the importance of competency and training among professional accountant towards money laundering compliance. This study used Protection Motivation Theory to explain on the importance of that attributes. A questionnaire survey was developed and sent to professional accountants. Findings from this study have identified that “competency & training” found to be significantly related to the level of compliance towards anti-money laundering regime.

Keywords: Money laundering; know your customer; client due diligent; compliance, suspicious transaction reporting; record keeping; competency; training.

1. INTRODUCTION

In Malaysia, AMLA was introduced in 2001 to mitigate money laundering offences. Due to the serious implications of this offence, there are provisions in AMLA 2001 enabling to freeze, seize, and forfeit the illegal proceeds of crime as a stringent measure to mitigate money laundering activities. BNM stated that there are more than a hundred money laundering cases involving companies and individuals that are still waiting for trials (BNM website, 21 May 2019). Managing money laundering issues is challenging and difficult, as the money launderers had craftily analyse every aspect of the related laws to identify advantages on any loopholes. Currently, there are cases that have taken more than two years in collecting evidence, yet the prosecution is still ongoing due to the difficulty of determining the primal wrongdoings (Zakiah & Khalijah (2012).

The advancement of the digital financial technology had further allow money launderers to become more creative whilst the legislation or regulation to mitigate such offences is still lagging or too slow to being operationalized. To further complicate matters, money launderers have started using the expertise of lawyers, accountants, auditors, company secretaries, and money changers in their criminal activities to facilitate on concealing their activities (Cabana (2007) and Ruiz (2004). Globally, this group of professionals mention above are named as **Designated Non-Financial Business or Profession (DNFBP)**. DNFBP is a reporting institution listed in Paragraph 3.3 (a) to (k) of the AMLA 2001. On 2004, DNFBP also becoming one of the reporting institution and needs to comply with AMLA 2001.

Professional accountants during the audit task should be able to detect any money laundering activities and being able to report to the BNM. It is understood that professional accountant should carried out all AMLA procedures known as CDD, KYC and record keeping

Currently, money launderers choose professionals like accountants and lawyers because the oldest modus operandi were through financial system, for example the banking institution, may not be easy for them. Banking institution had performed a number of efforts to mitigate money laundering. Most of the banks may easily identify those suspicious activities through their system and their well-trained employees. Professional accountants or lawyers are always chosen by the money launderers to act as a nominated person. They are appointed to perform certain duties or designated to perform certain acts or functions. In the money laundering context, they are aware of the risk, received instruction, performing task, and trustworthy (Nikoloska & Simonovski, 2012). Accountants and lawyers may not realize that they have aided the money launderers to set up new company, purchase assets, and invest in securities and others.

This study will identified whether competency and training is important for the professional accountant to comply with AMLA 2001 rules and regulation.

2. LITERATURE REVIEWS AND RESEARCH THEORETICAL

From the legislative perspective, the Malaysian Anti-Money Laundering Act 2001 defines money laundering as an “act that engages, directly or indirectly, in a transaction that involves proceeds of any unlawful activity, acquires, receives, possesses, disguises, transfers, converts, exchanges, carries, disposes, uses, removes from or brings into Malaysia proceeds of any unlawful activity; or conceals, disguises or impedes the establishment of the true nature, origin, location, movement, disposition, title of, rights with respect to, or ownership of, proceeds of any unlawful activity” (AMLA 2001, Part II, Section 4). Money laundering activities usually carried out through “structuring”, “smurfing” or “blending”. Splitting large amount of financial transactions into smaller amounts is intended to avoid detection of money laundering. “Structuring” can be implemented through a series of “smurfing” which additionally makes it’s difficult to identify money laundering. Structuring and smurfing can be used in placement which is the first stage of money laundering process and intends place illegal funds into financial system. The final stage known as integration, involves the integration of funds into the legitimate economy. This is realized through the purchase of assets such as real estate or luxury goods or by “blending” which means providing illegal funds to legal business by mixing such funds with legal income (Dobrowolski, 2019).

Being the gatekeepers of the AMLA regime, reporting institutions are encourage to systematically strengthened their procedures and enhance their roles in mitigating money laundering offences. The new FATF recommendations issued in 2012 for DNFBP, had no significant changes but the recommendations have been simplified to only two recommendations. Currently, DNFBP only need to comply with Recommendations 22 and 23. Recommendation 22 is specifically addressing on customer due diligence (CDD), which should be read together with Recommendations 10, 11, 12, 15 and 17 of the FATF Recommendation. Recommendation 23 is specifically on the regulatory and supervision requirement (Normah et al., 2016b).

This study will adopt Protection Motivation Theory (PMT), it has two components which are threat appraisal and coping appraisal. Threat appraisal includes three factors that explain how threats are perceived. These are basically rewards or benefits (any intrinsic or extrinsic motivation to increase or keep an unwanted behaviour), severity (the magnitude of the threat), and vulnerability (the extent to which the individual is perceived to be susceptible to the threat). Coping appraisal includes three factors that explain an individual’s ability to cope with the threat. It is response efficacy (the belief in the perceived benefits of the coping action by removing the threat), response cost (cost incurred to the individual in implementing the protective behaviour), and self-efficacy (the degree that he or she believes it is possible to implement the protective behaviour). This study, however will focused on the self-efficacy or renamed as “training & competency” to facilitate understanding of the readers.

Competency emphasises an individual's capabilities and competence to cope with the task or make a choice (Bandura, 1977, 1991). Competency has been shown to have a significant impact on an individual's ability to accomplish task (Compeau & Higgins, 1995). Competency is also known as expertise. Expertise can be divided into two. Firstly, it can be considered as knowledge that claims to be highly relevant for practical purposes. This is due to the nature of the type of knowledge that can be qualified as 'expertise'. Expertise is stored in professions and organisations, rather than in academic disciplines. Expertise can only be earned through working experience, which means, the longer you do the task, the more expert you will be. Secondly, expertise is a kind of knowledge that claims to be correct. This claim is difficult to be challenged by the users. Expertise is the knowledge produced and administered by specialists and can only be challenged by specialists. The expert competence is considered so advanced that it cannot be evaluated or controlled by people who do not have the same education and experience (Jacobsson, 2000). The inexpert person needs to trust the expert person (Hulsse & Kerwer, 2007). A research performed by the Ifinedo (2011) on the information system security policy has suggested that competency would have a positive effect on the information system security compliance. This is consistent with the study done by Verkijika (2018), which also found positive relationship between self-efficacy and smart phones security behaviour. The study also found that the detailed and comprehensive training provided had a significant gap in the attitudes between senior management and juniors. While senior management's attitudes were positive, junior staffs tend to perceive anti-money laundering activities as an extra burden in terms of banking operations due to the incomprehensive training given to them (Simwayi & Guohua, 2011).

In the context of banking institution, competencies are known as crucial factors in detecting money laundering activities at the beginning, when being approached by the new customers, to assess the level of risk until writing in the suspicious transaction reports. A frontline officer has been named as first line of "defences" in screening the customers for money laundering risk potential. The damages become unbearable if money laundering risk has passed through the frontline officers due to the failure of frontline officers to screen the new customer's background. However, any money laundering risk detected after reviewing the transaction of the new customer can be reported to BNM as suspicious transaction and the bank should not notify the customer regarding the report made to BNM (Isa, Sanusi et al., 2015). To continue promoting and maintaining expertise of human capital, this human capital should be provided with continuous education and training that are relevant, for example cutting edge technology, new financial instruments, regulation, policies, and the ability to trace and track illegal behaviour in the digital economy (Vaithilingam & Nair, 2007).

In addition, providing training and ensuring that only the properly trained personnel handle any transactions, have become legal requirements in many countries (Sathy & Islam, 2011). The importance of continuous training increases with the fast-paced advancement in money laundering techniques and the ever-evolving money laundering regulations. Continuous training programme will make the personnel to be updated with the sophisticated technology and new typologies of money laundering activities, thus making them to be motivated to detect money laundering transaction. Therefore, professional accountants should examine their anti-money laundering training strategies, goals, and objectives on an on-going basis and maintain effective anti-money laundering programmes that reflect the best practices.

The training given should clarifies about the AML legislation, rules, and procedures; the requirement of legislation bodies; the duties of competent authority as well as reporting institution; documentation; and most importantly to deal with typical customer and transaction of money laundering activities. All employees should be trained to be alert and watchful with regard to documents and answers by clients (Verhage, 2009). This is supported with the research done by Nagela (2019) on tax training which training may have increased the entrepreneur's knowledge about their financial obligations, regulations concerning deductions of business costs and their awareness with regard to penalties for incorrect deductions and increase compliance.

According to Zimeles (2004), training should include more real-life examples using a case study or role play. It is also found that, an effective training should focus more on the risks faced by the employees

and needs of the reporting institutions, especially when it is given to the employees that work closely with the clients. This is because, if they are facing with a situation of suspicious activities, these employees are in the best position to detect the activities. Another research done by Dusabe (2016) found that knowledge and skill for individuals working in the AML sector, such as the FIU members, regulators, public prosecutors, the judiciary and the law enforcement bodies, are important to make them capable complying with the requirements.

3. RESEARCH METHODOLOGY

This research adopts a quantitative research method by employing survey research as the primary method. A questionnaire survey is used as a main instrument to collect data from professional accountants, who are also being members of the DNFBP group. The final questionnaires were sent to the selected sample either email or by post. Simple random sampling were used in this study.

Constructs have been operationalised using the Likert scales. The Likert type scale is a common approach used to measure a wide variety of latent constructs (Kent, 2001). In this research, the seven-point Likert scale, ranging from (7) strongly agree to (1) strongly disagree were used for anti-money laundering compliance (independent variables). For the dependent variable which refer to competency and training; (7) strongly implemented to (1) strongly unimplemented were applied for the implementation of the anti-money laundering compliance as stipulated by AMLA 2001 and FATF recommendations. Instead of using one single measurement for anti-money laundering compliance, the study examines all three requirements of AMLA 2001 which are CDD, KYC and record keeping.

This study used SPSS to analysed all the data captured from the survey questionnaire. Some of the statistical procedures undertaken for the study would include techniques used to test data normality, data reliability, means scores, correlation between variables and linear regression analysis. Regression analysis is a set of statistical method to estimate the relationship between dependent variable and one or more independent variables. The regression equations are as follows:

$$\text{MODEL : } \text{ALL} = a + a_1 + s$$

Where,

Dependent variable

ALL: Magnitude of the variable referring to CDD, KYC and record keeping.

Independent variable

a1: Competency and trainings

4. RESULT AND DISCUSSION

This study focused to identify whether competency and training influence the compliance towards AMLA 2001 by professional accountants. Here, this item refers to a situation where professional accountants seek new knowledge through training in the area of anti-money laundering regime (AMLA 2001 and FATF) in order to enhance their competency in detecting and mitigating money laundering offences.

There are seven (7) items in the training & competency, namely (i) importance of AML training in detecting money laundering activities; (ii) extensive training to be provided by both BNM and MIA to improve money laundering detection capabilities among the professional accountants; (iii) training in money laundering will assist them in recognizing suspicious transaction; (iv) training materials to be used as a reference; (v) knowledge sharing gained from the training session with other members; (vi) adequate expertise gained from training to implement money laundering requirement as stipulated by AML regime and (vii) training enhances ability to detect money laundering activities. Interestingly, about ninety-five percent (95%) of the respondents agreed on how five training-related items (i.e. knowledge sharing, training material, attendance of training, extensive training and the importance of training) contribute positively to the professional accountants. However, such training may not adequately enhance their competency and ability to either implement anti-money laundering regime effectively or to increase their ability to detect money laundering activities. Competency needs a lot of exposure and experience. The professional accountants need more time before they can be competent in detecting money laundering activities. Lack of competency among professional accountant would

become one of the reason not to comply with AMLA 2001 and finally destroy the initiative of BNM to reduce money laundering cases. Refer to Table 1 for the regression result.

Table 1: Result of regression between training and competency and compliance of AMLA (Know Your Customer, Client Due Diligent and Record Keeping)

Variable	Coefficients	T stat	P value
Independent variable			
Competency and Training	0.192	2.554	0.011
R square			
Adjusted r square	0.454		
	0.413		

Based on Table 1, significant positive relationship is observed between money laundering compliance and training & competency ($R^2 = .454$), $p = .000$). Standardised beta coefficient of 0.63579 of money laundering compliance shows that training & competency make a strong and unique contribution in explaining money laundering compliance.

Training and competency is positively influence compliance among professional accountant in accordance to money laundering requirement. This study are consistent with the studies done by Ifinedo (2011), Verkijiya (2018) and Lwin et al., (2012). The results can be supported by the existing literature that the importance of continuous training increases within the fast-paced advancement in money laundering techniques and the ever evolving money laundering regulations. Continuous training programme will make professional accountants up to date with new AMLA 2001 and FATF requirement, latest and sophisticated technology (hardware and software) and new typologies of money laundering activities. In addition, Dusabe (2016) found that knowledge and skill for individuals working with the AML sector is crucial so that they are capable to comply with the requirements. Lacking knowledge on the basic of AML requirements as well as limited resources has negatively affected the smooth implementation of AML programmes (Subbotina, 2009).

Training and competency will become an important weapon in the implementation of anti-money laundering programme. Training provided by regulators as well as reporting institutions is known to be a gateway for the AMLA implementation. Without proper knowledge and training, all programmes relating to AMLA cannot be attainable. MIA may encourage training on AMLA regime as part of important training that should be obtained by all professional accountants every year. This is to ensure that all professional accountants keep up to date with any changes within the laws. CPE hours can be introduced to make the training become compulsory.

Competency is important in the process of detection of any suspicious transactions and activities; however, the professional accountant needs to be aware of the nature of client's business and industry so that it will help to determine any suspicious transactions. BNM should encourage all reporting institution to always add their knowledge and expertise by attending training and seminars. Those training and seminars can be initiated by BNM, MIA, MICPA or any other institutions.

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Disclosure in Integrated Reporting: Indonesia Perspectives

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ABSTRACT

The holistic perspective in integrated reporting <IR> can explain the impact of various conditions. This paper aims to explore the perception gaps between preparers and users of financial statements regarding disclosure of information in <IR> which is relevant for decision making. This study uses agency theory and legitimacy theory as a basic to analyse their perspectives. A survey with a web questionnaire is used to collect data. Using an independent sample t-test, we document that there is a significant difference between user and preparer perspectives. Furthermore, it is known that 80% of <IR> items are relevant in the user's decision making but only 34% of items will be disclosed to the public by the preparers. There are still limited studies that explore this matter using <IR> framework 2021. This study is useful for the regulator to understand information that should be disclosed so that <IR> is useful for both parties if Indonesia is going to implement <IR>. Further research should analyse with larger number of respondents in several other countries that have similar characteristics as Indonesia.

Keywords: agency theory, legitimacy theory, perception, preparers, users

1. BACKGROUND AND LITERATURE REVIEW

The whole processes in <IR> are developed as a dynamic and sustainable system (Barnabè et al., 2019). It can provide critical information for investors (Christopher & Arnold, 2020). However, the preparers face many challenges in the adoption of IR, especially to meet all the criteria requested by the framework (Balasingam et al., 2019). Preparers tend to report the information which important according to the preparers perception without knowing the user's needs. So, if Indonesia is going to implement IR, the regulator needs to maintain interest for both parties as said by the theory of public interest (Godfrey, 2010). Therefore, this study aimed to find out what information is relevant in users' decision-making and what information may be disclosed to the public according to the preparers. To the best of our knowledge, there is still no studies that analyse all items of information in detail. Most studies only use subgroups in content elements (Chariri & Januarti, 2017; Lipunga, 2015; Rowbottom & Locke, 2016; Tjahjadi et al., 2020). In addition, the previous studies used the 2013 <IR> framework. Meanwhile, this study uses the latest 2021 <IR> framework.

Based on legitimacy theory, the preparer would disclose their non-financial information to avoid the risk of losing social support (Shocker & Sethi, 1973; Wahl et al., 2020), reduced the cost of capital, and increase the value of the company (Wahl et al., 2020). Meanwhile, from agency theory stakeholders will for non-financial information relevant to their decision-making (Adhariani & de Villiers, 2019). As a result management has to give voluntary disclosure to satisfy the needs of stakeholder and reduce the asymmetry of information (Adhariani & de Villiers, 2019; García-Sánchez & Noguera-Gámez, 2017). Overall, this study contributes in several ways. First, it explores what type of information that should be classified as mandatory disclosure, if Indonesia intends to implement IR. Second, support management to understand the information needed by the users to enhance the quality of their report.

2. RESEARCH METHOD

The analysis of the study used quantitative analysis to understand information need by the users and what information will be disclosed by the prepares. This study used a close-ended questionnaire to gain users' and preparers' perceptions. The respondents in this study were divided into two groups, the preparers, and users. Preparers are divided into three sub-groups. The first group is the council member, the second group is Chief Executive Officer (CEO), and the third group consists of the Chief Financial Officer (CFO), finance controller, and accountant. In December 2020, we conducted a pretesting of 10 respondents to assess the validity of the data obtained (Mark et al., 2016). This is to ensure that respondents will have no difficulty understanding and answering the questions in questionnaires and determining the time needed by the respondents to fill up the whole questions of the survey (Mark et al., 2016). Then, we conducted a reliability test to ensure the consistency of research results when carried out at different times and conditions (Mark et al., 2016). Cronbach's alpha shows a value of 0,976 with 68 questionnaire questions which means that the questionnaire items are stated consistently for use in research. We used the Shapiro-Wilk test to determine data distribution, and it is known that all data are normally distributed because they have a value of $\text{asymp Sig. (2-tailed)} > 0,05$. Finally, an independent sample t-test is used to compare the perceptions gap between preparers and users. It is known that at the 10% of significance level, there is a significantly different perception between preparers and users.

3. FINDINGS AND DISCUSSION

3.1 Respondents

A total of 67 responses were received. Their profile is presented in Table 1. As we can see, the respondents in this study, consisting of 35 people (53%) as users and 32 people (47%) as preparers.

Table 1. Respondents' profile

Respondents		(%) of total respondents
Preparers	Group 1	91 %
	Group 2	6 %
	Group 3	3 %
	Total	100%
Users	Investor	29 %
	Auditor	29 %
	Creditor	11 %
	Audit committee	11 %
	Regulator	11 %
	Academist	9 %
	Total	100%

2. User's and Preparer's Perception on Integrated Reporting

According to Table 2, preparers agree that 34% of information could be disclosed to the public. Meanwhile, there were 88% of the information that relevant to users' decision-making. According to agency theory, this difference is because managers, as the preparers, will only disclose the information that is beneficial to them (Adhariani & de Villiers, 2019; Casonato et al., 2019). But managers have to be reminded that the disclosure is carried out as a form of accountability and ensured that the management has acted for the company's interests (Naynar et al., 2018; Ravenscroft & Williams, 2009).

According to Figure 1, preparers are willing to disclose 43% of information about corporate governance and 36% of information items regarding the strategy and resource allocation. According to the Otoritas Jasa Keuangan (OJK) regulation, management is familiar with disclosing that information in the annual report. In contrast, management is reluctant to disclose some information, such as risks and opportunities (0%), outlook (25%), and performance (27%). There are some possible reasons. First, management is afraid to disclose sensitive information to competitors. Moreover, South Africa shows a willingness to disclose sensitive information after the full adoption of <IR> (Sukhari & de Villiers, 2019). Second, that information is related to the qualitative information, which depends on the

management judgment, which is one of the main challenge in implementing <IR> (Adhariani & de Villiers, 2019; Bachoo & Ahmad, 2018).

Table 2. Perceptions on Integrated Reporting

Information	Preparer's Perception	User's Perception
Can be disclosed to the public / relevant in decision-making	23	34 %
Can't be disclosed to the public / Not relevant in decision-making	45	66 %
Total	68	100 %

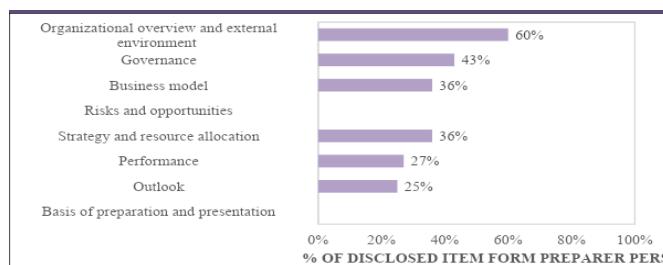


Figure 1. Percentage of Disclosed Item from Preparer's Perspective

Furthermore, based on users' perspectives showed in Figure 2, most of the information is relevant for their decision-making. Users will ask for more disclosure as a form of corporate accountability, as stated in agency theory (de Villiers & Van Staden, 2010). Users need that information to understand the management's ability to face the challenge both today or in the future, which can show the ability of companies to create value (IIRC, 2021). Besides, only 43% of information about corporate governance is relevant to the users. Because there is a perceptions gap regarding the relationship between corporate governance and financial indicators, some argue that corporate governance does not significantly affect the financial condition (Hutchinson, 2002; López-Arceiz et al., 2018; Mollah & Zaman, 2015; Pathan & Faff, 2013). They argue that corporate governance can reduce profits (López-Arceiz et al., 2018; Makni et al., 2009). However, another study explained that corporate governance would increase the company's ability to manage resources and public trust in the organization (La Porta et al., 2006; Mishra et al., 2019; Wang & Sarkis, 2017).

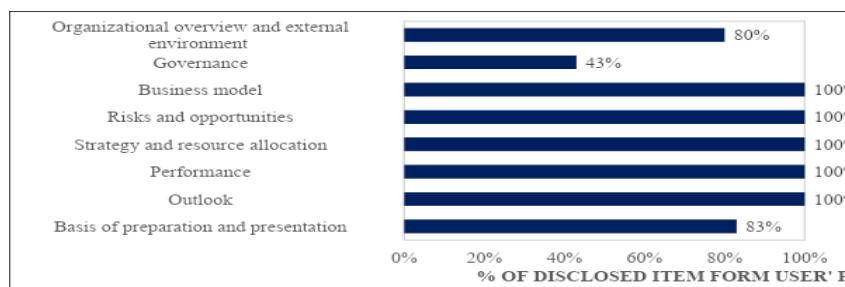


Figure 2. Percentage of Disclosed Item from User's Perspective

4. CONCLUSION

The findings indicate that there was a perception gap between preparers and users. According to agency theory, information asymmetry will cause differences in perception between the two parties. If Indonesia is to implement full <IR> adoption, then the regulator needs to understand preparers and users' perspectives. This study contributes to financial statement preparers regarding the information that should be disclosed in <IR> to provide high quality financial reports and can meet the expectations of stakeholders, then it can increase company value. This study also provides solutions for regulators in developing rules regarding the implementation of <IR> under stakeholder expectations. The

limitation of this study is it only based on small number of respondents as sample. Further research should use a larger number of respondents and in other countries with similar characteristics as Indonesia to gain insights and provide more understanding of preparers' and users' perspectives regarding <IR> implementation.

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Understanding Factors Affecting Auditor Independence in Malaysia Through Survey Questionnaires and Interviews

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ABSTRACT

Purpose: To provide understanding of the factors affecting auditor independence (AI) from the perspective of auditors in Malaysia using three factors: audit firm tenure (AFT), non-audit services (NAS) and auditor human capital (AHC) proxy by educational level (AHC 1) and professional experience (AHC 2). Design/Methodology/Approach: A mixed method design is adopted. In quantitative phase, questionnaires were sent to auditors under the Malaysian Institute of Accountants (MIA) to rank the most affecting item of each of the variables. Respondents were selected for an interview in qualitative phase. Findings: The interviewed respondents agreed that AFT, NAS and AHC 2 affect AI. On the contrary, they did not find any association between AHC 1 and AI. Research Limitations: In this study, only external auditors were investigated. The evaluation of results amid the current and prior studies was not accurate due to the differences in regards to research design, instrumentation, target respondents and evaluation approaches of the respondents' perceptions. Contribution: This study will provide insights to the existing literature on AI in the Malaysian context. The perceptions of external auditors in Malaysia have been sought in order to determine current perceptions regarding the factors affecting AI and the sufficiency of safeguards that are in place.

Keywords: Auditor Independence, Audit Firm Tenure, Non-Audit Services & Auditor Human Capital

1. INTRODUCTION

Auditor independence (AI) has been a major concern for a long time (Alleyne & Devonish, 2006). It became more prominent after the collapse of Enron which resulted in the closure of Arthur Andersen (Vinten, 2003). The number of corporate accounting scandals in the past decade was alarming where it heightened the need and importance of AI. Understanding factors affecting AI is highly relevant in Malaysia, a country that is not immune to accounting scandals. Recently, the Audit Oversight Board (AOB) of Securities Commission Malaysia (SC) has taken action against the audit firm "Jamal, Amin and Partners (JAP)" and its partner, Ahmad Hilmy Johari, over the provision of prohibited services (Lim, 2021). The AOB has viewed this non-compliance of ethical standards as a serious offence as it undermines AI and poses a self-review threat (Lim, 2021). Scandal cases in 2015 and 2018 that respectively involved 1 Malaysia Development Berhad (1MDB) and Lembaga Tabung Haji each involving billions of ringgit and illegal distributions of dividend are further proof that audit firms in Malaysia have failed to discharge their statutory obligations (Bernama, 2019; Kumar & Alifah, 2018). Most of the existing studies in Malaysia focused on the effect of AI while adopting only quantitative approach which utilized questionnaire as the research tool (Bakar, Barizah & Maslina, 2009); (Bakar, Rahman & Rashid, 2005). Moreover, Bakar et al (2009) and Bakar et al (2005) have studied AI from the perspectives of accountants and loan officers, respectively, and not that of auditors themselves. This motivates me to further develop interest in examining what exactly affects AI from an auditor's perspective using agency theory as well as in answering research questions (RQ) such as: RQ 1) how AI is defined and conceptualized, RQ 2) how ex-auditor employment affects AI, RQ 3) how AFT affects AI, RQ 4) how NAS affects AI and RQ 5) how AHC proxy by educational level (AHC 1) and professional experience (AHC 2) affect AI.

2. LITERATURE REVIEW

There are two aspects of independence: the real independence of an individual practitioner in the performance of his or her works, and the apparent independence of auditors as a professional group (Mautz & Sharaf, 1964). These two concepts of independence have been referred to as 'practitioner independence' and 'professional independence', respectively. This study uses another theme of AI, which is ex-auditor employment, to understand respondents' concerns over the independence of an auditor who previously has ties with a client as well as the independence of an auditor who never have any ties with a client. Based on past studies, it is not uncommon for auditors to be offered a position in clients' firms (Imhoff, 1978; Iyer & Raghunandan, 2002). This is known as 'revolving door' whereby senior financial reporting executives are hired directly from their external audit firms (Clikeman, 1998). AI can also be affected when the audit tenure is longer because auditors slowly align their judgements or decisions to be favourable to management which, in return, compromises their independence (Geiger & Raghunandan, 2002). Dart (2011) examines investors' perceptions on a long audit tenure and majority of his respondents disagreed that long-term audit tenure is a threat to AI. It was argued that NAS diminishes counterbalance in the relationship between clients and the auditing companies, which consequently generates a great risk of self-reliance and self-examination (Quick & Rasmussen, 2005). The income from NAS could make an audit firm economically dependent on an audit client, and this dependence may reduce the auditors' willingness to challenge possible misstatements of a client's financial statements (Kinney, Palmrose & Scholz, 2004). Education improves people's cognitive abilities (Barker, 2002). "Education, an important component of human capital, which help people improve their cognitive ability and address ethical concerns" (Cacioppe, Forster, & Fox, 2008). AHC can accumulate through auditors' professional experience, which helps in understanding the error patterns in their clients' firms as well as enhance AI (Nelson, 2009). Auditors with rich experience have valuable reputational capital, which is likely to encourage them to be more independent (Ittonen, 2015).

3. METHODOLOGY

This study adopted a mixed method design (Creswell, 2003). Questionnaires were sent to auditors under Malaysian Institute of Accountants (MIA). Random Sample Selection was employed in this study. Each contact person (i.e managers, auditors, & partners) of selected audit firms were contacted using contact details provided in the MIA website. They were requested to circulate the questionnaire link which has been sent to them through email, to all their staff/colleagues. This research has been designed in online survey (Google form) and respondents were given about 4 weeks to reply. A total of 90 responses received. Quantitative data was collected to rank the most affecting item of each variable, meanwhile qualitative data was obtained through a series of telephone interviews with 15 auditors from different firms with various qualifications and experience levels by using snowball sampling as a purposeful method of data collection, to explain how and why the highest ranked item of each variable affects the AI.

4. FINDINGS AND DISCUSSION

4.1 Quantitative Analysis of the Results

Findings from quantitative method comprises descriptive statistical data including mean value for variables AI (Ex-auditor employment), AFT and NAS. For categorical variable (AHC 1 and AHC 2), statistics are presented in frequency tables.

Table 1. Descriptive statistics for AI (Ex-auditor employment), AFT and NAS

Variable	Item	Mean	Std. Deviation
AI (Ex-auditor employment)	1	3.80	1.008
AFT	4	3.43	1.061
NAS	3	3.99	0.917

Table 1 demonstrates the mean value for the most affecting item under each of the variables in the questionnaire. Item 1 for AI (Ex-auditor employment), 'I am concerned about the independence of a senior auditor who seeks employment with his or her current audit client' has the highest mean score

of 3.8. This explains that most respondents of this study have ranked item 1 to be impairing the AI. This means that the respondents of this study were well informed about the danger of ex-auditors seeking employment from their audit client as it would impair their independence. Next, item 4 for AFT, ‘Companies are likely to present more appropriate reports with new auditors due to their preservation of AI, as compared to the auditors who have served for a long time’ has the highest mean score of 3.43.

Similarly, respondents of this study indicated that auditors who have worked with a client for a longer period of time will have trouble presenting appropriate reports, as compared to new auditors. Item 3 for NAS, ‘Income from NAS could make an audit firm economically dependent on an audit client’, scored highest mean at 3.99. Yet, the quantitative respondents did not perceive NAS as undermining independence nor enhancing AI. These items were included in the interview questions in qualitative phase to explain how and why the highest ranked item of each variables affect AI.

Table 2. Frequency table for AHC 1 and AHC 2

AHC 1 (Educational Level)	Frequency
Bachelor’s degree	47
AHC 2 (Professional Experience)	Frequency
1 – 3 Years	57

The items used to measure educational level follow the order of; (1) diploma, (2) bachelor’s degree, (3) master’s degree, (4) professional and (5) other. To perform clear analysis on AHC 1, the respondents were divided into 2 categories: less qualified and qualified. Item (1) diploma was used to categorize respondents who are ‘less qualified’ and the rest of the items such as (2) bachelor’s degree, (3) master’s degree, (4) professional and (5) other was used to categorize respondents who were ‘qualified’. Since most of the respondents in this study fell into the ‘qualified’ category, it can be said that these auditors could better preserve their independence. Similarly, items used to measure professional experience of the respondents were also divided into 2 categories: less experienced and more experienced. Items under professional experience followed the order of: (1) 1-3 years, (2) 4-6 years, (3) 7-9 years and (4) 10 years and above. To provide better understanding, auditors with less than 3 years of professional experience (1-3 years) were denoted as ‘less experienced’, whereas auditors with more than 3 years of professional experience (4-6 years, 7-9 years & 10 years and above) were specified as ‘more experienced’. Therefore, it can be inferred that the respondents could easily compromise their independence as majority of them fell under the ‘less experienced’ category.

4.2 Qualitative Analysis of the Results

RQ 1 is answered in this section as the interview results showed that most of the respondents defined or conceptualized auditor independence as ‘to make unbiased audit decisions.’ Here are some comments made by the respondents in defining AI:

“I can’t really be independent. Maybe because I have been working with this client for quite some time, to be exact—around 10 years. I am obligated to act in favour of the client, and there will be days where the client just asks on confidential matters related to reporting strategies and new findings on financial statements.” (R 12)

In answering RQ 2, the highest number of respondents who explained that AI could be undermined as there could be a familiarity threat between a client and an auditor. Some of the feedbacks are as follows: *“Of course, an auditor who joins his or her current audit client will have his or her independence impaired. If clients are making any fraud activities, auditors will not really bother as they are more concerned about their employment with the clients. Auditors should always be the third party. If they work with a client, then the ex-auditors can be more like partners to the client.” (R 6)*

To answer RQ 3, majority of the respondents said that AFT could affect AI merely because they understand the client’s business thoroughly. Some of the comments of the respondents are as below:

"Okay, in my own experience, my boss was much more lenient to clients because our audit firm was very small and we hardly get clients. So, it was just a small number initially. At that point, he, who was also an auditor, hold on to clients for a long time just to cover the start-up cost of the firm. This kind of scenarios weakens the auditor independence." (R 12)

To answer RQ 4, majority of the respondents agreed that NAS could affect AI due to the financial bond, as it could make them feel obligated to provide a good audit opinion. Their comments are as below:

"Actually, the income from NAS could undermine independence. It will eventually create a financial bond between these two parties. Therefore, an auditor who is supposed to work as an agent will be more like a partner in this scenario. Thus, it will jeopardize his or her independence. This is merely because there is a lot more opportunity for an auditor to make more money out of the client. (R 15)

To answer RQ 5, majority of the respondents only found an association between AHC 2 and AI. According to the respondents' educational levels, it could not affect independence as it is not a technical skill that can be learnt through education. Comments from the respondents are as below:

"No, I don't think there is any correlation between educational level and AI. Maybe it can reduce the auditors' mistakes but it has nothing to do with AI. Education will only make the auditor know the standard or policy better. It doesn't mean that if someone is uneducated, then he or she is not good at knowing a particular skill or understanding a job thoroughly." (R 10)

Most of the respondents agreed that AHC 2 could enhance AI because with greater professional experience, auditors can develop and get the synchronization of the clients' error pattern. Below is the comments from respondents:

"The longer the auditor is in the line of auditing, the more he is accustomed to different types of clients. So, he or she knows exactly how to deal with clients who demand unreasonably. They clearly know the consequences of not being independent too. An auditor perceives the reputation he gathered throughout his work experience as a valuable capital. This will eventually force him to be more independent." (R 7)

5. CONCLUSION

In this study, it is found that AFT, NAS and AHC 2 affect AI. However, no association was found between AHC 1 and AI. There are several limitations as this study only investigated the perception of a group which comprises of external auditors, and the results are only focused on them. Future studies are needed to investigate the perception of other users such as institutional and private investors, audit committees and members of regulatory bodies. Moreover, this study only focuses on the three factors affecting AI. It is recommended to investigate more factors in future researches. Next, the result evaluation between current and prior studies may not be accurate due to the differences in terms of research design, instrumentation, target respondents and evaluation approaches of the respondents' perceptions.

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Cost control and cost reduction in Small and Medium-sized Enterprises during the Covid-19 outbreak in Malaysia

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ABSTRACT

The study aims to explore the extent of establishing cost control and cost reduction strategies by Small and Medium-sized Enterprises (SMEs) to maintain their businesses during the pandemic. In addition, this study is to understand the level of awareness about cost control and cost reduction strategies among SMEs, and to explore the impact of the cost control and cost reduction strategies that have been set in motion by SMEs. The qualitative approach was used through in-depth semi-structured interviews using online platforms with business owners or managers. The outcome from the interviews shows that SMEs instigated cost control and cost reduction strategies to control their operating costs and to reduce unnecessary spending to sustain their business during this outbreak. By originating these strategies, SMEs are able to control their operating costs and to ensure that the cost does not go beyond a certain limit or amount. At the same time, they can increase the profit margins by focusing on value-added activities and eliminating non-valued activities without affecting revenue generation. This will lead to an improvement in the competitive capabilities of the company and, thus, this might ensure business sustainability and growth during the Covid-19 pandemic.

Keywords: Budgeting, costing techniques, management accounting, SMEs, sustainability

1. INTRODUCTION

Small and medium-sized enterprises (SMEs) play an important role in Malaysia's economic development because they account for 98.5 percent of all registered businesses, which are also referred to as the country's "backbone" (SMECorp, 2019). According to the report released by Department of Statistics Malaysia (DOSM) on the SMEs 2019 performance, the contribution of SMEs to the overall GDP in 2019 and 2018 was 38.9 percent and 38.3 percent, respectively. In terms of monetary value, SMEs contributed RM552.3 billion to the GDP in 2019, compared to the total value of the overall GDP of RM1,421.5 billion in 2019.

However, the present of Covid-19 outbreak has had a significant negative impact on Malaysia's economy, with approximately 100,000 companies having closed their doors since the first MCO in March of this year (Azman, 2021). The Covid-19 pandemic is expected to have a negative impact on the revenue of 91 percent of small and medium-sized enterprises (SMEs), with 37.5 percent of these businesses experiencing a drop in performance of more than 50 percent (New Straits Times, May 19, 2021). More than 40% of small and medium-sized enterprises (SMEs) are currently suffering and may be forced to close their doors if a complete lockdown (MCO3.0) is implemented in the near future.

During the Covid-19 period, the government continues to provide continuous support and initiatives, including the introduction of an Economic Stimulus Package to assist SMEs in continuing their business activities (SMECorp, 2020). However, this package is only available for a limited time and will not be able to cover all the costs incurred by the organisation. As a result, it is critical for SMEs to consider how they can survive and sustain their operations during and after the Covid-19 without having to lay off employees, reduce production due to cash flow constraints, or take any other action that will

negatively impact household income. Due to this situation, it is crucial for SMEs to adopt cost control and cost reduction strategies in order to survive and sustain their businesses during and after this outbreak. Thus, the study aims to explore the extent of use cost control and cost reduction strategies by SMEs to maintain their businesses during the pandemic. In addition, this study is to understand the level of awareness and the impact of cost control and cost reduction strategies among SMEs.

2. LITERATURE REVIEW

2.1 Cost control

When it comes to controlling costs, cost control is a process that involves practices of control that keep the costs of running a business within acceptable limits. The process of avoiding the wasteful use of valuable resources while encouraging efficiency and cost consciousness also contributes to the increase in profit (Akeem, 2017). The responsibility accounting control system, standard costing, budgetary control, and cost management ratios are the four most important cost control techniques to know. Wong et al. (2018) stated that cost control such as budget planning tools will assist SMEs in achieving its defined goals, resulting in the efficient utilisation of the organisation's resources, ensuring the survival and growth of the organisation by preserving its competitive capability, and ensuring that the organisation remains efficient. A company should investigate good procedures for determining why the company's costs are not in line with the pre-decided or budgeted costs to identify the root cause (Maher et al., 2018). The difference between what was actually spent and what was budgeted. Companies such as SME's can control their operating costs and ensure that costs do not exceed a certain limit or amount by implementing a cost control strategy.

2.2 Cost reduction

"Cost reduction" is defined by the CIMA, London as the "*the achievement of a real and permanent reduction in the unit cost of goods manufactured or services rendered without impairing their suitability for the use intended or reducing the quality of the product.*" (Arora, 2012). Increasing profit margins by eliminating all forms of waste and unnecessary spending without affecting revenue generation, such as costs of manufacturing, administration, distribution, and selling; focusing on value-added activities while eliminating non-value-added activities in the process, for example. It also to minimize the adverse impact of the decline by obtaining the highest possible return on each fund that the company invests. Cost-cutting measures have been found to have an impact on performance and competitive advantage in previous studies (Tomic et al., 2018). It contributes to the enhancement of the company's competitive capabilities, thereby ensuring the survival, growth, and prosperity of the organisation. The importance of cost reduction on SMEs can be seen from recent studies such as Edvardsson et al. (2019), and Soundararajan and Janardhan (2019). Consequently, it is critical to understand how SMEs employ these two strategies to sustain and survive their operations both during and after the outbreak of a pandemic.

3. METHODOLOGY

3.1 Research design

To accomplish the research objectives, a qualitative research method was used. The study conducted in-depth interviews with Malaysian SME owner-managers. Purposive sampling was used to select these respondents in order to meet the objectives. Thus, a qualitative approach is optimal for eliciting in-depth insights into and comprehension of the phenomenon of interest that cannot be addressed quantitatively. This is necessary when certain facts are known but additional information is required to fully explain the situation (Sekaran and Bougie, 2016).

3.2 Sample characteristics

SMEs were sampled across various industry sectors including manufacturing, services, and other sectors. Six SMEs were randomly selected, and respondents were SME owner-managers (Table 1), who serve as dominant figures in their organisations, overseeing financial matters and having direct influence on accounting decisions, as well as being knowledgeable about the firm's management accounting practices. According to Guest et al. (2020), a homogeneous sample of 6–7 interviews will typically secure the majority of themes, with six interviews reaching 80% saturation. Potential

respondents were contacted via email to inform them about the study's nature and intended use of the data.

Table 1. Profile of respondents

SMEs	No. of employees	Company profile	Nature of business	Interviewee	Current position
SME1	5	Medical supplies	Trading Services	Respondent 1	Owner
SME2	15	Training and consultations		Respondent 2	Owner-manager
SME3	17	Petrol stations	Retail	Respondent 3	Owner
SME4	5	Event platform	E-commerce	Respondent 4	Owner
SME5	30	Restaurants	Food & Beverage	Respondent 5	Owner
SME6	26	Information technology	Services	Respondent 6	Owner-manager

3.3 Interview design

Semi-structured interviews were conducted via the Zoom platform. A semi-structured face-to-face interview is one of the most effective methods for gathering data from SME owner-managers in order to obtain unpublished and internal information such as management accounting practises and to explore various participants' perspectives and perceptions. Interviews enable a more in-depth understanding of the organisation's cost control and cost-cutting procedures. Interviews were scheduled via email and telephone. All interviews were conducted in English and recorded by using a Sony voice recorder with the consent of the interviewees, transcribed by the researchers, and securely stored alongside the transcriptions. Each interview session lasted approximately 60 to 90 minutes. The interview questions incorporated previously identified themes.

4. FINDINGS AND DISCUSSION

4.1 Cost control strategies

The interviewees were asked the type of cost control technique adopted and how it being used in the organisation, the impact of this technique on the survival of the organisation during the Covid-19 to sustain the businesses and the challenges they are facing while implementing of this technique.

“Monthly budget... Assist us in monitoring and controlling costs such as salaries, office rental and staff allowances and control over other costs does not exceed the allocation... The challenge to implementing this technique is to maintain budget control...” (Respondent 1)

“Monthly budget and cashflows budget... We maintain the cashflows budget frequently used during Covid-19 to update cash position, control cash used, debt payment, manpower cost and to create new targets for business continuity plans. During Covid-19, the budget more focused on cash control, collection on uncollectable debt, and purchase of digital technology equipment. Time constraints will be the challenge to implementing those techniques...” (Respondent 2)

“Budgetary control, standard costing, financial ratio analysis, breakeven analysis and internal audit... During Covid-19, more responsible with higher accountability for the cost controller, cost variables are broken into details and analyzed on needs and priorities, more discussions and data sharing, transparency among cost controllers to optimize resource utilization and measure gaps against objectives...” (Respondent 3)

“Budgeting... Before Covid-19, it was less intense and less tracking. During Covid-10, it assisted us in creating initiatives or programs that are demanded to manage costs... Also, intense monitoring, therefore the team has to be supportive, and it enhances the performance efficiencies.” (Respondent 4)

“Monthly budget before Covid-19, but during Covid-19, preparation budget on a weekly basis. To know how much you can spend, how to operate, cash control... During Covid-19, the adjusting budget on a next day basis and used to control variable costs such as head count, marketing, and advertising expenses. Also, use standard costing when introducing new product lines...” (Respondent 5)

"Budgeting and costing techniques... Highly usage before and during Covid-19 for planning, controlling, and monitoring IT development, maintenance costs, software and hardware, and staff on-job training... Challenges to manpower competencies..." (Respondent 6)

Based on the findings, it is found that all the interviewees are able to understand the importance of cost control techniques and they adopt at least one cost control technique such as budgetary reports and share the same views on the impact of this technique to facilitate effective decision-making of resource allocation. Interviewees also convey that use of cost control techniques will assist them to plan, control and monitor the operation costs do not exceed the allocation and cash control. Also, it can be seen that the intensity of the usage was mostly high during Covid-19. Besides budgetary control, some companies have utilised the use of standard costing for cost controllers and when introducing new product lines.

4.2 Cost reduction strategies

Similarly, to the cost control questions, interviewees were asked about the type of cost reduction technique they used, how they implemented it in their organisation, the impact of this technique on the organisation's survival during Covid-19 to sustain their businesses, and the challenges they encountered while implementing this technique if any. To adequately respond to these questions, interviewees must understand the distinction between cost reduction and cost saving, which refers to a temporary reduction in costs.

"No cost reduction is used but the company applies cost savings...For example, saving in rental costs due to 30% cut by the landlord, saving in salaries due to incentives from the Government..." (Respondent 1)

"Manpower cost reduction...Pay cut for top management salaries by 25% and allowances...We have to apply cost savings by reducing staff allowance for salaries of more than RM5,000 duration for 4 months. More cash available for new services, reduced operation costs... The challenges effect on staff motivation and productivity..." (Respondent 2)

"Cost reduction assists us to prioritize expenses, with more selective procurement or comparative sourcing... Renegotiate terms with suppliers, especially on standard and recurring costs such as volume discounts, longer credit terms, lower borrowing costs, moratorium..." (Respondent 3)

"Our cost reduction strategies only focus on reducing rental costs by sharing office space with other tenants..." (Respondent 4)

"Reduction in our staff costs or head count for the first few weeks of MCO (March to April) by discontinuing part-timer staff and contract workers. Followed by retrenched full-time staff between 10% to 15% of total employees. The retrenchment is based on staff performance... We have shorter operating hours and reduced shifts that reduce operating costs. Cost saving on shop rentals by getting discounts from landlords..." (Respondent 5)

"Cost cutting strategies allow us to identify and reduce unnecessary expenses to maintain our business and improve our service... During MCO, most of our clients' businesses got affected... We have to reduce the price of service rendered to our clients by giving them a discount..." (Respondent 6)

The findings revealed that most SMEs used cost reduction techniques for the survival of the company and can be seen to be very essential to the sustainability of business during the pandemic. Some SMEs have used cost reduction strategies to reduce staff costs and operation costs, others have used cost savings to survive during the pandemic. Thus, cost reduction strategies consists of effective permanent saving in cost through continuous improvement without compromise the quality of product or service, as well as strategically reducing costs associated with business activities.

Overall, the findings in this research are different from the existing literature due to the current situation being faced by SMEs. For instance, high usage or intensity use of cost control and cost reduction techniques during a pandemic. Thus, the findings also identify patterns and significance emerging from the data. It is found that budgetary tools are the most common or successful approach employed by the respondents.

5. CONCLUSION

The relevance of this research is to explore the importance and the impact of cost control and cost reduction techniques on organisational sustainability in SMEs during the Covid-19 pandemic. The evidence from interviews revealed that SMEs had implemented cost control and cost reduction strategies throughout the organisation during the pandemic. Cost control and cost reduction strategies were found to be two effective cost management tools for increasing efficiency in organisations. Thus, both strategies are critical to organisational success and accomplish distinct goals. Regardless of its contributions, this research is subjected to its limitations that need to be addressed. This qualitative study involved several SMEs which to address the research objectives focusing more on exploratory studies. Hence, the findings are not conclusive in representing the population of SMEs in Malaysia. Perhaps, future research should utilise alternative research methods to generate more robust findings. In summary, the implications of this study shed light on the use and impact of cost control and cost reduction strategies in SMEs in order to sustain operations during a pandemic.

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The Relationship Between Tax Avoidance and Investment Efficiency In Indonesian Companies

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ABSTRACT

The purpose of this study is to examine the relationship between tax avoidance and investment efficiency in Indonesian companies. The grounded theory in this research is agency theory. This is because the higher the company's tax avoidance, the company shows high information asymmetry, so that it can trigger managers to be free to manage company funds, without being noticed by shareholders. The period of this research is for four years from 2016 to 2019 in Indonesia public companies. Using panel data as a testing technique, the results of this study indicate a negative relationship between tax avoidance and investment efficiency. The results of this study indicate that companies that do tax avoidance are increasingly inefficient in investing

Keywords: abs-residual; agency theory; cashetr; information asymmetry ;taxation

1. INTRODUCTION

Tax avoidance is believed to increase the company's free cash flow. This allows the company to use free cash flow to carry out investment activities. However, even though the company invests a lot, the level of investment efficiency needs to be considered. Based on agency theory, previous research form Khurana, Moser, and Raman (2018) found that information asymmetry creates agency conflicts so that investment is not efficient, especially in the utilization of the company's free cash flow. The existence of information asymmetry creates a moral hazard for managers which makes the interests of principals and agents incompatible. One form of this asymmetry is the existence of tax avoidance activities because the information provided by the manager is different from the actual conditions. In addition, it is believed that tax avoidance can be used to increase the company's free cash flow, but managers tend to use the free cash flow to finance unneeded investments, so that companies are increasingly inefficient in investing.

Therefore, we predict that corporate tax avoidance will reduce investment efficiency. This study uses data from companies registered in Indonesia from 2016 to 2019, the results show that the higher the level of tax avoidance, the lower the investment efficiency of the company.

2. THEORICAL REVIEW & RESEARCH HYPOTHEIS

According to Jensen and Meckling (1976), agency theory is created because the owner of capital (principal) appoints a manager (agent) to run the company. The purpose of the appointment of the agent is to provide the maximum possible profit for shareholders. However, in reality there is an agency problem between shareholders and managers. According to Shapiro (2005), these managers tend to be irresponsible for the tasks given, because they feel more ownership of the company, thus ignoring the interests of shareholders. Based on the agency problem, the manager's condition is greatly benefited, because the manager has access to more information than the capital owner, especially regarding the company's financial aspects.

The use of company finances should prioritize shareholder profits, but managers prefer to use the money to increase the value of the company, while one example is investing. According to Habib and Hasan

(2017), investment aims to get big profits in the future, but this is different from the desire of shareholders who want to share the profits from their investment. Because managers are more focused on the company, their investment activities tend to be inappropriate, this makes the company inefficient in investing.

Another problem within the company is the existence of tax avoidance, according to Kirchler, Maciejovsky, and Schneider (2003), tax avoidance is a way for companies to legally reduce tax payments. According to Khurana et al. (2018), tax avoidance is useful for increasing the company's free cash flow. However, the free cash flow obtained is not distributed to the owners of capital, but they are used for investments that are not needed by the company, thereby reducing the company's investment efficiency.

Based on the problem of free cash flow contained in Jensen (1976). Free cash flow in the company should be used to provide welfare for investors, but managers tend to use free cash flow to carry out activities that benefit themselves, such as making unnecessary investments. The investment made by the manager aims to increase the value of the company, so that the compensation obtained increases. This applies to free cash flow obtained from tax avoidance activities.

Several studies have shown that tax avoidance can increase investment efficiency. Finding from Khurana et al. (2018) suggests that a firm's large free cash flow, from tax avoidance activities, allows managers to better analyze which investments the firm needs. However, this is a problem, because managers can lose investment time by doing too much analysis. In another side, research from Asiri, Al-Hadi, Taylor, and Duong (2020) shows the opposite, namely tax avoidance is negatively related to investment efficiency. This is because managers make investments that are not needed by the company. The main goal is to take advantage of free cash flow from tax avoidance to get maximum profit in the future. Subsequent research from Firmansyah and Triastie (2020) showed a negative relationship between tax avoidance and investment efficiency. Research conducted on the manufacturing industry in Indonesia proves that tax avoidance can increase managers' moral hazard behavior. Therefore, the hypothesis of this study is: Tax avoidance is negatively related to investment efficiency.

3. METHODOLOGY

3.1 Empirical Model

$$\begin{aligned} \text{INV}_{\text{efi},t} = & \beta_0 + \beta_1 \text{CashETR}_{\text{i},t} + \beta_2 Z + \beta_3 \text{TobQ}_{\text{i},t} + \beta_4 \text{Year}_{\text{i},t} + \beta_5 \text{Levit} + \beta_6 \text{OPX}_{\text{i},t} \\ & + \beta_7 \text{DPR}_{\text{i},t} + \varepsilon_{\text{i},t} \quad (1) \end{aligned}$$

3.2 Variable definition

3.2.1 Dependent Variable (Investment Efficiency)

Following Chen's 2011 model, we use the estimation model (2) in determining the value of investment efficiency.

$$\text{INV}_{\text{i},t} = \beta_0 + \beta_1 \text{NEG}_{\text{i},t-1} + \beta_2 \% \text{RevGrowth}_{\text{i},t-1} + \beta_3 \% \text{RevGrowth} * \text{NEG}_{\text{i},t-1} + \varepsilon_{\text{i},t} \quad (2)$$

$\text{INV}_{\text{i},t}$ is total investment of company i in year t. It is measured using the net increase in tangible fixed assets and intangible assets divided by lagged total assets. $\text{NEG}_{\text{i},t-1}$ is value 1 if the company experiences negative revenue growth, and 0 if otherwise. $\% \text{RevGrowth}_{\text{i},t-1}$ is Percentage of change in growth of company i from period t-2 to t-1.

The equation is carried out for each industry and year. Then the residual result of the equation becomes a proxy for investment inefficiency. A positive residual indicates an over-investment problem, and a negative residual indicates an under-investment problem. Then the residual results are absolute. Following Gomariz and Ballesta (2014), to make it easier to read the research results, the absolute

residual value is multiplied by minus one (-1), so that the higher the absolute value of the residual indicates the higher the investment efficiency.

3.2.2 Independent Variable (Tax Avoidance)

To measure tax avoidance, this study uses CashETR. According to Gebhart (2017), the use of CashETR is because it can see tax avoidance that comes from the company's cash flow in paying taxes. To calculate the Cash ETR is the cash flow of tax payments divided by Pretax income. So the greater the Cash ETR value, the lower the tax avoidance. To make it easier to read the research results, the cash ETR results are multiplied by -1. Thus, the higher the value, the higher the tax avoidance.

3.2.3 Control Variable

Z is the risk of bankruptcy of the company as measured by the Altman Z-Score. *TobinQ* is company value measured using TobinQ. *Lev* shows the company's leverage as measured by the ratio of debt divided by total assets. *Year* is year is the difference in the year the company conducted the IPO minus the year of research. *Opex* is the company's operating expenses. *DPR* is the percentage rate of the company's dividend payments divided by net income.

3.3 Sample Selection

This paper uses all Indonesian companies listed on the Indonesia Stock Exchange from 2016 to 2019 as an initial sample, except for the financial, real estate, and property industries because there are different tax regulations. All data in this paper are taken from the Thomson Reuters database. the total sample is in table 1.

Table 1. Sample Characteristics

Description	Total
Sample based on number of companies	
IDX listing companies until 2019	672
Reduce:	
1. Earning before tax loss (2016-2019)	-380
2. Financial, real estate, utilities and construction industry sectors	-103
3. The Company IPO after 2016	-26
4. The Company does not complete data	-12
Firm Total	151
Year Observation	4
Total Sample	604

Source: Researcher

3.4 Descriptive statistics

From the results of descriptive statistics in Table 1, it can be seen that for investment efficiency, the average value is 0.040481. From these results Indonesia is actually already good, because the absolute value is still below 5%, but overall there are no companies that can be efficient in investing, this is shown by the maximum value which is not equivalent to 0. Then for tax avoidance, it shows the average value 0.4624157. From these results indicate that the average rate of tax avoidance is above the Indonesian tax rate of 25%.

Table 2. Descriptive Statistic

Variables	Observations	Mean	Standard Deviation
Absres	604	0.040481	0.0591673
Cashetr	604	0.4624157	0.9462697
Z	604	4.791519	6.067178
Year	604	16.75166	9.873222
Lev	604	0.4575977	0.2116405
Tobinq	604	1.854409	2.116723
Opex	604	9.551489	21.41884

Dpr	604	1.069928	16.04007
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Source : Researcher

4. RESULT

For research results, the R-square value shows 0.1399. This shows that the independent variable in the research model can explain 13.99% of the dependent variable. Then the F-test shows the number 0.0000, so that the variation of the investment efficiency variable can be explained by the independent variable and the control variable. For complete results can be seen in table 3.

Table 3. Regression Result

Dependent Variable Investment Efficiency	Predict	Coef	Prob
Cashetr	-	-0.002853	0.017**
Z	-	-0.0045566	0.006***
Year	+	0.0006303	0.034**
Lev	-	-0.0441763	0.017**
Tobinq	+	0.0055802	0.073*
Opex	-	0.0001868	0.045**
Dpr	+	-0.0000824	0.000***
R2			0.1399
Prob>chi2			0.0000
* Significant at α 10%			
** Significant at α 5%			
*** Significant at α 1%			

abres = Absolute residual of the company's inefficiency then multiplied by -1, **cashetr** = Tax avoidance indicator, measured by the amount of tax paid by the company in the current year divided by the company's profit before tax in the current year then multiplied by -1, **Z** = Using Altman Z-Score, **year** = Deduction the year the company started the IPO until the year the observation started, **Lev** = Total debt divided by total assets, **tobinq** = Total market capitalization of the company plus total company debt, then divided by total assets in the current year, **opex** = Total company operating expenses scaled by 1 trillion, **Dpr** = Total dividends issued by the company divided by total net income

Source: Researcher

Classical assumption test of research using Heteroscedasticity and multicollinearity, shows that in this study there is no problem of multicollinearity, but has problems with heteroscedasticity. Then for the test results of each variable shows that tax avoidance (CashETR) has a significance of 0.017 and a coefficient of -0.002853. This shows that tax avoidance is negatively related to investment efficiency. Bankruptcy risk (Z) shows a significance of 0.006 with a coefficient of -0.0045566. This shows that the more the company is away from the risk of bankruptcy (high Z value), the investment efficiency will decrease. the maturity of the company (year) shows a significance of 0.034 with a coefficient of 0.0006303. This shows that the more mature the age of the company will increase the efficiency of investment. The company's debt ratio (lev) shows a significance of 0.017 and a coefficient of -0.0441763. This shows that the higher the company's debt ratio, the lower the company's efficiency. Firm value (tobinq) shows a significance of 0.073 and a coefficient of 0.0055802. This shows that the higher the value of the company will increase investment efficiency. The operational cost (OPEX) shows a significance of 0.045 and a coefficient of 0.0001868. This shows that higher operational costs will increase investment efficiency. Finally, the Dividend Payout Ratio (DPR) shows a significance of 0.000 and a coefficient of -0.0000824. This shows that the higher the dividend payout ratio, the lower the investment efficiency.

From the test results, it can be seen that tax avoidance is negatively related to investment efficiency. This is in accordance with research from Asiri et al. (2020) and Zheng (2019) that tax avoidance will reduce investment efficiency because companies utilize cash flows from tax avoidance results without prior analysis, so companies tend to be wasteful.

5. CONCLUSION

This study aims to examine the relationship between tax avoidance and investment efficiency. Using public companies that have been in Indonesia for 4 years, the findings of this study indicate that tax avoidance is negatively related to investment efficiency. This shows that the lower tax avoidance activity makes the company's investment more efficient, this is in accordance with research Zheng (2019) which states that tax avoidance provides an opportunity for managers to do moral hazard because the free cash flow obtained from tax avoidance is used to finance unnecessary investments. . The results of the study have implications for policy makers to make a regulation to reduce tax avoidance, so that companies are more efficient in investing.

The limitations of this study are, first, this study does not classify companies in under and over investment conditions. Further research can use these two conditions to see the relationship between tax avoidance and investment in companies that experience over and under investment. second, this research was conducted in a relatively short time span. It is hoped that further research can be carried out over a longer time span, and because there is currently a COVID-19 pandemic, further research can look at the differences in the relationship between before and after the pandemic.

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Insight Drivers of Internal Audit Effectiveness in Malaysian Banks

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ABSTRACT

Till to date, prior studies do not conclude a universal theory in analyzing the Internal Audit (IA) effectiveness due to the fact that IA effectiveness is contextually dependent. This paper examines the determinants of Internal Audit effectiveness in Malaysian banks. The target population are internal auditors from the financial institutions in Kuala Lumpur. This study validated that three (3) out of four (4) variables (i.e. Organization, IA Processes, IA Relationship) have significant relationships with the dependent variable, Internal Audit Effectiveness. The results provide practical insights for Malaysian financial institution and regulators, to transfer the findings into their respective contexts and carry out on the enhancement on IA effectiveness.

Keywords – Malaysian banks, Internal Auditors, IA Effectiveness, Organization, IA Resources, IA processes, IA Relationship

1. INTRODUCTION

The interconnection of global economy with financial system has led to significant adoption of technological innovations such as FinTech in the Malaysian banking industry. Most banks are now engaging the digital transformation programme as their priority to ensure their future growth and presence in the financial industry. In driving the technology advancement in banks, there has been equally significant development and stringent regulations in the banking standards. Regulators are striving to achieve an optimal environment without weakening the financial system or eroding the consumer privacy protection.

The challenges faced by IA are in line with the recent speech delivered by the BNM Governor, Datuk Muhammad Ibrahim during the fifth Petronas Board Audit Committee Forum, entitled "Audit as a Partner of Change" stating all internal auditors are urged to be information technology savvy and analytical in big data management in order for IA function to stay relevant, progressive and competitive. However, the forum was held way back in 2016.

The importance of IA as a consultant or partner of change, risk-based audit approach and increasing fraud cases in this recent time has driven this study to examine the effectiveness of the IA function in Malaysian banks. This study addresses use the established theory introduced by Lenz, Sarens and D'Silva (2013) by studying whether the four ("4") main factors; organization, IA resources, IA processes and IA relationships, influencing IA effectiveness. Thus, the research objectives are to investigate whether organizational setting, IA resources, IA processes and IA relationship (respectively) influencing IA effectiveness.

2. LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

2.1 Organization

The context of organizational setting mainly refers to internal audit's position in the organizational structure, the probity of the internal audit offices organization, budgetary status and the existence of sound established in evaluating auditees' practices (Mihret and Yismaw, 2007). Past literatures state the organizational independence is a critical trait in IA function (Chambers, Selim and Vinten, 1988;

Bou-Raad, 2000; Van Gansherghe, 2005; Van Peursem, 2005; Christopher et al., 2009; Cohen & Sayag, 2010).

H1. There is a positive relationship between organization and Internal Audit Effectiveness

2.1 IA Resources

Literature review prove that for an effective IA operation, staff must be equipped with relevant knowledge, experience and competencies (Nassir, Hamid, Ali, Mohamad, and Muhamad Sori, 2001; Al-Twaijry, Brierly and Gwillian, 2003; Van Peursem, 2004; Van Peursem, 2005; Mihret and Yismaw, 2007; Lenz, Sarens and D'Silva, 2013).

H2. There is a positive relationship between Internal Audit resources and Internal Audit Effectiveness.

2.3 IA Processes

The International Professional Practices Framework (“IPPF”) provided by IIA (2017), is the standard setting body of the IA profession globally which addresses the risk-based approach helps IA to determine the most important thing to do. The essential aspect of risk-based approach is supported by past studies (Allegrini and D’Onza, 2003; PwC, 2009; Lenz et al., 2013). Improvement in executing audit work processes enhances the audit effectiveness are supported by study (Al-Twaijry et al., 2003; Albrecht et al., 1988; Mihret and Yismaw, 2007; Van Gansberghe, 2005).

H3. There is a positive relationship between Internal Audit processes and Internal Audit Effectiveness.

2.4 IA Relationship

Past literature review prove that support from senior management is a critical enabler for IA effectiveness (Albrecht, 1988; Goodwin and Yeo, 2001; Van Gansberghe, 2005; Mihret and Yismaw, 2007; Sarens and De Beelde, 2006a; 2006b; Christopher et al., 2009; Halimah et al., 2009; Cohen and Sayag, 2010). Lenz, Sarens and Hoos (2017) states the pattern of interaction between Chief Audit Executives (CAEs) and Senior Management (SM) is the key determinant of IA effectiveness.

H4. There is a positive relationship between Internal Audit relationship and Internal Audit Effectiveness.

3. METHODOLOGY

Preceding discussion of the past research has helped this study in adopting theoretical framework from Lenz, Sarens and D'Silva (2013).

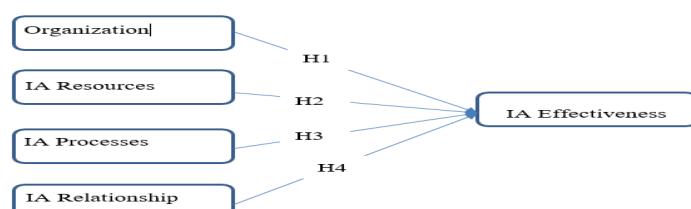


Figure 1: Theoretical Framework

For the data collection, questionnaires were distributed to banks in Klang Valley such as Bank Muamalat, Maybank, Public Bank, Agro Bank, Bank Rakyat, Bank Islam, RHB Bank, Affin Bank, SME Bank, Kuwait Finance House and MBSB Bank. In total, out of 440 questionnaires distributed, 233 questionnaires were received and only 210 are deemed sufficient and adequate to be used (supported by Sheridan & Lyndall (2007)). The research was carried out in the year 2017. Coded questionnaires were then analyzed by applying statistical techniques given in the Statistical Package for Social Science (“SPSS”) version 25.0 software.

4. RESULTS

The demographic profile of the respondents is shown in Table 1.

Table 1: Frequency Distribution of the Respondents' Demographic Profiles (n=210)

Variables	Category	Frequency	Percent
Age	Below 31 years	61	29.0
	31-40 years	88	41.9
	41-50 years	55	26.2
	Above 50 years	6	2.9
Position in the bank	Chief Audit Executive	2	1
	Managerial Level	21	10
	Senior Auditor	121	57.6
Education	Junior Auditor	66	31.4
	Doctoral Degree	Nil	Nil
	Master degree	46	21.9
	Bachelor degree	153	72.9
Professional Qualification	Others (Certification, Diploma)	11	5.2
	ICAEW/CPA/CA	19	9.0
	ACCA/MICPA	29	13.8
	Others (CIAFIN,CISA)	68	32.4
Bank (n=210)	NA	94	44.8
	Maybank	26	12.4
	Public Bank	34	16.2
	Affin Bank	14	6.7
	Bank Islam	28	13.3
	Bank Rakyat	23	11.0
	SME Bank	27	12.9
	Bank Muamalat	14	6.7
	Agro Bank	18	8.6
	Others (MBSB Bank, KFH)	26	12.4
Working Experience (n=210)	Less than 5 years	59	28.1
	5-10 years	83	39.5
	11-15 years	25	11.9
	16-20 years	18	8.6
	Above 20 years	25	11.9

Results in Table 1 shows that the internal auditors in Malaysian banks lacks pertinent professional qualification such as ACCA/CPA/CA but are compensated by the completion of basic tertiary education such as Bachelor Degree. This pattern might not be entirely unexpected in a nascent profession but perhaps it indicates that professional audit qualification is not mandated in order to secure a job as an internal auditor in banks today.

Table 2: Skewness and Kurtosis of Independent and Dependent Variables
Descriptive statistics

Variables	Skewness		Kurtosis	
	Statistic	Std. Error	Statistic	Std. Error
Organization	-.038	.168	-.297	.334
IA Resources	-.351	.168	.272	.334
IA Processes	-.276	.168	.529	.334
IA Relationship	-.031	.168	-.777	.334
IA Effectiveness	.218	.168	-.934	.334

Table 2 presents the skewness and kurtosis of dependent variable that is IA Effectiveness and independent variables such as Organization, IA Resources, IA Processes and IA Relationship. The analysis of Skewness and Kurtosis shown verifies all the values for the variables are within the acceptable range of -ve2 to +ve2, and thus it is normally distributed.

Table 3: Regression Table Coefficients

Model	Unstandardized Coefficients		t	Sig.	95.0% Confidence Interval for B		Correlations			Collinearity Statistics		
	B	Std. Error			Beta	Lowe r Bound	Upper Bound	Zero - order	Partia l	Part	Toleranc e	VIF
1	(Constant)	12.73 1	2.737		4.65 1	.00 0	7.334 18.12 8					
	Organization	.521	.084	.354	6.18 0	.00 0	.355 .687	.639 .396	.27 .27 9	.620 .620 1.61 2		
	IAResources	-.094	.053	-.104	- 1.77 7	.07 7	-.198 .010	.414 .414 -.123 .08 0	- -.123 .08 0	.591 .591 1.69 2		
	IAProcesses	.304	.055	.364	5.52 3	.00 0	.195 .412	.663 .360	.24 .24 9	.469 .469 2.13 3		
	IARelationship	.331	.067	.276	4.92 2	.00 0	.198 .463	.577 .325	.22 .22 2	.649 .649 1.54 1		

a. Dependent Variable: IA Effectiveness

The model equation in the regression results is shown as:

$$\text{IA Effectiveness} = 12.731 + 0.521 (\text{Organization}) + 0.304 (\text{IA Processes}) + 0.331 (\text{IA Relationship})$$

The results of p-value and β for each independent variable below conclude with Organization (IV1) has the strongest significance with IA effectiveness ($\beta=0.521$, $P=0.000$) followed by IA relationship (IV4) ($\beta=0.331$, $P=0.000$) and finally by IA processes ($\beta=0.304$, $P=0.000$). However, IA resources (IV2) ($\beta=-0.094$, $P=0.077$) does not have any significant impact on IA effectiveness. The results show absence of multicollinearity problem with all tolerance values above 0.1 and VIF values are below 10.

4.1 Discussion of Findings

The findings revealed that Organization (H1), IA processes (H3) and IA relationship (H4) are supported as shown in Table 3. It indicates an increase in the organization, IA processes and IA relationship will result to an increase in the level of IA effectiveness. However, IA resources, (H2) is not supported by the results of the regression value. The findings of this research are similar to the study conducted by (Albrecht, 1988; Arena and Azzone, 2009; Cohen and Sayaq, 2010; and Mihret, 2010).

The lack of an association between IA resources and IA effectiveness can be explained by poor qualified staff observed on traits of proficiency, experience and knowledge (Cohen and Sayaq, 2010; Mihret and Yismaw, 2007). This is evident by the demographic profile of the questionnaire results where the percentage of internal auditors with professional qualification such as ACCA or CIA are low in Malaysian banks. Another reason is possibly due to the lack of intensive training development provided to the internal auditors in Malaysia (Ali et al, 2007; Ahmad et al., 2009). According to Ahmad et al. (2009) training is utmost needed for the development of internal audit in Malaysia and also insufficient auditors limits the auditor's performance in Malaysian government sector. Therefore, IA department should be equipped with sufficient resources with continuous trainings and career advancement must be provided to IA staff while the trainings provided must focus on governance, ethical and fraud management in order to improve the internal auditor's competency level.

5. CONCLUSION

The results of the study will benefit the banks in Malaysia to use the information provided to enhance and maintain the IA effectiveness given the increase expectation of regulators, business transformations into digitalization and failures due to fraud and manipulation activities in recent times. If the IA does not deliver its role in ensuring the bank's risk management, control and governance in place, then the banks might find it difficult to absorb any types of losses that emerges from the IA failure.

Nevertheless, this study has its own limitations. The findings are not generalizable to all interested parties in internal audit function due to the study are confined to the banks in Malaysia. Second, samples were drawn only from institutions that were willing to participate. Third, a questionnaire was used in the collection of data subjecting to several setbacks of response rates and bias. Future studies should deepen in what holds all the factors together in association with IA effectiveness.

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Tax Avoidance and the COVID-19 Pandemic: Evidence from Indonesia

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ABSTRACT

This research aims to study corporate tax strategy facing the impact of the economic crisis due to the COVID-19 pandemic. In this study, tax avoidance is divided into two, namely nonconforming tax avoidance and conforming tax avoidance and uses data from 210 observations of companies listed on the Indonesia Stock Exchange from 2018 to 2019. We use the difference-in-differences (DiD) method in data analysis. We find that companies that are more affected by the COVID-19 pandemic are more aggressive in avoiding taxes compared to companies that are less affected by the pandemic. They carried out tax avoidance strategies earlier, specifically in the 2019 financial statements by implementing conforming strategies. This research is expected to be an input for the tax authorities to carry out supervision around the initial period of the crisis.

Keywords: conforming tax avoidance; Difference-in-Differences; DiD; Indonesia Stock Exchange; nonconforming tax avoidance

1. INTRODUCTION

Taxes have a very important role in Indonesia. However, in recent years, the tax revenue target set by the government has always been not achieved despite various efforts. This is caused by various factors, for instance the level of compliance of taxpayers is still low and the limited ability of supervision by tax officers. On the other hand, taxes are a driving factor in various corporate decisions. Various studies have shown that managers' aggressive tax avoidance is a common feature of companies in many countries around the world (Lanis and Richardson, 2015).

At the beginning of 2020, the whole world was hit by the COVID-19 virus pandemic which caused the closure of various business activities both domestically and between countries. Richardson et al (2015) noted that financial pressure caused a higher level of tax avoidance, which was indicated by a decrease in tax revenue. The financial pressure caused by the COVID-19 pandemic in early 2020 is also very likely to increase corporate tax aggressiveness so that the goal of increasing long-term compliance cannot be achieved. Tax avoidance strategies to deal with this pandemic may even be carried out earlier by taxpayers in the 2019 fiscal year due to the ease of extending the submission of the 2019 Corporate Income Tax Return until the end of June 2020. This study will examine whether the financial crisis due to the COVID-19 pandemic has an impact on tax avoidance behaviour, both non-conforming tax avoidance and conforming tax avoidance, thus encouraging companies to carry out tax avoidance strategies early to anticipate the impact of the economic crisis due to the pandemic.

2. LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

Financial distress can encourage companies to take a more aggressive attitude in terms of reducing the company's tax obligations considering that tax is one of the most significant costs incurred by the company. Tax savings can provide much-needed capital to fund a company's current operations to maintain a credit rating, and to maintain the status quo of debt covenants or even to reduce the risk of bankruptcy. (Brondolo, 2009). Management of companies experiencing financial difficulties may also perceive that tax authorities will be less stringent in enforcing tax laws in times of crisis, making it less

risky or more socially acceptable to reduce corporate taxes aggressively (Brondolo, 2009; Richardson et al., 2015).

In the context of Indonesia, the financial statements of companies listed on the Indonesia Stock Exchange in 2019 are granted an extension of submission by the stock exchange authority until the end of May 2020. The Director General of Taxes also issued Regulation of the Director General of Taxes Number: 06 /PJ/2020 dated April 17, 2020, which regulates leniency in submitting Annual SPT by Corporate Taxpayers during the COVID-19 Pandemic until June 2020. With reference to the conceptual framework of Wilde and Wilson (2018), it can be understood that in conditions of financial difficulty, the benefit in the form of cash flow if the company avoids taxes will increase compared to normal conditions. This will encourage an increase in tax avoidance. Companies as taxpayers will take advantage of the time extension to carry out tax avoidance strategies to save company cash to anticipate the impact of the decline in corporate income due to the COVID pandemic.

Accounting Standards in Indonesia, especially PSAK Number 8 concerning Events after the Reporting Period, allow companies as an entity to be able to record/adjust the amount of recognition if there are favorable or unfavorable events that occur between the end of the reporting period and the date the financial statements are authorized to be issued. Badertscher et al. (2019) notes that companies can avoid tax with conforming strategies, one of which is by accelerating the imposition of discretionary expenses to the current period. The research of Badertscher et al (2019) also shows that public companies listed on the stock exchange are more likely to engage in nonconforming tax avoidance strategies compared to private companies but companies with low capital market pressure have incentives to avoid taxes with a conforming strategy (reducing fiscal and accounting profits). This is because nonconforming tax avoidance is an expensive strategy, and if the benefits of a nonconforming strategy are smaller for firms experiencing lower capital market pressures, the conforming strategy becomes more attractive. Detection of tax officer evasion will be difficult if the taxpayer uses a conforming tax avoidance strategy.

Thus, the author hypothesizes as follows.

H1: There is an increase in nonconforming tax avoidance by stock exchange companies that are more affected by the COVID-19 pandemic in dealing with the impact of the COVID-19 pandemic compared to stock exchange companies that are less affected by the COVID-19 pandemic.

H2: There is an increase in conforming tax avoidance by stock exchange companies that are more affected by the COVID-19 pandemic in dealing with the impact of the COVID-19 pandemic compared to stock exchange companies that are less affected by the COVID-19 pandemic.

3. DATA AND METHODOLOGY

The data in this study was obtained from the Thomson Reuters Eikon database, namely data on the recapitulation of the company's financial statements for the period 2018 to 2019. For data not available in the database, the researcher collected data manually from financial reports downloaded from the Indonesia Stock Exchange website (www.idx.co.id). Industry classification is based on the two-digit Global Industrial Classification Standard (GICS) code. The sample selection was done by purposive random sampling method with several criteria. The selected sample companies are companies that are not specifically regulated by tax provisions, so there are several categories of company industries that are not included in the sample. Companies that are subject to Final Income Tax and companies engaged in the financial industry. Then samples with incomplete variables data are also excluded. Companies that experienced losses were also excluded, so that a total of 107 companies were obtained for the 2018 -2019 period. The total observations in this study were 214 observations. Table 1 shows data on selected companies per industry that are more affected and less affected by the COVID-19 pandemic.

Table 1 Industries Affected and Less Affected by the COVID-19 Pandemic

No	Industry Code	Industry Type	Number of Companies	Impact of COVID-19 Pandemic
1	10	Energy	13	more affected
2	15	Material	11	more affected
3	20	Industrial	20	more affected
4	25	Consumer Discretionary	20	more affected
5	30	Consumer Staples	25	less affected
6	35	Health Care	8	less affected
7	50	Telecommunication Services	10	less affected
Total			107	

Based on table 1, 64 companies are more affected by the pandemic (59.81%) and 43 companies from three sectors are less affected by the pandemic (40.19). The DiD method will be used by researchers in hypothesis testing. The DiD method combines insights from treatment-control group comparisons and before-after studies for a more robust identification (Fredriksson and Oliveira, 2019). The basic model of the DiD method is as follows.

$$Y = \beta_0 + \beta_1 \text{ TREATMENT} + \beta_2 \text{ POST} + \beta_3 \text{ TREATMENT} \times \text{POST} + X +$$

3.1 Definition of Variables

The dependent variable in this study is divided into two, namely nonconforming and conforming tax avoidance. Nonconforming Tax Avoidance is tax avoidance that refers to a tax planning strategy by reducing taxable income, while financial income is not affected (Badertscher et al 2015). The proxy used by the researcher is the Current Effective Tax Rate (Current ETR) with the Current Tax/Pretax Income formula and Book to Tax Difference (BTD) with the (Pretax Income-Taxable Income)/Lagged Total Assets formula. The formula for calculating CETR is in accordance with the research of Gupta and Newberry (1997), Hanlon and Heitzman (2010) and Huang et al. (2016). BTD according to research of Mills (1998), Desai and Dharmapala (2006) and McGuire et al. (2012).

Conforming Tax Avoidance (CONFORMTAX) is tax avoidance that refers to a tax planning strategy by reducing taxable income and financial income together (Badertscher et al 2015). CONFORMTAX was calculated according to the calculation model of Badertscher et al (2019). The first step to calculate CONFORMTAX is to calculate the ratio of Current Income Tax paid divided by lagged total assets. Furthermore, to eliminate the nonconforming tax strategy, a regression per industry per year is carried out as follows.

$$\text{CURRENT INCOME TAX_TO_ASSETS}_{it} = \alpha_0 + \alpha_1 \text{ BTD}_{it} + \alpha_2 \text{ NEG}_{it} + \alpha_3 \text{ BTD}_{it} \times \text{NEG}_{it} + \alpha_4 \text{ NOL}_{it} + \alpha_5 \Delta \text{NOL}_{it} + e_{it}$$

NEG is set to 1 for negative BTD and 0 otherwise. BTD and NEG are interacted because there is a difference in the effect of positive and negative BTD on the tax to be paid. ZERO is set to 1 for observations that have a fiscal loss from the previous year, 0 otherwise. ΔNOL shows the amount of fiscal loss utilized for the current year. The residual from the regression above is a measure of conforming tax avoidance or CONFORMTAX. A decrease in Current ETR and CONFORMTAX and an increase in BTD are signs of an increasing level of tax avoidance.

The independent variable used in this study is COVID, which is a dummy variable, 1 for companies whose business activities are more affected by COVID-19 (treatment group), 0 for those less affected by the pandemic (control group). The division of this group is based on the Press Release of the Ministry of Industry dated April 7, 2020, and Regulation of the Minister of Finance Number 23 of 2020 concerning Tax Incentives for Taxpayers Affected by the Corona Virus as well as research conducted by BNP Paribas Asset Management. POSTCOV is set for 0 for the Annual tax reporting year that has not been affected by the COVID-19 pandemic (in 2018) and 1 for the Annual tax reporting year that has been affected by the COVID-19 pandemic (2019). The control variables used are in accordance with the research models of Richardson et al (2015), Shevlin et al (2017), and Badertscher et al (2019).

Leverage (LEV), the debt level variable is used in this study because companies that have high debt levels have the possibility to reduce income levels and avoid taxes (Dechow et al. 2010; Hanlon and Heitzman 2010). LEVit is defined as total liabilities divided by total assets. Firm Size (SIZE) which is measured as the natural logarithm of total assets is used in this study to control for the effect of firm size. Capital Intensity (CINT) which is defined as the total of gross property, plant, and equipment (PPE) divided by total assets. Firm age (AGE) as measured as firm age in years controls for differences in the length of time the firm's shares have been traded on the public market.

3.2 Research Model

Hypothesis testing will use the DiD method to determine tax avoidance behavior before and during the COVID-19 pandemic.

$$ETR_{it}/ BTD_{it}/ CONFORM_TAX_{it} = \beta_0 + \beta_1 COVID_i + \beta_2 POSTCOV_t + \beta_3 COVID_i \times POSTCOV_t + \beta_4 LEV_{it} + \beta_5 SIZE_{it} + \beta_6 CINT_{it} + \beta_7 AGE_{it} + e_{it}$$

4. RESEARCH RESULTS

4.1 Descriptive Statistics

This study will examine the impact of the COVID-19 pandemic on corporate tax avoidance strategies. Based on table 2, companies affected by the pandemic experienced an increase in Current ETR in the period affected by the pandemic. This is in line with the decline in the company's BTD. Thus, it can be said that companies affected by the COVID-19 pandemic did not carry out a nonconforming strategy in the 2019 financial statements compared to the 2018 financial statements. Meanwhile, companies that were not affected by the pandemic almost did not experience a change in Current ETR but their BTD has increased in value.

Regarding the conforming strategy, companies affected by the pandemic experienced a decrease in CONFORMTAX in the period affected by the pandemic. Meanwhile, companies that were less affected by the pandemic only experienced a slight decline in CONFORMTAX. This means that in general, companies affected by the pandemic carry out a tax avoidance strategy with a conforming strategy in the 2019 financial statements compared to the 2018 financial statements. This conclusion needs to be tested with a regression analysis model.

Table 2 Comparison of Means of Tax Avoidance Variables Before and After the Impact of the COVID-19 Pandemic

No	Dependent Variables	More Impacted Firms		Less Impacted Firms	
		Before Pandemic	After Pandemic	Before Pandemic	After Pandemic
1	CETR	.2398502	.2495771	.2719598	.2719098
2	BTD	.0022835	.001529	-.0082046	-.0021184
3	CONFORMTAX	-.0119344	-.0137496	.0047934	.0045134
Observation		64	64	43	43
Samples		64	64	43	43

4.2 Hypothesis Test

Before performing panel data regression, multicollinearity, autocorrelation, heteroscedasticity tests, and cross-sectional dependence tests were performed. Based on the test results, the data experienced problems of heteroscedasticity and cross-sectional dependence. According to Hoechle (2007), if there is a cross-sectional dependence problem on panel data, it can be solved with the "xtscc" syntax in the Stata application. This model uses the Driscoll Kraay model for the standard error. The panel model with the "xtscc" syntax produces a robust standard error against heteroscedasticity, autocorrelation, and inter-individual dependence. The model in the hypothesis test is tested first with the fixed effect (FEM) model because this model can absorb the fixed effects between companies, namely the COVID variable so that the differences between times (before and after the period affected by the pandemic) will be more visible. However, the test results with the FEM model did not bring up the prob. F so that further analysis cannot be done. Thus, in this hypothesis test 2, the Pooled Least Square (PLS) model is used with the Driscoll-Kraay standard error. The syntax used in the Stata application is still the "xtscc" syntax

to overcome heteroscedasticity and cross-sectional dependence. The weakness of the PLS model is that it still includes differences between companies that are caused by time-invariant differences, in this case the COVID variable, so the model still contains time-invariant differences. However, this model can still be analysed further.

Table 3 Estimation Results with Pooled Least Square Model Using Driscoll-Kraay Standard Error

Independent Variables	Nonconforming Model				Conforming Model	
	Current ETR		BTD		CONFORMTAX	
	coef.	p-value	coef.	p-value	coef.	p-value
COVID	-.0493975	0.014	.0123912	0.012	-.0129851	0.006
POSTCOV	-.0093557	0.054	.0079581	0.012	-.0025776	0.025
COVID*POSTCOV	.0255744	0.000	-.0080905	0.002	-.0009042	0.053*
LEV	.0770102	0.121	-.0177352	0.118	-.0448935	0.042
SIZE	-.0011898	0.837	-.0001221	0.929	.0007065	0.334
CINT	.0625608	0.172	-.0216865	0.043	.0009301	0.691
AGE	-.0003247	0.281	-.000024	0.561	.0006766	0.011
Cons.	.2512906	0.274	.0146735	0.729	-.0103304	0.557
	Prob. F = 0.2096		Prob. F = 0.1433		Prob. F = 0.0514*	
	$R^2 = 5.49\%$		$R^2 = 5.40\%$		$R^2 = 18.81\%$	
Observation	196		196		196	
Samples	104		104		104	

***, **, * = p -value significant at 1%, 5%, 10%

Based on table 3, prob value. F for the model with the dependent variable Current ETR and BTD $> \alpha$, meaning that there is no simultaneous effect of the independent variables on the dependent variable Current ETR and BTD, so the two models cannot be analysed further. This insignificant F test result is in line with the low value of R^2 in both models. Prob. F for the model with the dependent variable CONFORMTAX $< \alpha = 10\%$, meaning that the independent variables together have a weak effect on the dependent variable CONFORMTAX. The model with the dependent variable CONFORMTAX will be tested further.

The observed variable is the COVID*POSTCOV interaction variable. The negative value of the COVID*POSTCOV coefficient in the model with the dependent variable CONFORMTAX shows that companies affected by the COVID-19 pandemic carry out a conforming tax avoidance strategy to deal with the impact of the financial crisis caused by the COVID-19 pandemic compared to companies that are less affected by the pandemic. Prob value. $t < \alpha = 10\%$ indicates that the variable COVID*POSTCOV has a weak-significant effect on the CONFORMTAX variables. Thus, it can be concluded that companies that are more affected by the COVID-19 pandemic have shown more aggressive conforming tax avoidance behaviour in their 2019 financial statements compared to companies that have been less affected by the COVID-19 pandemic (H2 accepted). The aggressiveness of tax avoidance is very possible because the company already knows that there will be a large pandemic impact on the company even though the beginning of the pandemic occurred in Indonesia just in early March 2020. The weak influence of the interaction variable TA*COVID*POSTCOV2 indicates that the pandemic conditions that occurred after the end of the 2019 financial year caused the company to be unable to carry out many profit reduction strategies in 2019 to reduce taxes that must be paid for the tax year even though there was time extension for submission of financial statements and annual tax payments for 2019.

4.3 Robustness Test

In this test, a placebo test was conducted by taking data outside the period under study and the results were compared with the period in which the study was conducted. The statistical method used is the DiD method as described previously, but the data used is data from the year before researched period. The expected goal in this test is to prove that there was no treatment effect before the COVID-19 pandemic. In this test, a comparison of 2017 and 2018 financial statement data is carried out and the results of which will be compared with the results of the main model comparing the 2018 and 2019

financial statements. The model used for this placebo test is a model with the dependent variables CONFORMTAX. In this test, a PLS regression model with the syntax "xtscc" was also selected for the statistical application because the data experienced cross-section dependence.

Table 4 Estimation Results of Main Regression Model and Placebo Model with Dependent Variable CONFORMTAX

Independent Variables	Main Model (2018 vs 2019)		Placebo Model (2017 vs 2018)	
	coef.	p-value	coef.	p-value
COVID	-.0129851	0.006	-.0132627	0.003
POSTCOV	-.0025776	0.025	-.0018848	0.020
COV*POSTCOV	-.0009042	0.053**	.0004355	0.040**
LEV	-.0448935	0.042	-.0493341	0.002
SIZE	.0007065	0.334	.0001494	0.368
CINT	.0009301	0.691	.0057876	0.177
AGE	-.0103304	0.011	.0006661	0.004
	Prob. F = 0.0514*		Prob. F = 0.2163	
	R ² = 18.81%		R ² = 14.67%	
Observation Samples	196		183	
	104		97	

***, **, * = p-value significant at 1%, 5%, 10%

Based on table 4, the coefficient value of the interaction variable COV*POSTCOV in the main model is negative while the placebo model is positive. But the prob value. F for the placebo test $> \alpha$ meaning that the independent variables have no effect on the dependent variable CONFORMTAX. Thus, there are differences in results between the main model and the placebo model. These different results show that the conforming tax avoidance in the pandemic-affected period is different from the normal period. This indicates that the COVID-19 pandemic has caused companies affected by the pandemic to be more aggressive in avoiding taxes with a conforming strategy.

5. CONCLUSIONS

Companies that are more affected by the pandemic carry out tax avoidance strategies early to anticipate the impact of the financial crisis due to the COVID-19 pandemic by using a conforming strategy. The aggressiveness of tax avoidance is very possible because the company already knows that there will be a large pandemic impact on the company even though the beginning of the pandemic in Indonesia just occurred in early March 2020. The reason for choosing a conforming strategy by the company during the financial crisis due to the pandemic may be motivated by the company's assumption that this financial crisis occurs globally and affects all companies so that the option of lowering accounting profits will not make the company's reputation look worse than other companies. In normal circumstances, this conforming strategy will not be used by the company because it will cause a decrease in profits reported in the financial statements so that it can reduce the company's reputation in the eyes of investors. Tax authorities need to carry out tighter supervision around the initial period of the pandemic so that the government does not lose potential tax revenue due to tax evasion by taxpayers in the period of the year that should not have been affected by the impact of the pandemic (year 2019).

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**Proposed Development of Inventory Management
Information System**

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ABSTRACT

The purpose of this study is to developed the Inventory information system at the Trading Company. Proper control of the inventory system will make it easier for the company to carry out operational activities and maintain the smooth operation cycle of the company. The provision of data information, especially between branches and the head office and warehouse cannot be done quickly, precisely and efficiently because the product writing system and product data entry are still done manually using Microsoft Excel. This condition has an impact on poor decision making. The study was conducted qualitatively using case study at PT P. This study uses the FAST and PIECES methods to find the problem of current system, so that it can be developed. The study involved documentation study, interviews and observation on parties engaged in division related to inventory activities on PT P. the results of this study PT P can integrate inventory reporting activities located in the division related and branches by using the design of a new database-based system so that inventory management between branches updates each other so management can making a better decision.

Keywords: *Analysis and Design of Information Systems, Inventory, Inventory Management System. FAST, PIECES*

1. INTRODUCTION

Inventory is one of the important factors in business activities and its availability cannot be avoided. With the inventory, the company can meet customer demand on time (Wahyudi, 2015) Good inventory control system will facilitate the company in carrying out operational activities and maintain the smooth operation cycle of the company (Singh & Singh, 2015). Organizing inventory needs to be done so that work efficiency does not occur and creates inventory regularity, in managing inventory it is necessary to have a control system and inventory recording because it will affect the production process and the company's financial statements (Wambua et al., 2015). In managing inventory administratively, there are still practices that are still carried out manually with software using Microsoft Excel and are not integrated between branches and centers whose sources come from files sent by branches and processed the fastest about 10 working days to procure supplies. Errors in the recording process or human errors in general still occur because they are still done manually using Microsoft Excel. Errors in recording will result in errors in the presentation of data in the Financial Statements which results in losses for the company in 2018 and 2019 the company suffered losses of 10 billion and 2 billion due to recording errors and the lack of inventory information that could not be accessed quickly and integrated, resulting in poor decision making, whether to do procurement or sales. and company do not know the exact amount of inventory they have. Also, excess inventory due to incorrect recording results in damage to inventory if it cannot be sold, because it has passed the expiration date. Reflecting on the problems experienced by PT P, especially for main commodities that are the advantages of PT P and with the enactment of space restrictions, there are several obstacles, which can include operational and administrative activities. For example, in the case of recording data for calculating the availability of inventory. In the calculation of inventory, products must be counted periodically so that there is no

shortage of inventory or the amount of inventory is below the minimum inventory. This will affect the relationship between PT P and consumers, it is feared that there will be a human error in carrying out these calculations so that what consumers need cannot be fulfilled. In addition, companies cannot make estimates and make decisions quickly and precisely because of limited information. This recording is considered important to do because it will determine how the availability of these products will affect the operations carried out by the company. This study provides a study on ways to identify, analyze, evaluate and design a trading company information management system using the Framework for the Application System Thinking (FAST) guidelines. However, it is limited to only adding the first 4 phases consists of: 1) Scope definition, 2) Problem analysis, 3) requirement analysis, 4) logical design. In defining the scope of system, the author will also use the Performance, Information, Economics, Control, Efficiency, and Services (PIECES) frameworks. The PIECES worksheet helps the FAST method at the stage of analyzing the problem and the desired system requirements. Case study conducted at PT P Trading Company. Method use development system is the preparation a system that new to replace system, or just to fix the system that had provided. System can be replaced by or repaired using some criteria to following: 1) There are problems that arise in the existing system, 2) Improper functioning of the old system can cause the old system not to run as expected, 3) Deliberate fraud will affect the security of the entity's assets and the truth of the data cannot be trusted, 4) Errors that often occur due to unintentional also cause the accuracy of the data to be not guaranteed, 5) Efficient operating activities are not met, 6)Organizational growth

2. METHODOLOGY

This study was conducted qualitatively using case study. Primary data obtained through interviews and observations. Interviews were conducted with user parties who have been involved in current system and division related to inventory on Trading Company. Secondary data was obtained through documentation study of PT P financial data including policies related to Purchasing, Distribution, Warehouse and employees. In addition, literature studies such as books, articles, journals and regulations were used to gain overview of analysis and design method as reference in identifying, analyzing and evaluating the development system associated with the results of interviews and observations. Analysis, Design and Development System focuses on the PT P Inventory Management System which are Purchasing, Record, Distribution, and Report. Furthermore, in this research will be used the development of the system that has been described by Whitten & Bentley (2007) namely, FAST is a method by describing the process of system development. In this study, it will be limited to 4 initial stages with the following details: Scope Definition, Problem Analysis and Requirement analysis and Logical Design. In defining the scope of system, the author will also use the PIECES frameworks. The PIECES worksheet helps the FAST method at the stage of analyzing the problem and the desired system requirements

3. RESULT

3.1 Scope definition, problem analysis and requirement Analysis

In this phase, it is necessary to carry out the process of gathering information using the PIECES (Performance, Information, Economics, Control, Efficiency, Service) framework. The implementation is on the object to be researched to determine the level of feasibility (capability limit) and the scope of the project. This phase is also useful for revealing important points of existing problems, opportunities to improve company performance and new needs (directives) that will be conveyed by management. In defining the scope of development of the system will be provide on table 3.1

3.1.1 Business identification requirement use case

Identification of requirements use case can be seen in the news case context diagram that can provide an overview of the main task actor on Figure 3.1

3.2 Logical design

At the logical design stage, the translation process is based on a business need as a system model which will then be interpreted as a technology. This can be described as an image that will describe a system for each solution based on the business model needs that must be met. Data Flow Diagram, Entity Relationship diagram and user interface input design from PT P Inventory Management information system will be displayed.

3.2.1 Data flow diagram

In order to be known easily the relationship between the users of the Management Inventory System PT P will be able to see the Context Data Flow Diagram on Figure 3.2

3.2.2 Database modelling

Database Management System (DBMS) will act as an interface between the database and various application programs on Figure 3.3

3.2.3 User interfaces input design

The physical design referred to in this study is the interface design. The design will describe the designed system consisting of.

- a. Inventory procurement transaction interface consisting of:
 - Purchase Request Form interface to create Purchase Request.
 - Purchase Order Input Interface to create Purchase Order.
 - Purchase Order Monitoring Interface to view purchase order status
 - Supplier Data Input Interface to add supplier data.
 - Delivery Order interface to enter Delivery Order data.
 - Receive Inventory interface to verify the inventory has been sent.
- b. Inventory recording transaction interface consisting of:
 - Inventory Data Input Interface to add Inventory data.
- c. Inventory transfer transaction interface consisting of:
 - Inventory Displacement Interface to enter Inventory migration data.
- d. Interface transaction reports to print those reports.

As example on preview interface inventory receive design Figure 3.4

4. CONCLUSION

- a. By using a database design that is integrated with each other, branches/headquarters can carry out related transactions using data input to the system directly, can do inventory stock taking faster than doing stock take using manual systems, can monitor inventory management directly without having to wait for reports based on the relevant section because all activities will be stored in the same database. The inventory management system can remind the end of the useful life of inventories by entering a reminder alarm system into the new system design so that the procurement division unit and distribution division can find out the value of inventory acquisition and the expiration value of each inventory that has been written off by PT P based on the data to be processed. updates by distribution division.
- b. To improve the effectiveness & efficiency of inventory management to be better by building an integrated system and labeling RFID tags on inventory, it is hoped that each item will be easily monitored in the system and can be stored in a database using RFID to identify inventory that has been labeled. In addition, it is hoped that this new design can find out the necessary data which will be stored in the inventory master database, with good database management, the desired report results will be obtained.

5. TABLE

Table 3.1 Matrix of Problems, Opportunities, Objectives and Limitations

Criteria	Problems or Opportunities	Cause and Effect	System Objectives System	Limitations
Performance	Takes a long time to stock opname	Inventory are varied but the number of team members doing stock opname does not increase and inventory code still uses manual labels	Can increase the speed of stock opname time and data entry	The new system should be able to use rfid tag system in its data entry process
	It takes approximately a while to get some information related to Inventory	The current system are still physical documents only so to find the desired information takes a long time	Can provide all the information needed about Inventory quickly	Design between data using interrelated tables in the database
Information and Data	Data is not integrated	The existing system still consists of several files in each section It can cause data inconsistencies that provide inaccurate information and will later have an impact on improper decision making	system already uses data which is integrated between branch and home office	The new system must use a relational database so that data can be synchronized by using relationships between tables
Control and Security	Inventory Encoding	Inventory encoding is still manual so It takes time for numbering to pay attention to whether the code is correct, no code is the same, and the code is already sorted	Generate inventory numbering in the form of RFID tag code	The new system must be able to identify RFID tags that can be inputted into the database
Efficiency	Requires a lot of people to do stock opname	Inventory coding is still done manually so it takes a lot of people to do stock opname to be quickly completed because it has to match one by one between physical goods with notes	can automatically encode with RFID Tag format	The new system should be able to identify RFID tags
Service	The system generates inconsistent information	By not integrating data between sections causes the system not to generate inconsistent information	Produce consistent information because the input process is done by different units, causing uniformity of information	The new system should use a relational database

6. FIGURE

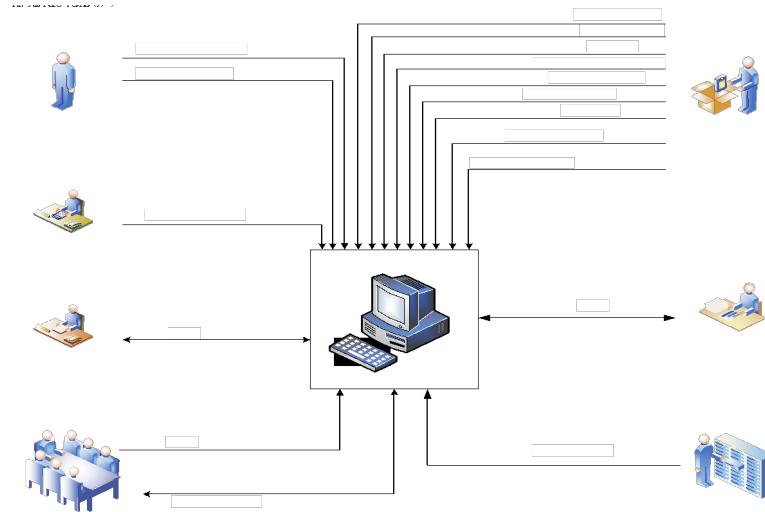


Figure 3.1 Use-Case Context Diagram

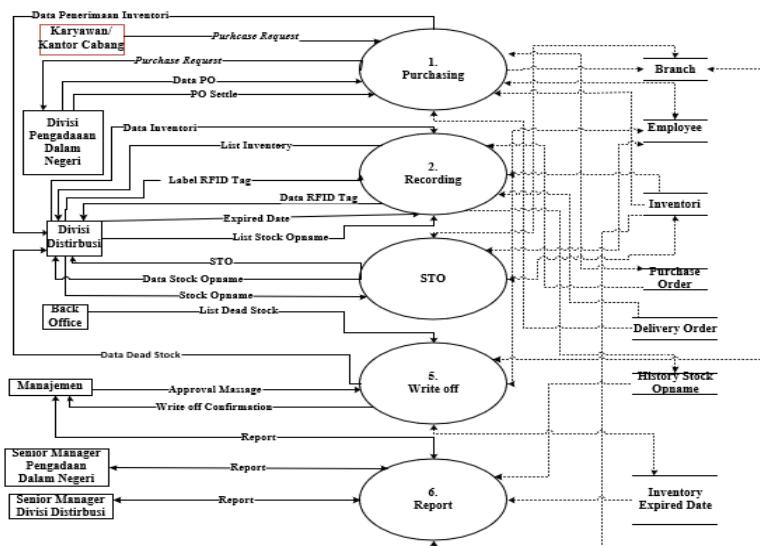


Figure 3.2 Data Flow Diagram Level 0

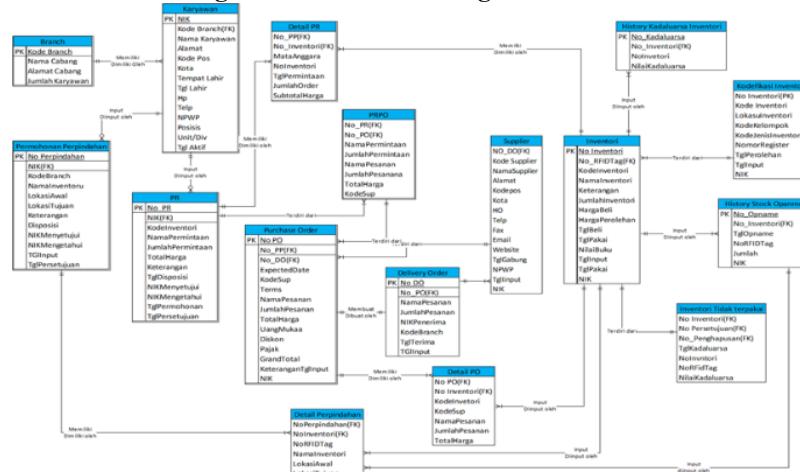


Figure 3.3 Fully Attribute Entity Relationship Diagram

Figure 3.4 Interface Inventory Receive Design

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Analysis and Evaluation of ABC Mixed Mutual Fund Portfolio Management

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ABSTRACT

The aims of this study are to observe ABC Mixed Mutual Fund (ABC) portfolio management processes and to analyze, evaluate, and propose recommendations to achieve better performance. This research uses a mixed method case study design. ABC's managers need to provide a clear benchmark in ABC's fund fact sheet in order to perform a fair assessment. Historical data shows that stocks have always been dominating the asset weight of ABC's portfolio. ABC's managers need to take advantage of this fund flexibility by building a well-diversified portfolio in order to improve its risk-adjusted performance. The backtesting results in this study show that expansive management in the fixed income instruments improved ABC's performance broadly. Constant Proportion Portfolio Insurance (CPPI) generated the best return compared to constant mix and buy and hold. Long-term asset allocation and rebalancing strategies in this study can be used as a reference for ABC's managers, institutional, and individual investors to manage their portfolios.

Keywords: Finance, Investment, Portfolio, Management, Strategy

1. INTRODUCTION

Mutual funds can be classified into four categories based on its assets: equity, fixed income, money market, and mixed (Azmi and Fianto, 2019). From 2013 to 2019, mixed mutual funds in Indonesia recorded an average annual Asset Under Management (AUM) growth of only 6.50%, the lowest AUM growth in the industry (Otoritas Jasa Keuangan, 2020). Mixed mutual fund managers are providing value through superior market timing capabilities (Cremers, Fulkerson and Riley, 2019). In a poor stock market condition, mixed mutual funds had generated better performance than any other type of funds (George, Norris & Javier, 2009). The average mixed mutual fund returns in Indonesia had underperformed its benchmark six times from 2010 to 2019 (Infovesta, 2020). Mutual fund investors in Indonesia have a behavioral tendency to choose well-performing funds (Loeis and Prijadi, 2016). Funds that perform well in aggregate receive bigger management fees (Berk and Van Binsbergen, 2015). ABC mixed mutual fund (ABC) is one of the funds that is available in Indonesia. During 2010 to 2019, ABC's return underperformed four times compared to its industry benchmark.

2. LITERATURE REVIEW

Markowitz (1952) states that to construct an efficient portfolio, investors will try to maximize the expected return with a certain level of risk, or minimize the level of risk with certain expected return. Portfolio management is a process that contains a series of integrated activities combined in a logical and orderly manner to achieve investment objectives (Maginn, Tuttle, McLeavey, and Pinto, 2007). Brinson, Hood, and Beebower (1986 & 1991) state that asset allocation policy is the overwhelmingly dominant contributor of portfolio return. Based on 30 mutual funds data from 2009 to 2016 in Indonesia, there were no managers who showed great ability in security selection. There were 11 managers that showed great ability in market timing based on Treynor-Mazuy model and 10 managers based on Henriksson-Merton model (Ramayanti and Purnamasari, 2018). Active rebalancing strategies delivered

significantly greater diversification ratio, return-to-risk ratio, and utility value compared to buy and hold strategy (Meyer-Bullerdiek, 2018). In a highly volatile market, Constant Proportion Portfolio Insurance (CPPI) delivered the best risk adjusted performance compared to constant mix and buy and hold (Agic-Sabeta, 2016).

The previous studies did not fully observe how the portfolio management processes are carried out in an investment product. The mutual fund studies above only analyzed each fund's performance quantitatively and the rebalancing studies above only tested the strategies using financial market data without implementing it to any type of investment products. This study aims to observe ABC's portfolio management processes and to analyze, evaluate, and propose recommendations to achieve better performance.

3. RESEARCH METHODOLOGY

This research will use a mixed method case study design that combines qualitative and quantitative methods. Mixed-method research has been used to produce richer information to better describe the conditions and reality (Creswell and Creswell, 2017). Qualitative methods will be used to analyze ABC's Strategic Asset Allocation (SAA), and document analysis and semi-structured interview will be used to for portfolio construction and revision. Quantitative methods will be used in the backtesting analysis in this research. The main assumption of backtesting analysis is that if a strategy generates a good result in the past, it can also be used in the future, although there is no guarantee for the same results (Ni and Zhang, 2005). Below are the assumptions that will be used in the backstesing analysis:

Table 1. Backtesting Assumptions

No.	Assumptions	Descriptions
1	Net Asser Value (NAV)	ABC's NAV is 1000 in the beginning of bakctesting period
2	Risky Assets	The risky assets consist of stocks and bonds, stocks return will be calculated using Indonesia Stock Exchange Composite Index daily return, bonds return will be calculated using BINDO Index (Bloomberg Indonesia Local Sovereign) daily return
3	Risk-Free Assets	Cash portfolio daily return will be calculated using money market overnight rate of Indonesia Overnight Index Average (IndONIA) and Jakarta Interbank Offered Rate (JIBOR)
4	Zero Tax Cost	No tax cost for bond's coupon, capital gain and overnight rate
5	Transaction Cost	Stocks buy/sell transaction fees are 0.25% for buy and 0.35% for sell, bonds buy/sell transaction fee is 0.50%
6	Zero Dividend	No dividend for stocks investment
7	Same-day Rebalancing	ABC's portfolio will be rebalanced in the same-day as the rebalancing trigger condition is fulfilled
8	Zero Management Fee	No management fee is determined, considering the difference in the amount of management fee for each type of mutual fund product

The backtesting analysis will use the Indonesia financial market data from 1st July 2014 to 30th June 2020 for the backtesting processes.

4. RESULTS AND DISCUSSIONS

ABC is being managed by the investment team of ABC asset management. This team is headed by one Chief Investment Officer (CIO). ABC's equity portfolio is being managed by equity fund manager (the main manager) while its fixed income portfolio is being managed by the delegated fixed income manager. There are two types of benchmark that were presented in the ABC's fund fact sheet: Indonesia Stock Exchange Composite Index and Infovesta Balanced Fund Index (IBFI). A good benchmark should reflect the risk and return that would be taken and the use of these two different benchmarks would add difficulties on the ABC's performance evaluation. ABC's managers are being supported with sufficient Capital Market Expectations (CME) on the investment decision making process. Below are the asset allocation limits based on ABC's Investment Policy Statement (IPS) and the historical Asset Weight:

Table 2. ABC's Asset Allocation Limits and Historical Weight

Assets	IPS Limits		Historical Weight (Average)
	Minimum	Maximum	
Stocks	10.00%	75.00%	74.91%
Bonds	10.00%	75.00%	17.13%
Money Markets (MM)	2.00%	75.00%	7.96%

The historical weight data above was gathered from April 2017 to December 2018. It shows that ABC's portfolio has been dominated by stocks. Fixed-income instruments (bonds and MM) were only weighted at 25.09% of ABC's portfolio. The stocks instruments have been actively managed by ABC's managers, while the fixed-income instruments have been passively managed. In order to achieve better performance, ABC's managers need to formulate better long-term asset allocation and management strategy. As a mixed-mutual fund, ABC has the flexibility to allocate its assets in three different asset classes. ABC's managers need to take advantage of this flexibility by constructing a well-diversified portfolio. ABC's managers should consider a more expansive fixed-income management to achieve a better risk-adjusted return. In this research, we conducted a backtesting analysis to illustrate how long-term asset allocation and active management approaches would affect significantly on ABC's fund performance. Below are the long-term asset allocation types that are used in this study:

Table 3. Types of Long-term Asset Allocation

Beginning NAV	Aggressive			Moderate			Conservative		
	Stocks (35%)	Bonds (35%)	MM (30%)	Stocks (25%)	Bonds (25%)	MM (50%)	Stocks (15%)	Bonds (15%)	MM (70%)
1,000.00	350.00	350.00	300.00	250.00	250.00	500.00	150.00	150.00	700.00

We over weighed the riskier assets (stocks and bonds) in the Aggressive allocation, balance the weight (50:50) between riskier and less risky assets (MM) in Moderate allocation, and over weighed the less risky assets in the Conservative allocation. In this research, we propose three types of rebalancing strategy: CPPI, constant mix, and B&H. Below are the rebalancing triggers for each type of the strategies:

Table 4. Rebalancing Triggers

Strategies	Rebalancing Triggers	Descriptions
CPPI	IPS Limits	Breach in IPS Asset Allocation Limit*
	Risky Assets	Risky assets value increased or decreased more than 5%
Constant Mix	IPS Limits	Breach in IPS Asset Allocation Limit*
	Constant Mix Room (Weight \pm 2.5%)	Asset allocation is less than or more than the constant mix room
B&H	IPS Limits	Breach in IPS Asset Allocation Limit*

* See Table 2. ABC's Asset Allocation Limits and Historical Weight

When all the conditions above are met, the portfolio will be rebalanced. In CPPI, the minimum allocation weight in money markets will be locked at 2.5% (IPS limit is 2.00%). In order to simplify the asset weight calculation, the risky assets in CPPI is a constant mix portfolio of 50% stocks and 50% bonds. We will use multiplier 7 for aggressive, 5 for moderate, and 3 for conservative asset allocation and we have also determined that the floor value of CPPI in this study is 900.00. Constant mix in this study will only allow each of its assets to fluctuate less than or more than 2.5% (room) from the asset allocation weights. The actual ABC's Net Asset Value Per Share (NAVPS) and the backtesting results of each strategy are expressed below:

Table 5. The Measurement of Actual ABC's NAVPS and The Backstesing Results

ABC's NAVPS	Date							Return	
	01/07/14	30/06/15	30/06/16	22/06/17	29/06/18	28/06/19	30/06/20	Total	SD**
Actual*	1,000.00	940.94	1,017.50	1,143.21	1,095.60	1,203.76	1,000.43		
Annual Return	-	-5.91%	8.14%	12.35%	-4.16%	9.87%	-16.89%	0.04%	11.42%

Aggressive NAV	01/07/14	30/06/15	30/06/16	22/06/17	29/06/18	28/06/19	30/06/20	Total	SD**
CPPI	1,000.00	1,039.31	1,104.40	1,215.22	1,244.39	1,347.56	1,311.88		
Annual Return	-	3.93%	6.26%	10.03%	2.40%	8.29%	-2.65%	31.19%	4.55%
Constant Mix	1,000.00	1,047.47	1,119.74	1,239.73	1,267.68	1,376.86	1,322.79		
Annual Return	-	4.75%	6.90%	10.72%	2.25%	8.61%	-3.93%	32.28%	5.23%
B&H	1,000.00	1,047.47	1,120.73	1,239.71	1,263.34	1,374.66	1,336.84		
Annual Return	-	4.75%	6.99%	10.62%	1.91%	8.81%	-2.75%	33.68%	4.89%
Moderate NAV	01/07/14	30/06/15	30/06/16	22/06/17	29/06/18	28/06/19	30/06/20	Date	Return
CPPI	1,000.00	1,040.90	1,100.85	1,193.72	1,229.50	1,318.47	1,335.89		
Annual Return	-	4.09%	5.76%	8.44%	3.00%	7.24%	1.32%	33.59%	2.67%
Constant Mix	1,000.00	1,046.72	1,113.14	1,212.46	1,246.26	1,340.93	1,326.01		
Annual Return	-	4.67%	6.35%	8.92%	2.79%	7.60%	-1.11%	32.60%	3.64%
B&H	1,000.00	1,046.72	1,112.52	1,211.22	1,243.03	1,337.83	1,326.95		
Annual Return	-	4.67%	6.29%	8.87%	2.63%	7.63%	-0.81%	32.70%	3.55%
Conservative NAV	01/07/14	30/06/15	30/06/16	22/06/17	29/06/18	28/06/19	30/06/20	Date	Return
CPPI	1,000.00	1,042.48	1,097.30	1,172.23	1,214.60	1,289.38	1,350.45		
Annual Return	-	4.25%	5.26%	6.83%	3.61%	6.16%	4.74%	35.04%	1.20%
Constant Mix	1,000.00	1,045.97	1,107.85	1,187.04	1,227.93	1,304.53	1,324.13		
Annual Return	-	4.60%	5.92%	7.15%	3.44%	6.24%	1.50%	32.41%	2.08%
B&H	1,000.00	1,045.97	1,104.30	1,182.73	1,222.73	1,301.00	1,328.66		
Annual Return	-	4.60%	5.58%	7.10%	3.38%	6.40%	2.13%	32.87%	1.88%

*Actual: Historical data of ABC's NAVPS was made to a thousand at the start of backtesting period to maintain fund's confidentiality

**SD: Standard Deviation

The backtesting results show that all strategies significantly outperformed ABC's actual return. It is proven that an expansive asset allocation in fixed-income instruments would generate good return broadly. The CPPI strategy generated the best performance compared to all of the strategies as it provided the highest total return in the moderate and conservative asset allocation and it provided the best risk-adjusted return (lowest SD) in all types of asset allocation. Based on this measurement, we will perform an attribution analysis and appraisal only on CPPI.

The attribution analysis and appraisal will be performed in order to illustrate how an active management approach would affect portfolio return in each type of asset allocation. As we mentioned before, there was a difficulty in assessing ABC's performance because there were two benchmarks that were presented in ABC's fund fact sheet. In order to perform this attribution analysis and appraisal, we defined a new portfolio benchmark. This benchmark is a B&H strategy that will use the ABC's historical asset weight (Table 2. ABC's Asset Allocation Limits and Historical Weight) as its asset allocation weight. The total return of this benchmark will be calculated using the same assumption that was used in the backtesting process (Table 1. Backtesting Assumptions). Attribution analysis data of the CPPI strategy are expressed below:

Table 6. Attribution Analysis Data

Date	Benchmark		CPPI					
	NAV		Aggressive		Moderate		Conservative	
01-Jul-14	1,000.00	Return	Return	Difference	Return	Difference	Return	Difference
30-Jun-15	1,023.20	2.32%	3.93%	1.61%	4.09%	1.77%	4.25%	1.93%
30-Jun-16	1,068.34	4.41%	6.26%	1.85%	5.76%	1.35%	5.26%	0.85%
22-Jun-17	1,219.50	14.15%	10.03%	(4.12%)	8.44%	(5.71%)	6.83%	(7.32%)
29-Jun-18	1,223.78	0.35%	2.40%	2.05%	3.00%	2.65%	3.61%	3.26%
28-Jun-19	1,340.74	9.56%	8.29%	(1.27%)	7.24%	(2.32%)	6.16%	(3.40%)
30-Jun-20	1,146.38	(14.50%)	(2.65%)	11.85%	1.32%	15.82%	4.74%	19.23%

CPPI consistently outperformed the benchmark portfolio four times out of six periods of return calculation. CPPI also consistently provided the best active management return (difference) in the last period of backtesting when the financial market was in a bearish period. These results are in line with the CPPI implementation objectives which are to maintain risky assets exposure during bullish periods and to protect the portfolio during bearish periods.

In appraisal, we will use Sharpe Ratio (SR) and Information Ratio (IR) to rate the CPPI returns. We use the yearly average of IndONIA & JIBOR to determine the risk free rate (R_f) in the SR appraisal. While in the IR appraisal, we use the portfolio benchmark yearly return as benchmark return (R_b). Below are the CPPI appraisal data:

Table 7. CPPI Appraisal Data

Appraisal	CPPI		
	Aggressive	Moderate	Conservative
Sharpe Ratio	0.06	0.21	0.50
Information Ratio	0.37	0.31	0.27

The results above show a different outcome for SR and IR appraisal. Based on the SR appraisal, the best rated CPPI is conservative allocation. This is because conservative allocation has the biggest MM allocation (smallest multiplier) of all the CPPI strategies. This means that conservative allocation would produce a return that is the most similar to a risk-free rate; therefore this allocation was rated the best in the SR appraisal. Conversely, aggressive allocation is rated the best in the IR appraisal. This is because this allocation has the biggest exposure in risky assets (highest multiplier). This allocation is most similar to the benchmark asset allocation (74.91% on stocks); therefore this allocation was rated the best in the IR appraisal.

5. CONCLUSIONS

ABC's managers need to provide a clear benchmark in ABC's fund fact sheet in order to perform a fair assessment. Historical data shows that stocks have always been dominating the asset weight of ABC's portfolio. ABC's managers need to take advantage of this fund flexibility by building a well-diversified portfolio in order to improve its risk-adjusted performance. ABC's managers as well as institutional and individual investors need to consider long-term asset allocation and rebalancing strategies in this study to manage their portfolios. Backtesting results of the proposed asset allocation and rebalancing strategies showed that expansive management in the fixed-income instruments could improve ABC's performance broadly and that CPPI generated the best return compared to constant mix and buy and hold. Further study should consider a better method to calculate the probability of portfolio returns; Monte Carlo simulation is one of the methods that are broadly used. Due to ABC's asset allocation limits, there was deviation in the CPPI multiplier in this research. Further study could consider implementing Time Invariant Portfolio Protection (TIPP) strategy, which is a variation of CPPI where the floor value is a dynamic value. Active management attribution in this study used a very simple method because ABC's security selection data is confidential. Further study should consider a more advanced attribution analysis.

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The correlation between anxiety and interest in learning among undergraduate students

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ABSTRACT

COVID-19 pandemic has affected every sector in daily life including education. During pandemic, education in the college has been held online. There are only limited knowledge regarding effects of anxiety on interest in learning among undergraduate students. Therefore, this study aims to shed some lights on the effect of anxiety on interest learning among undergraduate students. This cross-sectional study recruited 103 undergraduate students, located in Jabodetabek, and currently pursuing online lectures. This study used adapted instrument of State Anxiety Inventory Form Y by Spielberger (1983) and Interest in Learning Instrument by Saputro (2017) which is distributed through Google Form. All research data was analysed using Pearson Product Moment correlation. Based on the results of Pearson Product Moment data analysis showed a significant negative relationship between anxiety and interest in learning, $r = -0,544$, $p < 0,05$. Thus, it can be concluded that the higher anxiety experienced by the students, the lower their interest in learning.

Keywords: anxiety; interest in learning; online lectures; pandemic impact; undergraduate students

1. INTRODUCTION

During COVID-19 pandemic, every sector including the education system in schools and colleges has changed. To stop the spreading of COVID-19, learning activities were held online (Pratiwi, 2020). However, there are also disadvantages in doing an online lecture such as unstable internet conditions and uncomfortable places for studying so the task load becomes harder than usual (NurCita & Susantiningsih, 2020). Thus, negative effects of online lecture have decreased of interest in learning among undergraduate students (Wardani, 2020). Interest in people's activity would motivate people to do something that they interest with (Poerwanto, 2010). Therefore, it would be challenging to attend online study for students with low interest in study.

A survey from Sangga Buana University related to online learning on students' interest in learning showed that ineffective delivery of material by lecturer became a problem in online learning. This result caused online lectures were held by not optimal and decreasing students' interest in learning (Budianto, 2021). Other research also explained that students dislike the online learning system on accounting course due to limited media learning (Nasution, Windari, Harahap, & Elvina, 2021). Thus, interest in learning among students' is an important thing during distance learning. Interest in learning is defined by liking or be interested in learning activity without any suggestion from other people (Slameto, 2010). Interest in learning is also defined as a pleasure in carrying out activities which can arouse a person's passion to fulfill their abilities in learning (Safari, 2005). In addition, willingness and intentional involvement of individuals in cognitive activities are essential things in the learning process. It decides what subject we choose to learn and how well we can learn the information provided is also defined as interest in learning (Klassen & Klassen, 2014).

There were several factors found to be in relation with interest in learning namely: (1) environment (Habib, Sulistyowati, Rohmah, & Haryadi, 2020), (2) educators (Riamin, 2016), (3) facilities (Nur, 2015), (4) motivation (Hasanah, Ludiana, Immawati, & PH, 2020), (5) methods (Jusmawati, Satriawati,

& Sabilah, 2020; Mardesci & Mardesci, 2020), (6) learning media (Arisanti & Subhan, 2018; Jamil & Aprilisanda, 2020; Oktarika, 2015; Yunitasari & Hanifah, 2020), and (7) anxiety (Lisma, Rahmadhani, & Siregar, 2019; Yakubu, Bisandu, & Datiri, 2019). Anxiety was considered as a significant factor that influenced interest in learning.

The distance learning during COVID-19 pandemic caused a high level of anxiety with problems encountered by the students in the learning process (NurCita & Susantiningsih, 2020). Anxiety is one of the internal factors that affect interest in learning (Hong, Hwang, Tai, & Lin, 2018; Lisma et al., 2019). According to Nevid (2005), some of the characteristics of anxiety are fear of something that will happen in the future, fear of not being able to handle it, thinking that everything can no longer be controlled, and everything feels insurmountable to manage. Anxiety during distance learning can affect students' learning activities because individual with high level of anxiety could make attention become disappear due to loss control of these conditions that caused individual unable to do anything despite the instruction given (Sudrajat, 2008). Therefore, the high level of anxiety on individual would made an impact on loss of attention, interest, and ability to do anything.

The current study aimed to determine whether anxiety can affect interest in learning among undergraduate students.

2. METHODOLOGY

This study used a correlational design with 103 respondents. This study used a purposive sampling as a sampling technique. Respondents are undergraduate students who study online and located in the Greater Jakarta area (Jakarta, Bogor, Depok, Tangerang, and Bekasi). Anxiety was measured with State Anxiety Inventory Form Y by Spielberger (1983) which is adapted by Utami (2016) and interest in learning instrument was assessed by Interest in Learning Instrument by Saputro (2017). The questionnaire were distributed via Google Form. Pearson Product Moment correlation was used as the statistical analysis technique.

3. RESULT

3.1 Sociodemographic characteristics of respondents

Table 1 showed sociodemographic characteristics of the respondents. The majority of respondents were 17-20 years (73,8%). In addition, more than 70% of the respondents were female.

Table 1 Sociodemographic characteristics of the undergraduate students

Characteristics	Number (%)
Age Groups	
17-20 years	76 (73,8%)
21-24 years	27 (26,2%)
Sex	
Male	21 (20,4%)
Female	82 (79,6%)

3.2 Descriptive Statistics Analysis

Based on Table 2, mean value of the anxiety was 50,69 and it shows that the value is higher than interest in learning. Meanwhile, the mean value of interest in learning was 43,69. For interest in learning, the dimension of happiness has the highest mean value among other dimensions, whereas involvement has the lowest mean score.

Table 2 Descriptive Statistics

Descriptive Statistics			
	N	Mean	Std Deviation
Anxiety	103	50.69	11.837
Interest in learning	103	43.69	8.077
Attractiveness	103	12.87	2.488
Attention	103	8.54	1.929
Happiness	103	14.18	3.520
Involvement	103	3.53	1.219
Valid N (listwise)	103		

3.3 Tests of Normality

Based on Table 3, it shows that a significance value of 0.344 on the Shapiro-Wilk test. This shows that the significance value is > 0.05 . So, it can be concluded that the data distribution is normal or data is in the form of a normal distribution.

Table 3 Tests of Normality

Tests of Normality						
	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Score of interest in learning	,097	103	,018	,986	103	,344

3.4 Correlations

Table 4. shows the negative coefficient (r) = - 0,544 which means that there is a significant negative correlation between anxiety and interest in learning. Meanwhile, the significance value (P) = 0,00, where the P value $< 0,05$ and the correlation is significant. Therefore, it can be concluded that the alternative hypothesis (H_a) is accepted or there is negative correlation between anxiety and interest in learning.

Table 4. Correlations

		Correlations	
		Score of anxiety	Score of interest in learning
Score of anxiety	Pearson Correlation	1	-.544**
	Sig. (2-tailed)		.000
	N	103	103
Score of interest in learning	Pearson Correlation	-.544**	1
	Sig. (2-tailed)	.000	
	N	103	103

4. DISCUSSION

Based on the results of this study showed that there is a negative correlation between anxiety and interest in learning. Thus, it can be concluded that the higher anxiety experienced by the students, the lower their interest in learning. Anxiety is one of the internal factors that can affect interest in learning (Hong et al., 2018; Lisma et al., 2019). According to Nevid (2005), some of the cognitive characteristics of anxiety are fear of something that will happen in the future, fear of not being able to handle it, thinking that everything can no longer be controlled, and everything feels insurmountable to manage. Furthermore, individual with strong anxiety could feel overwhelmed and lose their attention, thus affecting their learning activities (Sudrajat, 2008). Thus, it can be seen that the high anxiety in individuals will have an impact on the loss of attention, interest, and ability to do anything, one of which

is learning activities which include interest in learning (Klassen & Klassen, 2014). The results of this study are in line with research conducted by Yakubu et al. (2019) that there was a negative relationship between test anxiety and achievement of students in mathematics. Moreover, limitation of the study was less varied respondents' gender. Research conducted by Eduljee & LeBourdais (2015) shows that compared to men, women experience a statistically higher level of anxiety. Further study could include more men for broader results.

4.1 Recommendation

Results of this study can be used as a reference for teachers in an effort to increase students' interest in learning by paying attention to anxiety factors that can affect interest in learning, especially during the COVID-19. Researchers from both educational psychology and clinical psychology can also use the results of this study as a reference in an effort to modify individual learning interests by paying more attention to students' anxiety.

4.2 Conclusion

The conclusion of the research shows that there is a significant negative correlation between anxiety and interest in learning. Therefore, it can be concluded that the variables that affect negatively on interest in learning means that the higher anxiety experienced by students, the lower their interest in learning.

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Risk Governance Analysis in the Implementation of Credit Restructuring during the Covid-19 Pandemic: Case Study at Bank SHDW

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ABSTRACT

This study aims to evaluate risk governance at Bank SHDW in the implementation of credit restructuring during the COVID-19 pandemic. In order to provide a stimulus to the national economy, Otoritas Jasa Keuangan (OJK) as the regulator issues a relaxation policy for debtors whose businesses are affected by the COVID-19 pandemic. This poses a dilemma for banks between providing leeway for debtors to stimulate the economy and by conducting a prudent credit evaluation. The research uses a descriptive approach in the form of a case study. The case study focuses on two debtors of Bank SHDW who have restructured COVID-19 credit, the first debtor is a retail segment debtor and the second debtor is a middle segment debtor. The results of this study indicate that Bank SHDW meets the elements of risk governance in managing its business. The implementation of credit restructuring on two debtors of Bank SHDW also did not violate the provisions of Otoritas Jasa Keuangan (OJK).

Keywords: Bank, COVID-19 pandemic, risk governance, restructuring, risk management

1. INTRODUCTION

In early March 2020, the Indonesian government announced that COVID-19 had begun to enter Indonesia and it did not last long until April 2020 the number of positive COVID-19 cases reached 1000 (Nuraini, 2020). In order to suppress cases of the COVID-19 pandemic, the Indonesian government issued PP No. 21 of 2020 concerning Large-Scale Social Restrictions. This is intended so that people do not gather and do activities outside their homes so that the spread of COVID-19 can be suppressed. This certainly affects the Indonesian economy. At the end of April 2020, based on data from the OJK, there were 74 banks that had realized the implementation of credit restructuring, a total of 207 trillion rupiah (Nida Sahara, 2020).

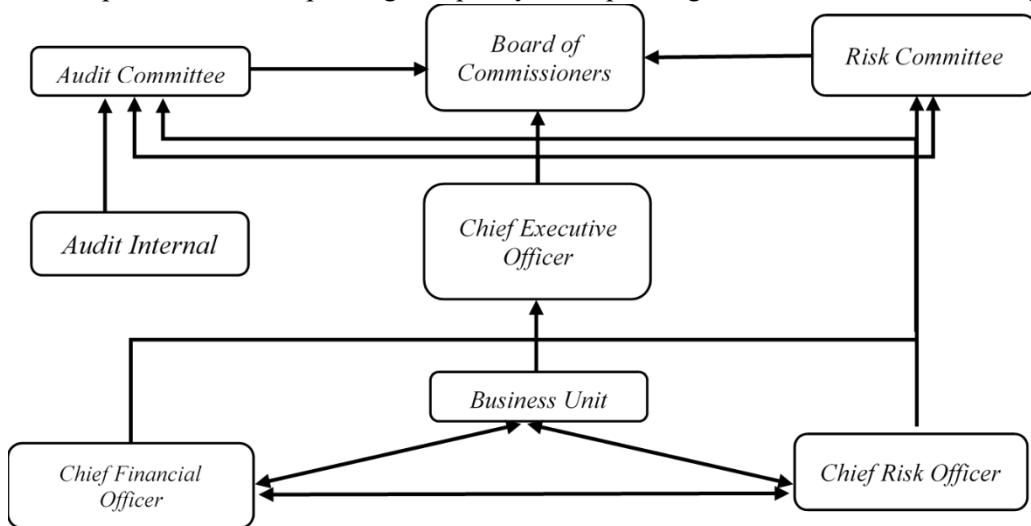
In order to provide a national economic stimulus to debtors affected by COVID-19, OJK issues POJK policy No.11/POJK.03/2020 concerning National Economic Stimulus as a Countercyclical Policy for the Impact of the Spread of the COVID-19. This regulation was issued considering the spread of COVID-19 has reached a global scale and will have a direct or indirect impact on the debtor's financial performance, thus affecting the debtor's capacity to make credit payments. Bank SHDW as one of the banks in Indonesia is also affected by the COVID-19 pandemic. Unlike other banks in Indonesia, Bank SHDW focuses on financing the agribusiness sector. At the beginning of 2020, the total value of loan restructuring from Bank SHDW was worth IDR2.5 trillion and by the end of 2020 it had increased by more than 250% to IDR6.9 trillion. Therefore, Bank SHDW issued various policies to provide economic stimulus to debtors affected by COVID-19 based on POJK regulation No.11/POJK.03/2020 issued by OJK. This policy needs to be issued with the principle of prudence and in accordance with the practice of Risk Governance. This is because debtors who are given relaxation must be those who are really affected by COVID-19, so a good assessment from Bank SHDW is needed. Therefore, the research questions that can be drawn are (1) How are the principles of Risk Governance practiced at Bank SHDW? (2) How is the implementation of the COVID-19 Restructuring Relaxation Policy issued by Bank SHDW in compliance with the regulations issued by the OJK?

2. LITERATURE REVIEW

In order to understand how risk governance practices at Bank SHDW, we must understand who is involved in managing risk governance and what principles must be practiced.

2.1 Roles in Risk Governance

Based on FSB (2013), in carrying out good risk governance in the company, each individual who plays a role has their own rights and responsibilities as regulated by law in general. The following positions that have an important role in improving the quality of corporate governance can be seen in Figure 1.



2.2 Figure 1. Roles in Risk Governance

Principles of Risk Governance based on the Basel Committee on Banking Supervision

Basel Committee on Banking Supervision divides banking governance principles into 13 principles:

- | | |
|--|--|
| Principle 1 – Board’s Overall Responsibilities | Principle 8 – Risk Communication |
| Principle 2 – Board Qualifications and Composition | Principle 9 – Compliance |
| Principle 3 – Board’s Own Structure and Practices | Principle 10 – Internal Audit |
| Principle 4 – Senior Management | Principle 11 – Compensation |
| Principle 5 – Governance of Group Structures | Principle 12 – Disclosure & Transparency |
| Principle 6 – Risk Management Function | Principle 13 – The Role of Supervisors |
| Principle 7 – Risk Identification, Monitoring, Controlling | |

3. RESEARCH METHOD

3.1 Research Approach

The approach used in this study is a qualitative descriptive approach in the form of a case study at a company engaged in the banking sector. Furthermore, this case study research is an evaluation case study. According to Ellet (2007), an evaluation case study is an evaluation of a phenomenon to assess its effectiveness, efficiency, and suitability based on certain indicators. The evaluation case study is used because this study aims to evaluate the implementation of Bank SHDW policies in adopting the relaxation policy issued by the Financial Services Authority (OJK). In this study, the extent of the suitability of the relaxation policy adoption by Bank SHDW will be examined. Then an analysis will be carried out on debtors who apply for COVID-19 credit restructuring. The method used in determining the sample is purposive sampling so that it can provide in-depth analysis. The samples of this research are debtor from the retail segment and debtor from the middle segment. These two segments were taken because of the total value of COVID-19 credit restructuring in 2020 at Bank SHDW is IDR 3.65 Trillion, the retail and medium segments contributed IDR 3.5 Trillion.

3.2 Triangulation Method

The triangulation method is a way to cross-validate using two or more different methods (Jick, 1979). The method used in this research is by two methods, namely document review and survey. Then, data triangulation technique was used to collect and compare data from three different sources (Yin, 2016). The three data are obtained in the following way:

1. Secondary data are documents disclosed by Bank SHDW that can be accessed by the public such as Annual Reports, electronic sources, and websites;
2. Survey for the Risk Management Division to assess the Risk Committee and the Internal Audit Division to assess the Audit Committee;
3. Internal documents related to the implementation of COVID-19 credit restructuring.

4. RESULTS AND DISCUSSION

4.1 Evaluation of Risk Governance at Bank SHDW

4.1.1 Result of Checklist of Risk Governance Principles at Bank SHDW

1. *Risk Governance Structure: Board Level* with average score 2.83
2. *Risk Governance Structure: Management Level* with average score 2.75
3. *Risk Management Practices* with average score 2.43

The overall average score of the Risk Governance Principles Checklist is 2.65 out of 3. This indicates that the disclosure of the risk governance principles of Bank SHDW is good. These results are in line with the conclusions of Etikah Karyani et al. (2019) which states that most Indonesian banks disclose these criteria as compliance with the disclosure requirements required by the Financial Services Authority (OJK).

4.1.2 Result of Evaluation Survey of Risk Committee and Audit Committee at Bank SHDW

Evaluation of the Risk Committee	Evaluation of Audit Committee
<p>1. Composition and Quality Average score: 4.38</p> <p>2. Understanding the Business and Associated Risks Average score: 4.40</p> <p>3. Process and Procedures Average score: 4.18</p> <p>4. Monitoring Activities Average score: 4.10</p> <p>5. Communication Activities Average score: 4.40</p>	<p>1. Composition and Quality Average score: 4.19</p> <p>2. Understanding the Business, Including Risks Average score: 4.18</p> <p>3. Process and Procedures Average score: 4.24</p> <p>4. Oversight of the Financial Reporting Process, including Internal Controls Average score: 4.26</p> <p>5. Oversight of Audit Functions Average score: 4.05</p> <p>6. Monitoring Activities Average score: 3.86</p>

The Risk Committee Evaluation Survey and the Audit Committee Evaluation were conducted to see if the results supported the results from the Risk Governance Principles Checklist. The survey results from the Risk Committee Evaluation have an average score of 4.29 out of 5. Then the survey results from the Audit Committee Evaluation have an average score of 4.13 out of 5. This can indicate that the oversight functions and internal control functions at Bank SHDW are running well. The results of these surveys support the results of the Checklist of Risk Governance Principles at Bank SHDW.

4.2 Implementation of COVID-19 Credit Restructuring at Bank SHDW

4.2.1 Bank SHDW COVID-19 Credit Restructuring Policy Making Process

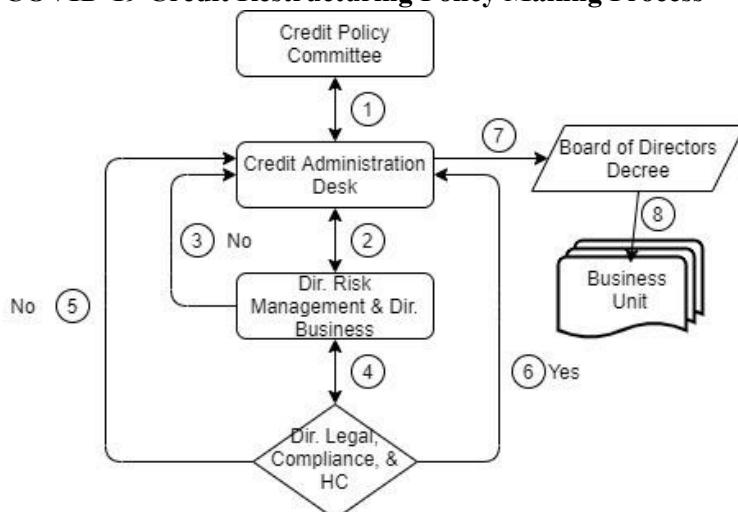


Figure 2. COVID-19 Credit Restructuring Policy Making Process

1. The Credit Administration Desk in adopting the credit restructuring relaxation policy will review it first and then the draft policy will be discussed together with the relevant work units in the Credit Policy Committee. This is to ensure which policies need to be updated and do not conflict with other policies.
2. The Credit Administration Desk then submits a draft to the Director of Business and Director of Risk Management for approval.
3. If the Director of Business and/or Director of Risk Management does not approve the draft, it will be returned to the Credit Administration Desk for correction.
4. Once the policy draft is approved, then the draft is forwarded to the Director of Legal, Compliance, & Human Capital to be tested for prudential principles.
5. If the draft does not meet the precautionary principle, the draft is returned to the Credit Administration Desk and reprocessed starting from point 1.
6. If the draft meets the precautionary principle, the Credit Administration Desk prepares the Board of Directors' Decree to be signed.
7. Bank SHDW Credit Restructuring Relaxation Policy Draft is stipulated by ratification of the Board of Directors.

4.2.2 Bank SHDW COVID-19 Credit Restructuring Policy

Bank SHDW issued 4 internal policies in the form of Circulars to respond to the relaxation policy of POJK No. 11/POJK.03/2020 concerning National Economic Stimulus as a Countercyclical Policy for the Impact of the Spread of COVID-19 issued by the Financial Services Authority (OJK).

Table 1. Policy Summary from Bank SHDW

POJK No. 11/POJK.03/2020 National Economic Stimulus as a Countercyclical Policy for the Impact of the Spread of COVID-19	Bank SHDW Policy
1. OJK states that banks can implement policies that support relaxation, which include policies for determining credit quality and policies for credit restructuring.	Policy B.52 The general guidelines from Bank SHDW to support relaxation are by making a policy "Relaxing Credit Quality Assessment and Credit Restructuring in the Context of National Economic Stimulus for Debtors Affected by COVID-19".

2.	OJK stated that banks need guidelines to support the relaxation policies issued.	Policy B.53 Considering the widespread impact of the COVID-19 pandemic, Bank SHDW made a policy regarding the implementation of credit initiatives and decisions in the form of "Implementation of Relaxation of Credit Initiative Provisions & Credit Committee Decisions during the COVID-19 Emergency Response Period".
3.	OJK stated that banks need guidelines to support the relaxation policies issued.	Policy B.29 Bank SHDW applies business protocols in dealing with the COVID-19 pandemic, namely the policy of "Business Protocols for Facing the COVID-19 Pandemic".
4.	OJK stated that banks must have guidelines for determining debtors affected by COVID-19 that at least contain criteria for debtors and affected sectors.	Policy B.30 In the context of implementing debt restructuring for debtors affected by COVID-19, Bank SHDW made a policy "Debt Criteria and Credit Restructuring Scheme in the Context of National Economic Stimulus for Debtors Affected by COVID-19"

4.2.3 Implementation of COVID-19 Credit Restructuring for Retail Segment Customers

Debtor ABC have two types of loans, namely Working Capital Credit (WCC) and Investment Credit (IC) at Bank SHDW. Debtor ABC have WCC of IDR750 million and IC of IDR1,250 billion. Things to note are the Debtor Criteria and the COVID-19 Restructuring Scheme for Debtor ABC. This is regulated in SK B.30. First, collectability as of February 2020 must be Current or Under Special Mention. Since the days of arrears of Debtor ABC is 0, Debtor ABC has Current collectability. This collectability check is also carried out on all loan data made by Debtor ABC in all banks other than Bank SHDW. Then, the debtor has a problem of decreasing income after the COVID-19 pandemic, but has good faith to settle his loan obligations. Data shows that debtor's income decreased from IDR500 million before COVID-19 to IDR150 million after COVID-19, which means there is a decline in income between 50-75%. Therefore, according to SK B.30, the restructuring of Debtor ABC belongs to the category of Scheme 3 of 4 Schemes. In Scheme 3, the restructuring that can be done is to postpone interest payments for a maximum of 6 months and a delay in principal instalments for a maximum of 12 months. However, due to the good faith of the Debtor, the relief provided in this loan restructuring is only a decrease in interest from 12% per annum to 6% per annum plus 4% deferred interest. This is done to ease short-term interest payments, and extend the interest payment period.

4.2.4 Implementation of COVID-19 Credit Restructuring for Middle Segment Customers

Debtor XYZ is a subsidiary of the XYZ Group. The parent company of Debtor XYZ has been a customer of Bank SHDW since 2016. Debtor XYZ became a customer of Bank SHDW in 2018 and applied for a loan in the form of an Investment Credit (IC) of IDR160 billion which was used to build a palm oil processing plant. Things that need to be considered in the COVID-19 credit restructuring are the debtor criteria and the schemes carried out by the bank. First, collectability as of February 2020 must be Current or Under Special Mention. Debtor XYZ and the parent company of Debtor XYZ until February 2020 have collectability of 1 or is called Current. Then the thing to note in this case is that the majority owner of Debtor XYZ comes from China, which is one of the countries most significantly affected by the COVID-19 pandemic. Then, the biggest factor that Debtor XYZ proposed for COVID-19 credit restructuring because the delay in factory construction due to the cessation of raw materials, labor, and machinery from China. This is in line with the explanation of Article 2 of POJK No. 11 of 2020, in which it is emphasized that all debtors who have transactions of goods and services with China can be categorized as debtors affected by COVID-19. Bank SHDW after conducting an in-depth analysis agreed to carry out Scheme 1, scheduling principal instalments for Debtor XYZ. In the COVID-19 credit restructuring scheme 1, there is actually a reduction in interest rates but this is not applied to Debtor XYZ because considering that interest rate/interest during construction (IDC) payments are paid after the disbursement of the IC principal is completed in 2023.

5. CONCLUSIONS

Research question regarding the practice of Risk Governance principles at Bank SHDW, it can be concluded that the practice of risk governance in Bank SHDW business processes is indicated to be well executed. This can be seen from the results of the Checklist of Risk Governance Principles, which is 2.65 out of 3. Then, the survey results from the Evaluation of the Risk Committee have an average score of 4.29 out of 5 and the survey results from the Audit Committee Evaluation have an average score of 4.12 out of 5. For the second research question, the implementation of COVID-19 credit restructuring in the case study of the retail segment debtor, Debtor ABC, and medium segment debtor, Debtor XYZ, are in accordance with applicable regulations.

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Audit Regulations vs Challenges:

What is the urgency of forensic accounting competency for auditors?

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ABSTRACT

Auditor competence is one of the factors to support compliance with the implementation of an audit standard. Compliance with auditing standards will reduce the potential for audit failure. Fraud Risk Assessment is a mandatory procedure required by audit standards. However, auditors often do not carry out FRAs adequately due to time and budget constraints. This study aims to determine the competencies auditors need in Indonesia regarding the implementation of FRA as required by state financial audit standards. We conducted interviews and discussed with senior auditors to find out the challenges of audit practice, audit standards that auditors must meet, and the urgency of auditor competence in meeting auditing standards applicable in Indonesia. We found that auditors who have forensic accounting competence have met the standards of professional competence of auditors and can carry out their duties professionally even within a limited time and budget.

Keywords: Forensic Accounting; Audit Regulation; Auditor Challenges; Auditor Competence

1. INTRODUCTION

The increase of corruption cases and its countermeasure internationally and in Indonesia have not reaped balanced results (Prihanto & Gunawan, 2020; Reichborn-Kjennerud et al., 2019), especially in regional/local governments (Ariva & others, 2020; Ejiofor et al., 2020). In Indonesia, corruption is regulated in Law No. 20 of 2001 about The Eradication Of Criminal Acts Of Corruption. The subject (perpetrator) of corruption is a person and a legal entity or corporation.

In the 21st century, the manipulation of financial statements often leads the auditor into litigation because no fraud was found during inspections, and there was no Fraud Risk Assessment. Considering that the clean report does not reflect the lack of audit risk (Saliha & Flayyihb, 2020) -the occurrence of audit failures and unknown material errors (Folleau et al., 2019) which cause inappropriate opinions (Askary et al., 2018)- auditor competence has an essential role in preventing corruption cases.

This study questions what competencies auditors in Indonesia need most today in connection with efforts to increase knowledge about Fraud Risk Assessment. This study further describes that auditors need various pieces of training to improve fraud detection sensitivity. These questions suggest gaps among regulations, challenges, and competencies. First, there are several types of audits - private vs state (MohammadRezaei & Mohd-Saleh, 2018) and performance audits (Muda et al., 2018; Raudla et al., 2016) vs forensic audits (Madzivire et al., 2020). Second, each auditor has different soft skills (psychological) and technical skills (Nguyen & Gong, 2012; Steelyana & others, 2012). Third, different cases indicate different challenges. So, auditor knowledge will influence auditor performance and risk assignment (Ahmad et al., 2013; Popoola et al., 2015).

2. LITERATURE REVIEW

2.1 Audit Regulation

Audit regulation is an effort to encourage audit quality (Kleinman & Lin, 2017). However, audit mandates - which must comply with regulations - may lead to a risk of litigation when malpractice occurs (Köhler et al., 2016). In addition, even though there have been various public complaints about over-auditing, this does not mean that audit quality has met stakeholder satisfaction (Knechel, 2016). Even though in practice, SAB already has a decision support system - which is still weak in terms of security and privacy protection (Chou, 2015) - the freedom and independence they have should not be a reason to reduce audit quality considering the responsibilities they bear (Saliha & Flayyihb, 2020). Recruitment, training, and leadership skills are an agenda that should be integrated along with company development and human resource competence (Pellegrini et al., 2018).

2.2 Auditor's Competence

Fraud has become an essential concern over the past few decades, which has also raised the issue of the responsibility of independent auditors to detect fraud (Fortvingler & Szívós, 2016). Mahsun et al. (2021) stated that the obstacle in implementing FRA was the lack of auditor knowledge about FRA implementation techniques, which decreased the level of audit findings. In recent years, the mistakes of company leaders have caused scandals and financial losses for the company. In the literature on financial fraud and corporate offences, the concept of the fraud triangle (Cressey, 1953) is commonly used to explain the leading causes of violations in organizations, e.g., (J. Cohen et al., 2012; Jeppesen & Leder, 2016; Soltani, 2014). The three components of this triangle are as follows: (1) pressure, (2) opportunity to commit fraud (lack of control, ineffectiveness, or neglect of control by managers), and (3) personality characteristics that support fraud rationalization. Most of the work in this area (management) has emphasized the problem of stress situations, incentives, and opportunities as early indicators of fraud risk. Therefore, the auditor's sceptical attitude dramatically affects the audit results. The issue of professional scepticism in auditing remains a critical area. The auditor is considered to lack professional scepticism, which is seen by audit supervisors and the public as the root of the problem with audit quality. This criticism has become increasingly important since the global financial crisis, and auditors and standard-makers are under pressure to raise professional scepticism (ACCA, 2017).

In auditing standards, it has been determined that one of the auditors' responsibilities is to evaluate how the company's business processes are uncertain (Pedrosa & López-Corrales, 2018). Therefore, auditors need a careful attitude and auditor skills in fulfilling the ethical code and professionalism. Readiness factors such as age, knowledge, abilities, and technical skills are factors that can encourage the accounting profession (Nguyen & Gong, 2012; Steelyana & others, 2012).

2.3 Professional Judgement

Audit quality is the quality of auditors in detecting and reporting material misstatements in client financial reports (DeAngelo, 1981). The auditor's opinion should represent the judgment as much as possible (Arruñada, 2000). For some institutions, the Audit is evidence of public accountability and bases to improve company performance (Funnell et al., 2016). The significance of the auditor's disclosure (Muñoz-Izquierdo et al., 2019) and the manager's decision (Mellahi & Wilkinson, 2004) are factors that influence business failure. the auditor should give the detail of evidence regarding the risk of business failure. Thus, audit reports can be used for early warning of possible impending failures (Casterella et al., 2000). On the other hand, investors and courts use audit report documents to evaluate the company's financial difficulties (Geiger et al., 2005; Kim et al., 2008).

2.4 Theoretical Framing

Stakeholder Theory

Stakeholder theory examines the relationship between parties that influence each other in a complex and dynamic way. The scope of stakeholder theory has moved into the realm of how to manage information that is important in strategic plans (Freeman et al., 2010). Stakeholder theory is used not only to determine why a company can outperform other companies but also to make better decisions (Freeman et al., 2020). Auditing is a systematic process for gathering evidence and assessing conformity

with applicable accounting standards, which reports the Audit results to interested parties (Arens et al., 2009).

3. RESEARCH METHOD

Literature review shows that there is a growing interest in auditor competence. This study will explore what competencies are most needed during the audit process according to the experience of auditors. The participants of this research were selected purposively. We conducted interviews with auditors with more than seven years of experience. This study succeeded in collecting data from 7 participants who were willing to be interviewed. The participants of this study may not represent the actual condition of the auditor population in Indonesia. However, this study assumes that senior auditors can represent the opinions of other auditors.

4. FINDINGS

4.1 Regulation Vs Challenges

There is a technical audit manual and includes guidelines for Fraud Risk Assessment. The auditor's proof that implemented FRA properly is an audit working paper called Fraud Risk Assessment Matrix (FRAM). This matrix instruction serves as a guide for auditors in detecting the existence of fraud. This means that the guidelines on FRAM act as a contract that contains audit procedures that the auditor must carry out. So, in essence, the auditor can be sued for not carrying out the processes in the guidelines that act as a contract. The guidelines or technical audit manual contain all risk measurement procedures, both the risk of fraud, disobedience, and non-compliance. All methods in the guidelines are designed to explore how big a risk is based on initial indications that may seem very small. Auditors can learn about this litigation risk from litigation experiences that have occurred within the SAB RI environment

A fraud audit is carried out to measure the damage caused by fraud, abuse, or neglect and covers various activities (Atagan, 2018). SPKN states that inspectors must design audits to detect deviations from the provisions of the legislation, fraud, and non-compliance. Based on the statement, three forms of irregularities must be understood by the examiner with their respective meanings as follows: 1) Deviations in the provisions of the legislation are all forms of actions that are not following the provisions of the legislation; 2) Fraud is a type of unlawful act that is done intentionally to eliminate or obtain something by cheating; 3) Non-compliance is an act that is far outside the mind that makes sense or is outside of standard healthy practices. For example, in a performance check on the efficiency of management in using funds for building maintenance, the examiner found incompetence if the renovations carried out in the office of a high official exceeded the proper etiquette. In this case, the examiner might not see the renovation cost quantitatively as a factor influencing the inspection results. Still, the examiner might look more at a qualitative factor affecting the purpose of the inspection. But, "*Not all auditors can understand properly related to how to implement the FRA in the auditing process.*" (P5)

Meanwhile, the participants of this study acknowledged that the implementation of the entire audit plan on each account took longer than the time set by the leadership. In comparison, the highest audit risk is litigation risk. The auditor may be held accountable at any time by the court for the judgment/opinion that has been given within ten years since the auditor gave the judgment/opinion so that the auditor may be prosecuted for an opinion error in a past audit with evidence of fraud known through non-financial measurements such as the presence of witnesses for fraudulent behaviour.

4.2 Forensic Accounting Competency and Experience

Auditors need forensic accounting capability to implement FRA properly. Meanwhile, none of the participants in this study had education in forensic accounting. The auditor cannot feel completely confident about the audit results because the scope of the problem and the audit scope is very comprehensive. The input for each account is different. Some accounts may have prepared financial statements according to standards, while other accounts do not follow applicable financial reporting standards. So the auditor must perform various audit improvisations. The available audit time is only 2 (two) months for 1 (one) year of financial statements.

Auditors are also obliged to examine various material transactions to find red flags. Auditors are also required to find out how big fraud is based on its small appearance. Therefore, the auditor needs a non-financial measurement type of Examination. In fact, non-financial measurement must be accompanied by forensic investigation competence.

5. DISCUSSION

To overcome resource and time pressure problems, auditors need strategic steps such as non-financial measurement. As for increasing the number of members and extending the inspection time seems to be the easiest solution. However, leaders need to consider competency requirements in recruitment to reduce human resource development funds. Considering the stakeholder theory that suggests gathering information as a decision-making material and outperforming competitors (Freeman, 2015; Freeman et al., 2010, 2020), auditors should develop themselves through various pieces of training as a strategic step in preventing fraud and complying with contracts, and minimizing litigation risk.

The Auditors' willingness to prepare Fraud Risk Assessment Matrix is considered a severe problem because it can lead to litigation, reduce the satisfaction level of audit service users, and reduce public trust in audit services. Accounting education (forensics) aims at the development of accounting professionals. Educators should be aware of the educational approaches that can be used (Boyce et al., 2001). Moreover, technical skills (only) cannot help auditors face business challenges (Dolce et al., 2020; Moore & Morton, 2017). The skills that need to be developed in prospective accountants are technical skills, personal skills, interpersonal and communicative skills, and management skills (IAESB, 2017). A case study perspective can help accounting program students develop various skills (Plant et al., 2019). The case study approach is different from the lecture method. It also encourages students and educators to participate in discussions (Baldauf et al., 2020).

Prospective auditors must also be careful in choosing the best training institution for their career. There is a gap between the expectations of the training centre (educator) and the employer's expectations regarding student intellectual skills, student technical skills, and graduate work readiness (J. Webb & Chaffer, 2016). Training centres / higher education should work with employers to develop the graduates they require (Bridgstock, 2009; Jackson & Chapman, 2012). However, Training centres should increase the relevance of their curricula to the needs of the employer. The balance between academic content and the requirements of employers and the employability attributes needs to be maintained (Bautista-Mesa et al., 2018; Boyce et al., 2019; Klibi & Oussii, 2013; Mourshed et al., 2013).

6. CONCLUSION

The auditor has given a fair opinion on the audited financial statement. However, the auditor is still faced with litigation risk due to the discovery of fraud after a fair opinion on a financial report. Participants in this study acknowledged that there is a gap between regulation and best practices. Auditors are required to assess the risk of fraud even though they do not want it and do not understand how to do it. So that other parties, such as the Corruption Eradication Committee (KPK), may find fraud in fairly audited financial statements. Auditors also need effective measures to detect fraud, such as implementing non-financial measurements and the practice of forensic accounting.

7. IMPLICATION

Based on stakeholder theory, auditors, regulators, educational institutions, and the public are interested parties in auditing. The results of this study can be used as a reference for regulators in compiling implementation guidelines and technical guidelines for auditing standard regulations. Auditors will improve the ability to perform non-financial measurements and knowledge of forensic accounting in developing an attitude of scepticism. Educational institutions will enhance the auditing learning curriculum by including forensic accounting materials. The public will understand why a fairly audited financial statement still contains fraud that the auditor has not detected.

Appendix

Interview Questions

Theme	Question
Audit Regulation	<ul style="list-style-type: none"> • How are FRA requirements regulated in our auditing standards (in Indonesia)? • What do you think about the State Financial Auditing Standards accommodating the provisions of fraud risk assessment?
Audit Challenges	<ul style="list-style-type: none"> • What are the obstacles you face in carrying out Fraud Risk Assessment? • What are the obstacles we face in implementing the FRA? As we know, that we (auditors) have FRAM? • If the State Financial Auditing Standards have accommodated fraud risk assessment provisions, how do you think the auditors understand in implementing fraud risk assessment?
Auditor Competencies	<ul style="list-style-type: none"> • How do you prepare the working papers regarding fraud risk assessment?

#Since this paper is part of more extensive research, interview questions are only partially presented following the purpose of this paper.

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Exposure COVID-19 Pandemic to Banking Financial Performance in Indonesia Moderated by Earnings Management

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ABSTRACT

The banking industry has a vital role in maintaining the stability of the national economy, therefore, banking performance must be a concern during the COVID-19 pandemic. This study aims to examine the relationship between exposure COVID-19 pandemic and banking financial performance in Indonesia where earnings management used as moderating. The approach used in this study is a mixed-method approach. A qualitative approach during data collection was carried out using content analysis techniques to see the impact of the COVID-19 pandemic exposure on the financial performance of the Indonesian banks. While the quantitative approach empirically tests the proposed hypothesis. Using the 2019 and 2020 Annual Report data for all banks listed on the Indonesia Stock Exchange, it was found that the exposure COVID-19 pandemic had a negative effects on the financial performance of banks in Indonesia. Likewise, with earnings management, which strengthens the negative relationship between the exposure COVID-19 pandemic and the financial performance of banks in Indonesia. The implication of this research is to empirically prove the negative relationship between exposure COVID-19 pandemic and banking financial performance and to become a reference for further research on global-scale disease pandemic exposure and its impact on companies.

Keywords: COVID-19; firm exposure; financial performance; earnings management; banking

1. INTRODUCTION

The determination of the COVID-19 virus outbreak as a global pandemic has a major impact on the global economy. On April 13, 2020, the Indonesian government declared COVID-19 as a national disaster with the issuance of Presidential Decree No. 12 of 2020. The implication of the Presidential Decree was the implementation of Large-Scale Social Restrictions (PSBB) in almost all regions in Indonesia which resulted in the inoperability of several business sectors due to weak demand. However, to maintain economic stability related to financial transaction services and payment transactions, the banking industry is still allowed to operate. The COVID-19 pandemic has resulted in a decrease in the potential income received by banks due to a decrease in the amount of credit that can be distributed to the public (Kristiyana, 2020). The weakening of bank credit growth was due to a decline in demand due to the implementation of the PSBB in almost all regions in Indonesia and the decline in people's incomes. Meanwhile, lending is the backbone for the banking to grow.

Research on the exposure of the pandemic (COVID-19, H1N1, SARS, MERS, Zika, and Ebola) to the financial performance of companies has been studied by several authors, but in contrast to previous research, using stewardship theory, this study examines the relationship between exposure to the COVID-19 pandemic on banking financial performance in Indonesia and earnings management as a moderator. The theory describes a situation in which managers are not motivated by their individual goals, but aim more towards their main outcome goals, namely for the benefit of the organization where executive managers want to do a good job and be a good steward of the organizational assets they manage (Donaldson & Davis, 1991). Therefore, management will make various efforts to be able to

maintain the performance of the organization it manages, especially in the face of this COVID-19 pandemic.

2. HYPOTHESIS DEVELOPMENT

2.1 Exposure COVID-19 Pandemic and Bank Financial Performance in Indonesia

Exposures COVID-19 pandemic, as has been studied in previous studies, explained that a decrease in demand, disruption to the supply chain and closure of production facilities, and increased uncertainty in the company will be able to affect future cash flows which can result in changes in the company's stock price (Hassan, Hollander, van Lent, & Tahoun, 2020). Korzeb and Niedziółka (2020) explained that financial exposure to banks in Poland during the COVID-19 pandemic was characterized by low profitability and poorer credit portfolio quality, so a decision was needed to add funds to the bank to cover potential losses. Based on stewardship theory, bank managers will try to maintain their bank's performance during the COVID-19 pandemic, for example by maintaining Capital Adequacy Ratio (CAR) so that it does not fall below the minimum limit of 10.5% as stipulated in Basel III (BIS, 2019). This is in line with the research of Kumar, Acharya, and Ho (2020) and the research of Sukarno and Syaichu (2006) which states that a bank's CAR shows the ability of bank capital to maintain the possibility of risk of loss on its business activities can improve the bank's financial performance. Furthermore, Goodell (2020) explained that the COVID-19 pandemic has had a major direct impact on investors, policymakers and the wider community and can cause large-scale economic damage which also affects the performance of vulnerable banks in times of declining economic growth such for example the possibility of non-performing loans and even the extreme possibility is the occurrence of large-scale withdrawals of funds (bank runs) by its customers.

Meanwhile, in the case of the H1N1 Swine Flu pandemic, it was found that the pandemic case resulted in an increase in bank borrowing costs and restrained the volume of bank loans (Gong, Jiang, & Lu, 2020). This is in line with cases of global AIDS and malaria pandemics in the past which found that the possibility of the collapse of the banking industry in developing countries increased with the increase in cases of the pandemic (Lagoarde-Segot & Leoni, 2013). This COVID-19 outbreak also needs to be anticipated, i.e. by carrying out a quick and decisive monetary policy response as has been done by the People's Bank of China (PBoC) to ensure that commercial banks can maintain access to liquidity and lending during the COVID-19 pandemic crisis (Funke & Tsang, 2020).

Based on several arguments outlined in the previous research, it can be concluded that exposure COVID-19 pandemic affects a bank's financial performance. Thus the first hypothesis in this study is as follows:

H1 : There is a negative relationship between exposure COVID-19 pandemic and bank financial performance in Indonesia.

2.2 Exposure COVID-19 Pandemic and Financial Performance of Banks in Indonesia With Earnings Management as Moderating

Based on stewardship theory, bank managers will make efforts for the benefit of the organization to achieve the goals of the organization following what was mandated by the principal. They will minimize exposure COVID-19 pandemic which can have an impact on their bank's financial performance. The higher the exposure COVID-19 pandemic, the lower the bank's performance. Tucker and Zarowin (2006) explain that income smoothing applied by companies is related to stock returns and company profits to reduce fluctuations in the realization of their company's income. This is in line with the research of Ozili (2017) which explains that registered banks in Africa practicing income smoothing with the motivation that investors see that these banks have good performance.

However, earnings management practices implemented by management can be one of the factors that can lead to decreasing bank performance in the future due to bias or unclear earnings contained in the bank's financial statements. The distortion of financial information will eventually accumulate and can have an impact on falling bank stock prices (Cohen, Cornett, Marcus, & Tehrani, 2014). This is in line with the research of Quoc Thinh and Ngoc Anh Thu (2020) which states that earnings management practices implemented by management that aim to meet analyst expectations and to increase firm value

in the short term will lead to discrepancies in the decision-making process of users of financial statements, as well as can have a negative impact on the value of the company in the long run.

Based on the arguments in several previous studies, it can be concluded that the earnings management practices carried out by banks to minimize exposure COVID-19 pandemic to financial performance may have an impact on decreasing bank performance. So the second hypothesis in this study is as follows:

H2 : Earnings management strengthens the negative relationship between exposure COVID-19 pandemic and bank financial performance in Indonesia.

3. RESEARCH METHODOLOGY

3.1 Samples and Data

The population of this study are all banks operating in Indonesia, while the sample of this study is all banks listed on the Indonesia Stock Exchange. The sample selection was carried out using the purposive sampling method which aims to be able to solve research problems and to provide research results that are more representative. The final result of sample selection obtained 51 observations. The period determined in this study is from 2019 to 2020. The selection of the period is based on the emergence of cases of the COVID-19 pandemic at the end of 2019 and developing into a global-scale pandemic in early 2020. The data used for this research is secondary data namely Annual Reports for 2019 and 2020 obtained from the Indonesia Stock Exchange (IDX) website, the official website of the bank, and Indonesia Stock Exchange Data, as well as inform others related to COVID-19, recession and financial crisis obtained from the Google search engine.

3.2 Research Model

This study uses a mixed-method approach (qualitative and quantitative) and uses panel data. The mixed-method approach is used to provide stronger research results when compared to using quantitative methods or individual qualitative methods (Malina, Grafton, Nørreklit, & Selto, 2011). The qualitative approach is carried out by conducting content analysis to measure the independent variables (Firm Exposure). Measurement of Exposure COVID-19 pandemic (Firm Exposure) was analyzed from the 2019 and 2020 Annual Reports of each bank. Each of these data is processed using the NVIVO 12 Plus application to find the level of Exposure COVID-19 pandemic to each bank using keywords obtained from searching for words related to recession and financial crises based on several previous studies. By using keywords that have been obtained, then data processing is carried out using NVIVO 12 Plus to produce coverage that indicates the level of exposure COVID-19 pandemic of each bank.

The quantitative approach taken is to empirically examine the relationship between exposure COVID-19 pandemic and the financial performance of banks in Indonesia with earnings management as moderating. STATA 14.2 software is used in this study to test the proposed hypothesis, then the model used in this study is as follows:

Model 1: Exposure COVID-19 pandemic and bank financial performance

$$\text{TobinsQ}_{it} = \beta_0 + \beta_1 \text{FE}_{it} + \beta_2 \text{DCov}_{it} + \beta_3 \text{CAR}_{it} + \beta_4 \text{NPL}_{it} + \beta_5 \text{BOPO}_{it} + \beta_6 \text{LnAsset}_{it} + \beta_7 \text{LDR}_{it} + \varepsilon_{it} \quad (1)$$

Model 2: The effect of earnings management on the relationship between exposure COVID-19 pandemic and bank financial performance

$$\text{TobinsQ}_{it} = \beta_0 + \beta_1 \text{FE}_{it} + \beta_2 \text{DCov}_{it} + \beta_3 \text{DA}_{it} + \beta_4 \text{FE}_{it} \text{DA}_{it} + \beta_5 \text{CAR}_{it} + \beta_6 \text{NPL}_{it} + \beta_7 \text{BOPO}_{it} + \beta_8 \text{LnAsset}_{it} + \beta_9 \text{LDR}_{it} + \varepsilon_{it} \quad (2)$$

4. RESULTS AND DISCUSSION

4.1 Descriptive Statistics

Descriptive statistics show that the TobinsQ variable has a mean value of 1.01764 with a minimum value of 0.85969 and a maximum value of 1.35383. This shows that the observed bank has represented all banking performance based on the value company where TobinsQ value of 0.85969 indicates that the bank's value is lower than the recorded bank asset value, while the Tobins Q value of 1.35383 indicates that the bank's value is higher than the recorded of the bank asset value.

The FE (Firm Exposure) variable has a mean value of 2.74% with a minimum value of 0.64% and a maximum value of 3.65% which indicates the level of exposure COVID-19 pandemic for banks in Indonesia. Meanwhile, the maximum ratio of Non-Performing Loans (NPL) in this research sample is still below the maximum limit set by the Otoritas Jasa Keuangan (OJK) of 5%. The Capital Adequacy Ratio (CAR) is seen for the minimum value being at a level above the minimum limit set in Basel III of 10.5% (BIS, 2019).

4.2 Result

Table 1. Regression test hypothesis H1 and H2

Variable	Prediction	Model 1		Model 2	
		Coefficient	Probability	Coefficient	Probability
FE	-	-5,0124**	0,038	-3,4974**	0,041
DCov	-	-0,0404	0,226	-0,0071	0,832
DA	-			0,3783*	0,066
FE_DA	-			-9,2322*	0,095
CAR	+	0,4905***	0,004	0,4283**	0,038
NPL	-	-0,9419	0,500	-0,5934	0,654
BOPO	-	-0,0111	0,937	-0,0691	0,601
LnAsset	+	0,0043	0,680	0,0076	0,472
LDR	-	-0,1290**	0,035	-0,1488***	0,005
Constant		1,0617	0,013	0,9531	0,018
R-squared		0,3522		0,4452	
N		51		51	

Notes:
***significance at level $\alpha = 1\%$, **significance at level $\alpha = 5\%$, *significance at level $\alpha = 10\%$
FE = Firm Exposure; DCov = Dummy COVID-19, 1 if during the COVID-19 pandemic, 0 if others; DA = Discretionary Accrual; FE_DA = Interaction of Discretionary Accrual with Firm Exposure; CAR = Capital Adequacy Ratio; NPL = Non-Performing Loan; BOPO = Operating Costs Compared to Operating Income; LnAsset = Bank Size; LDR = Loan to Deposit Ratio

The test results of Model 1 as presented in Table 1 prove that exposure COVID-19 pandemic (FE) has a significant negative effect (at the level of 5%) on bank financial performance. This can happen because the higher the level of exposure COVID-19 pandemic to the bank, the lower the bank's financial performance. These results are in line with the research of Hassan et al. (2020) which measures the exposure of epidemic disease outbreaks to company performance.

However, most of the control variables that are thought to affect bank financial performance are not proven to be significant in regression Model 1. The only control variables that significant are CAR (at the level 1%) and LDR (at the level 5%). CAR has a positive effect on bank financial performance and is following the research of Kumar et al. (2020) and the research of Sukarno and Syaichu (2006). This means that the ability of the bank's capital to maintain the possibility of risk of loss on its business activities can improve the bank's financial performance. Furthermore, LDR proved to harm the bank's financial performance. This result is different from the research of Sukarno and Syaichu (2006) which has a positive effect. The results in this study have a negative effect which is in line with Werdaningtyas' research and Sofriza Syofyan's research in Sukarno and Syaichu (2006) research which is caused by the higher the LDR in the bank, the higher the risk of bank liquidity because the amount of credit disbursed is greater than the amount of capital invested ultimately can reduce the financial performance of the bank.

The test results of Model 2 in Table 1 show that the exposure COVID-19 pandemic (FE) consistently has a significant negative effect (at the level of 5%) on bank financial performance. The higher the FE, the lower the bank's financial performance. Then the negative influence is further strengthened by the

moderation of earnings management (FE_DA) on the relationship between exposure COVID-19 pandemic (FE) and bank financial performance (TobinsQ).

Earnings management moderation has been shown to have a significant negative effect (at the level of 10%) strengthening the negative relationship between exposure COVID-19 pandemic and bank financial performance. This can happen because the earnings management applied by the bank's management may lead to the accumulation of distortions of financial information that can lead to discrepancies in the performance of the bank which in turn has an impact on the decline in the bank's financial performance and that is according to the research of Cohen et al. (2014) and research by Quoc Thinh and Ngoc Anh Thu (2020). Meanwhile, only CAR (at the level 5%) and LDR (at the level 1%) were shown to be significant and showed the same results as in Model 1. This finding proves the stewardship theory that management will make efforts to maintain the Bank's performance during the COVID-19 pandemic, namely by maintaining the CAR level in accordance with the Basel III.

5. CONCLUSION

This study aims to examine the relationship between exposure COVID-19 pandemic on banking financial performance in Indonesia and earnings management as a moderator. The results of this study shows that the exposure COVID-19 pandemic has a negative effect on the bank financial performance in Indonesia. To be able to maintain the financial performance of its banks during the COVID-19 pandemic, bank management will implement earnings management. However, it is empirically proven that the earnings management applied by the management strengthens the negative relationship between exposure COVID-19 pandemic and the bank financial performance in Indonesia. For this reason, appropriate and fast steps and policies need to be issued by regulators and standard setters to be able to reduce the negative impact of the COVID-19 pandemic on banking financial performance.

This research still has limitations, namely the number of samples is still limited to conventional Banks, so for further research, it can be added with samples of Bank Perkreditan Rakyat (BPR) which are also very affected by the COVID-19 pandemic case and also by adding the non-financial industrial sector as a sample to provide more comprehensive research results. Then, researcher also can add some variables to test the exposure COVID-19 Pandemic on banking financial performance, i.e. by using bank liquidity, bank interest rate, etc.

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A qualitative investigation on millennial consumer behavior in analyzing motivation, lifestyle, and consumer decision-making during the Covid-19 Pandemic.

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ABSTRACT

This study discusses consumer behavior during a pandemic. The Covid-19 pandemic situation has changed consumer behavior in choosing a product. This study is a qualitative study using in-depth interviews to gather information on important changes in making decisions. The number of informants used in the study was 20 people. They provide opinions related to motivation and preferences related to product purchase decisions. There are fundamental changes in making decisions. The study results indicated that consumer behavior's main factor is motivation; lifestyle and decision making. There is a shifting orientation of consumer behavior. Consumer behavior's motivation is shifting from hedonic to utilitarian; consumer behavior tends to have more on important values related health, and focusing more on social values while the decision-making stresses on the cognitive and economic view. This study provides the importance of theoretical insight regarding shifting motivation, lifestyle, and decision-making in Indonesia's millennial consumer behavior.

Keywords: motivation, lifestyle, decision making, consumer, The Covid-19 pandemic

1. INTRODUCTION

The Covid-19 Pandemic has inevitably influenced consumer behavior, including the decision-making process. The previous research of Loxton et al. (2020) found that coronavirus has influenced panic buying. Another study showed that the Pandemic might lead to transformative consumption patterns in the long term (Kirk & Rifkin, 2020) and created unusual purchasing behavior in the Pandemic's early stages (Latoo et al., 2020). Yuswohadi et al. (2020) showed that the Covid-19 Pandemic had changed consumer behavior. In consumer behavior, it focuses on lifestyle orientation, namely staying at home, returning to cultural values, using technology, and strengthening social capital. Koch et al. (2020) investigated the drivers of online purchase behavior during the COVID-19 Pandemic. The study showed that generation Y and Z's online shopping motives during the COVID-19 shutdown were normative, utilitarian, and hedonic reasons in choosing the products. Mason et al. (2020) confirmed that there are changes in consumer decision-making resulting from the Pandemic. The majority of the prior studies analyze consumer behavior during normal conditions. The present study adds the understanding of consumer behavior in the Covid 19 Pandemic context by using qualitative techniques. This study describes the dominant perspective underlying the behavior. From a managerial standpoint, the Pandemic circumstances will affect consumer behavior in the long term, and the companies need to understand consumer behavior to maintain a better strategy thoroughly. Therefore, the role of driving factors for consumer behavior during the covid-19 Pandemic must be further analyzed.

This study also focuses on the consumers of a millennial, which this generation has the digital engagement. Based on the Indonesian Central Bureau of Statistics data, it is predicted that Indonesia's productive population (age 15 to 64) were 179.1 million people in 2020, and millennials (age 21- 36) were contributing to around 63.5 million people. Their judgments and decisions will provide the potential opportunity to shape Indonesia's future, especially for their consumption activity (IDN

Research Institute, 2020). The economic strength is increasingly driven by young people, ranging from internet usage to businesses starting to employ and even be led by young people. The majority of internet users is millennials born when internet technology had started to become known (Delloite, 2019). The pandemic condition has boosted online business activity. The millennials become the primary consumer when purchasing online (Koch et al., 2020). Prior studies have identified consumer behavior during the covid-19. The previous studies emphasize quantitative studies of consumer preference of choice during the covid-19, rather than qualitative studies. The prior studies focus on how food consumption behavior, including changes in food shopping, preparation, and practices (Hassen et al., 2020); impact consumer food safety perceptions (Meixner & Katt, 2020); grocery shopping preferences for purchasing methods, time windows, minimum order requirements, and fees (Grashuis et al., 2020); panic buying in the early covid-19 (Yoshizaki et al., 2020); preference for the online purchase (Petrescu-Mag et al., 2020); and pro-social behavior during Pandemic (Lucarelli et al., 2020). Though previous research has conducted studies on consumer behavior during the Covid-19, the scopes were limited to analyze the context purchase preferences' perception. The reviews of qualitative works on the Indonesian market during the covid-19 Pandemic are inadequate. An excellent way to explore more consumer behavior during the covid-19 should analyze the shifting perspective. The present study attempts to fill the research gap by using a qualitative technique to understand the shifting perspective in analyzing the consumer behavior in consumer goods, especially of millennials consumers in Indonesia.

1.1. Methodology

The sample size of the study was 20. The respondents were ranging from 20-25 years old. Like the millennials, young consumers are more relatively experimental than older adult consumers, so the segment can be explored to gain much insight (Grant & Walsh, 2009). Based on Visa's study (2011), the millennials have spent a lot of time connecting online with friends and family using their laptops and smartphones. They are also assessing social networking sites and spending more time on social media.

This study used purposive sampling. The purposive sampling for 20 young adult respondents to be interviewed would be most appropriate in this study. The respondent was recruited based on the willingness to participate and the experience of purchasing products or consuming services during the Covid-19 Pandemic. The interview process was the primary tool used to collect data. The interviews were semi-structured. The interview process has two sections. The first section was the background data, such as product or service consumed. The second was recording responses to open-ended, qualitative questions. The researchers selected the respondents who were willing to describe their feelings toward the questions such as 1) In times of a pandemic, what consumer motivations are more dominant in decision making?; 2) Decision-making on the consumer side needs to pay attention to rationality aspects. How is your experience in making decisions at the same time during a pandemic? Describe consumer decision making by stages of attitude with cognitive, affective and conative or affective, conative and cognitive?; and 3) Lifestyle is an aspect that determines consumer behavior related to purchasing decisions. How do you analyze your current lifestyle during a pandemic? Can the determinants of lifestyle, namely demographics, sub-culture, social class, motivation, personality, emotions, values, culture, and past experiences, be used to explain this? All interviews were audiotaped and transcribed for analysis. Steps for analysis from Moustakas (Creswell, 2014) that is analyzed process for important statements, making units of the mean from important expression and described the essence with systematic. Related to reliability and validity tests, this study applied the reliability test. It used the member check by going back to each respondent while coding to ensure the researcher's interpretation of data matched with the respondents' arguments (Creswell, 2014).

1.2. Discussion and conclusion

First, theoretically, consumer motivation is divided into two: motivation, which is supported by aspects of utility and aspects of hedonism. During this Pandemic, the motivation of consumers to make decisions is dominated by utilitarian aspects. This is due to limited resources and conditions that make it impossible for consumers to spend more money beyond meeting their primary needs. In a pandemic, Maslow's hierarchy of needs will dominate physiological and safety requirements. The concept of cognitive motive also explains this motivation. According to McGuire's motivation, this motive focuses on the person's need to adapt to the existing condition. This is relevant to the current state of the Pandemic.

Second, lifestyle is about how individuals live and enact their self-concept (Hawkins and Motherbaughs, 2016). The lifestyle of millennials is currently experiencing changes. These changes are caused by the current motivation driving their behavior. This drive was caused by a pandemic situation that changed their activities and interests. They prefer activities to stay at home. Besides, they have attitudes and try to consumer health products. They also have a change in value, namely having an orientation towards empathy and environmental values. This value influences their activities and interest in having concern for the community and the environment. Third, the decision making for this millennial generation has also changed. This decision-making is based on information retrieval. According to Solomon (2018), this decision making is based on cognitive information processing. This means that consumers will consider several information to avoid risks. Consumers also think about whether or not they need to make a decision. This decision is based on trying to prevent the risk of specific consequences.

Motivation

Maslow's hierarchy of needs will dominate physiological and safety needs. People will tend to fulfill their needs to eat and be safe from the threat of contracting the COVID-19 virus. During the Covid-19 Pandemic, the more dominant motivation in making decisions was motivation to fulfill basic needs in physiological conditions, namely eating, drinking, and getting enough rest to increase body immunity as a form of prevention against the coronavirus. Another motivation is to meet safety needs in security and safety by maintaining distance and cleanliness to avoid viruses. Consumer decisions will always pay attention to safety motivation as the main thing. Purchasing foodstuffs, nutrients, vitamins, and medicines is anticipating the risk of contracting the disease due to a pandemic. This is also including the selection of product purchasing mechanisms, consumers tend to choose online to avoid direct exposure to the potential for acquiring the coronavirus through close direct interaction with other people (outside the nuclear family and family of one household) who could be people without symptoms.

Regarding the Covid-19 Pandemic, this condition positively affects consumers to buy products that focus on only the main benefits. This is important because consumers only allocate a certain amount of money to meet their primary needs. In these conditions, product needs are focused on meeting basic needs. For example, when consumers feel hungry, consumers can buy or eat products as long as they are complete. Consumption of products not to fulfill other benefits such as hedonic or certain prestige conditions. This condition that tends to be alarming affects consumers to save money for what is more practical. The use of the product is also no longer intended to invite other people's praise. Based on Yuswohady (2020) survey, the need to eat alone has led to the fulfillment of utility alone by ignoring the aspect of indulgence. That is, eating food as long as people can meet their hunger needs, clean and healthy is enough. This has become a daily routine. Eating is no longer a social media for consumers, but eating is sufficient to meet the primary needs. As previously explained, consumers will focus more on products that have value for their lives. Consumers will tend to put their ego or hedonism aside.

Lifestyle

Lifestyle is how a person lives life based on a self-concept formed from past experiences, innate characteristics, and current situations. During a pandemic, the lifestyle of consumers can change. Lifestyle is an actualization or manifestation of our self-concept. A person's lifestyle also affects all aspects of one's consumption behavior and is a function of the inherent individual characteristics that have been shaped through social interactions. The Covid-19 Pandemic lifestyle emphasizes a healthy

& economic lifestyle with a utility-oriented orientation where consumption is more towards meeting basic daily needs. In this case, lifestyle determinants such as demographics, sub-cultures, social class, motivation, personality, emotions, values, culture, and past experiences affect the new lifestyles during a pandemic. The Covid-19 Pandemic itself is an aspect of the external environment that affects consumer decision making. Based on the consumer behavior model, the external environmental element is a factor that influences consumer decision making and is a stimulant received by the consumer's five senses through the perceptual process. This perception will influence consumer attitudes, which in turn can shape consumer lifestyles and behavior.

The Covid-19 Pandemic impacted demographics, namely jobs and income of people affected during the Pandemic, such as many people who have lost their jobs and efficiency policies in several companies that affect employee income, thus forming a more efficient lifestyle (less consumption). The Covid-19 Pandemic also concerns sub-cultures where each culture consists of a smaller sub-culture that provides more special characteristics and socialization for its members. According to Yuswohady et al. (2020), the current lifestyle during the Pandemic is staying at home, online - shopping, food delivery, consuming frozen food, utilizing television media, Do It Your Self, and working at home or working from home. This is also relevant to the finding. Advances in technology have made it easier for consumers to carry out activities at. Online shopping is a shopping activity using the internet. This makes it easier for consumers to shop without having to leave the house. Advances in banking technology and other infrastructure make it easier for consumers to shop easily. Ruiz-Molina et al. (2017) argue that company innovation can facilitate services to consumers in online transactions because this can create consumer loyalty.

During the Pandemic, people develop social values. It is related to altruism values. Altruism is a concern for the welfare of others without regard for oneself. This behavior is a virtue that exists in many cultures and is considered necessary by some religions. Altruism is a character that likes to defend and prioritizes others' interests; love that is not limited to fellow humans is also human nature in the form of an urge to do service and kindness to others. Related to altruism, there is a strengthening of cultural values. The cultural values that emerge here are social capital. This means that there are togetherness and trust in each other. In general, people have the same feelings and beliefs about something that makes them mutually reinforce emotional bonds with each other. Based on the survey by Yuwohady et al. (2020), consumer behavior during the Covid-19 crisis has changed. One of the changes in the existence of emphatic society. This emphatic society shows the empathy orientation of society. This empathy arises because of the high number of victims affected by Covid-19 in Indonesia. Apart from the empathy aspect of the social environment, empathy for the physical environment is also formed. Pandemic conditions also decrease the ability to buy something. The consequence is that consumers decide to use what is there to meet other needs. This can be done by recycling. This activity will create savings and efficiency of funds. The study of Lucarelli et al. (2020) showed that the Covid 19-pandemics had influenced pro-environmental behaviors. The Covid-19 has reinforced the pro-environmental behavior and supported engagement in the behavior, such as using a more fuel-efficient car, recycling, and reducing waste.

Decision Making

The results of this study are in line with the research of Perrota et al. (2021), that this pandemic condition encourages consumers to have a more utilitarian orientation. Research also shows that individuals focus more on buying products related to food and medicine, hand sanitizer, hand washing, and also reduce public transportation. The existence of a pandemic affects individuals to be more careful regarding decision making. Decision making during a pandemic is more oriented towards an economic perspective and cognitive information processing. This shows that during this Pandemic, consumers tend to pay attention to important information in making decisions. There are aspects of learning that need to be considered in making decisions. Besides, consumers tend to focus on rationality. This rationality explains that making decisions strengthens the aspects of benefits and prices. Thus, the decision will ignore the emotional part, which tends only to reinforce the pleasure aspect. This pandemic condition makes consumers careful in making decisions because they consider the limited resources to

buy. Besides, this pandemic condition also forces consumers to be more rational in paying attention to the surrounding environment in making decisions. This rationality is also seen in the consumer orientation to focus on a healthy lifestyle. The research of van der Werf et al. (2021) explain the existence of a lifestyle that leads to health. The pandemic has also changed consumers' lifestyles to pay more attention to health aspects which include aspects of daily activities or activities in consumers' lives. Halevy (2020) also confirms this research that the decision-making aspect is more about philanthropy. Individuals also allocate their time and money for charity aspects. There is an impact orientation aspect to discuss individual behavior. Individuals are starting to pay attention to the impact of their behavior on the outside environment, so donations to people during this pandemic show the aspect of altruism

1.3. Conclusion

In a pandemic like this, consumers certainly don't have many choices. This is because consumers cannot have the opportunity to travel to the mall. Consumers decide to stick to the use of existing brands without considering looking for other brands. Consumers allocate their time for other things rather than considering purchasing another brand. This also provides an advantage from the marketer's side. Marketers will find it easy to make consumers like their products without worrying that consumers will look for other brands. This pandemic condition affects consumers not to seek additional information. Consumers' psychological condition forces consumers to keep using existing brands only without looking for new ones. Besides, consumers also avoid the risk of looking for new things. Sellers of non-primary goods should consider including necessities in their list of products they sell. Discounts and product value additions need to be made to change consumer purchasing decisions. Regarding rationality, consumers tend to focus on price. Consumers' tendency to choose lower prices needs to be the attention of sellers of branded or expensive products. Nowadays, having a discount seems like a necessity. Offering product bundles can also help increase consumer interest in choosing your product. From the company side, the company can provide several strategies. For example, they are sharing social values .

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Proposed corporate balanced scorecard using circular balanced scorecard approach

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ABSTRACT

The aim of this study is to propose a corporate balanced scorecard (BSC) that can be implemented by the CV XYZ's management by using circular BSC approach. This case study uses qualitative method by interviewing CV XYZ's management. CV XYZ is one of micro, small, and medium enterprises located in Jakarta, Indonesia which has never implemented performance measurement before. CV XYZ also does not have explicit vision, mission, value, and strategy. Since 2019, CV XYZ has focused its sales on exporting seafood products abroad without having any goal setting and business control practices. We use circular balanced scorecard as the conceptual framework and we found that on the desired strategy map, we can not only rely on the critical success factors from the management's desires. Currently, the implementation of business process control that is implicitly carried out by CV XYZ are controlling cost, selling price, and trust from buyers with or without performance measurement. As the final output, we design a corporate BSC which is expected to help increase its competitiveness in the global competition and improve its business performance.

Keywords: desired strategy map; implicit key management dashboard; implicit strategy map; micro, small, and medium enterprises (MSMEs); performance measurement.

1. INTRODUCTION

Every business is established with the purpose of generating profits, so management will manage operations and finances well to generate profits. This is also the objective of CV XYZ, the unit of analysis of this study. CV XYZ is one of the micro, small and medium enterprises (MSMEs), that has been established since 2013 in Jakarta, Indonesia. This company was initially engaged in the seafood distributor industry which sold their products to hotels, restaurants and supermarkets in Jakarta, Bandung, and Bandar Lampung. However, in 2019, the owner sees business opportunities towards seafood export. So since then, the owner of CV XYZ only focuses on fulfilling orders for seafood export. It is prestigious for CV XYZ, which is only medium scale enterprise and from developing country, can participate in export business to developed countries, such as United States of America, European Union, and Australia. To be able to export and compete globally, CV XYZ must meet international standards so there must implement a good management system.

CV XYZ has never implemented a good management system consisting of not limited to performance measurement. Thus, CV XYZ needs a more adequate system and measurement mechanism in today's changing and competitive environment because at present management only use limited management tool. One of the control systems that the management can use is diagnostic control systems, which is used to assist management to monitor results and correct it if there are deviations from predetermined performance standards (Simons, 2000). One of the diagnostic control systems is Balanced Scorecard (BSC) which enables an organization to create a strategic focus by translating organizational strategy into operational objectives and performance measures into four different perspectives, namely financial

perspective, customer perspective, internal business process perspective, and learning and growth perspective (Kaplan and Norton, 1996).

The aim of this study is to propose a corporate BSC that can be implemented by the management of CV XYZ using circular BSC approach. The circular balanced scorecard approach can be summarized into four phases, which is individual dashboards and implicit management dashboard, implicit strategy map, desired strategy map, and BSC (Biazzo and Garengo, 2012). Figure 1 is the summary of the circular balanced scorecard approach. This paper is a case study using qualitative method by interviewing key management of CV XYZ. From the above explanations, this proposed corporate balanced scorecard is expected to help improve CV XYZ's business performance in the future and compete on seafood export industry in the global competition.

Some previous studies about performance measurement are on MSME in the Netherlands (Brinkerink, 2015), empirical study related to the implementation of BSC in MSME by Prof. Stefano Biazzo and Prof. Patrizia Garengo (2012), and a case study related to the application of the BSC on Small and Medium Enterprise (SME) by Widhayat Rudhi Windarta (2014). Brinkerink's study objective is to find critical success factors (CSFs) and how can these CSFs support the development of a performance measurement system. Different from Brinkerink's study, this study conducted on MSME in Indonesia with a uniquely fit using circular BSC approach and the development of a performance measurement system is not only based on CSFs at first but need to start by exploring management dashboard. Biazzo and Garengo on their empirical study explained the experiences of three leading MSMEs in Italy which successfully experimented with the circular balanced scorecard approach. Different to that empirical study, this study uses case study in the form of a more in-depth study only on a medium-sized enterprise in Indonesia. Windarta's study entitled The Proposal of Implementation BSC in SME (A Case Study on the CV. SBA) seems similar with this study. But, unlike Windarta's case study, on this case study researchers do not use traditional top-down approach BSC which start from vision, mission, values, and strategy. Researchers use a circular balanced scorecard approach which is more appropriate to be implemented on CV XYZ because it doesn't have explicitly strategic vision as a fundamental element on the traditional top-down approach BSC. Lastly, based on the knowledge of the researchers, there is no previous research that has raised the theme of circular BSC on MSMEs in Indonesia.

2. METHODOLOGY

This study uses case study approach which specializes in studying a single case, which is CV XYZ as the unit of analysis. Qualitative method is applied on this study because this method emphasizes the importance of participants in research and it is holistic, comprehensive, and more detailed (Creswell, 2014). The data used in this study is primary data from CV XYZ because the contents of the documents and the information provided cannot be accessed by public. For the research instrument, we use semi-structured interviews with 6 resource persons, which are director also as owner, human resource manager, finance and accounting manager, operations manager, export manager, and purchasing manager. The semi-structured interviews provide a lot of flexibility so that the interviewee not only answer questions that have been prepared and planned, but there is also a development of the answers given so that the flow of data obtained is multidimensional (Galletta, 2013). For data analysis, we use thematic analysis which is in line with circular BSC approach. Its formulation through coding and combining various themes used in determining various operations that have been controlled by management, and generating arguments to determine critical success factors, strategy map, and BSC.

3.0 RESULT

Findings on this result section is based on the interviews with the key management of CV XYZ (five managers and one director also as owner) and is arranged by order based on the following research questions:

1. The implementation of business process control is carried out by management of CV XYZ currently was analysed using the implicit key management dashboard (first phase on circular BSC) and implicit strategy map (second phase on circular BSC).

- Proposed corporate BSC for management CV XYZ using the circular BSC approach was designed through the third and fourth steps of circular BSC, namely desired strategy map and BSC.

3.1. Implicit Key Management Dashboard

The implicit key management dashboard is made based on the interview result with management CV XYZ which is identified have or not have performance measurement. On the table 1, we processed implicit key management dashboard of CV XYZ with measurement.

3.2. Implicit Strategy Map

Figure 2 is the implicit strategy map of CV XYZ that reflects its current effort to control the business process with or without measurement.

3.3. Desired Strategy Map

On figure 3, we processed desired strategy map of CV XYZ based on the implicit strategy maps and CSFs from the management's desires.

3.4. Balanced Scorecard

Table 2 is the proposed corporate balanced scorecard with measurement based on the desired strategy map of CV XYZ.

4. DISCUSSION AND CONCLUSION

The implementation of business process control carried out by management of CV XYZ at this time is answered by the implicit key management dashboard, in accordance with the first phase on circular BSC, and implicit strategy map, in accordance with the second phase on circular BSC. Implicit key management dashboard and implicit strategy map are successfully obtained based on the interview with key management of CV XYZ. The management tries to control cost, selling price, trust from buyers, and its internal business process with or without performance measurement. Then, proposed corporate BSC to the management is designed through the third and fourth steps of circular BSC, namely desired strategy map and BSC.

In this paper, we choose the circular balanced scorecard as the conceptual framework because CV XYZ does not have vision, mission, strategy, and strategic plan which are the fundamental element on traditional top-down approach BSC. Comparing with the data on the results, we found that on the desired strategy maps, we cannot only rely on the CSFs from the management's desires. We add five additional objectives compared to the implicit strategy map. After that, we also add the measurement of the proposed corporate BSC at each point in the desired strategy map. In conclusion, this proposed corporate BSC should be implemented and expected to help CV XYZ's business performance to compete globally in the future. The measurement of this corporate BSC needs to be monitored continuously based on feedback as it is implemented. This is where the BSC can have a circular and dynamic pattern, which is indicated by the efforts to continuously improve the design and measurement of the BSC through analysis and various changes that occur in the future, based on the changing competitive environment faced by CV XYZ.

This research has limitations on the data obtained from CV XYZ that cannot be published and confidential. In addition, this research is limited to make dashboard key management and not starting from the individual dashboard as suggested by circular balanced scorecard. This is because researchers cannot interview every individual who works at CV XYZ, but can only interview key management. Another limitation due to external factor which is the pandemic situation, so the researchers were not able to do direct observation. The next step that can be applied as a useful suggestion for further research is to cascade down from the existing company BSC to BSC per division or per department then to BSC per individual in the form of Key Performance Indicators (KPI).

FIGURES

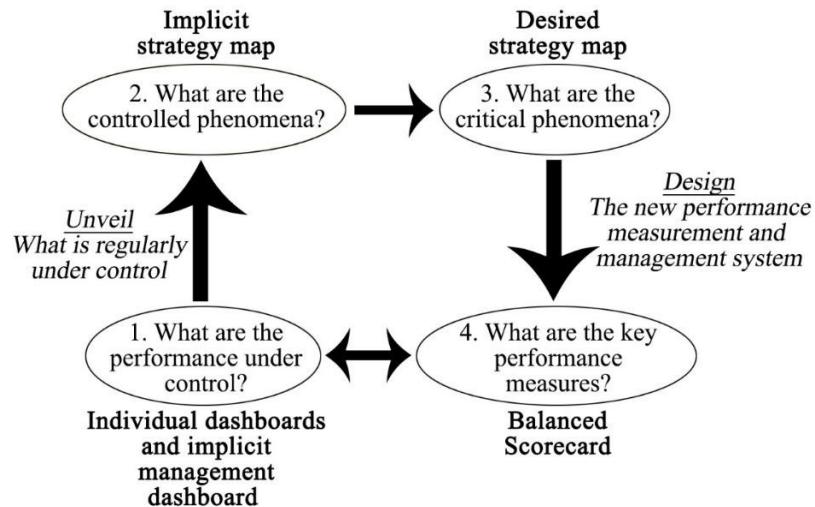


Figure 1. Circular Balanced Scorecard Approach

Source: Biazzo and Garengo, 2012

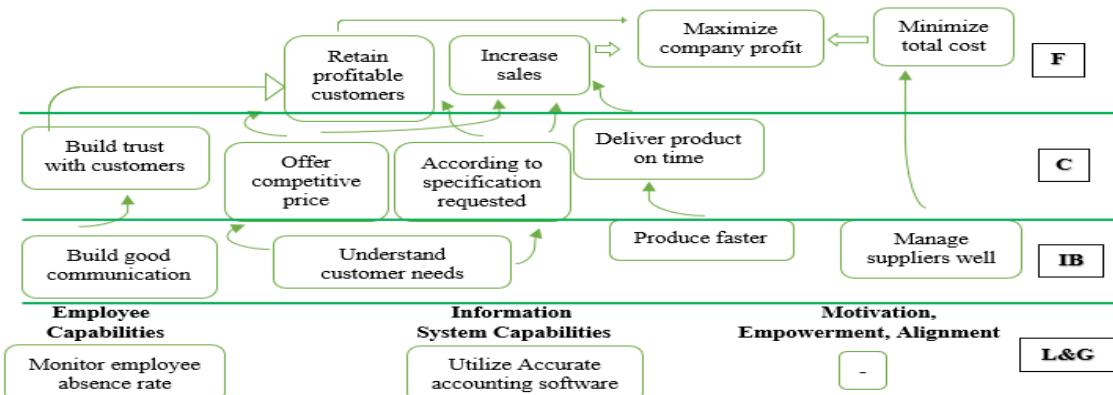


Figure 2. Implicit Strategy Map of CV XYZ

Source: Processed by authors based on interview result

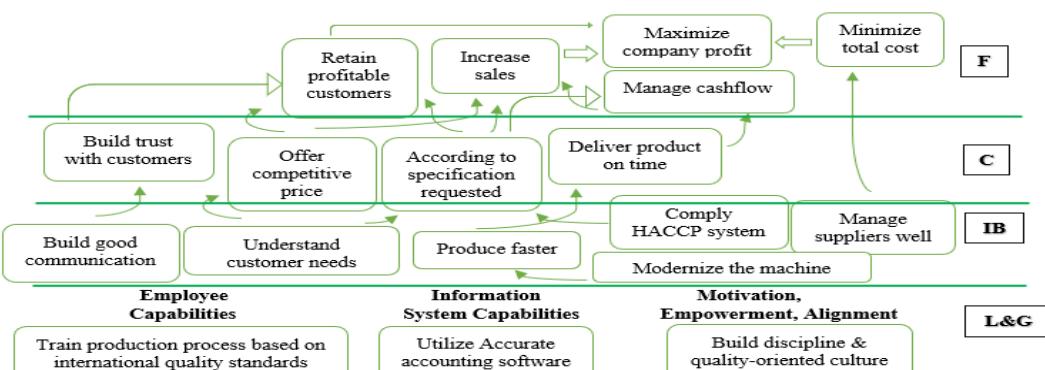


Figure 3. Desired Strategy Map of CV XYZ

Source: Processed by authors based on implicit strategy map and CSFs from management's desires

TABLES

Table 1. Implicit key management dashboard of CV XYZ with measurement.

Measurement	Frequency	CSFs
Company profits	Per export shipment	
Total sales	Monthly	Target revenue, target profit, and control selling prices and costs
The highest standard cost	Per export shipment	
Inspection results from surveyor	Per export shipment	
Microbiological and chemical test results	Per export shipment	Control product quality and safety, and meet customer expectations
The number of complaints from customers	Per export shipment	
Hazard Analysis and Critical Control Point Certificate	Annual	
Employee absence rate	Monthly	Ensure employees work diligently
The number of temperature deviations in the product cold storage logger data	Monthly	Ensure the product is stored at the right temperature (frozen -18 degrees Celsius or below)

Source: Processed by authors based on interview result

Table 2. Proposed corporate balanced scorecard with measurement.

Code	Measurement	Measurement	
F1	Gross profit margin	Percentage of satisfied customers	
F2	Profitable customer contributions	Percentage of void order because of high price	
F3	Sales growth	Percentage of out of specification products	
F4	Cost ratio		
F5	Cash to cash cycle	Percentage of on-time delivery	
IB1	Number of customer's complaints	L&G1	Production training hours per month
IB2	Hours for engaging with customers	L&G2	Percentage of system utilization
IB3	Total kg production per hour	L&G3	
IB4	Hazard Analysis Critical Control rating		Training hours of discipline and quality-oriented culture
IB5	Percentage of realization of machine modernized		
IB6	Percentage of raw material purchase from preferred suppliers		

Source: Processed by authors based on 3.3. desired strategy map

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Using formative feedback to self-directed learners in the learning of tax online

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ABSTRACT

Online learning has been widely enforced to practice in higher education beginning from the spread of Covid19. However, most course content was designed earlier with respect to traditional classrooms and hence with the shift to online learning, it requires modification in terms of teaching practices and assessment. Accordingly, the aim of this paper is to identify student's perception on their readiness to online learning and to determine if formative feedback works effectively to undergraduate students studying taxation online. Initially, a survey on students online learning readiness scale was carried out, forwarding two dimensions namely self-directed and comfort to online learning. Provided that all students were considerably prepared for the online learning, this study documents the implementation of problem-based learning tasks augmented with formative feedback in an effort to enhance learning among undergraduate university students studying taxation online. Formative feedback was designed to reflect both feedback from the respective academic staff and self-assessment of the student. Research data gathered from 87 students enrolled in taxation course revealed that formative feedback provided for every topic of the course, proved to be effective tools in helping students understand and synthesize taxation concepts, thereby promoting deep learning to perform well in their formal assessment. Findings of the study specified that formative feedback can be adapted for use in teaching taxation for online learning self-directed learners.

Keyword: Self-directed learning, formative feedback, student's readiness for online learning

INTRODUCTION

During this covid-19 pandemic, education is inevitably to be conducted based on the planned allowed time. As an alternative to traditional learning as well as to sustain the effectiveness of teaching and learning, universities considered online learning as an option in line with the rapid growth of the internet. The shift has generated changes in the teaching-learning process in higher education institutions and has demanded modifications in teaching style to properly adapted to the online environment. Thus, in an effort to overcome challenges encountered by the students such as accessibility to the internet, availability of proper devices, as well as delay interaction or feedback while learning, academic staffs should identify level of students' readiness towards online learning mainly to facilitate academic staffs to adapt to the new conditions, particularly in the context of complex course such as taxation which require students to comprehend in both legal and technical calculation of taxes so as to comply to the updated changes in associated legislations. Accordingly, the aim of this paper is to identify student's perception on their readiness to online learning and to determine if formative feedback works effectively to undergraduate students studying taxation online. Main objective of teaching and learning was to enhance students understanding and deep learning in the subject area.

LITERATURE REVIEW

Online education is defined comprehensively by Singh & Thurman (2015) as education which is being delivered in an online environment through the use of the internet for teaching and learning. This includes online learning on the part of the students that is not dependent on their physical or virtual co-location. The teaching content is delivered online and the instructors develop teaching modules that

enhance learning and interactivity in the synchronous or asynchronous environment (Singh & Thurman, 2019). Online learning, however, is appealing to some range of learners but not so promising for some other learners. Therefore, efforts to determine level of students' readiness is crucial in the first place to measure learner's needs to online learning.

Taken into consideration the changing technologies and students' different levels of prior knowledge, there was a need to examine student readiness over time. From thereon, academic staffs could design appropriately the delivery and assessment to the course. Instructor or academic staff should design curriculum and learning environments to promote self-efficacy in learners (Broadbent, 2021), with a focus on mastery experiences, scaffolding tasks with some achievable steps, through vicarious experiences such as the use of problem-based learning and support from the academic staff.

Apart from teaching, academic staffs also need to provide formative feedback on written work that recognizes the need for students to engage with the subject matter in the classroom, to reflect on it and to feed forward to the future assessment (Quinton & Smallbone, 2010). This complete learning cycle is crucial to achieve deep learning and critical thinking (Mackintosh Franklin, 2021). Formative assessment of student performance is a technique that has been utilized since 1960s. Its key value lies in its 'continuous' nature, whereby constructive reviews and recommendations can be provided to students throughout the learning process. Formative assessment is also deemed as assessment for learning because its focus is to help the student improve on future work (Broadbent et al., 2021). These techniques give feedback in time for revisions to occur, provide scaffolding for learners, inform instruction, and most importantly, involve students as partners in assessment. These pedagogical strategies show that the resulting benefits of improved instruction, enhanced student learning, and better student products are worth the time and effort, and contribute to a productive classroom climate where the focus is more on learning than on grading (Fluckiger et al., 2010). In past research it has been assumed that if quality feedback is provided (input), learning (output) automatically follows (Fabienne, 2019). Online learning, however, would also demand students to act as self-directed learners in the process of acquiring profound knowledge.

Self-directed learners are motivated, persistent, manage time effectively, and seek assistance when necessary. Initial self-directed learning research was carried out by Zimmerman (1989) who described self-directed learners as metacognitively, motivationally and behaviorally active participants in their own learning process. Such students personally initiate and direct their own efforts to acquire knowledge and skill rather than relying on teachers, parents, or other agents of instruction (Zimmerman, 1989). In other words, success is much dependent upon learners who are moving to a more independent, self-directed style of learning.

METHODOLOGY

There were multiple instruments could be used to measure student readiness to online learning (Hung, et al., 2010; Yu & Richardson, 2015; Dray & Miszkiewicz, 2007). In this current study, instrument adopted from McVay (2001) which emphasize on measuring two factors namely self-directed learning and a second factor that was described as comfort with online learning, was utilized. The "self-directed learning" factor emphasized on the student's actions to cope with learning online whereby the second factor, comfort with e-learning, included a number of questions in the instrument that dealt with willingness to engage with others through electronic means, and comfort with accessing learning resources from electronic sources such as the Internet.

McVay's (2001) Student's readiness for Online Learning (SROL) questionnaire was administered to 87 undergraduate Universiti Teknologi Malaysia students enrolled in taxation 2 course during Semester 2 session 2020/2021. All students selected have involved in online classes for at least 2 semesters and have passed taxation 1 course. The questionnaire was administered during class time and students were instructed to answer the questionnaire in a context of their readiness to learn taxation. The questionnaire is answered by respondents choosing, along a five-point Likert scale to their level of agreement with 11 items.

Based on the findings on student's readiness to online learning, academic staff discovered that students need to be monitored continuously in every task given. The course was designed so that for each end of chapter task assigned, feedback was provided to each student in class during the discussion. Students would receive feedback from both academic staff and peers. Students were also asked to self-evaluate their periodic performance and what could be done to enhance learning. Formal assessments were carried out in the mid and end of the period of the course. First assessment was carried out in week 9 followed by second assessment in week 12 and final assessment in week 17. Students' performance was measured using actual score of each formal assessment.

RESULTS

Based on the survey, students could be labelled as self-directed learners due to mean value of self-directed learner's items which approaching 4.0. Table 1 displays the mean score for each item in the questionnaire. In terms of comfort to online learning, mean value seems to state that they are undoubtedly still uncomfortable with online learning. Cronbach alphas for each of the eight factors however suggested reasonable internal consistency, ranging from .70 to .95 (Nunnally, 1994).

Questionnaire items	SDL (Mean/SD)	Comfort (Mean/SD)
I am willing to dedicate 8 to 10 hours per week for my studies.	3.7931(0.92934)	
When it comes to learning and studying, I am a self-directed person.	3.6667 (0.96046)	
I believe looking back on what I have learned in a course will help me to remember it better.	3.9770 (0.99973)	
In my studies, I am self-disciplined and find it easy to set aside reading and homework time.	3.7701 (0.83110)	
I am able to manage my study time effectively and easily complete assignments on time.	4.0115 (0.90854)	
As a student, I enjoy working independently.	3.8966 (0.97688)	
In my studies, I set goals and have a high degree of initiative.	3.9655 (1.00520)	
I am comfortable communicating electronically.		3.8161 (0.93422)
I am willing to actively communicate with my classmates and instructors electronically.		3.7586 (0.90175)
I feel that online learning is of at least equal quality to traditional classroom learning		3.4138 (1.00639)
Mean (SD)	3.8686 (0.80406)	3.5000 (0.75483)
Reliability	0.936	0.776

Table 1: Descriptive analysis of student's readiness to online learning

Another approach to complement the online learning and to perceive online learning and traditional face to face likewise, personalized feedback from academic staff as well as self-feedback were utilized. Personalized feedback for problem-based learning activities particularly to the question of 'Did you feel prepared for today's lesson? Why or why not? obtained from each student varies and include:

Yes I'm preparing myself before this class, because I want to follow my lecturer's lesson related with the current topic.

Not really but I learned something today

No, because i did no pre-class preparation. But I do understand reason for the numbers in the exercise.

Not really but I learned something today

Yes because i read a little bit about this chapter before class

Nope, not enough time to study, too much assignment

Not really, because I have not done the self-revision. But Dr explanation make me more understand.

Yes, i already revise a bit before entering the class because by doing so can help me understand more during classtime

Not enough preparation, I have to study and practice more

Finally, in the surveys, students explained the characteristics that they believe to be essential components to a successful online student. Among answers were ‘Good work ethic’, ‘time management’, ‘motivated’, ‘independent’, ‘responsible’, and ‘timely feedback from the academic staff’.

The effectiveness of strategies used in the course was observed from the formal evaluations which include midterm and mock final examinations. Both formal assessments evidenced notable achievement as students need to grasp intense knowledge in the chapters assessed. Table 2 shows mean score for all three formal assessments done in the course. Students perform well and could answer the task given perfectly and contributed to the high-grade achievement. The grade obtained from the assessments revealed that formative feedback furnished for each chapter was a very constructive tool in reinforcing student’s learning which trigger to high achievement at the end of the course.

Table 2: Mean of students score in the formal assessments

Assessment	Test1	Test2	Grade
Mean score	67%	74%	91%

CONCLUSIONS

The incorporation of student-directed activities and formative feedback was determined to be an efficient and effective method as a basis to reinforce and retain learning and to facilitate students in the formal assessments of the course. Student-directed activities facilitated the acquisition of knowledge, which was augmented by formative feedback from the academic staff and peers as well as personalized feedback from the previous tasks. Formative feedback received were considered as beneficial and could enhance student’s learning and performance in the designed formal assessment. When it comes to technology, teaching with technology is not a one size fits all approach as it depends on the types of technology in use at the time and also the curriculum content being taught. In other words, the incorporation of technology provides additional factors for consideration in terms of teaching pedagogy and construction of learning experiences.

LIMITATIONS

The instrument does not include an exhaustive list of student online readiness competencies. It is vital to interpret the results with caution as it may not be generalizable to all contexts and settings. On top of that, only accounting students enrolled in taxation course of Universiti Teknologi Malaysia were selected as respondents. Thus, future research should strive to include other areas of competencies not included in this study and also collect data from various courses in higher education.

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Evaluation of Implementation and Assessing Maturity Level of Enterprise Risk Management (ERM) in Third-Party Administration (TPA) Company

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ABSTRACT

A phenomenon due to Covid-19, which has caused shocks to several sectors. The effectiveness of disaster management as part of the risk management process to minimize various impacts on the company. XYZ Company as third-party administration company (for insurance company and health provider) has a quite high level of vulnerability and risk on their business process (especially in a pandemic). So important for the company to assess how mature the company's current risk management implementation is. It helps them to identify weak areas of their Enterprise Risk Management (ERM) and prioritize resources to improve these areas. The purpose of this study is to provide insight for the company as a guide to identify the effectiveness of the process and provide corrective suggestions for weak areas. The type of the research used is case study at XYZ company. This study is mixed method with data collection conducted through literature study, questionnaire, and interview triangulation data method for validation in XYZ Co. related to risk management implementation. The research found that the maturity level of ERM implementation in the company has reached the Initial Level (referring to the RIMS definition).

Keywords: enterprise risk management, framework, maturity level, RIMS, TPA company

1. INTRODUCTION

There are many kinds of the challenge for the company both internally and externally such as an unexpected disaster that could damage business operation which can be caused by multi factors and of them is disease outbreaks. Since the end of 2019, a phenomenon has occurred all over the world with the emergence of a new virus that spreads quickly and can threaten safety known as Corona Virus Disease 19 (Covid-19). Business Continuity Institute (Elliot 2021) identified that non-occupational disease (e.g. pandemic) ended up being the primary cause of business disruption and earned a risk score 18.6 for 2020 (increased 81% from last year and the highest risk score ever noted in the BCI reports). The threat is a corporate risk that requires more mitigation and control. Because risks that arise might cause the failure of the organization in achieving its objectives. (ISO 2018)

This risk also threatens XYZ Company, the third-party administration company that refer to the company has a role as a third party between insurance & health provider. XYZ relates with many insurances as their client and health provider as their partner which is required to have service excellence for customer satisfaction. However, this pandemic actually caused a decrease of -2.78% for the customer satisfaction index and -5.27% for the customer loyalty index. The decline in the company's reputation illustrates the lack of effectiveness in implementing ERM that has not considered business risks comprehensively. Implementation of risk management is expected to provide added value in the Organization and must be supported by the performance of all business units.

One measurement of the effectiveness of risk management can be by measuring maturity. Maturity is the level of organizational capability development that describes the effectiveness and efficiency of existing processes in an organization. Risk and Insurance Management Society, Inc. (RIMS 2006), an organization engaged in risk management, in 2006 has issued a model of risk maturity model. The

RIMS model is equipped with 7 attributes to measure the maturity level of risk management implementation in a company. Companies need to assess the maturity of their ERM because this assessment can help companies to get a clear overview of the status quo, strengths, and weaknesses of their ERM implementation. (Zhao, Hwang et al. 2013) And the similar research was conducted by I Made at Telco Company. (Wirawan 2018)

In practice, the assessment of the maturity level has not been carried out by XYZ Co. Then it's hard to describe the existing condition of the company and identifying its strengths, weaknesses, and also resources allocation. The purpose of this study is to analyse the maturity level of risk management implementation that expected to be used as a guide in identifying the effectiveness and efficiency of the risk management process, providing corrective suggestions for areas that are less than optimal and expected to be able to mitigate their company risk. The benefit of this research is that the evaluation of the maturity level of risk management is expected to add the company's value for third party and optimize the company's resources to support the achievement of company goals.

2. LITERATURE REVIEW

Risk is defined as the effect of uncertainty on objectives, and corporate has to manage them. The paradigm shift towards traditional risk management has evolved into Enterprise Risk Management (ERM) that give the executives and business unit a holistic view of risk (treat the existing risk as a portfolio risk) (Misbah 2017) Therefore, ERM is referred to as an approach related to comprehensive and integrated risk management (Zhao, Hwang et al. 2013). One of the standards related to enterprise risk management issued by the ISO International Institute, namely ISO:31000. The use of International Standard in the implementation can ensure that process of risk management in the company (including identify, assess, assign risk owners, take action to mitigate risk, and monitor & review progress) is going well.

Maturity Assessment is a tool used to evaluate the effectiveness of ERM in a company. A previous study (Misbah 2017) using the Fuzzy method to assess ERM Maturity based on ISO 31000 develop by Zhao specific for construction firms. In this study, a tool used to assess ERM maturity using the framework of Risk Insurance Management Society (RIMS) namely Risk Maturity Model (RMM). RMM is a general framework based on any standard whether referring to ISO 31000, COSO standards or others. A recent study (Wirawan 2018) also used this framework. In RMM, divide into seven attributes namely:

1. Adoption of ERM-based Approach;
2. ERM Process Management;
3. Risk Appetite Management;
4. Root Cause Discipline;
5. Uncovering Risks;
6. Performance Management;
7. Resilience and Sustainability;

These attributes are further detailed into 25 indicators. For each attribute, assessment results can be grouped into six levels of maturity: Non-Existent, Ad Hoc, Initial, Repeatable, Managed, and Leadership.

3. RESEARCH METHODOLOGY

The type of research is case study in XYZ Co and conducted by using mixed method to understand the conditions such as how far and mature the company (XYZ Co) in applying risk management.

3.1 Data Collection

The instruments of data collection used are questionnaires, interviews, and literature study. The respondents of questionnaire distribution are carried out by the business unit representative (managerial level) as a risk management user (risk owners). Respondents for data collection in this study were selected using a non-probability sampling technique that can accurately represent the existing population known as purposive sampling based on existing functions as many as 7 respondents. Meanwhile, the interview process is carried out to the risk management unit in the company which is in charge of the overall risk management process on XYZ Co. conducted to understand the level of ERM implementation. The additional step is to conduct a confirmation interview regarding the respondent's answer from the previously submitted questionnaire as a follow-up action of the unrepresentative result, if at any case a lot of "neutral" choices.

3.2 Data Validation

The validity of data is tested by the triangulation method. The method is done by comparing data collected from 8 interviewees, respondents, and any related document in XYZ Co. The document covering the Annual Report, Company's Risk Profile, Risk Management Reports, and Risk Register. These documents have an important role in the primary information obtained through the interview and questionnaire.

3.3 Data Analysis

The obtained information is analysed to assess its conformity with the characteristics of each level of risk maturity according to the guidelines defined in the risk maturity model of RIMS. (RIMS 2015) Based on the results of conformity analysis, the authors can conclude the level of risk maturity in the company and provide the evaluation.

The research methodology involves going through the following steps:

- Step one – Initial interview carried out to the risk management unit (identification of business processes related to risk management at XYZ Co)
- Step two – Questionnaire distribution
- Step three – Confirm the results of the questionnaire (if at any "neutral" cases)
- Step four – Further interviews and documentation checklist as feedback on the results of the questionnaire;
- Step five – Analysis of the overall data collection result as a description of the existing conditions in XYZ Co and then compared to the classification in the RMM framework to determine the maturity level of ERM implementation.

4. RESULT AND DISCUSSION

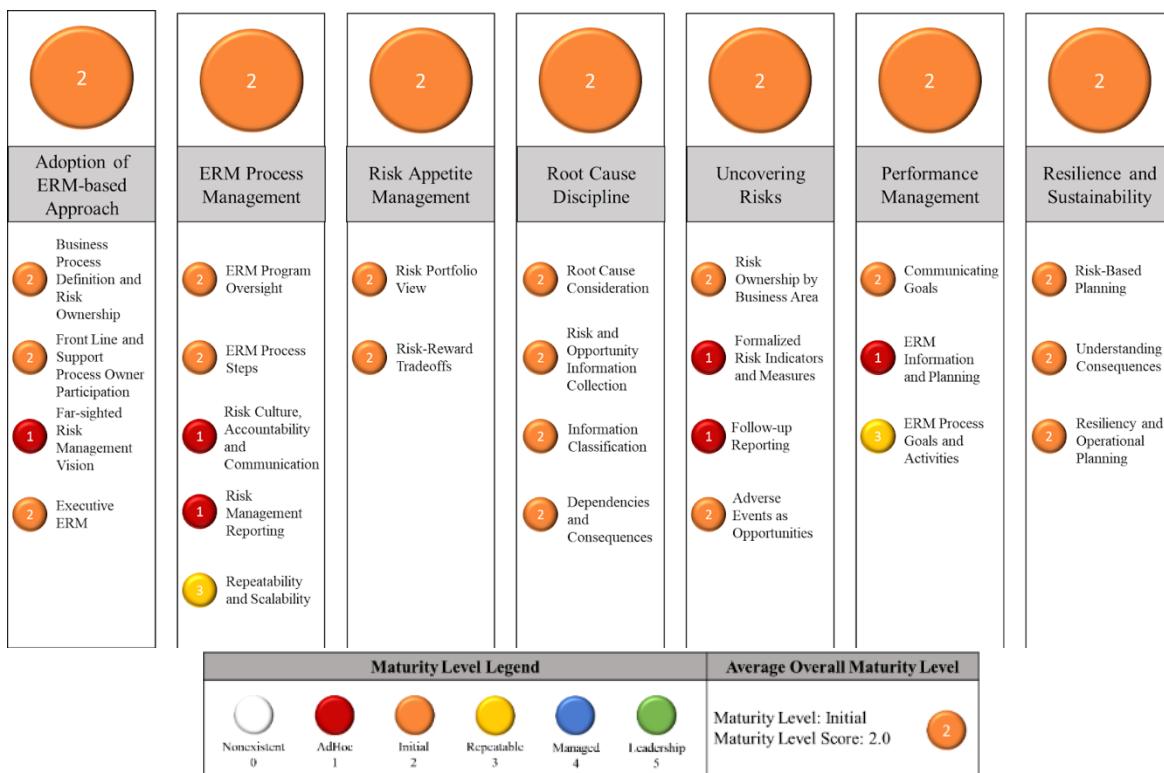
4.1 Descriptive Statistics

In this study, it was calculated using descriptive statistical assessment. This method is a transformation of research data in tabular form so that it is easier to interpretation. Description of the data measured using the mean value. The data collection of questionnaires, it was found that in average for each attribute of the maturity assessment was three or neutral. However, further step taken and it known that the risk management process that runs in the company is not optimal and some information is not evenly distributed to all levels so that understanding of the business unit is limited.

4.2 Risk Maturity Level

Based on Risk Management Maturity framework by RIMS, the results from data collection obtained in the maturity assessment (include each attribute and indicator) are shown in Figure 1.

Figure 1. Maturity Level Summary Report



Source: RMM by RIMS, reprocessed data based on research

Assessment of each attribute and indicator can be described as follows:

- Attribute-1 Characteristics ERM-Based Approach: The average indicator on attribute-1 is at the initial level (except related to far-sighted risk management vision is ad-hoc level). Business processes are identified and ownership is defined, but not working optimally. ERM risk plans are understood by management. There tends to be inequality in the implementation of ERM in the Company. Risk management focuses on past events.
- Attribute-2 ERM Process Management: There are two indicators at the initial level, two indicators at the ad-hoc level, and one indicator at level repeatable, that is repeatability and scalability on the ERM process. Management recognizes a need for an Enterprise Risk Management Process. There is a framework that describes roles and responsibilities, although there is still no dedicated Company Risk Board that actively reviews the risk plan. The current process has not accommodated all the needs of the business and support areas.
- Attribute-3 Risk Appetite Management: All indicators of this attribute at the level initial. There is a risk assessment of the company. However, there has been no disclosure regarding the company's risk tolerance. Risk assumptions are only implied within management decisions and aren't understood outside senior leadership.
- Attribute-4 Root Cause Discipline: On this attribute also has all indicators at the initial level. For the majority, only past risk events are considered. A classification for collecting risk information exists. As the guide said, awareness of a root cause approach's importance exists, but no measured scheme or scenario organizes risk indicators as the core of a risk management framework and ERM Process.
- Attribute-5 Uncovering Risks: There are two indicators at the initial level, two indicators at the ad-hoc level related to formalization, standardization, measurement, and also reporting. Formal lists of risks for each department and discussions of risk are part of the ERM Process which is presented in the Risk Register. Like the previous attribute, corporate risk indicators are collected centrally, still dependent on past events.
- Attribute-6 Performance Management: There are three different levels (ad-hoc, initial, repeatable) but overall, this attribute is at the initial level. The understanding of how a risk-based approach helps them achieve their goals is uneven. It can be said, Motivation for management or support

areas to adopt a risk-based approach is lacking. There has been an evaluation of the allocation of resources but it is not effective.

g. Attribute-7 Resilience and Sustainability: On this attribute also has all indicators at the initial level. There are business analysis issues include disruptive technology, competitors, and environmental changes (external factor) with reporting and control by senior management, but for internal factor is lacking. Risk mitigation takes into account business needs, but in execution, there are still things that are not as expected.

Based on the assessment and analysis of the maturity level of ERM implementation at XYZ Co., the authors assess XYZ Co. still at the initial level where the company is in the early stages of implementing the Risk Management process. The issue that has emerged and is sufficiently highlighted is the awareness of all business lines and the distribution of information and capabilities that also need to be developed.

4.3 Evaluation

Several evaluations can be done to increase the level of maturity of the existing conditions. According to the point of view of the unit responsible for risk management, the current risk assessment is effective as seen from the decreased level of risk from the period before mitigation was carried out. However, a broader view in assessing the effectiveness of the current process needs to be done, such as regarding the distribution of information and understanding of all business units. Because there are several sections identified the need for the role of risk management but the implementation of risk mitigation is still basic, such as in the decision to make a large-scale project (big project).

The Company has tried to fulfill the functions by the standard framework that has been set, but limited resources have not been able to optimize the performance of the existing functions, the commitment of management has been seen.

5. CONCLUSION

Based on the results of research, from 6 levels (including level 0) of risk management maturity according to RIMS, XYZ Co has reached the 2nd level (Initial) and overall has reached the early stage of implementation on this company. The company has tried to fulfill the function by the standard framework. Some processes have been understood, but there is a lack of awareness at the non-managerial level and information dissemination issues impact the understanding of all personnel, so turn out the implementation less optimal.

In order to improve this condition, some improvements on ERM implementation in XYZ Co. that can be done is as follows:

- a. Designing Risk Acceptance Criteria / Risk Appetite and setting the threshold for risk appetite clearly, so the overall risk management process become more relevant;
- b. Improve the awareness and role of ERM by linking to performance appraisal at any level on the company;
- c. Improvement of documentation and dissemination of information related to company policies such as Decree of Director etc.

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CEO overconfidence: determinants and the impact on firm risk

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ABSTRACT

This study aims to examine the determinants of CEO overconfidence and to investigate the impact of CEO overconfidence on firm risk. The data used came from a sample of 261 non-financial companies listed on the Indonesia Stock Exchange during 2014–2018. The dependent variable for the first objective was CEO overconfidence, while the independent variables were the gender, education, age, tenure, and awards of CEO, firm age, firm size, and return on assets (ROA). The dependent variable for the second objective was firm risk and the independent variables were overconfidence, firm age, firm size, and ROA. The method of data analysis for the first objective was a logistic regression, while for the second objective the data was analysed employing a fixed-effect model. The results of the study show that higher likelihood of CEO overconfidence was associated with male CEO and lower number of awards won by CEO even after controlling for the effects of firm age, firm size, and ROA. In addition, the results of the study found that overconfident CEO was not associated with the firm risk even after controlling for the effects of firm age and ROA.

Keywords: CEO characteristics; CEO overconfidence; firm risk; logistic regression; fixed-effect model; Indonesia.

1. INTRODUCTION

Overconfidence is a bias behaviour where someone will value his/her ability better compared to others. Overconfidence behaviour is interesting to study because besides it can result in bias decision, that behaviour is also experienced by different parties, such as investors, managers, and also politicians (Glaser & Weber, 2011). This is not surprising because, according to status-enhancement theory, overconfidence behaviour faced can help them achieve higher social status so that they can get access to more resources, better quality of information, and other benefits (Anderson et al., 2012). This theory was also supported through a research carried out by Kennedy et al. (2013) that argued when someone's overconfidence behaviour can be detected, other party does not give negative response against overconfident person, but otherwise. On the other side, overconfidence behaviour can cause decision making based on emotional feeling (Jlassi et al., 2014) that can cause miscalibration against result potential that wants to be achieved (Ben-David et al., 2010) so that results in low performance (Jlassi et al, 2014).

An empirical evidence on overconfidence by gender shows that male is more likely to be overconfident than female (Huang & Kisgen, 2013). Huang and Kisgen (2013) argued that women make different investment and finance decision compared to men where male manager often makes value destroyed acquisition. An empirical evidence shows that the higher the educational attainment of CEO the higher the likelihood the CEO to be overconfident (Ben-David et al., 2007). Corporations that are run by more educated CEO is capable to gain a greater investment and manage that investment efficiently. This has caused those corporations can achieve better performance and improve company's value in particular after doing the initial public offering (Gounopoulos et al., 2021). An empirical evidence shows that younger CEO had higher overconfidence (Purhanuddin and Zakaria 2015). They argued that as the CEO gets older they tend to select investment that reduces company's risk so that improving company's

performance. On the contrary, older manager are more likely to be conservative and tend to choose to reduce company's leverage level (Bertrand & Schoar, 2003). An empirical evidence shows that CEO with longer tenure was an important factor that affected company's performance because the CEO had had expected knowledge to solve problems (Ayaba, 2012). This has caused that CEO to produce better performance compared to CEO with shorter tenure so that it is expected to increase CEO overconfidence. An empirical evidence shows that awards received by a CEO will increase the his/her power and status (Malmendier & Tate, 2009). In addition, the achievement accomplished by a CEO can improve the his/her view on his/her capability (Hayward & Hambrick, 1997). Therefore, when a CEO views his/her capability better than other CEOs then he/she tends to be overconfident.

A CEO is required not only to observe and understand various existing decision, but also firms risk that might happen for each selected decision. UBS (2005) defined firm risk as loss potency for business, investment, and operational activity (Coleman, 2007). If the CEO makes decision for his/her own advantage rather than for company then agency problem will emerge so that it will increase firm risk (Meles et al., 2021). In this study, firm risk was measured using total risk because firm risk measure valued is better compared than to using beta (Cai et al., 2016). Therefore, total risk was measured using the standard deviation of stock return (Ross et al., 2016).

What are the factors that influence CEO overconfidence in Indonesia? How does CEO overconfidence affect firm risk? This study is aimed to examine the effects of CEO characteristics on CEO overconfidence and to investigate the impacts of CEO overconfidence on firm risk after controlling for the effects of firm age, firm size, and return on assets (ROA). It is hoped that the results of the study will contribute to better understanding of CEO overconfidence and firm risk.

2. RESEARCH METHOD

2.1 Data

This study used data from the Indonesia Stock Exchange (*Bursa Efek Jakarta/BEJ*) during 2014–2018. The unit of analysis was non-financial corporations. The sample was selected purposively with some criteria: (1) non-financial corporations were listed on BEJ during 2014–2018; (2) non-financial corporations conducted initial public offering (IPO) before January 1st, 2014; (3) non-financial corporations reported annual report during 2014–2018; (4) non-financial corporations provided complete data about CEO during 2014–2018; (5) non-financial corporations reported complete financial report during 2014–2018; and (6) non-financial corporations had not 0% firm risk data. The number of non-financial corporations that met the criteria was 261. As the study covered 2014–2018 the sample size than became 1,305 observations.

2.2 Research variables

This study had two objectives: to investigate the determinants of CEO overconfidence and to examine the impact of CEO overconfidence on firm risk. Therefore, the dependent variable was CEO overconfidence and firm risk for the first and second objective respectively. The main independent variables were CEO characteristics for the first objective and CEO overconfidence for the second objective. The CEO characteristics included the gender, education, age, tenure, and awards won. The effects of main independent variables were controlled for the effects of control variables, that is the firm age, firm size, and return on assets (ROA). The operational definition of the dependent, independent, and control variables was given in Table 1.

Table 1. Variables in the study and their operational definition

Variable	Operational definition
CEO overconfidence	Accumulation of 3 dummy variables; 1 if total accumulation equals 2 or more, otherwise 0.
Firm risk	First, industry-adjusted debt-to-equity-ratio, 1 if ratio more than 0, otherwise 0. Second, dividend yield, 1 if ratio is 0, otherwise 0. Third, capital expenditures divided by total of lagged assets, 1 if the firm's ratio more than industry's ratio, otherwise 0.
CEO gender	Dummy, 1 if CEO is male, otherwise 0
CEO education	Dummy, 1 if CEO education above median, otherwise 1
CEO age	Dummy, 1 if CEO age below median, otherwise 0
CEO tenure	Dummy, 1 if CEO tenure above median, otherwise 0
CEO awards	Number of awards won by CEO
Firm age	Observation year minus year when IPO
Size	Natural logarithm of total assets
Return on assets	Net income after taxes divided by total assets

2.3 Research model

This study employed panel data regression method as research method and analysed two different regression using STATA 12. The first regression model tested was a logistic regression to examine the effects of CEO's gender, age, education level, tenure, and number of awards on CEO overconfidence. Meanwhile, the second panel data regression model was tested using a generalized linear model (GLS) to analyse the association between CEO overconfidence and firm risk. Control variables were added into the two models that included firm age, firm size, and return on assets.

3. RESULTS

The results of descriptive analysis of this study were presented in Table 2. These are the summary statistics that include the mean, standard deviation, minimum, and maximum of each variable in the model. It can be seen that 45.4% of CEO in the study was overconfident, the firm risk (stock return volatility as measured by standard deviation) ranged between 0.0023 and 1.2787, 92.6% of CEO were male, the CEO education were dominated by bachelor degree, 47.5% of CEO aged below median, 48.4% of CEO tenure was above median, the mean of firm age was 15.7 years, the firm size varied from 54,006 million rupiahs to 351,958,000 million rupiahs, and ROA ranged between -1.84 and 0.72.

Table 2. Summary statistics of variables in the model.

Variable	Mean	Std. dev.	Min	Max
CEO_OVER	0.4536	0.4980	0	1
RISK	0.0613	0.0488	0.0023	1.2787
CEO_GENDER	0.9264	0.2612	0	1
CEO_EDU	1.3448	0.6148	0	3
CEO_AGE	0.4751	0.4996	0	1
CEO_TEN	0.4843	0.4999	0	1
CEO_AWARD	0.0881	0.3620	0	3
FIRM_AGE	15.6781	9.0166	1	41
SIZE (in million Rupiahs)	12,747,433	27,810,312	54,006	351,958,000
ROA	0.0393	0.1046	-1.8362	0.7160

The results of multivariate analyses were presented in Table 3. These are the parameter estimates (estimated regression coefficients) and the *p*-value (Prob.) for Model 1 and 2. It can be seen that for Model 1, both CEO gender and CEO award were statistically significant at the 5% significant level, while CEO education, age, and tenure did have significant effect on CEO overconfidence statistically. Meanwhile, for Model 2, it can also be seen that CEO overconfidence had insignificant effect on firm risk statistically. In addition, all control variables had strong significant association with CEO

overconfidence statistically, while firm age and ROA had strong significant association with firm risk statistically.

Table 3. Estimated regression coefficient and *p*-value (Prob.) for Model 1 and Model 2.

Variable	Model 1		Model 2	
	Coef.	Prob.	Coef.	Prob.
CEO_OVER			-0.0003	0.474
CEO_GENDER	0.5272	0.013**		
CEO_EDU	-0.0798	0.206		
CEO_AGE	-0.0594	0.312		
CEO_TEN	-0.0348	0.386		
CEO_AWARD	-0.2853	0.045**		
FIRM_AGE	-0.0347	< 0.001***	0.0047	< 0.001***
SIZE	0.1646	< 0.001***	-0.0127	0.422
ROA	-5.56507	< 0.001***	0.0433	< 0.001***
Cons.	-4.5239	< 0.001***	0.0230	0.449
Observation	1305		1305	
LR Chi2	116.89			
Prob > Chi2	< 0.001			
F		7.31		
Prob > F		< 0.001		

***significant at $\alpha = 1\%$; ** significant at $\alpha = 5\%$.

CEO gender was positively associated with CEO overconfidence. It means male CEO had higher probability of being overconfident than female CEO. Meanwhile, CEO awards was negatively associated with CEO overconfidence, implying the higher the number of awards won by a CEO, the lower the probability of being overconfident. It might be because having more awards encourages a CEO to maintain the reputation as the best CEO and be more careful in making decision so that it will reduce the overconfidence level.

CEO overconfidence was not associated with firm risk. It means that the overconfident CEO had not increased firm risk than other CEO. It is because the overconfident CEO may carry out his obligations by the principal's objectives so that it can reduce the company's risk. This finding supports the results of the study by Hackbarth (2008) that argued overconfident CEO could do decision making related with the investment so that reducing conflict between manager and investor that can lead to improved company performance, thus reducing the agency problem.

4. CONCLUSIONS

The results of this study show that male CEO was more likely to experience overconfidence than female CEO. In addition, the higher the number of awards won by CEO, the lower the probability of CEO overconfidence. Further, overconfident CEO had lower firm risk than other CEO.

This study has some limitation. First, the variables used to measure CEO overconfidence were limited only to secondary data, such as industry-adjusted debt-to-equity ratio, dividend yield, and capital expenditures. Therefore, it is necessary to find secondary and primary data that measure CEO overconfidence more effectively. Second, there were incomplete annual reports and data related with CEO so that their companies were not included in this study.

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Indonesian view: Will technological development change accounting roles?

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ABSTRACT

Technological developments can have an unavoidable impact on human life, including within the accounting and finance sector. Rapidly evolving technology combined with the COVID-19 pandemic, which has changed the way businesses operate, means that technology adoption is no longer a future need. This study aims to explore the perceptions of Indonesian accounting practitioners, students, and lecturers regarding changes in the accounting and finance function due to technology adoption, the skills required to contend with it, and the accounting education support needed to provide the requisite skills. Surveys were distributed to three respondent groups using a purposive sampling method. The answers were then analyzed quantitatively using descriptive analysis. This study found the junior-level accounting role to be the most at risk of replacement by technology. New skills such as technology-related and digital skills need to be learned, but business and communication skills also require improvement. Accounting education curriculums may need to be adjusted to provide the skills required to contend with technology adoption.

Keywords: accounting education; accounting profession; change in accounting function; digital skills; technology disruption

1. INTRODUCTION

Technology is advancing rapidly. Ray Kurzweil in Butler (2016) argues that humans have difficulty maintaining pace with the speed of technological development as humans develop at a linear rate while technological change is exponential. Alongside the development of technology, the industry has entered the Industry 4.0 era where the use of computer technology is now commonplace, and where computers are hyperconnected and capable of making decisions (Lu, 2017). However, not all countries are ready for this technological change. Indonesia is ranked 56 out of 63 for digital competitiveness (Institute for Management Development, 2020) and 72 out of 141 for information and communication technology adoption (World Economic Forum, 2019). Accounting is viewed as one of the professions being threatened by the use of technology (Hekmati, Barvayeh, & Hashemi, 2011). Therefore, this study aims to explore the impact of technology adoption on the accounting function and the skills that accountants need to survive. Interestingly, the COVID-19 pandemic has helped to accelerate technology adoption by forcing people to work from home (Institute of Singapore Chartered Accountants, Lee Kuan Yew Centre for Innovative Cities, & Ernst & Young, 2020).

2. LITERATURE REVIEW

Christensen (1997) introduced disruptive innovation theory to explain why dominant incumbents failed to compete with new entrants in the hard disk drive industry. The reason is disruptive technology, whereby new technologies slowly come to surpass the dominant technologies in specific markets (Si & Chen, 2020). The concept of disruptive technology was then developed into the broader notion of disruptive innovation, which refers not only to disruptions in technology, but also in areas such as products and business models (Christensen, Raynor, Rory, & McDonald, 2015). In this study, disruptive innovation theory is used as the basis for technology that has disrupted and changed the accounting and finance function.

Technology began to develop at the end of the 18th century and was represented by mechanical production plants based on water and steam power. This is known as the first industrial revolution. The second industrial revolution began at the start of the 20th century and was characterized by mass labor-driven production based on electrical energy. The third industrial revolution began in the 1970s and featured automatic production based on electronics and information technology. Meanwhile, the fourth industrial revolution, namely Industry 4.0, is presently ongoing (Koh, Orzes, & Jia, 2019; Lu, 2017). Industry 4.0 has already yielded several technologies, including Internet of Things (IoT), big data analytics, cloud computing, robotic process automation (RPA), artificial intelligence, and blockchain. These technologies have changed the accounting and finance function (Dai & Vasarhelyi, 2017; Institute of Chartered Accountants in England and Wales, 2018; Richins, Stapleton, Stratopoulos, & Wong, 2017; Roozen, Steens, & Spoor, 2019; Seasongood, 2016).

3. RESEARCH METHOD

This study used a survey as its research instrument to answer the following research questions:

RQ1: Perceptions of technology adoption impact on accounting and finance function.

RQ2: Skills needed for accountants to face technology adoption.

RQ3: Perceptions of accounting education support in teaching the skills needed to face technology adoption.

A questionnaire was developed based on the Institute of Singapore Chartered Accountants et al. (2020)'s research results and the Skills Framework for Accountancy (SkillsFuture Singapore, Workforce Singapore, Singapore Accountancy Commission, & Institute of Singapore Chartered Accountants, 2020). The questionnaire was pretested on seven people to assess whether the questions were understandable. It was later distributed to three groups of respondents: accounting practitioners, lecturers, and students. It was distributed online in June 2021 through social media and with colleagues' help. Purposive sampling was chosen as the respondents had to satisfy certain criteria. They had to either work in accounting and finance with a minimum of three years' work experience (for practitioners), teach on an accounting program at university (for lecturers), or be pursuing accounting education in the form of a bachelor's, master's, or doctoral degree (for students). An additional requirement for bachelor's students was that they should be in at least their sixth semester. Except for the demographics section, the questionnaire contained close-ended questions and responses on a Likert scale, ranging from 1 (strongly disagree) to 4 (strongly agree). The questionnaire was divided into four sections: section A (demographic and background information), section B (perceptions of the impact of technology adoption on the accounting and finance function), section C (the emerging skills needed by accountants to handle technology adoption), and section D (the skills that an accountant must enhanced to contend with technology adoption).

4. RESULTS AND DISCUSSION

A total of 266 responses were received to the questionnaire, 199 of which were valid: 105 from practitioners, 82 from students, and 12 from lecturers. Most of the respondents from the practitioner group were male, aged 40 to 59, had completed an accounting bachelor's degree, worked as professionals (partners in consulting and auditing), and had 11 to 20 years' experience. The practitioner respondents worked mostly in local or national companies, which are classified as big enterprises (according to Pemerintah Republik Indonesia (2008) regulation). The majority of the student respondents were women, aged 31 to 40, and were taking accounting master's degrees at a state university. Most of the lecturer respondents were women, aged 50 to 59, had completed their master's degree education, and held Indonesian Chartered Accountants certification. Financial accounting courses were the most widely taught by the lecturer respondents, followed by management accounting. Most of the lecturer respondents had taught accounting for 21 to 30 years and taught at private universities.

4.1 Perceptions of changes in the accounting and finance role due to technology adoption

Section B of the questionnaire asked the respondents to rate the extent to which they thought technology would replace the accounting and finance work functions or tasks listed. The work functions or tasks listed in the questionnaire were taken from Institute of Singapore Chartered Accountants et al. (2020). The respondents' answers for each work function or task were averaged and the average scores combined according to each job role. Each role consisted of several work functions or tasks. The total average score for each job role was then analyzed to determine which roles had the highest and lowest average scores.

Table 1. Ranking of accounting and finance job roles that technology will replace.

Rank	Practitioners	Students	Lecturers
1	Accounts Assistant	Accounts Assistant	Accounts Assistant
2	Accounting Executive	Accounting Executive	Accounting Executive
3	Management Accountant	Management Accountant	Management Accountant
4	Senior Accounts Executive	Business Controller/ Financial Director	Business Controller/ Financial Director
5	Finance Manager	Senior Accounts Executive	Senior Accounts Executive
6	Business Controller/ Financial Director	Financial Planning & Analysis Manager	Financial Planning & Analysis Manager
7	Financial Planning & Analysis Manager	Business Controller/ Financial Director	Treasury Manager
8	Financial Controller	Treasury Manager	Finance Manager
9	Treasury Manager	Financial Controller	Financial Controller
10	Head of Treasury	Head of Treasury	Head of Treasury
11	Chief Financial Officer	Chief Financial Officer	Chief Financial Officer

Table 1 indicates that all three groups of respondents considered Accounts Assistant to be the job role that is most impacted by technology adoption. Accounts Assistant is the junior level within the accounting function whose work tasks comprise processing business transactions and reports (Institute of Singapore Chartered Accountants et al., 2020). This result is consistent with that of the Institute of Singapore Chartered Accountants et al. (2020), namely that the junior level of accounting will experience the most significant changes due to automation. Most of these tasks can be undertaken using information technology. The work tasks of Accounts Assistants will experience changes or additions for which workers in such positions will be required to update their skills. The job role deemed to be least affected by technology adoption is Chief Financial Officer (CFO). The tasks of a CFO include driving change in the finance function, strategic planning and talent development in the organization, heading investor relations, and supporting the organization as a strategic business advisor (Institute of Singapore Chartered Accountants et al., 2020). While strategic roles still need technology, this does not completely replace human performance.

4.2 New skills that accountants must learn and skills to be enhanced to handle technology adoption

In the first part of sections C and D, the respondents were asked to rate the extent to which they agreed that accountants need the listed skills to deal with technology adoption. The skills listed in section C were classified as emerging skills while those in section D were classified as skills to be enhanced to deal with technology adoption (Institute of Singapore Chartered Accountants et al., 2020). The three groups of respondents highlighted digital skills as new skills to be learned, e.g. digital technology adoption and innovation and digital technology environment scanning. The lecturers also emphasized the importance of non-digital skills including business acumen, business planning, and finance business

partnering. Digital literacy skills need to be enhanced, with decision making, problem solving, and soft skills also requiring improvement. This indicates that even though technology assists accounting work, it is not possible to replace human abilities in analyzing, interacting with others, and conveying ideas.

4.3 Accounting education support in providing graduates with skills to handle technology adoption

In the second part of sections C and D, the respondents were asked to rate the extent to which they agreed that the listed skills already provided by accounting education. The skills listed were the same as those given in the first part of sections C and D. In summary, the practitioners and lecturers considered that accounting education cannot provide new skills regarding business and managerial practices, such as business acumen, business planning, change management, and macroeconomic analysis. Meanwhile, the students perceived that accounting education was incapable of providing new digital skills, such as data analytics and the adoption and innovation of digital technology. As for the skills to be enhanced, the survey result indicates that the practitioners and lecturers considered that accounting education cannot provide strategic skills, such as decision making, leadership, resource management, problem solving, and sense making, while the students thought accounting education could not provide relationship skills and digital literacy. These results indicate that the majority of the student respondents, who are younger, tended to focus on technological developments and social interaction skills, while the practitioners and lecturers focused more on practical business skills.

5. CONCLUSIONS

This study aimed to capture the perceptions of Indonesian accounting practitioners, students, and lecturers regarding changes in the accounting and finance function due to technology adoption, the skills needed to deal with technology adoption, and the support from accounting education in providing the skills required to contend with technology adoption. The findings indicate that lower-level job roles such as Accounts Assistant were considered the most vulnerable to replacement by technology, while higher-level roles such as Chief Financial Officer were considered to be the least affected. The work functions or tasks of lower-level job roles may therefore be eliminated and replaced with other tasks to the extent that accountants need to update their skills.

In general, the new skills that need to be learned are technology and digital skills. However, alongside learning new skills, accountants also need to improve their managerial business skills (e.g. decision making and problem solving) and soft skills (e.g. communication and interpersonal skills). Accounting education can help to provide the skills that graduates require although the practitioners and lecturers perceived a lack of provision in certain business and managerial skills (including business acumen, business planning, change management, decision making, and sense making). Meanwhile, the student respondents tended to consider that accounting education needs to incorporate digital and relationship skills. Future studies may seek to investigate more in-depth use and impact of technology on the accounting and finance function in different regions of Indonesia by covering more small and medium sized enterprises or remote areas.

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The Effect of Industrial Sector and Corporate Governance Reform on Tax Avoidance Practices in Malaysia

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ABSTRACT

This study investigates tax avoidance activities among companies in different sectors in Malaysia. It also seeks to examine the impact of corporate governance on tax avoidance activities. Four proxies is used to measure tax avoidance; accounting ETR (AETR), cash ETR (CETR) Tax Expenses to Operating Cash Flow (TECF) and Cash Paid to Operating Cash Flow (CPCF). Using sample of listed companies in Bursa Malaysia from 2005 - 2015, this study recognises the importance of industrial sector in determining the amount of effective tax rate paid by companies listed in Bursa Malaysia. The result finds that manufacturing companies, Infrastructure Project Companies (IPC) and hotels pay significantly lower effective tax than other companies in different sectors. Additionally, the study also finds evidence that the corporate governance has significantly successful in mitigating the tax avoidance practices among listed companies in Malaysia.

Keywords: tax avoidance; industrial sector; corporate governance; MCGG; ETR

1. INTRODUCTION

Corporations and wealthy individuals used a range of tax avoidance schemes to avoid and evade taxes, especially corporations, because taxes took away a greater proportion of the companies' pre-tax earnings and subsequently reduced the company's distributable profit (Annuar et al, 2014). The corporate tax avoidance benefited the company in form of increased cash flow (Hanlon & Hitzman, 2010), which subsequently increased the company's value (Desai et al., 2007, Lisowsky, 2010, and Wang et al. 2020). Further, tax avoidance could reduce the average interest rate of company, whereby tax savings gained from tax avoidance activities could be used to finance companies' projects without borrowing funds (Kholbadalov, 2012). Liang et. al. (2021) suggested that rather than self-developed tax avoidance strategies, companies prefer to imitate tax strategies of peer groups in the same industry to reduce potential regulatory risk and to maintain competitive parity over others. On the part of the government, tax avoidance represented a loss to total revenue. Tax avoidance became a government's main concern since the loss of tax revenues due to tax avoidance significantly impacted the government's planning, especially to the nation's development policy and the continuity of the people's well-being. In Malaysia, companies' income tax was the major contributor to the total government revenue. In 2019, total companies' income tax collected by the Inland Revenue Board amounted to RM63 billion, representing 47.32 percent of total direct tax collected for the year. The prevalence and the negative impact of tax avoidance sparked the interest to study the determinants of the menace. Despite the growing body of literature in determining tax avoidance, very little attention devoted to the relationship between industrial sector and tax avoidance. Thus, this study aims to investigate the relationship of tax avoidance behaviour with the industrial sector. In addition, this study aims to investigate whether the revision of the Malaysia Code on Corporate Governance (MCCG) in 2007 and 2012 affects tax avoidance activities among the listed companies in Malaysia. The remainder of the paper is organised as follows. Section two provides a brief description of the Industrial sector in Malaysia and the Malaysian Code on corporate governance and hypotheses. Section three elaborates

the research design, and section four presents and discusses the findings. The final section provides the conclusions and discussion

2. LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

Industrial Sector in Malaysia

After independence in 1957, the Malaysian government embarked into many initiatives and strategies to introduce and strengthen the industrial sector in Malaysia. In the earlier years, the Malaysian government introduced the Import Substitution Industrialization strategy (ISI) to encourage foreign investors to set up production, assembly, and packaging plant in Malaysia to supply goods imported from abroad. Then, the government launched New Economy Policy (NEP) which led to the formation of Heavy Industries Corporation of Malaysia (HICOM) to go into partnership with foreign companies involved in petrochemicals, iron and steel, cement, paper and paper products, machinery and equipment, transport equipment and general engineering. In 1986, the government introduced Industrial Master Plan (IMP) which specifically focusing on manufacturing. Under IMP, many industrial incentives were given through Promotion Investment Act (PIA) and Industrial Coordination Act (ICA) and also through Investment Tax Allowance and a major revamp of the Export Credit Refinancing Facilities (ECR) (Kinuthia, 2009). The second IMP (IMP2) launched in 1996 shifted focus from traditional industrial based to cluster-based approach. IMP2 aimed to strengthen sector linkages, develop dynamic industrial clusters, and promote higher value-added activities. In 2006, the government introduced the third IMP (IMP3) which aimed to achieve long-term global competitiveness through transformation and innovation of the manufacturing and services sectors. Under IMP3, government targeted 12 sectors in manufacturing for further development and promotion. The Malaysian government provided heaps of tax incentives to companies in the industrial sectors. Tax incentives, which either direct or indirect were expected to promote more investment exclusively in manufacturing, agriculture, tourism, and other approved sectors. The main direct incentives for companies were the pioneer status which permitted the companies to enjoy partial or total relief from the payment of income tax for specific period, and investment tax allowance on the company's qualifying capital expenditures for period from 5 to 10 years. The government also offered indirect incentive in the form of exemption from import and excise duty. Therefore, the companies from different sectors, which operated under different conditions, might face different tax implications, and enjoy different opportunities to reduce their tax burden. Some sectors were highly competitive and very reactive to economic condition and political event, while some sectors were protected by the government. Kim and Limpaphayom (1998) suggested that industrial effects might be an essential factor that explained the differences in ETR for non-western companies due to the long-standing sector policy in these countries to protect certain sectors. Derashid and Zhang (2003) found that the manufacturing companies and hotels paid significantly lower effective taxes than other companies in other sectors in Malaysia. Based on the above discussion, we posit the following hypothesis:

H1: There is a significant relationship between tax avoidance and types of industrial sectors.

Malaysia Code of Corporate Governance Reform

The first Malaysian code of corporate governance, which was initiated by Securities Commission (SC), was issued in March 2000. Since then, many efforts had been made by the Malaysian government to enhance the best practice of corporate governance in Malaysia. The code essentially aimed to set out principles and best practices on structures and processes that companies may use to achieve the optimal governance framework. All listed companies were required to disclose their compliance level to provide a strong facilitative regulatory regime including corporate accountability and high-quality corporate governance mechanisms that would reinforce investor confidence (Rahim et al. 2015). The MCCG was reviewed in 2007 to strengthen the board of directors (BOD), audit committees and the internal audit function, and ensure that the BOD and the audit committee discharge the roles and responsibility effectively (Bhatt, 2016). Another revision was made to MCCG in 2012 with greater emphasis put on boards members. Areas that were strengthened in this revision included the responsibilities, roles, and composition of the board; commitment, independence, and remuneration of directors; risk-management framework and internal controls system; the integrity of financial reporting and a relationship between

the company and the shareholders. Corporate governance mechanisms were able to enhance the best practices in corporate performance and transparency (Ahmad Haji, 2014) and reduce tax aggressiveness through the ability to govern and monitor corporate tax decisions (Abdul Wahab et al., 2017). Bhatt (2016) suggested that the Malaysian listed companies' performance improved after MCCG 2000. Therefore, we construct the following hypothesis:

H2: There is a significant relationship between tax avoidance and revised MCCG.

3. METHODOLOGY

Sample Selection and Data Collection

The data used in this study are derived from the companies listed in the Main Board of Bursa Malaysia from 2005 to 2015 consecutively and are collected from Thomson Reuters Data stream. The following are excluded from the data collected:

- a. Companies in Finance, REITs, Mining, Closed end fund and Exchange trade fund because of their uniqueness and limited number of companies.
- b. Companies with net operating loss and negative ETR. (Kim and Limpaphayom (1998), Derashid & Zhang (2003), Abdul Wahab et al. (2017))
- c. Companies whose effective tax rate greater than 1 due to loss carried forward. (Mahenthiran and Kasipillai, (2012), Derashid & Zhang (2003))
- d. Companies in a sector of less than 10 companies.

Finally, the sample consists of 3,164 company-year observations over eleven-year period.

Dependent, Independent and Control Variables

The dependent variable for this study is tax avoidance. Effective tax rate (ETR) is used to measure tax avoidance as suggested by previous studies (Derashid & Zhang, 2003; Annuar et al, 2014; Mahenthiran and Kasipillai, 2012; Abdul Wahab et al. 2017). Four measurements of ETR are employed in this study, namely, accounting ETR (AETR), cash ETR (CETR), Tax Expenses to Operating Cash Flow (TECF) and Cash Paid to Operating Cash Flow (CPCF). The first three measurements only capture the non-conforming tax avoidance (Mahenthiran and Kasipillai, 2012). Salihu et al (2014) suggested the fourth measurement for conforming tax avoidance. We classify tax avoidance company by looking at the differences of ETR and corporate statutory taxes rates. The company with lower ETR than tax statutory rates is labelled as '1' and considered tax avoidance company. The company with higher ETR than tax statutory rates is labelled as '0' and considered as non-tax avoidance company. The main independent variables in this study are sector classification and reviewed MCCG. There are nine sectors identified in this study using Bursa Malaysia classifications. Dummy variables are employed to examine the effects of MCCG reviewed in 2007 and 2012 on tax avoidance. We include three control variables which are company size, leverage and growth. The following four multiple regressions were estimated to investigate the impact of GLIC ownership on each proxy of tax avoidance. The regression equations are as follows:

$$AETR = \alpha + \alpha_1(IND) + \alpha_2(MCCG7) + \alpha_3(MCCG12) + \alpha_4(Control\ Variables) + \varepsilon \quad (1)$$

$$CETR = \alpha + \alpha_1(IND) + \alpha_2(MCCG7) + \alpha_3(MCCG12) + \alpha_4(Control\ Variables) + \varepsilon \quad (2)$$

$$TECF = \alpha + \alpha_1(IND) + \alpha_2(MCCG7) + \alpha_3(MCCG12) + \alpha_4(Control\ Variables) + \varepsilon \quad (3)$$

$$TPCF = \alpha + \alpha_1(IND) + \alpha_2(MCCG7) + \alpha_3(MCCG12) + \alpha_4(Control\ Variables) + \varepsilon \quad (4)$$

4. RESULTS AND FINDINGS

Multivariate Analysis

Results from multivariate analysis are presented in Table 1. From Table 1, hypothesis 1 is supported because we find positive and strong significant relationships between Consumer, Industrial, IPC and Hotel sectors with tax avoidance. This finding is consistent with Derashid & Zhang (2003). They suggested that the positive relationships between manufacturing and hotel sectors, and tax avoidance were due to various tax benefit under Industrial Master Plan, long standing industrial policies by Malaysian government to develop and promote companies in manufacturing sectors, and numerous tax incentives for tourist sectors.

Table 1: Regression Analysis for Industries Sector and MCCG

Variables	AETR	CETR	TECF	TPCF
Construction	-.368	-.180	-.457*	-.376
Consumer	1.032***	.873***	.556**	.476**
Industrial	1.054***	.899***	.780***	.782***
IPC	.644*	.678*	1.124**	1.082***
Hotel	1.308**	1.734***	2.694***	2.600***
Plantation	.708***	.470*	-.325	.031
Properties	.009	-.121	-.056	-.228
Technology	.849***	.947	1.584***	1.504***
Trading & Services	.200	.152	.177	.100
MCCG7	-.335***	-.042	-.194*	-.057
MCCG12	-.545***	-.505***	-.336***	-.323***
Control Variables				
LOG assets	.165***	.076**	.052*	.028
ROA	-.020***	-.010*	-.007	-.009
LEV	1.034***	1.129***	.675**	.594***
MTBV	-.012	-.020*	-.014	-.037**
Observation	3164	3156	3164	3156
Adjusted R square	0.098	0.075	0.081	0.073

Note:

***Statistical significant at the 1% level, **Statistical significant at the 5% level, *Statistical significant at the 10% level

Table 1 also shows that the hypothesis 2 is supported because the regression analysis shows significant negative relationships between tax avoidance and MCCG12, and tax avoidance and MCCG7. This finding gives clear evidence that the reviewed MCCG had significantly reduced the tax avoidance practices among listed companies in Malaysia.

5. CONCLUSION

This paper examines whether tax avoidance practices are influenced by the industrial sector and the reform of the Malaysian Code of Corporate Governance (MCCG) in 2007 and 2012. The results suggest that the industrial sector and reviewed MCCG are important factors in determining tax planning practices. Our result confirms the study done by Derashid and Zang (2003) even though we use different time lengths. This study employs sample data under IMP3 that focusing on the service sector as a main contributor to the economic growth, while Derashid and Zang (2003) utilized sample data of companies listed from 1990-1999 that are under IMP2 which manufacturing sector leads the driving growth. Our result also suggests that MCCG in 2012 has significantly successful in limiting tax avoidance practices. This study, however, subjects to several limitations where the data only covers tax avoidance practise from 2005 to 2015 and considers only MCCG 2007 and 2012. Future research may include the effect of MCCG 2017 and 2021 on corporate avoidance practice in Malaysia. A few significant changes were introduced in the recent MCCG compared to the former version of 2012. It includes the board composition which must at least half is an independent director, the tenure limit of nine years for independent directors and the requirement to disclose the company's policy on gender diversity. The most recent updates of the MCCG were released in April 2021 with the special focus on good corporate governance and board leadership during the post-pandemic recovery period (Surendran, 2021). It also promotes on the adoption of best practices among companies with low level of compliances to the

governance. The effect of pandemic Covid 19 on tax avoidance practices should also be researched since the government introduced many tax incentives during the pandemic that might influence companies' decisions in their tax planning strategy.

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The Effect of Tax Amnesty and Other Determinant Variables on Tax Aggressiveness in Indonesia

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ABSTRACT

The current economic development is getting more advanced. Therefore, companies are increasingly competing to get as much profit as possible. In Indonesia, taxes are the main source of state revenue, but tax collection has not been able to achieve the predetermined target and continues to decrease from 2017-2019. This paper aims to determine the factors that influence tax aggressiveness. Such as, tax amnesty, profitability, leverage, firm size, independent commissioner, and institutional ownership. The sample of this study consisted of 67 manufacturing companies listed in the Indonesian Stock Exchange (IDX) and submitted financial statements consistently in the period 2013-2018. This study used secondary data and purposive sampling method for selection of samples. We used multiple regression analysis to examine the factor effecting tax aggressiveness. The results showed that the Leverage, profitability, and independent commissioners, have significant effect on the tax aggressiveness. While tax amnesty, firm size and institutional ownership does not significant effect on tax aggressiveness. This study can be used to develop policies relating to tax regulations for large companies in Indonesia, with the goal of reducing tax aggressiveness by large corporations.

Keywords: Tax aggressiveness, tax avoidance, tax amnesty, effective tax rate, manufacturing

1. INTRODUCTION

The current economic development is getting more advanced. Therefore, companies are increasingly competing to get as much profit as possible (Sutduean, & Jermitsittiparsert, 2019). Various ways are used by managers to face this competition, one of which is by maximizing company value. In Indonesia, taxes are the main source of state revenue. Based on the Central Government Financial Statements (Audited) for Fiscal Year 2019 published on the Ministry of Finance's website (Kemenkeu, 2019), it shows that the realization of state tax revenues in 2019 reached IDR 801.16 trillion or only 50% of the target of IDR 1,577,56 trillion. Optimization of tax collection in Indonesia has not been able to run optimally. One of the reasons which cause this problem is tax aggressiveness by companies. Tax aggressiveness can be done by reducing taxable profit companies through systematic tax planning activities, either legally or illegally. According Ogbeide and Iyafekhe, (2018) Tax aggressiveness is the combination of tax planning, tax mitigation, tax avoidance, tax shelters and in a legal and illegal regulated by the tax authorities.

Tax amnesty is the program implemented by Indonesian government in 2016. Tax amnesty is one of the tax reform agenda launched by the government to extend and intensify taxation. Tax amnesty is an agenda implemented by the Indonesian government from 2016 to 2017 to taxpayers that include a relief of unpaid taxes, a relief of tax administration sanctions, and a relief of criminal sanctions on assets acquired in 2015 and previously that have not reported in Annual Tax Return. Most of the previous studies only focused on factors that were more internal to the company but not much studies have discussed external factors such as government policies on tax aggressiveness. So that the previous research has not been able to answer how the effect of tax reform i.e. tax amnesty on tax aggressiveness. With this research gap, as Indonesian government implement tax amnesty program researcher interested in discussing how tax amnesty affects tax aggressiveness.

Based on the previous research, factors that can influence on tax aggressiveness including profitability, leverage, firm size, independent commissioner, and institutional ownership (Salaudeen 2017; Delgado et al. 2012; Noor et al. 2010; and Richardson & Lanis 2007). The current study aims to further confirm these determinant factors on tax aggressiveness, especially after implementation of tax amnesty.

2. HYPOTHESES DEVELOPMENT

2.1 Tax Amnesty

Baer and LeBorgne (2008) defines tax amnesty as a limited-time offer by the government to a specified group of taxpayers to pay a defined amount, in exchange for forgiveness of a tax liability (including interest and penalties), relating to a previous tax period (s), as well as freedom of legal prosecution. Rusmadi and Rahayu (2017) found that tax amnesty positively had a significant effect on tax aggressiveness. The results of the Bayer, Oberhofer, & Winner (2014) research applied a significant positive effect of tax amnesty on American corporate tax compliance.

H1: There is positive association between tax amnesty and tax aggressiveness.

2.2 Leverage

Debt is one the external source of financing in which the companies use as an alternative in their capital structure. Leverage also shows the use of debt to increase profit. However, fixed interest expense will be created in shape of debt. In this situation a manager behavior often influences to show a lot of debt in financial, which will minimize the tax expense (Richardson and Lanis, 2007). Some of the previous researcher indicate that there is effect of leverage on tax aggressiveness and stated that the higher the leverage ratio the lower the effective tax rate (ETR) which indicate high tax aggressiveness by the firm is that come is which come from the interest expense that minimize the tax expense (Lanis & Richardson, 2015).

H2: there is positive association between Leverage and tax aggressiveness.

2.3 Profitability

Profitability is a description of the company's ability to generate profits during a certain period. According to Majed et al. (2012), the profitability ratios are an indicator for the firm's overall efficiency. Good performance will be shown through the success of management in generating maximum profits for the company (Hery, 2016). High profitability ensures that the firm will be able to easily pay the taxes charged, which allow the principal (tax collector) to gain from high profitability (Pratiwi, 2017) Additionally, Manzon and Plesko (2002) shows that there is a negative association between profitability and tax aggressiveness and state companies take advantage of tax exemptions and make more efficient use of tax deductions and credits.

H3: there is negative association between profitability and tax aggressiveness.

2.4 Firm size

According to Riyanto (2008), the size of the company is seen from the value of equity, sales value or value of assets. As the size, operations and earnings of company increase, the taxes paid by such company also increases, therefore the company want to lower the taxes and enhance profit (Madugba et al, 2020). Dewi et al. (2014) stated that the high the company profit the high the government's attention will be to apply tax payment to taxpayers. therefore, it will encourage companies to take action on tax avoidance, which show a positive relationship between firm size and tax aggressiveness. In line with Ogbeide (2017) report that firms' size has a positive impact on effective tax rates. However, Taylor and Richardson (2013) showed that firm size had no significant influence on tax aggressiveness.

H4: there is positive association between firm size and tax aggressiveness

2.5 Independent Commissioner

Independent commissioners are commissioners who come from outside the company and have no relationship with the internal company, either directly or indirectly. Based on the regulation of the Financial Services Authority number 33 / POJK.04 / 2014 article 20 paragraph 3, the company must have an independent commissioner of at least 30% (thirty percent) of the members of the Board of Commissioners who can be elected first through the General Meeting of Shareholders (GMS).

Independent commissioners have a role that is quite influential on the level of the company in paying taxes. According to Lanis and Richardson (2011), the greater the number of independent commissioners, the greater the influence it has to supervise management performance, so that management's aggressive behavior towards corporate taxes will decrease.

H5: There is negative association between independent commissioner and tax aggressiveness.

2.6 Institutional ownership

According to Fadhilah (2014), institutional ownership is the proportion of shares owned by an institution like an investment company, insurance company and banking or other financial institution that is measured in a percentage of the number of shares held in the company. Institutional ownership has fiduciary responsibility to ensure that the firm makes corporate decisions that will maximize shareholder wealth (Grossman et al. 1980). Previous study found a positive association between institutional ownership and tax aggressiveness. (Khan et al. 2017). Thus, we hypothesize that the greater the number of shares owned by the institution, the more the company will do tax aggressiveness.

H6: There is positive association between institutional ownership and tax aggressiveness.

3. METHODOLOGY

This research employs a quantitative methodology. The measurement of tax amnesty used dummy variable in order to obtain a parsimony (simple) model that after the tax amnesty coded 1 and before tax amnesty coded 0. The object of this research is to use manufacturing companies listed on the Indonesia Stock Exchange (IDX) from 2013 to 2018. The period 2013-2018 was chosen to cover the conditions before and after the implementation of the 2016 Tax Amnesty Policy. The data source used in this research is secondary data obtained from reliable sources like, annual report data and financial reports of the companies that have been audited and have been published on the Indonesia Stock Exchange. In this study we used statistical testing assisted by Software Statistical Product and Service Solution (SPSS) for analysis. For quantitative analysis using multiple linear regression test by performing the previous classical. To test the proposed hypothesis, we used the following model.

$$TAit = \alpha + \beta_1 DTAit + \beta_2 LEVit - ROAit - \beta_4 \beta_3 ICit + \beta_5 SIZEit + \beta_6 IOit + eit$$

4. RESULT AND DISCUSSION

4.1 Descriptive Statistic

Based on table 1, the mean leverage is 0.433, while profitability, firm size, Independent Commissioner, Institutional Ownership, and ETR are 0.118, 20.767, 0.377, 0.621 and 0.261 respectively. The standard deviation describes how much the data varies. If the standard deviation is much smaller than the mean, then the mean value can be used as a representation of the entire data. So that the mean value used as a cut off for the categorization of each variable. The value of ETR is in the range 0-1, but because ETR is a negative proxy, the value is multiplied by minus one (-1).

Table 1 Descriptive Statistics

Variable	Min	Max	Mean	Std.dev
Leverage	0.012	0.942	0.433	0.190
Profitability	0.001	0.885	0.118	0.114
Firm Size	11.185	29.346	20.767	2.980
Independent Commissioner	0.000	2.250	0.377	0.204
Institutional Ownership	0.000	0.998	0.621	0.275
ETR (Tax Aggressiveness)	0.124	0.929	0.261	0.988
Observation	402			

4.2 Result of Regression

The results of multiple linear regression analysis on the tax aggressiveness have an R2 coefficient of 0.078 (Table 2). This means that 7.8 percent of the tax aggressiveness is influenced by this model. The rest is explained by other variables outside the variables used in this study. The results of this multiple regression analysis have been through the previous classical assumption test with the results there is no heteroscedasticity ($p>0.05$) and there is no multicollinearity with a tolerance value > 0.1 and a VIF value < 10 .

The results showed that leverage had a very significant effect on the tax aggressiveness. This result accepted the hypothesis and in line with Richardson and Lanis (2007) the higher leverage ratio value means the company is using higher amount of funding from third-party which create high interest cost arising from the debt and if the interest costs become high it will reduce the company's tax burden. However, our study contradicts to the finding of Ogbeide (2017) and Ribeiro et al (2015), who shows that leverage has no substantial impact on tax avoidance.

Based on the result of regression test we accept the H3 which was shown as there is negative relationship between profitability and tax aggressiveness. The result is consistent with Noor et al. (2010), and Manzon & Plesko (2002) who found a negative relation between profitability and tax aggressiveness and state that company take benefit from the tax exemptions and use tax deductions and tax credits in a more efficient manner. In line with Pratiwi, (2017) who state that High profitability ensures that the firm will be able to easily pay the taxes charged, which allow the principal (tax collector) to gain from high profitability.

The third variable that has significant effect on tax aggressiveness was independent commissioner which shows a positive significant effect. Based on this result our H5 is rejected. This finding is in line with Armstrong et al. (2015), Independent commissioners usually do not understand the background and complexity of the company's business activities which causes independent commissioners to be less familiar with tax aggressiveness actions taken by company management which implies positive relationship between independent commissioners and tax aggressiveness (Armstrong et al. 2015). In contrast, some of previous research found that the greater the number of independent commissioners, the greater the influence it has to supervise management performance and will always supervise them to comply with applicable laws and regulations. so that management's aggressive behavior towards corporate taxes will decrease (Lanis and Richardson, 2011).

Table 2 Regression Test

Independent Variables	Tax Aggressiveness		
	Unstandardized (B)	Standardized (β)	Sig
Tax Amnesty	-0.000	-0.003	0.953
Leverage	0.077	0.173	0.001**
Profitability	-0.147	-0.166	0.001**
Firm Size (Ln Total Asset)	-0.005	-0.025	0.616
Independent Commissioner	0.072	0.112	0.025*
Institutional Ownership	0.026	0.085	0.090
Constanta		-0.066	
R ²		0.078	
Adj R ²		0.064	
F		5.861	
Sig		0.000	

Note: *= significant at p<0.05, **= significant at p<0.01

5. CONCLUSIONS, IMPLICATIONS AND SUGGESTIONS FOR FUTURE RESEARCH

This study aims to analyze the effect tax amnesty, leverage, profitability, firm size, independent commissioner, and institutional ownership on tax aggressiveness. Based on the analysis the result of this study shows that leverage, profitability, and independent commissioner (wrong interpretation of result) have significant influence on tax aggressiveness while tax amnesty, firm size and intuitional ownership were not proven to significantly effect on tax aggressiveness in manufacturing companies in Indonesia. We limit our study only to Manufacturing companies listed in Indonesia stock exchange so that does not describe all sectors listed on the Stock Exchanges. Therefore, future may fill the gap by taking a sample from other sector as well, so that the result can be more generalized.

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The impact of COVID-19 on MSMEs: Empirical evidence from Indonesia

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ABSTRACT

The coronavirus disease (COVID-19) pandemic has affected the global and Indonesian economy. In Indonesia, Micro, Small, and Medium-sized Enterprises (MSMEs) contribute significantly to the economy. Hence, impact of the pandemic on the MSMEs would affect the economy significantly. However, research on this issue is currently lacking. This research aims to analyse the impact of COVID-19 pandemic on MSMEs businesses. By using Business Continuity Management (BCM) framework, the research also investigates business strategies to survive in crisis. This research used primary data collected from 203 MSMEs operating in Indonesia by distributing online questionnaires. The results indicate that most of the participating enterprises have been affected on various aspects and they are facing several issues such as raw material, production, distribution, marketing, financial, among others. This research is significant because policy makers as well as the MSMEs might be able to learn policies and strategies needed in order to survive in the pandemic. Based on the results, alternative policy recommendations were discussed and proposed to ease the adverse effects of the pandemic on MSMEs in Indonesia.

Keywords : Business Continuity Management; entrepreneurship; MSMEs; innovation; pandemic

1. INTRODUCTION

Micro, small and medium-sized enterprises (MSME) have been seen as potential supporters for domestic economy, thus perceived to have vital roles in domestic economy. This is also supported by Ministry of Cooperative and Small and Medium Enterprises stating that more than 64 million units of MSME absorb 97% total workforce and contribute as much as 60% to national gross domestic product (depkop.go.id).

Identified in 2019, COVID-19 has spread widely and created pandemic up to the present. The spread of COVID-19 has continued to spread around the world while escalating the number of its cases every day. The pandemic of COVID-19 has widely and deeply affected all people in the world, starting from health to economic crises. Even, *Organisation for Economic Co-operation and Development* (OECD) reported that this pandemic created a global economic recession marked with closure on production activities in many countries, decline consumption rate and public trust, fall of stock exchange which eventually result in uncertainty.

In response to the increased number of cases and the fact that COVID-19 has spread to almost every region in Indonesia, the government has applied some policies to prevent the spread by doing a local quarantine, and physical distancing. As a result, economic activities and people mobility have stopped temporarily followed by the decrease in people purchasing power and hindrance in production process in which MSMEs have been affected. The effect of pandemic to MSMEs will eventually affect the economic condition of Indonesia as MSMEs play significant role and contribute to domestic economy of Indonesia.

This current study aims to assist practitioners as well policymakers in identifying strategies required to respond to the impact of the ongoing pandemic on MSMEs. Furthermore, this study emphasizes to pay

more attention to the huge risks brought by environmental uncertainty to MSMEs and help these companies in predicting risks in business decision-making and planning.

2. THEORETICAL FRAMEWORK

2.1 Business Continuity Management (BCM)

In ISO 22300:2018 Security and Resilience, Business Continuity Management (BCM) is defined as holistic management process providing a framework to identify potential threats so that the organization is able to mitigate any disruption by preparing for policies, identifying potential risks, organization structure and its responsibilities, work mechanism, and operational procedure to recover activities of organization when incident occurs.

BCM is aimed to secure the provision of assets (Tammneedi, 2010) and enforce business stability in order to make the business process back to normal after incidents likely information technology failure, telecommunication failure, and any disruptions which danger health and safety of employees (Draheim & Pirinen, 2011). The disasters that can disrupt business process are many, namely storm, earth quake, fire, flood, terrorism and plagues (Hiles, 2010).

According to the guidance of Multi-hazard Business Continuity Management Guide for Small and Medium Enterprises developed by ILO (2011), BCM consists of three elements (1) preventive measures 2) preparedness arrangements (3) response options. The element of preventive measures is prepared and conducted before disasters occur (Kato & Charoenrat, 2018). According to guidance by ILO, BCM is implemented in 10 stages. Stage 1-8 is made before disaster occurs, stage 9 is executed during the disaster, and stage 10 is after the disaster (International Labour Organization, 2011).

3. RESEARCH METHOD

This research used questionnaire with sample population including all the owners or managers of MSMEs active in Indonesia. The sample population are those active in Indonesia or has been operating since before the pandemic of COVID-19. The sampling technique was Non-Probability Sampling. To select the sample, the convenience technique was used. This is a quantitative research using primary data as the source of data. The data was collected by distributing the questionnaire in google form through online social media. The questionnaires were handed to the owner or manager of MSMEs meeting the requirements. Total of 203 respondents were involved in this study.

The result of the research was taken from questionnaires distributed to owners (79.3%) and managers (20.7%) of MSMEs comprising of female (55.2%) and male (44.8%). The participant respondents were from different background of ages, starting from under 17 years old (1%), between 17 to 25 years old (59.6%), between 26 to 35 years old (26.1%), between 36 to 45 years old (6.4%), between 46 to 55 years old (2.5%), to above 55 years old (4.4%).

On the classification of micro-scale enterprise (60.1%), small-scale (23.6%), and medium-size enterprises (16.3%), respondent had various kinds of business, among others were food and or beverages (38.9%), fashion (23.6%), travel and tourism (8.4%), goods delivery services (7.9%), farming (5.4%), and etc. In majority, the respondents owned or worked in MSMEs whose company ages were less than two years (46.8%), followed by the companies whose ages were between 2 to 5 years (32%) and more than 5 years (21.2%). The research questionnaires were distributed to the MSMEs operating in Indonesia, with majority from Yogyakarta Special Province (23.2%) followed by East Java (17.2%), Jakarta (12.8%), Central Java (10.8%), West Java (6.9%), Bali and West Nusa Tenggara (each 5.4%), Banten (4.9%), West Sumatera (2.5%), Riau and Lampung (each 2%), Riau Islands; West Kalimantan ; East Kalimantan; South Kalimantan (each 1%), and North Sumatera; Jambi; South Sumatera; Bangka Belitung Islands; East Nusa Tenggara; and Central Sulawesi (each 0.5%).

4. FINDINGS AND DISCUSSION

4.1 Impact of COVID-19 pandemic on MSMEs

As already predicted, the COVID-19 pandemic affected MSMEs in Indonesia significantly. The restriction on any activities as a result of some policies to cut the spread of COVID would affect the operational activities of MSMEs. According to respondent, 53% respondent stated that they ran their business activities as usual, while 47% of them said the vice versa. Doing business not as usual here means the changes on business activities. It dealt with changes on the number of employees, change on working system from working at office to work from home, face to face work to online using social media, and others. These changes could trigger both operational and financial problems for MSMEs.

After given further questions on what kind of operational problems faced during COVID-19 pandemic, the respondents said that they faced operational problems related to raw materials/resources, business process, distribution, and marketing. Operational problems for MSMEs during COVID-19 pandemic were related to accessing raw materials (33%) and the ever-increasing price of the raw materials (50%). Meanwhile, related to business process, the problems were related to the decrease number of customers (9%), drop in customers' demand (82%), and barriers to operational issues as in goods and service delivery, when goods delivery took longer time (37%) with the increase in delivery cost (31%). Problem in the field of marketing during COVID-19 pandemic was related to the barrier to direct marketing process (72%) plus the impediment to identify their prospective customers (73%).

The problems of business and operational or of MSMEs will affect their financial condition indirectly. Answering the questions related to financial condition during the pandemic, respondents stated the problems such as the decrease in sales (82%), increase in expenses (65%), decrease in asset values (62%), barriers to capital access (52%), decline in investment values (50%), and barriers to pay for obligation (42%).

4.2 Strategies adopted by MSMEs to tackle the current situation

To survive and even grow amid the havoc situation of COVID-19 pandemic, MSMEs should use appropriate strategies. Each MSME had its own strategy to face the situation of COVID-19 pandemic. As illustrated in graph 4, the strategy mostly used by the respondents was utilizing technology (97%) followed by providing health equipment for their employees (86%), as a response to the changing situation by, giving mask, hand sanitizer, and handwear. Besides, they also practiced work-from-home system (58%). All of these were goaled at reducing physical contact and keeping the distance. Yet, for survival reason, some respondents reduced the number of their employments (27%). Some respondents even changed their business category (20%) so that they could continue their business amid the COVID-19 pandemic.

Problems in MSMEs operational activities were not only the result of the changing situation, but also their finance. On the distributed questionaries, a question on what strategy used to overcome problems during the pandemic was answered respectively. The data processing result tells that the most strategy used was asset allocation (46%), followed by reducing prices of products or service (44%), reducing salary of employees (26%), proposing for loan (23%), closing business partially (23%), and closing business totally (5%).

4.3 Adoption of Information Technology before and after COVID-19 pandemic

COVID-19 pandemic has constructed people behavior in that they utilize information technology and communication better (postel.go.id). People start to get accustomed to digital business such as communicating through social media, use digital payment to do transaction, and also make online shopping. These motivate business actors to optimize the use of technology so that the continuity of their business was guaranteed (cnbcindonesia.com).

According to (WL Fong, 2011), to compete with global market, small companies need to adopt information technology for their business. A research by (Oswari et al., 2008) found that the intensive use of information technology positively affected the company performance. (Ghobakhloo et al., 2011)

stated that adopting information technology could multiply productivity while strengthening both competitive edge and relation between business owners with suppliers and distributors.

The use of social media generated benefits for MSMEs. A research by (Priambada, 2015) explained that social media could support both process and development of MSMEs business, for instance making the connection between customers and supplier easier, increasing and expanding their market, adding more skills and knowledge to MSMEs owner, escalating volume of sale, and attracting marketing targets. Not only that, other benefits of using social media were that the business owners could access information from all over the world. These findings were also supported by (Patma et al., 2020) stating that adopting information technology, especially internet and online business give positive impacts to social media marketing (SMM). SMM is an instrument that can assist business actors to market their products and draw more customers. Especially during COVID-19 pandemic. The use of social media platforms such as Zoom, Google Meet, Instagram, and WhatsApp by MSMEs grow significantly from 83% to 95% since COVID-19 pandemic.

Online marketing orientation is defined as facilitating companies to do selling and buying process as well as marketing by using internet. The higher the orientation on marketing online, the higher the business performance (Tjahjadi et al., 2020). The advanced technology with its various features and platforms enables users to do online selling and purchasing (Miliana et al., 2018). Marketplace and websites could be utilized as media for product branding and the users could get feedback review for evaluation resulting in a better product. Moreover, some marketplace platforms such as Shopee and Tokopedia in Indonesia provide features to keep the detail of financial transaction by a seller account making the bookkeeping easier. These features undoubtedly are beneficial as they can lessen time and cut extra cost. 62 % respondents said that they had used marketplace before COVID-19 pandemic, and the percentage kept rising into 82% since COVID-19 pandemic.

According to (Yakean, 2020), the non-cash payment can prevent virus transmission which was difficult to avoid when using cash payment method. Therefore, the non-cash payment became one strategy of MSMEs during COVID-19 pandemic. From the data processing result, 66% of respondents had applied the non-cash payment before the pandemic and this percentage rose dramatically into 81% during COVID-19 pandemic.

Using application will give a company a competitive advantage compared to the others not using it. The application was not only for branding or identity but also for raising customers' brand awareness. This research found that 21% respondents had the application before COVID-19 pandemic and became 26% during the pandemic.

From the above explanation, it can be concluded that some respondents used technology to adapt with the changing situation. The number of the respondents who used technology had also increased respectively since COVID-19 pandemic. They used various kinds of platforms from social media, market place, digital payment methods, websites, and even applications. By doing so, people would be more familiar to use technology and gadget. In other words, the pandemic had successfully created a condition in which business actors were forced to optimize technology in order to survive and even to develop better during the pandemic. It should be a momentum for MSMEs owners to shift from conventional to digital business behavior.

4.4 Adoption of Business Continuity Management

This research shows that 36% of the respondents protected their company by using insurance service. 80% of them backed up important document or data of their company. Meanwhile, to avoid the unnecessary things, 87% ensure suppliers were ensured to provide adequate resources needed for production process during disasters. These three are classified into prevention element. For a long-term objective of a company, identifying priority assets is a must in that the company will be able to recognize a situation when it has to select which asset can be sold or maintained in order to keep the company active as usual, this action was applied by 77% of respondents. It is also essential for a company to assess risks of disasters that may occur, and this is done by 77% of respondents. When

implementing BCP, a company can prepare for a series of scenario to survive during critical condition as a plan to face unwanted risks which disturb the business process during disasters, this action was done by 84% of respondents. The plan of business continuity should be transmitted to employees to raise the awareness and ensure every individual understand his role and responsibility. 84% of the respondents made a communication with their employees related to business continuity and 85% of them disseminated awareness of emergency procedure and raised awareness on role and their responsibilities. These five are classified into the element of preparation.

Communication is not only limited between company and supplier, but also among the employees themselves, and between superior and inferior. This is important to prevent new case of a problem and in fact, it is the element mostly used in that 96% respondents ensured no barriers of communication in a company. Company also had to keep their other important asset that is their employees as without them the company would not be able to run their business activities. 91% of respondents stated that they guaranteed security and safety work of their employees by facilitating health equipment and deciding to do a work from home program. The two actions are classified into the element of response option.

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Analysis of The Role of Interactivity in Creating Brand Equity Influencer in The Tourism Industry

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ABSTRACT

This research aims to examine how followers become loyal to social media influencers, particularly in the tourism industry which effected due to COVID-19 pandemic. It suggests influencer interactivity as a unique feature of influencer brands and investigates how it affects influencer authenticity, emotional attachment, and thus brand loyalty. A total of 225 respondents was formed to measure the theoretical model. Participants were asked to respond to the survey questions based on their perceptions of travel influencer they follow and pop up first on their mind in Instagram. The relationships among variables were tested via structural equation modelling. The results indicate that Influencer Interactivity is positively associated to Influencer Authenticity along with Emotional Attachment. This research is expected to provide additional knowledge related to influencers as a form of marketing strategy to promote tourism industry players such as Destination Managing Organizations (DMO), Travel Agencies, or Hotels.

Keywords Social Media Influencer, Human Brand, Brand Equity, EWOM, SEM

1. INTRODUCTION

According to Chang et al., (2015), the form of a traditionally word of mouth as a part of marketing strategy devolve to online and currently called as electronic word of mouth. One of the forms of e-WOM strategy is doing an approach to social media influencers who are expected to provide important information related to the company's brand (Thurau, 2004). World Federation of Advertisers (2016) also stated the most widely used social networking site for collaboration between brands and influencers is Instagram.

Tourism is appointed as the pillar sector which has the potential to always be developed. This because the tourism industry has a main function as a foreign exchange earner (Kementerian Sekretariat Negara Republik Indonesia, 2019). However, according to UNWTO (2020), travel and tourism industry are the most impacted sectors during the arising of the COVID-19 pandemic. To restore the trust of domestic and international tourists, the Ministry of Tourism and Creative Economy finally decide to create protocol campaign consisting of Cleanliness, Health and Safety Environment (CHSE) (Kompas, 2020) and appointed influencers so that the information will be absorbed optimally (Detik Finance, 2020). Various kinds of research started finding ways on how to maximize the effectiveness of influencer marketing, which is becoming a popular strategy in real marketing contexts (Laroche et al., 2013; Lou and Yuan, 2019). However, there are still few studies that examine influencers as a brand. A deeper study related to influencers as a brand needs to be done in order to provide a rationale for how influencers can play a role and have a significant impact on certain industries. The purpose of this research is to look at the influencer interactivity of travel influencer as a brand with study implications related to impacts of COVID-19 in tourism industry. Besides, this research also aims to see if this interactivity could lead to loyalty of their followers.

2. CONCEPTUAL FOUNDATIONS AND HYPOTHESES

1. Influencer as a brand

The perception of a person brands has shift increasingly with the widespread of the utilization of the internet, TV, or even social media (Furedi,2010). The effect function of social influencer on consumer decisions or views related to a product or service is important. Therefore, to explore the characteristics of these influencers as a brand and explore further what components creating these influencers, several previous researches have discussed and included conventional celebrities into the category of influencers. However, Djafarova and Rushworth (2017) argue that there are different concepts between celebrities and influencers on social media due to the differences that exist in brand development that carried out by the two entities. Celebrities build their self-image and give an influence by the way of traditional channels, for an instance television and magazines.

On the other hand, influencers offer their influence through social media, specifically by publishing content that they create themselves and depend on their ability in a particular field such as cuisine, technology, automation, amusement, and sports (Jun & Yi, 2020). Influencers as a brand are also unique since they have factual time, straightforward, fast and reciprocal two directions of conversation by followers (Jun & Yi, 2020). Completed with alive communications, follower's potency to assume a certain influencer discover them as a special individual. Suchlike interactivity allows to increase an attachment of followers who follow these influencers (Labrecque, 2014).

2.2 Influencer Interactivity and Influencer Authenticity

Influencer interactivity is interpreted as two directions of interactions among influencers with followers. It occurs through an endless comment as well as reaction on the influencer's social media Instagram (Jun and Yi, 2020). Influencer Authenticity is perceived as a perception by followers regarding the influencer's ability to create honest and authentic content (not artificial) and based on self-motivation of the influencers since their favor the sphere. This statement supported by Moulard et al. (2016) which said consumers can conclude that influencers have a huge level of Influencer Authenticity, after the consumer clearly see that the influencers are very enthusiastic in providing information or reviews related to certain goods/ services without any compulsion from external parties.

Based on those explanations above, it could be assumed that if the level of interactivity of a social media influencer is high, it will give an image that the influencer really enjoys their role and happy to respond followers personal messages. As a result, the followers will be pictured that the influencer is sincere to respond the followers within their own will. Thus, suggest the following hypotheses:

H₁: Influencer interactivity is associated to influencer authenticity in a positive way

2.3 Influencer Interactivity and Emotional Attachment

Thomson et al. (2005) light up an emotional dimensions of brand attachment that mirror the bond among a customer with a particular brand. Furthermore, it also absorbs the sense against the brand, as well as to affection, passion and connection. Based on Jun & Yi (2020), influencer interactivity is seen for having similarities with relatedness. Relatedness can be described as a human's demand to sense a feeling of intimacy with others as a consequence to closely associated with emotional attachment (Deci and Ryan, 2002).

Accordingly, it also increasing the intimacy and an important communication in forming emotional attachment to influencers. Influencers as a category of brand also enable to interact with followers. This becomes the most active interactions in real time which in the end ultimately creating a way for customers to become emotionally attached to influencers. Thus, suggest the following hypotheses:

H₂: Influencer interactivity is associated to emotional attachment in a positive way

2.4 Influencer Interactivity and Brand Trust

According to Tatar and Eren-Erdogmus (2016), human's involvement of brand trust in marketing possibly boost an online communication or interactivity in social media. Furthermore, Coyle et al. (2012) found that supposing a brand deliver factual respond to customers through its microblogs and actively interacts, trust would be increased. Interactivity in this context means an endless interaction

with followers that embodied when an influencer reacts rapidly and proactive to a tiny or even meaningless messages. This extended an interaction that assists follower sense that their relation regarding to the influencer is fun and safe. Hence, when the influencer interacts to their followers proactive, later the followers will sense a particular influencer which viewed as a brand is secure and proper of presenting absolute results. Thus, suggest the following hypotheses:

H₃: Influencer interactivity is associated to influencer brand trust in a positive way

2.5 Influencer Authenticity and Emotional Attachment

Aside from influencer communication or interactivity, influencer authenticity is also one of the main necessary components in forming Emotional Attachment. Authenticity could be defined as natural, actual and authentic (Beverland & Farrelly, 2010; Preece, 2015; Thomson et al., 2005). Previous research related to personal brands stated authenticity as a main component when creating emotional attachment (Ilicic & Webster, 2014). If influencer authenticity is high, it will increase emotional attachment through positive impressions. This could be happening because followers can strongly argue that the authenticity of content published by influencers is managed by the influencers themselves. Thus, suggest the following hypotheses:

H₄: Influencer authenticity is associated to emotional attachment in a positive way

2.6 Influencer Authenticity and Brand Trust

Brand trust along with brand authenticity are two different things, but they are interrelated. Brand trust focuses on results of the product and the product quality itself, while brand authenticity focusing on the product processes. Brand trust point out to the self-assured projections of the brand's accuracy with objective (Delgado et. all, 2001). Other than that, Brand trust can also interpreted as a form of consumer willingness to buy the brand products since it relies on the ability of the brand to always prove their functions in accordance with their statement (Chaudhuri & Holbrook, 2001; Morgan & Hunt, 1994). Trust will increase when the consumers feel the authenticity of the brand since they feel that what the brand do is sincere (Hernandez-Fernandez and Lewis, 2019). Based on the above explanation, if it is related to the context of influencers as a brand, it can be inferred that if followers see that the influencer really enjoy creating their content without any expectation that they will get a respond from the external parties, the followers will believe that the content reflects the authenticity of influencers. Thus, suggest the following hypotheses:

H₅: Influencer authenticity is associated to brand trust in a positive way

2.7 Emotional Attachment and Loyalty

Emotional Attachment could be a significant determinant of loyalty (Grisaffe dan Nguyen, 2011). Khan and Rahman (2017) stated that there is a relationship between emotional attachment to human brands, especially related to satisfaction, trust, and commitment. Furthermore, based on the research of Jun and Yi (2020), one of the result states that emotional attachment from social media influencer followers could increase their loyalty to social media influencers. Followers tend to have a sense to maintain a relationship with social media influencers when there is a strong emotional attachment among them. Therefore, the hypotheses developed into:

H₆: Emotional attachment is related to loyalty in a positive way

2.8 Emotional Attachment and Brand Trust

When someone has an emotional attachment to a brand, it will encourage positive emotions related to security and in the end increase brand trust (Tsai, 2014). Jahn et al. (2012) found that the attachment dimension consists of self-perceive along with essence of connection with a companion. These qualities including feature of predictability, dependability, together with confidence which also affect brand trust (Wieselquist et all., 1999). Other than that, Jun and Yi (2020) state that emotional attachment able to increase brand trust. Accordingly, the following hypotheses suggest:

H₇: Emotional attachment is related to brand trust in a positive way

2.9 Brand Trust and Loyalty

Brand trust is determined through the assumption that it will offer consistent and decent element (Chaudhuri & Holbrook, 2001; Delgado et all., 2005). Lau and Lee (1999) found after a customer

believes that a particular brand is able to provide what they expect, it will lead the loyalty to the brand. This statement sponsored by the findings of Sirdeshmuukh et al. (2002) and Aydin et all. (2005) which proves the impact of brand trust on loyalty is positive and significant. Consistent with these findings, the hypothesis developed into:

H₈: Brand trust is associated to loyalty in a positive way

3. METHODOLOGY

3.1 Data collection

The questionnaire used to obtain information from this survey method was collected by asking respondents a structured list of questions. The data categorized as the primary data and will be used in testing hypotheses. We only accept a person who have Instagram accounts. It is also an obligatory to follow the Instagram accounts of travel influencer to be a participant in our questionnaire. An online survey conducted in order to examine the hypothesis relationships as the stated before.

3.2 Measure

The questionnaire used 6-point Likert scales. This research model was taken based on previous research Jun and Yi (2020) and implemented to the conceptual model of the research contained in Figure 1. We also gather information on education, gender, along with the age to control for participant heterogeneity.

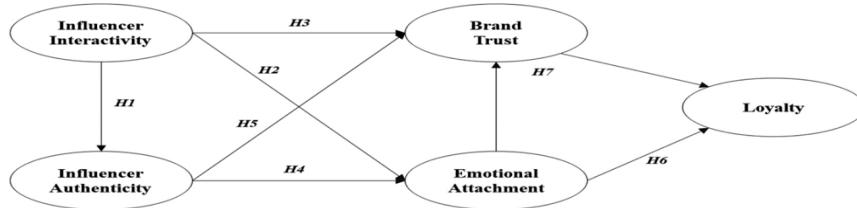


Figure 1 Research model

4. RESULTS

1. Respondent profile

This research gathered 225 suitable responses of respondents that fact were Instagram users and following at least one of travel influencer in Indonesia. The sample consist of a pretty near equal split of males (48 percent) and females (52 percent), who were aged between 18 and 25 (66 percent), aged between 26 and 35 (31 percent) and aged between 36 to 45 (3 percent). Most respondents were educated in university (55 percent) and declare their self as a person who loves to travel (88 percent). Generally speaking, the sample profile is predominantly representative of travel influencers followers in Instagram as well as relevant for the objective of this study.

4.2 Data analysis

Confirmatory factor analysis was processed through AMOS 24.0 to perform the validity of the constructs. After doing an appraisal for the designed model, the result adequately fit the data. The standardized weights for the entire factors were beyond 0,5. The Chi-square (CMIN/DF) result was 2,126 which categorized as good fit, NFI was 0,903 categorized as good fit, CFI was 0,946 categorized as good fit, and RMSEA was 0,071 categorized as good fit. The entire satisfy the suitable fit criteria recommended by Bagozzi & Yi (1988) also Bentler (1990). The CFA aftermath indicate a well-known weight are hugely significant ($p < 0.01$). The reliability points out, that is, Cronbach's alpha values along with the composite reliability (CR), were beyond 0,7, showed great accuracy (Bagozzi and Yi, 1988). AVE for the entire components was beyond 0,5, to such a degree ensuring equal internal consistency (Fornell & Larcker, 1981).

4.3 Structural model results

The study hypotheses were examined through structural equation modeling. This approach permits factual estimates to be fetched for the non-normally distributed data. The suitable indicator proves a certain suggested structure model personifies the data set great. As presented in table 1, the findings support six of the eight hypotheses. Influencer interactivity drive to several positive results with

reference to influencer brands equity. It escalates the follower's conception of influencer authenticity along with attachment favoring influencers. It is also remarkable that influencer authenticity mediates the effect of interactivity on attachment. By way of explanation, alive intercommunication reinforce authenticity concerning the social media influencer and increase the followers' emotional bond with the influencer.

The findings also pinpoint that influencer interactivity affect influencer authenticity, emotional attachment, and eventually brand loyalty. Our discovery is essential since that form of interactivity is an uncommon characteristic of influencer as a brand. We farther identified if authenticity mediates the link among influencer interactivity with emotional attachment. The indirect relationship interpolated influencer interactivity with emotional attachment mediated through influencer authenticity is positive and significant. As both direct and indirect correlation are statistically significant, the sectional mediation of influencer authenticity in the relationship between influencer interactivity and emotional attachment was accepted.

However, H3 was rejected, we analyze that the cause of this result is the interaction frequency between travel influencer and respondent. Within the questionnaire, there is part of measuring the interaction frequency which divided into three categories, below 5 times, between 6 to 15 times and above 15 times. The result is 139 or 62% of total respondents have an interaction with travel influencer below 5 times. Therefore, most respondents in this study don't interact intensively so that they don't form trust with these influencers. We also found that the major fallout of emotional attachment to the influencer brand. Particularly, emotional attachment which positively involve loyalty with the influencer. As reported by the research stream on brand attachment (Park et al., 2010), the current research demonstrates that emotional attachment positively impacts the developmental intentions of followers to have long-term relation among influencers. To sum up the discussion above, the statistical results can be seen below.

Table 1. Hypotheses Testing Result

Hypotheses	Path	Estimate	C.R	P-Value	Result
H1	Influencer Interactivity □ Influencer Authenticity	0,324	6,287	***	Supported
H2	Influencer Interactivity □ Emotional Attachment	0,560	6,655	***	Supported
H3	Influencer Interactivity □ Brand Trust	-0,168	-7,99	0,424	Not Supported
H4	Influencer Authenticity □ Emotional Attachment	0,355	3,413	***	Supported
H5	Influencer Authenticity □ Brand Trust	0,319	1,838	0,066	Not Supported
H6	Emotional Attachment □ Loyalty	0,283	3,168	0,002	Supported
H7	Emotional Attachment □ Brand Trust	0,914	2,576	0,010	Supported
H8	Brand Trust □ Loyalty	0,475	6,166	***	Supported

5.CONCLUSION, IMPLICATIONS, LIMITATIONS, AND RECOMMENDATIONS FOR FURTHER RESEARCH

5.1 Conclusion

Based on the result, it can be concluded that there are two paths that can be used in achieving loyalty, specifically through Emotional Attachment and Brand Trust. The results show that to build loyalty, it will be stronger through the Brand Trust with a number of t-value 6.166. However, even though Brand Trust is the most powerful variable in forming loyalty, Emotional Attachment is still needed since Influencer Interactivity and Influencer Authenticity does not have a significant impact on Brand Trust.

5.2 Theoretical implication

From the theoretical point of view, this research makes the following compelling contributions. First, this research conducts deeper interpretation for represent and calculating the perception of influencer interactivity. Based on its real-time and the two-way communications through social media, it come up that the interactivity of the influencers require to be defined adversely from that brand websites/ pages (Labrecque, 2014; Song and Zinkhan, 2008) or the current human brand (Chung and Cho, 2017). Next, the current study offers a deeper research on influencer authenticity.

5.3 Managerial implication

From a theoretical standpoint, this research result provides instruction to influencer brands which want to create solid brand equity in tourism industry. Mckinsey & Company (2018) declared a certain generation Z is continually switching brands, therefore accomplishing the achievement of brand loyalty way more difficult than ever for most firms. Our result show that communication increase purity and that both interactivity and authenticity had important aspect in the long-term brand equity formation of influencers, especially in tourism industry. Influencers favor to post a huge number of contents to keep the followers. Other than that, travel influencers also help farther advantage the positive effects of communications when they can quickly analyze the desire of their followers and catch them in new content that will be posted as a return.

5.4 Limitations and further research directions

This study has limitations that may affect the overall research results. This first limitation of this study is the scope of influencers which only focused on the tourism industry. Next, the platform that used in this research is solely Instagram. Finally, the research was conducted during on pandemic situation, where consumers' ability and mobility to visit the tourism areas was very limited. For further research based on similar topics should deepen the different industries such as culinary or beauty industry. Hereafter, if the future researchers still use the same industry, which is a tourism industry, it could conduct a comparative research between the celebrity endorses with non-celebrity endorses. Future research could also conduct a study using other platform than Instagram.

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Potential Implementation of Risk-Based Audit Planning at ABC Hospital

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ABSTRACT

The trend of corruption in the health-care sector in Indonesia is steadily increasing. Worse yet, there are several potential additions to corruption in the handling of Covid-19 in the health-care sector. However, there are no guidelines and implementations of a risk based audit plan in the ABC Hospital. This study aims to analyze the potential implementation of the Risk Based Audit Plan (RBAP) concept (IIA, 2020) through a case study on ABC Hospital. The research method used is descriptive qualitative analysis with a case study approach with instruments namely document review, interviews, and focus group discussions. The results showed that the RBAP concept can be implemented in a relevant way to ABC Hospital. There are several stages of RBAP concept (IIA, 2020) that have been quite carried out by ABC Hospital Internal Audit Function (IAF), except at the stage of risk analysis, resource estimation including potential use of external parties, and consult-submission to the supervisory board. One of the main recommendations is that ABC Hospital can use the risk factor model in the preparation of annual audit plan. This study proposes the implementation of the RBAP concept in order to strengthen the ABC Hospital IAF as a third line.

Keywords: Hospital; Health-Care; Indonesia; Internal Audit; Risk Based Audit Plan.

1. INTRODUCTION

In 2019 corruption in the health sector was ranked seventh in the order of the number of corruption by sector (Rachman & ICW, 2020). In addition, during the Covid-19 period -along with an increase in the health budget- there is an increase in the potential for corruption in the procurement of medical devices (Rachman & ICW, 2020; Indonesian Corruption Watch, 2020), especially in hospitals. Addressing corruption in the health sector is important because, the overall impact of corruption in the health sector on society and individuals can be far greater than the monetary value of the amount involved (Sommersguter-Reichmann et al., 2018).

As the third line of defense, the challenges of the Hospital Internal Audit Function (IAF) are getting higher. Risk-based internal audit supported by the implementation of risk-based audit planning has been proven to be able to increase the added value of the internal audit function in corporate governance (Martino et al., 2019; Sarens et al., 2012) especially in dealing with fraudulent acts. Associated with risk-based auditing, implementation of risk-based audit planning is one of the tools and techniques that can be used (Motubatse et al., 2015). A risk-based audit planning approach is the key to the success of Internal Audit (Chi, 2009).

However, until this research was carried out, there were no guidelines and implementation for the preparation of a risk-based audit plan in the IAF unit of the Hospital. Internal auditors should develop a continuous focus on risk and develop a risk-based audit plan (Bechara & Kapoor, 2012). In addition, ABC Hospital IAF has difficulty in prioritizing the annual audit plan program at the hospital. There are several audit plan programs that cannot be realized in the current year and are always repeated.

Previous research explained that with a risk-based approach in local hospitals in the United States, audit activities were evaluated and sorted by risk level (Hemaida, 1995). However, research using the RBAP

concept from the IIA in 2020 is still rare. This concept presents stages and models for implementing audit planning in a more flexible but still systematic manner (The IIA, 2020).

As a response to the literature gap in the form of the RBAP concept in 2020, this study aims to analyze the potential application of the RBAP concept in depth through a case study on the ABC Hospital IAF. The context of the research is the activity of ABC Hospital IAF in preparing the Annual Audit Planning.

2. RISK BASED AUDIT PLAN

Associated with the implementation of risk-based auditing, implementation of risk-based audit planning is one of the important tools and techniques that can be used (Motubatse et al., 2015). The preparation of this annual audit plan is in accordance with the criteria of the International Standards for Professional Practice of Internal Auditing (IPPF, 2017), which states that the Head of Internal Audit must develop a risk-based plan to set priorities for internal audit activities in accordance with organizational goals. Comprehensive risk-based planning allows the internal audit activity to provide timely priority monitoring issues to stakeholders (Chi, 2009), as well as being a guide for the Head of the Internal Audit Unit to allocate IAF unit resources efficiently and effectively so as to minimize the risk of disruption to hospital operations (Hemaida, 1995).

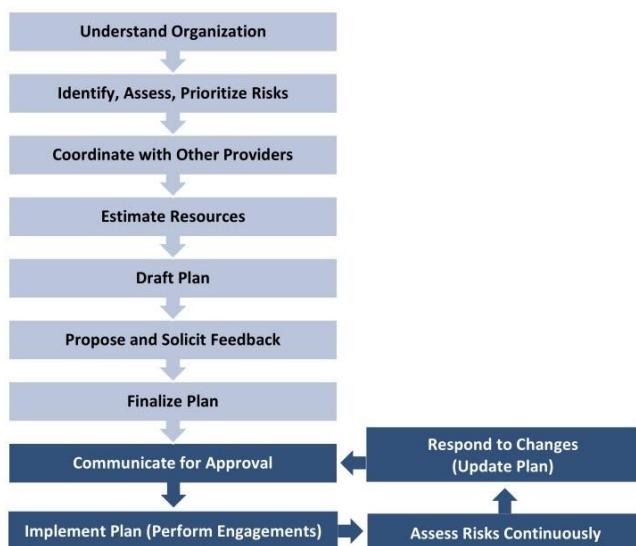


Figure 1. Tahapan Internal Audit Plan Development Cycle:
Source: Practice Guide IIA, (2020a)

In May 2020, the IIA released new guidance on the preparation of an annual internal audit plan. Figure 1 describes the standard steps in preparing a risk-based audit plan that can be used for entities in all fields.

3. RESEARCH DESIGN

The unit of analysis in this study is the organizational unit, namely IAF ABC Hospital. The reasons for selecting the object of ABC Hospital IAF are (1) IAF has difficulty in prioritizing and compiling a potential and executable Annual Internal Audit Plan (AIAP) every year. (2) IAF includes too many inspection program plans so that it cannot be completed within a period of 1 year. (3) IAF has not yet implemented the concept of Risk-Based Annual Audit Planning. (4) Two members of the IAF have dual duties as the first line, namely as health service officers so that line blurring occurs. (5) IAF does not yet have a security policy to guard against the threat of conflict of interest of IAF members in their duties.

This research uses a qualitative case study methodology. The research was carried out in two months (February-March 2021), using research instruments such as: document reviews, interviews and focus group discussions (FGD). Furthermore, data analysis was carried out using thematic analysis methods

that focused on identifying, analyzing, and reporting patterns (themes) in the data (Braun & Clarke, 2006, p.79).

4. DISCUSSION

Furthermore, this section will analyze and discuss the potential application of the RBAP concept in order to strengthen the role of IAF at ABC Hospital as the third line.

The discussion was conducted to answer research questions about how to apply the relevant Risk-Based Audit Planning concept to the ABC Hospital IAF. The discussion on the application of the Risk-Based Audit Planning concept is based on the stages as in the Practice Guide- developing a risk-based Internal Audit Plan (IIA, 2020).

1.Organizational Understanding and Audited Universe

ABC Hospital IAF generally understands the business processes and organizational goals and expectations of stakeholders. However, it is known that IAF rarely coordinates with the Supervisory Board, especially regarding the preparation of the AIAP, so it is better for IAF to involve the Supervisory Board in requests for information on the organization of the Hospital (IIA, 2020).

Hospital IAF also has an audited universe as required by IIA (2020) which is prepared based on an organizational structure approach. Because some risks can exist across organizational units or between the organization and the external environment (IIA, 2020). Therefore, Hospital IAF needs to consider adding audit objects based on processes or functions where there are inherent potential risks.

2. Identification, analysis and prioritization of risks

ABC Hospital has not identified, analyzed and prioritized the highest risks for monitoring. This is due to the ignorance of the Hospital IAF to the concept. They are more likely to perform inspections that are easy to perform (or have low risk). In addition, they also avoid taking the object of inspection where the IAF resources does not have the ability. The preparation of AIAP should be carried out on a risk basis as IPPF (2017) that the assignment planning as an internal audit activity must be based on a documented risk assessment, which is carried out at least once a year.

Based on the parameters from the risk register of the ABC Hospital in 2020 is not mature enough (Risk Aware). Therefore, it is better if the Hospital IAF does not use the results of the organizational risk assessment that has been made by the Hospital Risk Management team in compiling a risk-based AIAP. Preferably, the Hospital IAF can use the risk factor approach method, because it is the simplest method and can be combined with the results of the organization's risk register assessment. Based on (IIA, 2020) the risk factor method is carried out by identifying factors common to all auditable units that affect the organization's ability to achieve its objectives. The risk factors that can be used are: Budget Size, Strategic Risk, Potential for Fraud, Complexity, and Coverage of Assurance.

The risk factors above are different from the results of research (Hemaida, 1995) which uses one of the risk factors in the form of annual income. The reason is because the ABC Hospital is not fully profit-oriented, and prioritizes the impact of strategic risks such as: hospital reputation, public perception, and hospital non-compliance risk.

The risk factors from (Hemaida, 1995) that are still relevant to use are the complexity factor, and resource consumption which is similar to the budget size factor. Meanwhile, additional factors apart from research (Hemaida, 1995) that are relevant for ABC Hospital are strategic risk, potential fraud and still many cases of fraud and malpractice in hospitals, as well as as a result of local governments owning ABC hospitals, so they are subject to the scope of state finances and their management. Meanwhile, the insurance coverage factor is prioritized because the resources of the Hospital IAF are limited, so they cannot carry out regular audits every year on one particular object of examination (audit).

3. Other Considerations (non Risk Based)

Hospital IAF has often accommodated requests for examination or consultation from the hospital management. However, the Hospital IAF has not accommodated requests for examination or consultation from the Hospital supervisory board, due to the lack of communication between them.

4. Resource Estimation

Hospital IAF has not analyzed the resources needed to execute the AIAP it has compiled. It is important for the Head of IAF (IIA, 2020) to estimate resources to implement AIAP, so that IAF can allocate its resources appropriately and rationally, and can plan potential audits by external parties if there are high-risk inspection objects that must be carried out with limited available resources.

5. Preparation of RBAP, Submission of RBAP

The draft plan for the AIAP Hospital IAF is only discussed and approved by the management leadership. The reason is because the supervisory board is not required to approve the AIAP in the BLUD rules, and the supervisory board of the ABC Hospital is still new which was formed in July 2020. It is recommended that the ABC Hospital IAF ask for input and approval on the AIAP draft to the supervisory board, in addition to the hospital management leadership, because it can improve independence of IAF as the third line.

6. Finalization of RBAP and Continuous Communication.

Hospital IAF has carried out ongoing communication regarding the execution of the Annual AIAP through informal communication. The formal communication in the form of an Annual AIAP realization report is submitted to the Director of the Hospital at the end of the reporting period. Hospital IAF can conduct regular formal communication (quarterly or semi-annually) with senior management, and revise the Annual AIAP if necessary. This is done in order to avoid the accumulation of information in one point which can reduce the level of acceptance from stakeholders towards the realization of the IAF activities of the Hospital.

5. CONCLUSIONS

The application of the concept of Risk-Based Audit Planning (RBAP) is very possible for ABC Hospital IAF. It is known that several stages of risk-based audit planning (IIA, 2020) have been carried out by ABC Hospital IAF, except at the stage of risk analysis, resource estimation including potential use of external parties, and submission to the supervisory board. The risk analysis stage is the most crucial stage. At this stage there are several risk factors that can be used as relevant to the results of the study (Hemaida, 1995), plus other factors that are different because of the attractive nature and conditions of ABC Hospital. Hospital IAF can use a simple method, namely risk factors, so it is easy to implement for the first time according to needs. Recommendations that can be given to ABC Hospital IAF are to use the risk factor approach method in preparing the AIAP, involve the Supervisory Board in the preparation of the AIAP, analyze the required resources in detail, coordinate with external parties (such as regional inspectors) in managing overlapping supervision, and ensure that the audit universe has captured all risks that may threaten the organization.

This research has contributed both empirically and to practice. Empirically, this study complements (Hemaida, 1995) research conducted at a local hospital in the United States that has applied the concept of risk-based audit planning, although it still uses the previous RBAP concept. The practical contribution of this research is to provide sufficient evidence for ABC Hospital that the application of the RBAP concept is very possible to be applied in order to strengthen the role of the third line (Hospital IAF).

Further research can analyze the potential for implementing risk-based internal auditing in hospitals. Audit planning as analyzed in this study is an early stage of the risk-based internal audit process (Tuanakotta, 2019).

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The Use of Open Educational Resources in Open and Distance Learning: The Learning Experiences of First-Year Undergraduates Accounting Students

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ABSTRACT

Since the pandemic crisis of COVID -19 arose around the world, the education system has changed significantly; from the traditional face-to-face class to Open and Distance Learning (ODL) mode. This is when Open Educational Resources (OER) gained its popularity. Consequently, the privilege of educational institutions in providing knowledge to students has changed and that knowledge is no longer under the exclusive control of educators. The role of educators in the context of conducting the learning process in the classroom is actually getting replaced with ICT supported learning tools. This study investigated the experiences of the first-year accounting undergraduates in a local public university in using OER during their ODL session. The data were collected by using an electronic survey which mainly asked them about advantages, compatibility, trial-ability, visibility and also difficulties of using OER. The result shows the majority of respondents opted from Agree to Strongly Agree to all the questions asked, in measuring their experiences with OER. These responses demonstrated a step forward in realising the globalisation of online learning within this institution.

Keywords: Accounting; education; learning tool; ODL; OER

1. INTRODUCTION

Open Educational Resources (OER) is defined as teaching and learning resources such as textbooks, multimedia, tests, software and assessments that reside in the public domain or have been released under an intellectual property license that permit the free use and repurposing of the resources by others (Abramovich & McBride, 2018; Hilton, 2016). Before the COVID-19 pandemic hit worldwide, the movement to OER has gotten a modest start in higher learning institutions in Malaysia due to a lack of broad understanding of OER. Only several higher educational institutions have implemented OER earlier in line with the Malaysian Education Blueprint 2015-2025 (Higher Education) transformation. The document highlighted 10 shifts that will spur continuous excellence in the higher education system, one of them is to globalise online learning.

Previously, OER were only demanded by adult learners that enrolled for distance learning courses and as a mechanism to promote Malaysia as an international education hub for overseas students. However, the COVID-19 outbreak has changed the education system globally. Now, everyone has experience in the Open and Distance Learning (ODL) mode, either educators or students, have to change along with it. Due to these ODL courses, awareness about OER is gradually growing. The role of academic staff now is being expanded from the traditional elements of research and teaching to a broader role encompassing all elements relating to the discovery, integration, interpretation and application of knowledge as stated in Malaysian Education Blueprint 2015-2025.

In order to move Malaysia to one where technology-enabled innovations are harnessed to make education more accessible, this study was intentionally done to investigate the experiences of the first-year accounting undergraduates in a local public university in using OER during their ODL session. The adoption and expansion of OER with the aid of information and communication technology (ICT) such as Massive Open Online Courses (MOOCs) have started a few years back in this institution. In addition to that, this effort has become more prominent during ODL sessions as its educators are changing drastically from traditional lectures in face-to-face classes to video-conferencing, live streaming and recorded audio and video being uploaded in YouTube. However, in this study OER efforts are focusing on lecture and learning materials purposes only.

2. LITERATURE REVIEW

Due to the rise of implementing OER practices especially during the pandemic crisis, there have been numerous findings discovered on the effectiveness and implications of these educational policies towards student's performance. Generally, previous literature has produced somewhat mixed results. Application of OER would be effective as a learning intervention because it ensures that all students have access to the course materials and would therefore result in better learning outcomes. Venegas Muggli and Westermann (2019) highlighted that first-year higher education students in face-to-face mathematical course classes who used OER resources obtained better examination grades than students who used the open textbook or relied on traditional proprietary textbooks. OER is assumed to be relevant because they facilitate learning processes by delivering diverse open access materials and are easily accessible to students in a variety of disciplinary areas, including accounting. Additionally, Little and Jones (2020) proved that students completely performed better in online learning by using OER than in the traditional class.

In contrast, some studies found a negative effect regarding the implications of OER. OER practices may give rise to a negative effect if the students perceive lack of support, low confidence level and consequently discourage them to adopt different versions of learning resources. Due to the sudden transition to OER, it might potentially deteriorate student's performance since they already get used to the previous traditional method. Indirectly, these students would then be at a learning disadvantage. This argument further proved by prior findings who reported a negative effect of OER application in certain courses and semesters as compared to a commercial textbook (Fischer et al., 2015; Winitzky-Stephens & Pickavance, 2017), subsequently lead to unfavourable learning outcomes. While, other researchers do not find any significant difference in academic achievement between OER adoption and traditional learning material (Tang et al., 2020; Fialkowski et al., 2020). Final course grades of students in the OER class were on a par with the performance in traditional textbook class (Chang, 2020).

Over time, extensive literature has been developed on the benefits and drawbacks of OER. According to Grimaldi et.al. (2019), textbooks have been used as primary learning resources for all students, and the quality is comparatively high in general. Kermanshahi and Nipa (2018) supported that OER is the solution for the rising price of the textbook and suitable for young students who are good at using technological devices as they will carry the devices such as smartphones or tablets in their pocket. The content of OER can be accessed at any time and anywhere if the students have an internet connection (Swigart and Liang, 2016). Therefore, the use of OER to replace the traditional textbook can substantially reduce the students' financial burden. Although there are many advantages of OER, the past literature also found problems in using OER. Krelja (2016) highlighted that some students face issues in accessing OER because some resources require special software or application to access the information needed. Sultan & Rafiq (2021) supported that some students lack computer literacy skills and thus faced difficulty finding relevant information when accessing OER. Additionally, Debbarma & Durai (2021), OER has caused the lack of human interaction between students and teachers as it disconnects the face-to-face interaction as mostly the teachers are using online applications such as Zoom, Google Meet, Microsoft Teams, Google Classroom as a medium for communication and sharing the information with the students.

3.RESEARCH METHODOLOGY

This study was attended by first-year undergraduate accounting students from a local public university in Perak who had their first experience of ODL in semester 20202 when it was implemented. A set questionnaire adopted from a previous study (Afolabi, 2017) was used as a method of data collection that was sent through an e-survey using Google Form. The variables were demographic information, advantages of OER (Variable 1), compatibility of OER with past experience (Variable 2), tri-ability of OER (Variable 3), visibility of OER result (Variable 4), and finally the difficulty and understand-ability of OER to be used (Variable 5). Scales from Strongly Disagree (1), Disagree (2), Agree (3) and Strongly Agree (4) are used to measure their experience. A total of 108 samples of responses were collected from the e-survey out of a total population of 702 first-year undergraduates who were in the first and second semester of the program and were taking the same modules as prescribed by the institution in the respective study plan. Statistical analysis was performed using SPSS (Statistical Package for Social Science) software. Descriptive statistics were performed with the calculation of frequency and percentage for quantitative variables.

4. FINDINGS AND DISCUSSION

Demographic information of respondents shows that 87% of total respondents are female. The majority of 88.9% of them were part 2 students, while part 1 was just 11.1%. The data also shows that 69.4% which was the majority of respondents were taking 6 courses during the first semester of the ODL session, followed by 14.8% of 5 courses while the minimum number of students of 6 was taking 8 courses.

Table 1. Analysis of Variables (Top Scores)

Variables	α	Mean	% A-SA	% D-SD
1. Does Open Educational Resources (OER) have a user advantage?	0.878	2.898	89.9	
i.The OER is a positive innovation				30.5
i.OER makes it more convenient to communicate with teaching lecturers and friends				
Is OER compatible with your past experience?	0.731	2.814	83.3	33.3
i.Using OER would require me to change my study habit				
i.I am eager to respond to the discussion group on OER via Learning Management System (For e.g: through Google Classroom, uFuture, etc)				
i.Using OER increases my interaction with the subject matter				33.3
Does OER allow trial-ability?	0.712	2.784	37	
i.I am confident in my ability to use OER				
i.I do trial and error in working with OER				89.8
Is the result of using OER visible to you?	0.701	2.807	36.1	
i.OER makes teaching real				
i.I have seen other universities using OER				80.6
Is OER difficult to use and understand?	0.835	2.817	82.4	
i.OER is user friendly				
i.I am confident in my ability to use OER				33.4

A-SA = Agree to Strongly Agree; D-SD = Disagree to Strongly Disagree

From Table 1, the mean score for all the variables are slightly above the midpoint of 2 which highlighted that respondents agree with all the OER experiences when more than half of the total respondents chose Agree to Strongly Agree to all their experiences when being asked about OER. Item 1 for Variable 1 which is about the advantages of OER shows 89.9% Agree to Strongly Agree to say OER is a positive innovation that will spur the lights of the initial implementation of OER in previous years before ODL started. While the highest Disagree-Strongly Disagree in this Variable 1 was shown

by Item 2, where 30.5% found that it is harder to communicate with teaching lecturers and friends who agree with OER. Item 1 in Variable 2, shows the highest score for Agree-Strongly Agree as respondents saw by using OER, they have to change their study habit, while Item 2 and 4 show the highest score for Disagree-Strongly Disagree with 33.3% are not eager to respond to group discussion using OER and by using OER will not increase their interaction in the subject matter. However, the majority of them opted for Agree to Strongly Agree because learning content through OER in this institution is performed dynamically instead of static when students are encouraged to question, make adjustments of prior learning to incorporate new ideas, testing of understanding and feedback which has led to increment in their interaction in the subject matter. Next, 89.9% of the respondents Agree-Strongly Agree by Item 3 in the 3rd variable as they can do trial and error in working with OER. 36.1% Disagree-Strongly Disagree with Item 1, as they do think that OER is somehow terrifying for them. Item 3 for Variable 4, shows the highest score for Agree-Strongly Agree when respondents have seen other universities have already using OER. 36.1% of total respondents seem to be Disagree-Strongly Disagree with Item 2 in Variable 4, as they don't think that OER makes teaching more real compared to traditional face-to-face learning using textbooks, manuals and printed handouts. 82.4% of respondents Agree-Strongly Disagree with Item 1 of Variable 5 as they see OER is user friendly but 33.4% have doubted their confidence in their ability to use OER during this ODL session.

5. CONCLUSION, LIMITATION & RECOMMENDATION

OER can play a strategic role in facilitating the wider collaboration of students and institutions across geographical boundaries, enhancing the quality of teaching and learning and reducing the educational costs for students especially during this pandemic crisis of Covid-19. At the bottom of all these potential advantages of OER, is a robust technological infrastructure, high level of IT literacy, transparent legal framework, an abundance of tools and a positive attitude towards the benefits and value of OER. All the efforts and resources need to be syndicated for a better OER since it is a limelight of open and distance learning. Apart from that, educators are also needed to be conversant with up-to-date IT skills and their applications to be able to benefit from using OER and thus giving the best experience for students in applying the OER. Credits should be given to this institution in taking swift shifts in utilising OER during ODL as a step forward to globalising online learning, as documented in the Malaysian Education Blueprint. The limitation of this study was a small sample size of just first-year undergraduate students thus generalisation of OER experience amongst first-year undergraduates of this institution is vague. A bigger sample may be collected in the future to provide a bigger picture of students' experience with OER, especially in this ODL session. The impact of using OER on academic performance may also be the centre of attention for future research.

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Trend of Gig Economy Among Thai University Students

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ABSTRACT

The objective of this research is to study the participation and perception of Thai university students towards the Gig Economy. Gig Economy is a free-market system in which companies seek to work with independent contractors or freelancers. The data was collected by questionnaire from 506 college students. The results showed that 42% of the students were performing gig work and 32% stated they entered gig work on their own initiative. Regarding their plans for after-graduation, as high as 88% plan to enter full time employment as well as perform gig work. Earning money was the top reason for involvement in gig work (41%). The research found the trend that Thai university students have intention for part-time work in the Gig Economy after their graduation. Therefore, the researchers suggest that business schools shall consider adding more academic and practical content focusing on entrepreneurship and its relationship to the Gig Economy. In addition, further study should expand to other generations to gain deeper understanding of the role of Gig Economy in Thailand.

Keywords: gig economy, gig work, university student, entrepreneurship education, Thailand

INTRODUCTION

Gig economy is a free-market system in which companies seek to work with independent contractors or freelancers (Gillis, 2020). Currently, in a global context, there is no accepted definitions of the Gig Economy; yet the term is used in media, economics, labor and business research. A majority of the scholarly research depends on the study of gig workers in the service industry, such as ride sharing services and food-courier services even though the term Gig Economy covers workers in many different types of short-term jobs and projects. This research applies the definition of Gig Economy as being created by alternative work arrangements where the worker is not paid a wage or salary, does not have an implicit or explicit contract for a continuing work relationship, and does not have a predictable work schedule or earnings such as independent contractors and freelancers, day laborers and on-demand or platform workers (Abraham et al., 2019). The gig work is usually transacted on a digital marketplace and the workers are employed and paid per assignment (Youmatter, 2020). The rise of the Gig Economy is closely connected to advances in technology. The global Gig Economy is projected to grow from \$204 billion in 2018 to \$455 billion in 2023 (Broda, 2020).

In Thailand, there is limited published official data on gig workers. However, a survey by the EIC in 2017 found that the gig population in Thailand stood at 30% of the total workforce and includes people with higher education such as MBA and Phd graduates (Economic Intelligence Center of the Siam Commercial Bank, 2017). Entrepreneurship education research conducted by Ratten & Usmanij (2021) stated that entrepreneurship education is a progressive and cutting-edge topic. In turn, it is necessary for academic institutes to provide education that copes with the changing environmental dynamics. In a recent Forbes article regarding the growth of gig workers in the United States, the article predicts that freelance workers will make up more than half of the U.S. workforce by 2023 (Henderson, 2020). Prior research on gig workers focuses on the service industry of delivery such as Uber and Food Panda to name only a few, and the issues of existing business models, labor management practices, and regulations (Healy et. al., 2017, Abraham et. al., 2019). Mulcahy has written that:

“Despite changes in how we work, universities have yet to integrate the study or practice of the Gig Economy into their curriculum or career services. Instead, they continue to educate and prepare students to become full-time employees in full-time jobs. That approach does a disservice to students who will graduate ill-equipped and unprepared to succeed as independent workers” (Mulchay, HBR, 2019).

Based on the above situations and statements the current study was conducted in order to learn Thai University students ‘participation and perception in the Gig Economy as a means to gain understanding for improving entrepreneurship education. Presently there are no published papers that have focused on this topic in Thailand.

The objectives of this study are twofold:

- 1) To study the participation and perception of Thai university students towards the Gig Economy.
- 2) To discuss how the research findings can be used to develop entrepreneurship education to meet the changing business environment.

METHODOLOGY

The population of the research consisted of first year university students in Thailand. According to Thailand National Statistical Office (2021), the number of university students in Thailand in year 2019 was 2,076,924. The data was collected through online surveys during 2020. Slovin’s formula was applied to calculate the sample size necessary to achieve a certain confidence interval when sampling a population. This formula is suitable when the researchers do not have enough information about a population’s behavior to otherwise know the appropriate sample size. Slovin’s formula is written as: $n = N / (1 + Ne^2)$ where N equals the number of samples and N equals the total population (Hotjar, 2021). From the formula, the appropriate sample size was 385. To ensure that the research gathered sufficient results, the study randomly distributed 600 questionnaires and received 506 completed questionnaires. As a larger sample size generally means greater accuracy, the researchers then took the 506 completed surveys for analysis. The data was collected by the researcher team during March 2020.

RESULTS

The survey of 506 students comprised of 363 (72%) females, 138 (27%) males, and 5(1%) as others. The results are as follows.

Table 1. Performing gig work (N = 506)

Performing gig work	Frequency	Percentage
Yes	212	42
No	294	58

Out of 506 students, 212 (42%) were currently performing gig work while 294 (58%) were not.

Table 2. Type of gig work performed (N = 212)

Type of gig work performed	Frequency	Percentage
Part-timer, continuous part time job but not commit for long-term	66	31
Online seller (part-time)	48	23
Internet worker such as Youtuber, Blogger	29	13
Freelancer, receive a short-term project from a customer, able to perform more than one project at a time	25	12
Investor, on own (not being hired by anyone), i.e., by investing in the Stock Market	25	12
On-demand workers, such as Grab or Food Panda	7	3
Offline seller (part-time)	5	3
Other types of part-time worker	7	3

The top five types of gig work currently performed include part-timer or continuous part-time job with no commitment for long-term work (31%), online seller (part-time) (23%), internet worker such as

Youtuber or blogger (13%), freelancer who receives a short-term project from a customer and is able to perform more than one project at a time (12%), and investor working on their own (not being hired by anyone) such as investing in the Stock Market, respectively.

Table 3. Influence to perform gig work (N = 212)

Influence to perform gig work	Frequency	Percentage
Own initiative	162	76
Parents or guardians	27	13
Friends	10	5
Social media	5	2
People you know whom perform gig work	4	2
People you admire but not personally known	4	2

When students were asked who influenced them to perform gig work, as high as 76% answered that they performed gig work due to their own initiative, while 13% and 5% said that their influences were their parents or guardians, and friends, respectively.

Table 4. After graduation, intention to perform gig work (N = 506)

Intention to perform gig work after graduation	Frequency	Percentage
Non-gig work	39	8
Part-time gig work	443	88
Full-time gig work	24	5

The questionnaire asked students if they intended to perform gig work after graduation, from the 506 students, as high as 88% stated they were interested to work part-time in the Gig Economy. While only 8% answered that they did not have intention to perform gig work after graduation and 5% intended to do full-time gig work. It should be noted as trend that 88% of students intent to perform part-time gig work after graduation

Table 5. After graduation, reason to perform gig work (N = 506)

Reason to perform gig work after graduation	Frequency	Percentage
To earn money	207	41
To have opportunity to experience different types of work	87	17
To have flexible working hours	65	13
To gain higher compensation than the permanent job	57	11
To gain new experiences	45	9
To learn new skills	26	5
To be able to work from anywhere	19	4

From the 506 informants, if they were to work in the Gig Economy after graduation, the top three reason given were to earn extra income (41%), to have opportunity to experience different types of work (17%), and to have flexible working hours (13%).

Table 6. After graduation, reason NOT to perform gig work (N = 506)

Reason not to perform gig work after graduation	Frequency	Percentage
Unstable income	156	31
Limited available works	92	18
Limited welfare such as insurance or compensation when taking sick leave	84	17
Difficulty to find customers	83	16
Other jobs might already be taken by other people who possess higher knowledge or skills	52	10
Personal disinclination	15	3
Limited relationship with employers	12	2

Difficulty for self-time management	6	1
Lack of support for personal financial management and taxable income.	6	1

However, the informants also provided reasons not to perform gig work after graduation. The top three reasons consist of unstable income (31%), limited available work (18%), and limited welfare such as insurance or compensation when taking sick leave (17%).

DISCUSSION

It should come as no surprise to educators that university students today are interested in pursuing gig work since they are known the world over as Generation Z. The label Generation Z is applied to people born after 1995, the same year the internet became popular (Seemiller & Grace, 2017). In her book “Generation Z Goes to College” (Mulcahy, 2017) points out that Generation Z students prefer to engage in hands-on learning opportunities in which they can immediately apply what they learn to real life. This is due to their learning style of observation (watching videos to learn) and they want to know that the concepts they are learning have broader applications to more than just a practice example. The writer of the book gave an example of one student discussing the importance of being “able to apply [learning] in a variety of everyday life settings,” and another shared about “grasping concepts and applying them to other problems.” Both qualities of learning through observation and applying knowledge to multiple areas aid entrepreneurs to work independently and to develop business ideas (Mulcahy, 2017). The characteristics of Thai university students of Generation Z is no different than the characteristics of global Generation Z university students. This generation are known as global citizens due to growing up with smartphones, broadband Internet access at home, or an online connection at school. University students have had access to more information at their fingertips than any other generation (Seemiller & Grace, 2017).

The results of this research are closely aligned with world trends of the Gig Economy. Worldwide reports on the Gig Economy show an increase in employment whereas this research showed 42% of the informants were involved in the gig workforce. A report from OECD Economic Surveys of Thailand notes that a shift in working patterns is forcing workers to rely on new skills. As the trend of remote and freelance work is growing in popularity, both workers and employers should accelerate to adapt to work in a new world where the context is changing (OECD Economic Surveys: Economic Assessment, Thailand, 2020). Two changes that are having an impact on the world labor markets consist of the growth of automation and AI adoption being used in all production sectors, as well as the shift from single-core work to multitasking. The adoption of automation will replace some jobs and at the same time help create 6.1 million jobs worldwide such as data and AI to marketing and content. (World economic Forum, 2020). Siam Commercial Bank Economic Intelligence Center (2017) also reported the shift from single-core work to multitasking or independent work is on the rise in many business sectors due to opportunities in the Gig Economy as well as gig workers being highly flexible, giving employers the opportunity to select high-potential workers for each project.

CONCLUSION

The characteristics of involvement of Thai university students in the Gig Economy as well as their perceptions, along with the changes in the world labor market have implications for entrepreneurship education. As stated in the introduction, entrepreneurship education is dynamic and needs to connect with the ever-changing business environment. Thailand has a long history of entrepreneurship, and the Gig Economy is another form of entrepreneurship that needs to be studied and researched. This research found that a high percentage of university students are aware and interested in being part of the Gig Economy. Higher education business institutes should ensure the methods of learning are aligned with the needs for gig employment. In order to succeed in the Gig Economy, certain characteristics are needed such as time management, ability for self-motivation, working with others, and technical skills. The communication skills that are necessary include the ability to network and discuss individual unique abilities and skills (Mulcahy, 2019; Petriglieri et al., 2018). The aforementioned characteristics should be included in all business school coursework through various assignments and projects as an

opportunity for students to gain and practice their skills in these areas. Based on the findings, the researchers suggest that further study should expand to other generations in Thailand to gain a deeper understanding of the role the current Gig Economy plays in Thailand for both workers and employers. Further study should consider how the information could be shared with higher education business institutions to ensure entrepreneurship education is continuously aligned to the changing environmental dynamics.

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A Study of Base-lending Rate and Capital Structure for Pre- and Post-Recession in Malaysia

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ABSTRACT

This paper investigates the pattern of capital structure of 4,127 Malaysian companies from 2002 to 2015. We then specify the sample into two periods, the pre-recession period from 2002 until 2007 and post-recession period from 2009 until 2015, to determine whether there is any significant difference in term liabilities between the two periods. We found a sharp downwards movement in long-term debt and total debt after the 2008 year of recession. We also documented that the level of total debt and long-term debt to be significantly higher before the recession hits and they decrease after the recession occurs and the correlation between capital structure and BLR is significant during the post-recession period.

Keywords: recession; interest rate; economic downturn; capital structure

1. INTRODUCTION

Even after more than a decade, the 2008 recession is still being discussed as people recollect the origin and the cause of it. Many believed that the recession was not the work of one person or a one-day work, but a work of different entities and individuals over a few years. The recession was initiated in the United States (US) housing market when the subprime mortgage loan borrowers failed to honour their obligation due to the increase in interest rates from 1% to 5.25%. The low interest rate was initially introduced in the US with an intention to stimulate the economy after the short financial crisis in 2001, and the interest rate increased as the economy became better. However, many entities and individuals took advantage of the low interest rate and the flood of liquidity to buy houses regardless of their poor creditworthiness and high risk of default. The situation got worse by the introduction of collateralized debt obligations (CDOs) which were based on the mortgage in the secondary mortgage market. The CDOs were rated inaccurately and were actively traded among investors. At one point, the demand for the houses declined because people cannot afford the expensive houses coupled with high interest rates. Meanwhile, the current borrowers were unable to meet their commitments as the interest rate increased which led to a large number of defaults and eventually, banks started to panic. The secondary mortgage market was shattered as well. Eventually, many were forced to file for bankruptcy and shut down the businesses. The market became very volatile which caused the investors to lose money.

Malaysia was not spared from the effect of the 2008 financial crisis initiated in the US as stated by the Central Bank of Malaysia (BNM) in its report, “As Malaysia is a highly open economy, the impact of the global recession was felt strongly in the external trade-related sectors. The recession in the advanced economies started to impact the Malaysian economy in the fourth quarter of 2008.” (Central Bank of Malaysia, 2009, p. 13). However, unlike the US, the impact of the recession was different in Malaysia. At the time US was hit by the 2008 recession, the Malaysian banking system was sturdy, the financial market was able to absorb the shock, and the country’s reserve was strong to face the crisis as the lesson was learnt during the Asian Financial Crisis 1997 – 1998 (Central Bank of Malaysia, 2009; Prema-chandra, 2010). Malaysians also had little exposure to the CDOs which were introduced in the US. Even though the financial market was reported as performing good, Prema-chandra (2010) mentioned that

there is a huge drop in the KLSE Price for 2008 approximately 20% between 2007 and 2009. Deesomsak, Paudyal and Pescetto (2004) studied the difference in the capital structure between pre- and post- Asian Financial Crisis 2007 of Asian Pacific Region countries, specifically, Thailand, Malaysia, Singapore and Australia. At that moment, the reduction in share price was around 30%.

During the recession, the government and the related authorities would quickly respond to the crisis to deter from slipping deeper into the economic downturn. Recovery policies were introduced and different countries would take different measures. In the case of Malaysia, among the measures taken by BNM during the 2008 recession was money easing, i.e. reducing Overnight Policy Rate (OPR), which would affect the base-lending rate (BLR) or the borrowing cost. Interest rate is theorised to have impact on capital structure in accordance with the trade-off theory. It means recession should have an impact on capital structure. There are a few studies that discovered trivial changes in the capital structure between pre- and post-recession periods (Ebrahim et al., 2014; Fosberg, 2008; Iqbal & Kume, 2015; Trinh & Phuong, 2015). There were changes discovered to the relationship between leverage and firm as well as country specific factors for pre- and post-recession periods (Deesomsak et al., 2004). Also, the leverage was found increasing from pre-recession to recession period (Iqbal & Kume, 2015), and during recession, the debt accumulated(Fosberg, 2008). After recession, prior studies found the leverage and the accumulated debt were reversed to before recession (Fosberg, 2008; Iqbal & Kume, 2014).

Interest rate, which is believed to give impact to the choice of capital structure, has insignificant impact on the determination of capital structure in United States for the last forty years, but the tax rate is found to be more sensitive to firms' leverage (Karpavičius & Yu, 2017). Bokpin (2009) discovered the same insignificant negative relationship between leverage (long-term debt) and interest rate. Interest rate is negatively related to debt and the relationship is significant only when the firms predict negative GDP. Karpavičius and Yu (2017) suggested that the firms might ignore the changes in interest rate because of its volatility, unlike tax rate which is steadier over time. Research on the impact of interest, however, is still limited (Karpavičius & Yu, 2017) and currently, no study in Malaysia has yet conducted study on the impact of base-lending rate on the capital structure, distinguishing pre and post-recession period. Therefore, the aim of this paper is 1) to study the pattern of Malaysian companies' capital structure from 2002 until 2015 and 2) to examine the difference in capital structure between pre- and post-recession period.

2. METHODOLOGY

The sample includes all Malaysian public companies listed on Bursa Malaysia's Main Market. The companies chosen are from nine industries, namely, construction, consumers and products, hotel, industrial products, industry, plantation, property, technology, and trading and services. However, we exclude the finance industry due to its different characteristics as well as its own unique regulations. The data for capital structure variables are collected using Thomson DataStream service. The data for BLR is collected manually from Bank Negara Malaysia Annual Reports. The period of this study is from 2002 until 2015, excluding the 2008 data which is identified as the recession period (Duggal & Budden, 2011). We only study the 2008 recession cycle because the economic cycle for that recession year is complete, that is, recovery-growing period (2002-2007), recession (2008) and another recovery-growing period (2009-2015). The final sample of this study consists of 4,127 companies/years observations.

This study separates the data into two sets of samples, which are the pre-recession period that covers the year 2002 until 2007 and the post-recession period that covers the year 2009 until 2015. Thus, there are 1,829 companies/years observations for pre-recession period and 2,298 companies/years observations for post-recession period. For the purpose of validity and robustness of the study, we adopt two different proxies for capital structure as dependent variables. We test the hypotheses using total debts to total assets (TDEBT) in one regression model and total long-term debts to total assets (LTDEBT) in the other regression model as our capital structure proxies (Fama & French, 2002; Frank & Goyal, 2009).

As stated before, BLR is the rate set by the commercial banks and it represents the cost of borrowing the money to be lent to the banks' borrowers. The commercial banks' BLRs are often determined by Bank Negara Malaysia using the overnight policy rate (OPR). The higher the BLRs, the higher is the cost of borrowing borne by the companies. Thus, it should signify a correlation on the companies' financing behaviour, where the level of debt will be affected when BLR changes. Thus, the null hypothesis is:

H_0 : There is no change in level of debt when BLR changes.

3. FINDINGS

3.1 Descriptive Findings

Table 1 shows the comparison of descriptive analysis of samples between pre-recession period and post-recession period. Table 1: Panel A shows the descriptive statistics for 1,829 companies/years observations from 2002 to 2007, while Table 1: Panel B shows the descriptive statistics for 2,298 companies/years observations from 2009 to 2015. The mean for both TDEBT and LTDEBT during post-recession are lower compared to the mean during pre-recession period. This result is consistent with the finding by Jermann and Quadrini (2006) that states companies' leverage is likely to lower during the recession period.

Table 1. Descriptive Statistics

	Panel A: Pre-recession period (2002 – 2007)					Panel B: Post-recession period (2009 – 2015)				
	Min	Max	Mean	Kurt.	Skew.	Min	Max	Mean	Kurt.	Skew.
TDEBT	0.0026	0.9971	0.3898	0.272	-0.495	0.0049	0.9438	0.3714	0.308	-0.507
LTDEBT	0.0000	0.7456	0.2119	0.552	-0.419	0.0000	0.7333	0.1917	0.603	-0.368
BLR	5.98	6.72	6.3619	0.045	-1.675	5.51	6.79	6.3622	-1.287	0.396

Table 1 shows the descriptive analysis of the pre-recession period sample consists of 1,829 observations from 2002 until 2007 and the post-recession period sample consists of 2,298 observations from 2009 until 2015. TDEBT is the total debt divided by total assets. LTDEBT is the long-term debt divided by total assets. BLR is the average annual base lending rate stated and reported by Bank Negara Malaysia in their annual reports.

The first objective is to study the pattern of Malaysian companies' capital structure from 2002 until 2015. In Figure 2 and Figure 3, we have plotted trend analyses of annual average for total debt ratio (TDEBT) and annual average for long-term debt ratio (LTDEBT) from 2002 until 2015, with the purpose of illustrating the trend movement of companies' long-term debt and total debt. Duggal and Budden (2011) stated that the 1998 recession effect continued until 2002, and afterward, the economy recovered and was in a non-recession period.

Therefore, from 2002 to 2008, a steady trend with insignificant increase or decrease in leverage for both TDEBT and LTDEBT can be seen from Figure 2 and Figure 3. The year 2008 is recognised as the recession year and it is marked in both trend analyses. There is a sharp downwards movement, indicating a change in the financing behaviour in terms of total debts and long-term debts immediately after the recession. Accordingly, the Malaysian companies reacted to the event and quickly adjusted their leverage. From 2009 until 2015, we can see the acute decline in both types of leverage before the companies slowly picked up their leverage a few years after the recession ended. This finding is also consistent with the study of Fosberg (2008) and Iqbal and Kume (2015).

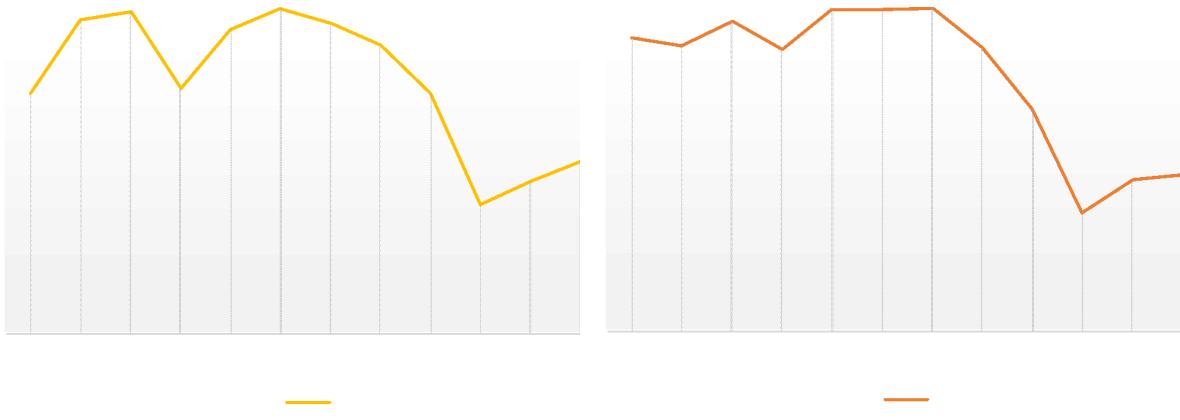


Figure 1. Trend analysis for total debt ratio

Figure 2. Trend analysis for long-term debt ratio

3.2 Comparison of TDEBT and LTDEBT between pre- and post-recession period

The second objective of this paper is to examine the difference of the companies' capital structure. Thus, we carried out the test to compare the mean for both TDEBT and LTDEBT between pre-recession period and post-recession period to see whether the level of each debt is significantly higher or lower before the recession as compared to after the recession. The results in Table 2 indicate that the TDEBT and LTDEBT during pre-recession period is significantly higher than during the post-recession period as indicated by higher mean value of TDEBT and LTDEBT, in which both are significant at 1%.

Table 2. Independent t-test group statistic

	N	TDEBT	LTDEBT
Pre-recession period	1,829	0.3898	0.2119
Post-recession period	2,298	0.3714	0.1917
Independent t-test and Levene's test for equality of variance			
	F-Value	Sig.	Sig.(2-tailed)
TDEBT	4.275	0.039	0.002***
LTDEBT	4.279	0.039	0.000***

**significant at 1% level

When we look into the correlation analysis in Table 3. We can see significant negative correlations between BLR and LTDEBT as well as TDEBT only during the post-recession period. While there is a positive correlation between BLR and debts during economic expansion (pre-recession), it is not, however, significant. The significant negative correlation post-recession period suggests companies adjust their capital structure to reflect the changes in BLR during economic contraction.

Table 3. Correlation analysis of BLR and capital structure pre- and post-recession period

Base-Lending Rate (Pearson Correlation)		
	Pre-recession period	Post-recession period
TDEBT	0.004	(0.049)**
LTDEBT	0.012	(0.048)*
N	1,829	2,298

**significant at 1% level

*significant at 5% level

The result also suggests that the Malaysian companies borrow more when the economy is healthy (before the recession period), and significantly reduce their borrowing after the recession hits the economy. Prior studies also discovered similar findings that the companies are most likely to employ

higher debts during economic growth (de Jong et al., 2008; Frank & Goyal, 2009) and, interestingly, the base lending rate before the recession is also lower than the rate after the recession which could possibly affect the level of debt, especially between 2002 and 2005, and gradually increase up to the recession period. This is because, after the recession, the BNM introduced the money-easing policy and the BLR was immediately reduced. Therefore, the null hypothesis is rejected.

4. CONCLUSION

Recession has undeniably affected the Malaysian economy regardless of the scale of the impact. This event could alter the financing decisions of Malaysian companies and hence, the companies' capital structure. This paper, therefore, studies the pattern of Malaysian companies' capital structure from 2002 until 2015 to see if there is any fluctuation in the level of debt of Malaysian companies, especially, before and after the recession. Interestingly, we have found a decline in the trend after the recession compared to before the recession. This finding leads to another analysis which is to examine the difference in capital structure between pre- and post-recession period. The analysis confirms that the level of debt before recession is higher than the level of debt after the recession. The results suggest that the Malaysian companies borrow more when the economy is healthy but lower the debt during the economic downturn, which is corroborated by the correlation analysis. This study concludes that the change in the capital structure could be due to the lower base lending rate as a result of recovery policies taken by the Malaysian government during the crisis.

For future study, we suggest using short-term debt as dependent variable and short-term interest rates as the independent variables to see the effect of short-term interest against the leverage. Furthermore, the sample of the study can also be lengthened to capture two cycles of recession.

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Analysis of Hedging: Institutional Logics in Managing The Risk of Fluctuation in Government Debt Exchange Rate Before and During the COVID-19 Pandemic

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ABSTRACT

This study aims to explore the phenomena behind the motivation and challenges involved in hedging policy to manage the risk of fluctuation in the government debt exchange rate before and during the COVID-19 pandemic. As its research strategy, this study uses the case of the Debt Management Office of Indonesia and employs descriptive, content, thematic, and constant comparative analyses to process the research instruments. Using institutional theory, this study finds that the government did not engage in derivative hedging transactions before and during the COVID-19 pandemic due to concern regarding the impact on the market and the different risk appetites of the leadership within the decision-making process. The study concludes that there was competition between the different material carriers, with routines being the dominant logic. This institutional factor triggered the practice of decoupling the regulations as symbolic carriers in the implementation of derivative hedging. Normative isomorphism was the only type of institutional isomorphism found in the implementation of hedging transactions before the COVID-19 pandemic, with no types found during the pandemic.

Keywords: hedging derivatives; pandemic COVID-19; government debt; institutional logics; isomorphism

1. INTRODUCTION

The declaration of COVID-19 as a pandemic led to an 85-point or 0.59 per cent fall in the rupiah-US dollar exchange rate, from IDR 14,374 per US dollar to IDR 14,459 per US dollar (Tempo.com, 2020), while on 1 April 2020, the rupiah skyrocketed to IDR 16,495 per US dollar (Bank Indonesia, 2020). This led to pressure on the foreign currency debt burden of the Indonesian government, which over the last ten years has tended to increase in proportion. According to the Indonesia Ministry of Finance (2020), the change in the exchange rate increased the debt position of IDR 284.61 trillion.

In financial practice, both the private and public sectors carry out hedging as a means of controlling foreign currency exchange rate risk. In the private sector, hedging can increase firm value and reduce the cost of debt due to its role in reducing changes in foreign currency risk, bankruptcy risk, and income volatility risk (Chen & King, 2014; Makar, DeBruin, & Huffman, 1999). Meanwhile, derivative instruments offer the public sector the ability to guard against macroeconomic risks (Hinkelmann & Swidler, 2005). Various countries around the world have used derivative instruments, including Sweden and the Czech Republic (OECD, 2005; The Swedish National Debt Office 2003). The Indonesian government currently has a legal umbrella governing the implementation of hedging with derivative transactions. However, up to the middle of the second semester of 2020, it had not executed any such transactions. Most recently, this has been further impacted by the prevailing turbulent environment caused by the COVID-19 pandemic.

By using a case study and institutional theory-based approach, this research seeks to explore in-depth the motivation and challenges facing the Debt Management Office of Indonesia (the Directorate

General of Budget Financing and Risk Management/DJPPR) linked to the execution of derivative hedging transactions before and during the COVID-19 pandemic as a means of managing government debt in the context of exchange rate fluctuations. The study also aims to fill the gaps in the limited previous research by discussing hedging in the public sector using an institutional theory approach since the majority of current research focuses mainly on the use of hedging in the private sector.

2. LITERATURE REVIEW

The majority of the previous research discusses hedging in the corporate sector. The research found that one way of encouraging companies to hedge with derivative instruments is with the use of hedging substitute instruments owned by the company (Ciorciari, 2019; Makar et al., 1999; Nance, Smith Jr., & Smithson, 1993). Hedging has also been shown to reduce the cost of corporate debt (Chen & King, 2014; Hinkelmann & Swidler, 2005; Makar et al., 1999). Meanwhile, Bartram, Brown, and Fehle (2009) and Ciorciari (2019) found that the availability of derivatives markets also encouraged companies to use derivative instruments. Yet hedging is not always the best policy alternative, given that some risks are difficult to find and mitigate; additionally, doing so could jeopardize other legitimate foreign policy objectives (Ciorciari, 2019). In the public sector, several factors influence the choice of a passive or active hedging strategy, including the capacity of the risk management unit, institutional policies, and financial market developments (Koc, 2014). Effective debt management necessitates the acquisition of debt at a low cost and for certain risks to then be transferred through the use of derivatives (OECD, 2005). However, in the context of a pandemic, uncertainty and costs can increase rapidly (Bhargavaa, Jamison, Lauc, & Murray, 2001; McKibbin and Fernando, 2020; World Bank, 2014). Meanwhile, (Wiastanto, 2018) conducted more specific research on hedging in the management of the Indonesian government's debt.

This research uses the New Institutional Theory approach. Institutional logics offers the best approach to rationalizing a series of activities that are present in the aspects of social structure (Friedland & Alford, 1991; Scott, 2005; Thornton & Ocasio, 1999). Institutional logics takes the view that every institution comprises two elements, namely material and symbolic (Thornton, Ocasio, & Llounsbury, 2012). Symbolic carriers are defined as the rules, norms, and belief systems inherent in institutional logics, while material carriers are the routines, relationship systems, and artifacts (Lepoutre & Valente, 2012; Thornton et al., 2012). Material carriers are also defined as the individual and collective actions of the actors and artifacts by specific logics (Lepoutre & Valente, 2012; Zietsma & Lawrence, 2010). Isomorphism is a further element of the new institutional theory. It illustrates how initially diverse institutions become homogeneous due to external pressure (DiMaggio and Powell, 1983; Oliver, 1991). Previous research by Aldemir and Uysal (2017) also used the institutional theory approach to explain the development of the public accounting system in Turkey, while Rizal and Shauki (2019) used it to explain the motives and constraints of banks in their early implementation of Indonesian accounting standards.

3. METHODOLOGY

This research employs a case study strategy, using a single case with multiple embedded unit analyses. It also employs a qualitative approach since it focuses on a specific case study only; this enables a deep understanding of the phenomenon without generalizing. Data triangulation is used since more than one research method is applied. The data comprise both primary and secondary data. The primary data are the results of the interviews and documents obtained directly from the analysis unit and the results of observations, while the secondary data comprise documents obtained from government websites. Interviews were conducted on three respondents who are tasked in managing the Government's debt risk, both at the technical level and at a higher level. The form of the interview is more semi-structured. The documents consist of laws, government regulations, ministerial regulations and director general regulations.

The data analysis process consists of descriptive analysis, content analysis, thematic analysis, and constant comparative analysis conducted with the help of NVivo 12 Pro/Plus software. Descriptive analysis is carried out to analyze the legal documents governing hedging transactions in managing the risk of government debt portfolios. It is also applied to the results of the non-partisan observations made

by the researcher. Meanwhile, content analysis and thematic analysis are used to process the interview data obtained. The content analysis seeks to capture the things that were conveyed by the respondents in order to answer the research problems, while the thematic analysis classifies the interview results based on the themes of concern in the study. Finally, constant comparative analysis was performed by comparing the answers between the respondents to assess whether there are similarities or differences. The unit of analysis in this research is the Indonesian Directorate General of Budget Financing and Risk Management (DJPPR).

4. FINDINGS AND DISCUSSION

Through non-partisan observations, it was found that prior to the COVID-19 pandemic, at the technical level, efforts to actively manage risk through hedging transactions were carried out for approximately a decade. Meanwhile, during the COVID-19 pandemic, based on the observations made, there were no significant changes in hedging policies. It is also evident from the documents obtained that there was no change in policy before compared to during the COVID-19 pandemic. As such, we consider that there were no changes or new arrangements related to hedging policies during the pandemic.

In the case of hedging using derivative instruments as a way of managing government debt in the context of exchange rate fluctuations before and during the COVID-19 pandemic, the government faced several logics that it considered with regard to its implementation. Essentially, there was no logical difference in the periods before and during the COVID-19 pandemic. The logics are, first, the availability of alternative instruments for managing exchange rate risk. Up to now, the government has frequently used loan conversion instruments and natural hedging to manage the risk of its debt portfolio and the risk of repayment of government debt obligations. The availability of alternative instruments reflects research by Nance, Smith Jr., and Smithson (1993) and Makar, DeBruin, and Huffman (1999). They concluded that one factor encouraging companies was the use of company-owned substitute hedging instruments, among others, whether this involved a natural hedge for a company or not.

Second, the logic that becomes a challenge involves the potential impact on financial markets. This is due to the large number of government transactions at a time when the domestic dollar supply market is not yet liquid. In addition, one of the respondents stated that the government was concerned that carrying out derivative hedging transactions would lead to the creation of a certain exchange rate in the market. This consideration of financial market conditions is in line with previous research by Bartram et al. (2009) and Koc (2014). Third, there is the logic of the availability of regulations that affects the government's motivation to execute hedging transactions. The government has engaged in formulating laws and regulations governing the authority and implementation of hedging transactions since 2010. It succeeded in including a clause related to the implementation of derivative hedging in the state budget Law for Fiscal Year 2013. The fourth logic is the difference in the risk appetite of the leadership. While one type of leadership supports active risk management through derivative hedging transactions, other leaders consider such transactions to be risky and would not choose to pursue them. This consideration is in line with Koc (2014), who concluded that the choice between derivative hedging or natural hedging depends on institutional policies and the capacity of the debt risk management unit.

In reality, these logics clash, which has led to the decoupling of the existing regulations (symbolic carriers). The logic that dominates and becomes a challenge is therefore the development of financial markets. In addition, during the COVID-19 pandemic, it was found that the government was more focused on meeting the financing needs of the state budget rather than managing risk through hedging transactions. Meanwhile, the institutional factors that encourage decoupling are actors, routines, and SOPs. The influence of the actor, in this case the leadership, has a significant influence on the process of preparing the hedging transaction infrastructure, including the decision to conduct hedging transactions through derivative instruments before and during the COVID-19 pandemic. The routine factor can be viewed in the context of the extent to which the government debt risk management unit is comfortable with the existing instruments and concerned about trying hedging as a new initiative.

According to DiMaggio and Powell (1983), an institution will face an alignment process comprising three types of institutional isomorphism, namely mimetic, coercive, and normative isomorphism. Based

on an analysis of these three types of isomorphism, before the global COVID-19 pandemic, only normative isomorphism was found to affect the implementation of hedging policies through derivative instruments as a means of managing the risk of exchange rate fluctuations on government debt, as indicated by the government's active efforts to develop its risk management capabilities. Coercive isomorphism was not found because the plan relating to the preparation and implementation of hedging transactions with derivative instruments featured no pressure or encouragement from creditors/lenders to the government as borrowers. Mimetic isomorphism was also not encountered as the government merely observed the actions of other developing countries while continuing to exercise its own discretion regarding the decision of whether or not to hedge. During the COVID-19 pandemic, meanwhile, none of the three types of isomorphism was found. Normative isomorphism was not present during the COVID-19 pandemic because the government focused more on state budget financing.

5. CONCLUSION

With regard to managing the government debt portfolio, especially managing fluctuations in the exchange rate of government debt, it was found that the use of derivative hedging was constrained both before and during the COVID-19 pandemic due principally to concerns about the turmoil that would arise in the financial market if the government engaged in derivative hedging transactions. One of the logics that accompanied this concerned the availability of alternative instruments and differences in the risk appetite of the leadership. Another took account of the preparedness of the existing regulations. In addition, the pursuit of derivative hedging transactions was not a policy priority during the COVID-19 pandemic. Competition was identified between the different material carriers of actors, SOPs, and routines in the implementation of derivative hedging before and during the COVID-19 pandemic. These three components served as institutional factors that triggered decoupling practices preventing institutions from carrying out the relevant points in laws and regulations relating to the implementation of hedging transactions.

From the results of the analysis of the three types of isomorphism, only normative isomorphism was found before the global COVID-19 pandemic. During the pandemic, none of the three types of isomorphism was found. This shows that as a government debt management institution, the DJPPR tends to be different or heterogeneous compared to other institutions and is more involved in periodic efforts to improve.

This research was limited in terms of the scope of the risk management unit. It could thus be expanded in the future by conducting interviews with the front office and the state treasury management unit to deepen the implementation of natural hedging thus far. The involvement of these two units would further develop the findings and conclusions. Considering that this research employs a qualitative approach with a new institutional theory framework, it is also necessary to conduct quantitative research on derivative hedging transactions. This would assist in obtaining a clearer picture of the costs and benefits involved in any decision by the Indonesian government to conduct derivative hedging in comparison to the logics that it has already considered.

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Do Joint Audit and Accounting Conservatism matter on Firm Performance? Empirical evidence from Egypt

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ABSTRACT

This study examines the impact of the joint audit on firm performance, using accounting conservatism as a mediator. Using a sample of 336 firm-year observations of non-financial firms listed in the EGX 100 Index of the Egyptian stock market from 2012 to 2019, we find that joint audit is positively and significantly associated with the level of accounting conservatism on the MTB scale, which indicates that the increase in the level of accounting conservatism is linked to the activation of the joint audit approach. Furthermore, a positive and significant relationship between the level of accounting conservatism and the firm performance on Tobin's Q scale. Finally, we find that accounting conservatism mediates the relationship between joint audit and firm performance. Our findings contribute to accounting practices and performance literature by conducting more research that can provide an additional explanation about the impact of joint audit on conservative accounting practices, and introducing an Egyptian or international standard for joint audit. These findings help regulators, investors, and policymakers realize the importance of joint audit in increasing accounting conservatism levels and improving a firm's performance.

Keywords: Big-4, Egyptian stock market, joint audit, MTB model, Tobin's Q model.

1. INTRODUCTION

The European Commission (EC) proposed the Green Paper (Audit Policy Lessons from the Crises) in October 2010 to consider measures to improve audit quality and overcome the phenomena of audit market concentration, through a series of proposals, such as requiring joint auditing of joint-stock companies to improve audit quality and foster competition among audit firms, by assigning two auditors to carry out the audit phases simultaneously and publish a joint audit report (Deng et al., 2014; zerni et al., 2012). Based on extrapolating the accounting literature that focused on studying the relationship between joint audit, accounting conservatism, and firm performance, we note that most companies that have committed to using joint audit have more conservative accounting practices when issuing their financial statements. This has a favorable impact on enhancing accounting conservatism, lowering agency issues, and improving the firm's performance (zerni et al., 2012; Mandour et al., 2018). The study of (Deng et al., 2014) concluded that there is no significant difference in the impact of joint audit and single audit on audit quality, but that audit fees sometimes rise in companies that use joint audit. While the study (Sana'a, 2016) discussed the positive impact of conservative accounting policies on financial indicators related to firm performance and their impact on share value growth. On the other hand, some studies (Sohn, 2012) concluded that there is an adverse effect of accounting conservatism practices on the accuracy of financial analysts' predictions in the capital markets.

The research gap is that, while literature reviews have made significant progress in the study and analysis of the joint audit approach and its impact on audit quality, audit fees, audit market

concentration, and earning management practices in the foreign environment, there are still some research gaps in this field that can be studied in the Egyptian context, specifically the limitations of literature review that focused on the relationship between joint audit, accounting conservatism, and firm performance in light of the growing international interest in the study and evaluation of joint audit over the last two decades. Despite the presence of numerous literature reviews that addressed the joint audit from the standpoint of accounting conservatism, the findings of these studies were inconsistent with one another and largely inconclusive in explaining the nature of this contentious relationship. In terms of the measurement tool, the current study differs from previous studies, it relied on analyzing the financial reports of a group of companies listed on the EGX100 index and designing three models to measure the relationships between research variables. This is what sets this study apart from previous relevant literature.

Our study aims mainly at developing a theoretical framework supported by applied evidence to measure the impact of the joint audit on the relationship between the level of accounting conservatism and the performance of firms listed in EGX 100. By studying joint audit in a developing nation, our study adds to and enriches previous research. Our study contributes to the study of the interactive impact of the joint audit, accounting conservatism, and firm performance, while also giving clear practical data about the nature of this relationship in Egypt. The remainder of this paper is organized as follows. Section 2 presents the study's research design and data description. Section 3 discusses the empirical results, and Section 4 concludes the study.

2. METHODOLOGY

Our research focuses on the listed companies in the EGX 100 Index during the period from 2012 to 2019, since these companies are the top 100 active and liquid companies listed on the market, accounting for the number of trading days and the number of transactions. In addition, this index provides an appropriate representation of all sectors of the economy.

2.1 Data and sample

The final sample consists of 42 non-financial companies covering 13 sectors, yielding 336 firm-year observations. Financial and accounting data were collected manually from published annual reports and supplementary clarifications of the sample companies published on their official websites, in addition to the annual disclosure book issued by the Cairo and Alexandria Stock Exchanges for the most active companies, and Egypt for Information Dissemination company website (www.egidegypt.com) to obtain the complete annual financial statements for the sample companies, As well as some related websites such as Mubasher Info (www.mubasher.info).

2.2 Variables definition

1. Joint Audit

The joint audit is measured by a dummy variable, which takes a value of 1 when applying the joint audit, or zero otherwise, by analogy with some previous studies (Mandour et al., 2018; Lobo et al., 2017; André et al., 2016; Deng et al., 2014).

2. Accounting Conservatism

Our hypothesized variable represented the level of accounting conservatism, which is defined and measured by the model of market to book ratio of equity (MTB), which was presented by (Beaver and Ryan, 2005), MTB is considered one of the most widely used measures in accounting studies as well as the availability of data Required (Banker et al., 2016), is calculated by the following equation: $MTB = \text{Market value of equity} / \text{book value of equity}$.

3. Firm Performance

Firm performance is measured based on Tobin's Q model as one of the main models for measuring the firm performance, It is considered the most accurate and used model in accounting studies (Pham et al., 2012), and it reflects market estimates regarding future profits. The value of Tobin's Q is measured based on the total market value of equity and the book value of the total liabilities divided by the book

value of assets (Pham et al., 2012; Brian et al., 2015; Singh et al., 2018), It is calculated as follows: Tobin's Q = (market value of equity + book value of the total liabilities) / book value of assets.

2.3 Regression models specifications

Based on the above, three models were developed to measure the impact of the joint audit as an independent variable on the relationship between the level of accounting conservatism and the firm's performance as dependent variables. Our study also used some control variables that would control the relationship between the independent variable and the dependent variables, as shown in Figure 1:

Figure 1 Research framework

After reviewing the previous figure that shows the relationships between independent and control variables with the variables dependent, the study models can be formulated in the form of regression models, as follows:

The first model: the effect of the joint audit on the level of accounting conservatism: $ACit = \beta_0 + \beta_1(JOINTA) + \beta_2(ROA) + \beta_3(ROE) + \beta_4(LEV) + \beta_5(F SIZE) + \beta_6(AUDITS) + \beta_7(IND) + \epsilon_{it}$

The second model: the impact of the level of accounting conservatism on the firm performance: $TQit = \beta_0 + \beta_1(AC) + \beta_2(ROA) + \beta_3(ROE) + \beta_4(LEV) + \beta_5(F SIZE) + \beta_6(AUDITS) + \beta_7(IND) + \epsilon_{it}$

The third model: the impact of the joint audit on the model of the relationship between the level of accounting conservatism and the firm performance: $TQit = \beta_0 + \beta_1(AC) + \beta_2(JOINTA*AC) + \beta_3(ROA) + \beta_4(ROE) + \beta_5(LEV) + \beta_6(F SIZE) + \beta_7(AUDITS) + \beta_8(IND) + \epsilon_{it}$

3. RESULTS AND DISCUSSION

We used panel data logistic regression analysis to estimate the relationship between the joint audit, accounting conservatism, and firm performance. Table No. 1 shows the impact of the joint audit on the relationship between the level of accounting conservatism and the firm performance listed in EGX100, by comparing the results of the third model with the results reached in the second model:

Table 1 Multiple Linear Regression

Our results indicate that the value of the significance level test reached (0.0001) for the variable that reflects the interaction between the joint audit and the level of accounting conservatism (JOINTA*AC), which is less than the value of the significance level (0.05), which indicates that there is a significant impact of the introduction of the joint audit on the relationship between the level of accounting conservatism and the firm's performance. Also, the significance level of each of the constant (c) and the following control variables: return on assets ratio (ROA), return on equity ratio (ROE), leverage rate (LEV), and the firm size (FSIZE), less than the value of the significance level (0.05). This means that there is a significant effect between these variables and the firm's performance (TQ), and it is also found that there is no significant effect for each of the audit firm size (AUDITS), and the type of industry (IND), as the value of significance level, is greater than (0.05).

4. CONCLUSION

We find a statistically significant relationship between the joint audit and the level of accounting conservatism in the financial reports of the companies listed in the EGX 100, where the value of the adjusted R-Squared reached (0.1803) and this value indicates that the independent variables in the model explain the percentage (18.03%) of the change in the level of accounting conservatism, where the sign of the regression coefficient was positive and the probability value of F-statistic (Sig. = 0.00) was less than the level of significance (0.05). This result is consistent with studies of (Zerni et al., 2012; Lobo et al., 2013; Mandour et al., 2018). We explain that activating the joint audit positively affects the level of accounting conservatism in the financial reports. Our results also find a positive and statistically significant correlation between the level of accounting conservatism and the firm performance listed in EGX100, where the activation of conservative accounting practices led to an increase of (Tobin's Q) from (1.205) in 2012 to (1.969) in 2019, where the value of adjusted R-Squared reached (0.4830) and this value indicates that the independent variables in the model explain the percentage (48.30%) of the change in the firm's performance level, where the regression coefficient sign is positive and the probabilistic value (Sig. = 0.00) is less than the level of significance (0.05). Finally, our findings find

that the interaction between the joint audit and the level of accounting conservatism in the financial reports listed in the EGX100 has a positive impact on the firm's performance, as the value of the adjusted R-Squared reached (0.9178) and this value indicates that the independent variables in the model explain the percentage (91.78%) of the change in the firm's performance, where the sign of the regression coefficient was positive and the probabilistic value of the interactive variable (Sig. = 0.00) was less than the level of significance (0.05), and it became clear that there is an improvement in the explanatory power of the model from (0.9163) to (0.9207), and also the value of the coefficient of the level of accounting conservatism increased from (0.4830) to (0.5392), which indicates the positive effect of introducing the joint audit in the relationship model.

Table 1 : Multiple linear regression models for the third model

Variable	The relationship between accounting conservatism level and firm performance			
	The second model variables (before joint audit)		The third model variables (after joint audit)	
	Coefficient	Prob.	Coefficient	Prob.
C	-61.90492	0.0218	72.20918	0.0064
DAC	0.482986	0.0000	0.539181	0.0000
(JOINTA * AC)	-----	-----	0.273960	0.0001
DROA	1.050755	0.0000	1.016350	0.0000
DROE	-0.493915	0.0000	-0.525144	0.0000
DLEV	1.212780	0.0000	1.209005	0.0000
DFSIZE	-2.214363	0.0000	-2.235769	0.0000
AUDITS	-0.018957	0.7328	0.012313	0.8220
IND	0.012249	0.8185	0.030600	0.5584
ECM(-1)	-0.167238	0.0038	-0.197600	0.0005
R-Squared	0.916321		0.920680	
Adjusted R-squared	0.913669		0.917878	
F-statistic	345.5448		328.4841	
Prob (F-statistic)	0.000		0.000	
Durbin-Watson stat	1.528245		1.579743	

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Analysis the Impact of Merger on Bank Performance in the Long Term Period in Indonesia: A Case Study from PT Bank CIMB Niaga Tbk and PT Bank OCBC-NISP Tbk

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ABSTRACT

This paper aims to analyze the impact of the merger of PT Bank CIMB Niaga Tbk. and PT Bank OCBC-NISP Tbk. on their financial performance and non-financial performance for the period 2008-2019 and 2011-2019, using secondary data such as financial statements and other published reports. Financial performance is measured using financial ratio analysis and market value analysis. Non-financial performance is measured by using customer funds, branch office, and employee productivity. Analysis the impact of merger is conducted by comparing the performance trend of the merged banks and the performance between the merged banks and non-merged bank. This research shows the bank's performance trend after the merger is better which is mainly seen from the ratio of CAR, NPL, market capitalization, total customer funds, and employee productivity. The performance of the merged bank does not have a significant difference from the non-merged bank except for CAR, LDR, and employee productivity.

Keywords: financial performance; financial ratio; market value; non-financial performance; performance trend

1. INTRODUCTION

The topic of merger and acquisition has attracted interests from many of researchers. Despite the great interest of this topic, there is still incomplete research that remains in some ways. According to Agarwal and Mittal (2014), the merger and acquisition research area can be dealt more effectively through case study method. They said it can accurately bring out what the pros and cons of the impact of merger and acquisitions are and whether it should be carried out or not. It shows a clear picture of how the management performance is doing as the impact of merger in the companies.

In the short term, mergers and acquisitions from bank consolidation will increase the capital owned by the merged bank so that market power will be higher. For large national private banks (large total assets), large market forces will reduce the risk of default, thereby strengthening their financial stability (Yusgiantoro, Soedarmono & Tarazi, 2019). However, it is necessary to evaluate the impact of mergers and acquisitions in the long term to assess the effectiveness of these mergers and acquisitions that will increase or decrease the value of these banks. The bank's assessment is carried out by evaluating the company's long-term performance on value creation in the merged bank.

Amalia and Ika (2014) conducted a study on differences in the performance of banks with foreign ownership in Indonesia before and after mergers and acquisitions using financial ratios for a period of eight years (2002-2010). The results show that the performance of merged banks in Indonesia has increased after the merger.

In the other country, Ahmed, Manwani, and Ahmed (2018) conducted research on the use of merger and acquisition strategies for growth, performance improvement, and survival in the financial sector.

This study uses an analysis of financial ratios related to the profitability of merged banks in Pakistan before and after the merger within a period of eleven years (2005-2016). The results show that most of the profitability of the merged banks in Pakistan decreased after the merger.

Zafar & Shah (2020) conducted an analysis of long-term financial performance with a sample of three banks in Pakistan after mergers and acquisitions by comparing them across the banking industry. The study was conducted by assessing the financial performance of banks after the merger for ten years (2010-2019). Financial ratio analysis was calculated and statistical data analysis was performed using the T test. The results show that the long-term financial performance of the merged banks has a significant difference from the banking industry average.

The different results indicate that the analysis of the impact of mergers on bank performance in the long term can be studied in more depth by using case studies that can provide a clearer picture of bank performance. And analysis is not only done with traditional performance measurements that only look at financial performance, but also look at non-financial performance.

This paper will discuss two private banks that have merged to comply with policies issued by Bank Indonesia, namely PT Bank CIMB Niaga Tbk (CIMB Niaga) and PT Bank OCBC-NISP Tbk (OCBC-NISP). Both banks have foreign controlling shareholders and are public financial institutions. Public financial institutions selected because of the analysis of the impact of the merger on the bank's financial performance also analyze the market value of the bank. Since CIMB Niaga merged in 2008 and OCBC-NISP merged in 2011, the two banks have never conducted mergers and acquisitions with other banks until now. Therefore, it is interesting to evaluate how the two merged banks manage the performance to create long-term value.

In evaluating the impact of mergers on bank performance in the long term, the growth of the merged bank can be compared with the banks that did not carry out the merger, namely PT Bank Pan Indonesia Tbk (Panin Bank) which is a national private bank and public financial institutions. Based on these issues, this paper aims to provide an evaluation of the variables that must be considered in order to evaluate the impact of the merger on the performance of the two merged banks to create long-term value; also any difference that results from measuring and evaluating the financial and non-financial performance of the merged and non-merged banks in the long term period.

2. METHODOLOGY

The advantage of using a case study approach is a deep and broad understanding of event. This is expected to provide benefits for the merging banks to evaluate the impact of the merger on the performance of the merged banks. Secondary data from bank's financial statement and other published reports are collected from two public company banks that merged after Bank Indonesia issued a single presence policy, namely CIMB Niaga and OCBC-NISP and non-merged bank, namely Panin Bank. These merged banks will be compared with the non-merged bank that is Panin Bank, which has the same size with CIMB Niaga and OCBC-NISP.

Analysis of financial performance in the long term with a sample of three banks in Pakistan that was merged was carried out in the long term for 19 years (2002-2019) by Zafar and Shah (2021). Therefore, this paper used long term period from 2008 until 2019.

Variables that will be used to analyzed the financial performance using financial ratio are Capital Adequacy Ratio (CAR) and CAR Tier I as an indicator of capital ratio; Non-Performing Loan Ratio (NPL)-Gross and NPL-Net as an indicator of asset quality ratio; Return on Asset (ROA), Return on Equity (ROE), Operational Expenses Ratio (BOPO), and Net Interest Margin (NIM) as an indicator of profitability ratio; and Loan to Deposit Ratio (LDR) as an indicator of liquidity ratio. Variables that will be used to analyzed the financial performance using market analysis are Market Capitalization (MC), Price Earning Ratio (PER), and Price to Book Value (PBV). Variables that will be used to analyze the non-financial performance are customer funds, employee productivity using income per employee and operating income per employee, and branch office. Variables have been collected from bank's

financial statement and bank's annual report. Variables have been analysed by using descriptive statistics specifically averages.

3. RESULT

Data from year 2008-2019 are used for CIMB Niaga to analysis performance trend in table 1. From the analysis of the impact of the merger on CIMB Niaga, it shows that the bank's performance in CAR and CAR Tier I as an indicator of capital ratio experienced a steady upward trend. CIMB Niaga's performance in the asset quality ratio after the merger improved with a decrease in NPL-Gross and NPL-Net. CIMB Niaga's performance in profitability ratios after the merger declined with the decline in ROA, ROE, and BOPO ratios. Only the NIM ratio has increased. CIMB Niaga's performance in LDR as an indicator of liquidity ratio decreased because the increase in credit extended was greater than the increase in its funds, so that CIMB Niaga was less liquid. MC tend to show positive trend, although there was negative trend in year 2011 to 2015. PER and PBV tend to show negative trend after merger although in the early year of merger PER and PBV has the high ratio. The non-financial ratio performance for employee productivity and customer fund have positive trend. Meanwhile, branch office shows negative trend.

Data from year 2011-2019 are used for OCBC-NISP to analysis performance trend in table 2. From the analysis of the impact of the merger on OCBC-NISP, it shows that the bank's performance in CAR and CAR I as capital ratio show positive trend, although there was negative trend in year 2014 to 2015 and 2017 to 2018. OCBC-NISP's performance in NPL-Gross and NPL-Net as asset quality ratio shows no significant change in increase or decrease. OCBC-NISP's performance in profitability ratios after the merger improved with the increase in ROA, ROE, and BOPO ratios. NIM shows no significant change in increase or decrease. OCBC-NISP's performance in LDR as liquidity ratio decreased because the increase in credit extended was greater than the increase in its funds, so that OCBC-NISP was less liquid. MC show positive trend although there was negative trend in year 2015 and 2017 to 2019. PER and PBV has tend to show negative trend after merger although in the early year of merger PER and PBV has the high ratio. Finally, the non-financial ratio performance for employee productivity and customer fund have positive trend. Meanwhile, branch office shows negative trend.

As a result, not all bank performance trends shows improvement in long term period after merger. Difference merged bank shows difference improvement. CIMB Niaga and OCBC-NISP have only same improvement in CAR, CAR Tier I, NPL-Gross, NPL-Net, market capitalization, total customer fund, and employee productivity. The result of this study not generally support all of Amalia and Ika (2014) which stated that there is an increase in the performance of banks that have merged in Indonesia due to not all performance shows improvement in long term period.

Table 3 shows the average of financial performance for year 2008-2019 for merged bank compared to non-merged bank. The average of CAR and CAR Tier I which is an indicator of capital ratio shows that non-merged bank has better performance than merged bank. It means merged bank cannot sustain the strong capital owned by bank in the long term period. The average of NPL-Gross and NPL-Net which is an indicator of asset quality ratio shows that non-merged bank is between merged banks. The average of ROA and ROE which is an indicator of profitability ratio shows that merged bank has slightly better performance than non-merged bank which indicates increasing in profit and interest income of merged bank. The average of NIM and BOPO shows that non-merged bank is between non-merged bank. The average of LDR which is an indicator of liquidity ratio shows that non-merged bank is more liquid than merged bank. The average of MC, PER, and PBV shows that non-merged bank is between merged banks. The average of non-financial performance that consist of the average of customer funds, employee productivity using operating income per employee and branch office shows non-merged bank is between merged banks. As a result, there is no significant difference on the average of financial performance data merged bank and non-merged bank except for CAR, LDR, and employee productivity. The result of this study is contrary to Zafar & Shah (2020) which states that there is significant difference between merged banks and banking industry average in Pakistan.

4. CONCLUSIONS

Based on the result of this paper, the merger of CIMB Niaga and OCBC-NISP only have positive impact on bank performance trend for capital ratio (CAR and CAR Tier I), asset quality ratio (NPL-Gross and NPL-Net), market capitalization, and non-financial performance (total customer fund and employee productivity). And there is no significant difference in bank performance after merger between merged bank and non-merged bank except for CAR, LDR, and employee productivity.

There are still some limitations in the study, namely the use of instruments in this study only includes secondary data such as financial reports and other published data and this study only takes the banking industry so that the results of the study cannot be used in other industrial sectors. Beside that, the bank performance analyzed in this study is only represented by limited financial ratio and non-financial ratio.

For future research of this study, it can be used primary data such as interview and questionnaire list and used other ratios to analyze the performance.

TABLES

Table 1. Financial and Non-financial Performance Trend PT Bank CIMB Niaga Tbk

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
CAR	15.6%	13.9%	13.5%	13.2%	15.2%	15.4%	15.6%	16.3%	18.0%	18.6%	19.7%	21.5%
CAR Tier I	11.9%	11.5%	9.7%	10.2%	12.3%	12.9%	13.3%	14.2%	16.4%	17.3%	18.4%	20.2%
NPL-Gross	2.5%	3.1%	2.6%	2.6%	2.3%	2.2%	3.9%	3.7%	3.9%	3.8%	3.1%	2.8%
NPL-Net	1.4%	1.1%	1.9%	1.5%	1.1%	1.6%	1.9%	1.6%	2.2%	2.2%	1.6%	1.3%
ROA	1.1%	2.1%	2.8%	2.9%	3.2%	2.8%	1.4%	0.2%	1.2%	1.7%	1.9%	1.9%
ROE	7.4%	15.3%	20.9%	19.1%	20.9%	17.7%	8.5%	1.5%	6.5%	8.3%	9.1%	8.7%
BOPO	88.3%	83.0%	76.8%	76.1%	71.7%	73.8%	87.9%	97.4%	90.1%	83.5%	81.0%	82.4%
NIM	5.7%	6.8%	6.5%	5.6%	5.9%	5.3%	5.4%	5.2%	5.6%	5.6%	5.1%	5.3%
LDR	87.8%	95.1%	88.0%	94.4%	95.0%	94.5%	99.5%	98.0%	98.4%	96.2%	97.2%	97.8%
MC (in trillion Rp)	12.2	17.0	45.7	30.4	27.4	22.9	20.8	14.8	21.0	33.9	22.8	24.1
PER	17.6	10.8	17.9	9.6	6.5	5.4	9.0	35.0	10.2	11.4	6.6	6.6
PBV	1.3	1.5	3.3	1.7	1.2	0.9	0.7	0.5	0.6	0.9	0.6	0.6
Customer Fund (in billion Rp)	84.1	86.3	117.8	131.8	151.0	163.7	174.7	178.5	180.6	189.3	190.8	195.6
EP:I/E (in million Rp)	513	658	727	764	910	946	883	1,012	1,129	1,233	1,270	1,360
EP:O/E (in million Rp)	113	190	273	319	404	409	197	93	188	321	385	428
Branch Office	665	659	751	901	974	984	964	826	634	542	503	451

Sources: Authors' calculation based on Annual Report

Table 2. Financial and Non-financial Performance Trend PT Bank OCBC-NISP Tbk

	2011	2012	2013	2014	2015	2016	2017	2018	2019
CAR	13.8%	16.5%	19.3%	18.7%	17.3%	18.3%	17.5%	17.6%	19.2%
CAR Tier I	11.0%	13.9%	17.4%	17.2%	16.1%	17.2%	16.6%	16.6%	18.2%
NPL-Gross	1.3%	0.9%	0.7%	1.3%	1.3%	1.9%	1.8%	1.7%	1.7%
NPL-Net	0.6%	0.4%	0.4%	0.8%	0.8%	0.8%	0.7%	0.8%	0.8%
ROA	1.9%	1.8%	1.8%	1.8%	1.7%	1.9%	2.0%	2.1%	2.2%
ROE	12.9%	12.2%	11.9%	9.7%	9.6%	9.9%	10.7%	11.8%	11.6%
BOPO	79.9%	78.9%	78.0%	79.5%	80.1%	79.8%	77.1%	74.4%	74.8%
NIM	4.8%	4.2%	4.1%	4.2%	4.1%	4.6%	4.5%	4.2%	4.0%
LDR	87.0%	86.8%	92.5%	93.6%	98.1%	89.9%	93.4%	93.5%	94.1%
MC (in trillion Rp)	7.6	12.9	14.0	15.4	14.5	23.5	21.3	19.4	19.2
PER	10.1	13.1	9.5	11.7	9.7	13.3	9.9	7.4	6.6
PBV	1.2	1.4	1.0	1.0	0.9	1.2	1.0	0.8	0.7

	2011	2012	2013	2014	2015	2016	2017	2018	2019
Customer Fund (in billion Rp)	47.4	60.8	68.9	72.8	87.3	103.6	113.4	125.6	126.1
EP:I/E (in million Rp)	494	524	597	674	762	1,002	1,166	1,282	1,404
EP:OI/E (in million Rp)	169	187	229	267	289	345	444	574	654
Branch Office	412	350	339	337	339	340	338	308	283

Sources: Authors' calculation based on Annual Report

Table 3. Average of financial and non-financial performance data merged bank and non-merged bank

	CIMB Niaga	OCBC-NISP	Panin Bank
CAR	16,35%	17,57%	20,11%
CAR Tier I	14,02%	16,02%	17,04%
NPL-Gross	3,04%	1,41%	2,94%
NPL-Net	1,60%	0,66%	1,11%
ROA	1,92%	1,90%	1,85%
ROE	12,00%	11,12%	10,56%
BOPO	82,65%	78,06%	81,3%
NIM	5,67%	4,28%	4,48%
LDR	95,16%	92,09%	90,2%
MC (in trillion Rp)	24,41	16,43	21,1
PER	12,22	10,16	12,07
PBV	1,15	1,02	1,03
Customer Funds (in billion Rp)	153,7	89,5	108,2
Employee Productivity: Income per Employee (EP: I/E) (in million Rp)	950	878	1,669
Employee Productivity: Operating Income per Employee (EP:OI/E) (in million Rp)	277	351	322
Branch Office	738	338	495

Sources: Authors' calculation based on Annual Report

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The Influence of Internal and Macroeconomic Factors on Non-Performing Financing of Islamic Rural Banks in Indonesia

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ABSTRACT

This study was conducted to determine the influence of internal and macroeconomic factors on Non-Performing Financing in Islamic Rural Banks (IRBs) in Indonesia. IRBs has an important factor in economic activity in Indonesia as it provides financing for small and medium enterprises. Internal factors consist of Return on Asset (ROA), Profit Sharing Ratio and Non-Profit Sharing. Meanwhile, macroeconomics consists of inflation and the BI Rate. The sampling technique in this study used purposive sampling technique and the sample in this study amounted to 150 IRBs with a time period of 2017-2019. The type of data used is secondary data from the official website of Bank Indonesia and the Financial Services Authority. The analysis method used in this research is panel data regression method. The results showed that ROA and BI Rate had a significant negative effect on NPF. Meanwhile, inflation, profit-sharing and non-profit sharing financing ratios have a significant positive effect on NPF in IRBs. This research can contribute to the evaluation of IRBs financial performance in managing their financing risk.

Keywords: *NPF, Internal Factors, Macroeconomy, Islamic Rural Banks (IRBs), Credit Risk*

1. INTRODUCTION

Indonesia Islamic rural bank was established to improve the economic welfare of Muslims, especially rural microeconomic groups. IRBs can support the cycle of economic activity through economic activities and strengthen the spirit of ukhuwah Islamiyah, so that it can increase per capita income and improve the quality of life (Muhammad, 2011). The capability of the IRBs is still relatively small, so it is necessary to make various efforts to improve the capability of developing the business of the IRBs with the scope and business capability of the BPRS.

In its current development, Islamic banking faces major challenges, namely the ability to compete and control the possibility of various risks, one of which is the risk of bad loans. This risk is a risk that arises due to the inability of the customer or other party to carry out their obligations or return the financing to the bank in accordance with the agreement that was agreed at the beginning. This risk cannot be avoided because it is attached to the main activity of the bank, namely channeling funds. This risk is the biggest risk, because losses due to bad credit can damage bank capital. The ratio of bad loans or known as Non-Performing Financing is a ratio that shows the size of the bank's non-performing loans (Nugrohowati and Bimo, 2019).

One of the problems faced by Islamic banking in Indonesia is Non-Performing Financing (NPF). NPF refers to a condition where the money lent to the debtor cannot be collected within a certain period of time (Rivai and Arifin, 2010). The Central Bank of Indonesia sets the maximum NPF rate for banking at 5%. Table 1 shows the annual NPF data during the period, the percentage of NPF is more than 5%. In addition, they reached 9.68%, 9.30%, and 8.94% in 2017 to 2019. Therefore, the NPF level needs attention because it has consistently exceeded the Central Bank of Indonesia threshold. The NPF must be managed properly to avoid losses and maintain the credibility of the IRBs.

Tabel 1. Assets and financing development of Islamic Rural Banks, 2017–2019

Year	Assets	Funding	NPF(%)
2017	10,840,375	7,763,951	9,68
2018	12,361,734	9,084,467	9,30
2019	13,758,294	9,943,320	8,94

Source: Financial Services Authority

Research conducted by Muhammad et al (2020) found that ROA had a significant negative effect on NPF. Supriani and Sudarsono (2018) revealed that in the short term ROA has a positive effect on NPF in Islamic banks in Indonesia. Lidyah (2016) found that inflation had a significant negative effect on NPF and the BI rate partially had a significant positive effect on NPF. Firmansari (2015) and Tabrizi (2014) found that inflation had a significant effect on NPF for both Islamic commercial banks and sharia business units in Indonesia and Soebagio (2005) research showed that the BI Rate had a negative relationship with NPF.

The results of research conducted by Ekanto (2013) concluded that the distribution of financing provided based on non-profit sharing contracts has a negative and significant influence on Non-Performing Financing in Islamic banking. While the profit-sharing variable is only the Musyarakah contract which has an insignificant effect. According to research Ligardianti (2006) profit-sharing financing does not have a significant effect on NPF. While the results of Wahyuni's research Wahyuni (2016) concluded that there was a significant influence in moderating the effect of the volume of murabahah financing on the performance of Islamic commercial banks. NPF moderates the effect of profit-sharing-based financing volume on the performance of Islamic commercial banks as proxied by ROA.

Based on the above background, the authors are interested in conducting research on the Effect of Internal and Macroeconomic Factors on Non-Performing Financing at Islamic People's Financing Banks in Indonesia. The variables of the bank's internal factors are return on assets, the ratio of profit sharing and non-profit sharing to total financing, macroeconomic variables in the form of inflation and BI Rate, and there is a control variable in the form of asset size.

2. THEORETICAL FRAMEWORK AND HYPOTHESIS

2.1 Theory Keynes

John Maynard Keynes (5 June 1883 – 21 April 1946) was a revolutionary in the field of economics. Keynes is also known as the father of macroeconomics because of his great contribution to the world of economics through his findings. There have been many theories about economics put forward by Keynes. One of Keynes' theories that is legendary and often used as a reference to this day is the theory of consumption that he expressed.

2.2 The Anticipated Income Theory

According to this theory, bank liquidity problems can be planned. This liquidity theory emphasizes liquidity in a dynamic and broad sense. This theory is based on the ability of a debtor to pay his loan by looking at the debtor concerned. The future income of a debtor is getting better, it will ensure smooth payments in a timely and controlled manner, so that the further impact of bank liquidity will always be maintained (Fahmi, 2015).

2.3 Hypothesis

1. Inflation and Non-Performing Financing

When inflation occurs, where price increases occur continuously, it will have an impact on the decline in people's purchasing power as a result of the value of money being disturbed due to inflation. This will result in a decline in sales growth so that conditions in the business world will also weaken. This causes customers to have difficulty in carrying out their obligations such as returning their financing, thus causing non-performing financing to increase (Arijanto, 2010). Based on this, the authors formulate the following hypothesis:

H1: Inflation has a positive effect on Non-Performing Financing.

2. BI Rate and Non-Performing Financing

An increase in the Bank Indonesia interest rate (BI Rate) followed by an increase in bank lending rates can lead to an increase in non-performing loans, because the interest expense that must be borne by debtors will increase. There is a positive relationship between the BI Rate and NPF because Indonesian banks are still running a dual banking system, namely conventional banks and Islamic banks. If BI interest rates rise, commercial bank lending rates will rise, affecting bank financing, namely an increase in non-performing loans. Based on this, the authors formulate the following hypothesis:

H2: BI Rate has a positive effect on Non-Performing Financing.

3. Return on Asset and Non-Performing Financing

Return on Assets is a measure of the bank's overall profitability ratio. The profit earned reflects the performance of the bank itself. The greater the ROA of a bank, the greater the profit obtained and the better the position of the bank in using its assets (Dendawijaya, 2003). A high ROA indicates a very good performance on the part of the bank in terms of generating high income. Based on this, the authors formulate the following hypothesis:

H3: Return on Assets has a negative effect on Non-Performing Financing.

4. Profit Sharing Ratio and Non-Performing Financing

The provision of financing types consisting of profit-sharing financing such as mudharabah and musyarakah contracts and non-profit sharing financing such as ijarah, murabahah, istishna and qard contracts can be classified into the bank's own factor (creditor). To cause indications of problematic financing from account behavior (Account Attitudes), business activity behavior (Business Activities Attitudes), customer behavior (Customer Attitudes). Based on this, the authors formulate the following hypothesis:

H4: Profit sharing ratio has a positive effect on Non-Performing Financing.

5. Non-Profit Sharing Ratio and Non-Performing Financing

A high NPF level indicates that banks must be careful and reduce the financing disbursed. The bank's prudence will have an impact on decreasing customer demand because they feel that bank analysis tends to take quite a long time. Any increase in non-profit sharing financing such as murabahah, ijarah, or qard contracts will reduce non-performing financing, even if the amount is not too large.

According to Wardiantika and Kusumaningtias (2014) financing with non-profit sharing contracts has a negative and significant impact on Non-Performing Financing. The lower the NPF, the greater the financing that will be channeled by the bank. Conversely, if the NPF is high, the financing will decrease. Based on this, the authors formulate the following hypothesis:

H5: Non-profit sharing ratio has a negative effect on Non-Performing Financing.

3. RESEARCH METHOD

The population in this study is the Islamic People's Financing Bank registered with the Financial Services Authority. The number of Islamic People's Financing Banks in Indonesia as of December 31, 2019 was 164 BPRS and the sample in this study was 150 BPRS. Sampling using purposive sampling technique (purposive sampling is a sampling technique with certain considerations).

This type of research is quantitative research with data sources using secondary data. The secondary data used in this study were obtained from the annual financial statements of BPRS published by the Financial Services Authority during the 2017-2019 period and annual macroeconomic data published by Bank Indonesia. Data analysis in this study consisted of descriptive statistics and panel data regression analysis. Data analysis used the ordinary least squared method, with the ratio function $NPF = f(I, BI\ Rate, ROA, Profit-sharing\ ratio, Non-profit\ sharing\ ratio, asset\ size)$, resulting in the following regression equation:

$$Y_{it} = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + e$$

Where Y is *Non-Performing Financing*, X1 is inflation, X2 is *BI Rate*, X3 is *Return on Asset*, X4 is *Profit-sharing ratio*, X5 is *Non-profit sharing ratio*, and X6 is *Asset size*

4. DATA ANALYSIS AND DISCUSSION

Inflation shows an average value of 3.00 with a standard deviation of 0.20, the maximum value of the inflation variable is 3.16 and the minimum value is 2.72. The BI Rate shows an average value of 5.08 with a maximum value of 6.00 and a minimum value of 4.25 and a standard deviation of 0.71. ROA shows an average value of 1.913 with a standard deviation of 2.861, the maximum value of the ROA variable is 9.960 and the minimum value is -9.490. The profit-sharing ratio shows an average value of 10.68 with a standard deviation of 14.26, the maximum value of the profit-sharing ratio is 78.00 and the minimum value is 0.00.

The non-profit financing ratio shows an average value of 89.09 with a standard deviation of 14.86, a maximum value of 100.00 and a minimum value of 0.00. NPF shows an average value of 3.979 with a standard deviation of 2.750, the maximum value of the dependent variable NPF is 9.90 and the minimum value is 0.000. The asset size control variable shows an average value of 17.40 with a standard deviation of 1.25, a maximum value of 21.06 and a minimum value of 9.89. The results of descriptive statistical analysis obtained and processed using eviews 9 are presented in the following table:

Table 2. The result of Descriptive statistics analysis

	NPF	Inflation	BI Rate	ROA	Non-profit sharing ratio	Profit sharing ratio	Ln Asset
Mean	3.979	3.003	5.083	1.913	89.091	10.686	17.406
Maximum	9.990	3.160	6.000	9.960	100.000	78.000	21.060
Minimum	0.000	2.720	4.250	-	0.000	0.000	9.890
Std. Dev	2.750	0.200	0.717	9.490	14.865	14.266	1.252
Observation	450	450	450	2.861	450	450	450
					450		

There are three types of approaches in panel data regression, namely Common Effects Model (CEM), Fixed Effect Model (FEM) and Rando Effect Model (REM). The first two-step test is analyzed to select the best model. First, the Chow test was performed to compare FEM with CEM. (FEM is selected if p-value < 0.05). Second, the Hausman test was performed, which compared FEM and REM (FEM was selected if p-value < 0.05). The next test uses the Lagrange Multiplier (LM) test to compare CEM and REM. The LM test is carried out if the Chow test and Hausman test above have different results. From the two previous tests, it can be concluded that the best model used is REM. The test results can be seen as follows:

Table 3. The result of chow-test and Hausman-test

Type of test	Test of summary		
Chow-test	Statistic	d.f.	Prob.
	558.133348	149	0.0000
Hausman-test	Chi-sq statistic	Chi-sq d.f	Prob.
	0.000000	6	1.0000

1. Analysis of panel data regression with the random effects model

The results of the Chow test and the Hausman test show that the most appropriate model to use is the Random Effect Model. Therefore, to test the significance, the results of data regression from the Random Effect Model are used. Table 4 below is the result of the regression using the Random Effect model.

Table 4. Regression result with of the random effects model

Variable	Coefficient	Std. Error	t-Statistic	Prob.	Conclusion
Inflation	6.076	0.339	17.921	0.000	Supported
BI Rate	-0.098	0.046	-2.103	0.036	Rejected
ROA	-0.018	0.009	-2.054	0.040	Supported Rejected
Non bagi hasil	0.583	0.205	2.843	0.004	Supported Control variable
Bagi hasil	0.661	0.250	2.638	0.008	-
Ln Assets	-2.235	0.767	-2.910	0.003	
C	-27.591	8.446	-3.266	0.001	

Inflation has a significant positive effect on NPF. In theory, a continuous increase in inflation will cause a decrease in the real income of the community so that the level of quality of life of the community in meeting their needs will decrease. This condition causes customers to experience difficulties in returning their financing because most of their income will be allocated to meet their daily needs as a result of these rising prices. This causes an increase in bad loans. The BI rate has a significant negative effect on NPF, this is because even though interest rates are used in the operational activities of conventional banks, Islamic banks cannot be separated from the influence of setting interest rates. If the BI Rate increases, the amount of financing disbursed by Islamic banks will increase because the number of obligations that must be returned by customers to Islamic banks is lower than conventional banks. However, with the lower loan repayment amount, the customer is likely to be able to pay off his obligations to Islamic banks.

ROA has a significant negative effect on NPF, a high ROA ratio will cause a decrease in the ratio of non-performing financing in BPRS, because a high ROA ratio means that the profits obtained by the bank are also higher. When the profits are high, non-performing financing such as bad loans will also be small. The profit-sharing ratio has a significant positive effect on NPF. The greater the profit-sharing rate generated in financing, it will stimulate the emergence of profit-sharing contracts, thus affecting the increase in the amount of financing distributed. Thus, the risk of bad credit or Non-Performing Financing will increase. The ratio of non-profit sharing financing has a significant positive effect on NPF. Non profit-sharing financing such as ijarah, murabahah, ishtishna ', and qardh contracts are financing that has certainty in profit rights so that the risk of failure to pay is smaller than profit sharing financing. Transactions carried out by these financings also tend to be low or even declining.

5. CONCLUSION

This study explains the factors that influence the financing of non-performing Islamic rural banks in Indonesia. This study measures several variables such as Inflation, BI Rate, Return on Assets, Profit-sharing and non-profit financing ratios that affect Non-Performing Financing with asset size as a control variable. Based on the results of the research using panel data regression, it shows that the variables of Inflation, ROA, and Profit-Sharing Ratio have a significant positive effect on Non-Performing Financing. Meanwhile, the BI Rate and Non-Profit Sharing Ratio variables have a significant negative effect on Non-Performing Financing.

For IRBs in Indonesia, this research can be used as material for future evaluations to reduce the ratio of non-performing financing or bad loans. The BPRS must improve its internal financial condition to overcome the risk of bad loans. For sharia BPR management to pay more attention to the high level of Non-Performing Financing because it can have a bad impact on operations in the future. Policy makers must immediately formulate risk mitigation policies related to high NPF in the NPRS industry because it is feared that it will increase and have an impact on the possibility of a higher bank failure rate.

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Thin Capitalization Rule & Corporate Tax Avoidance Strategies

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ABSTRACT

Thin capitalization is one of the most common method which used by firms to avoid tax. In 2015, the Indonesian government issued thin capitalization regulation which applied from 2016. Using the agency-tax management framework, as well as leads shown by previous studies, we argue that there will be changes in affected firms tax avoidance strategies after the regulation applied. Unfortunately, there are no previous studies that address this matter. Using 2015-2018 financial data from Indonesia's publicly-traded firms, we investigate whether thin capitalization rule could change affected firms tax avoidance strategies. This study provides an additional contribution by point out changes in strategy over time. We use quasi-experimental approach with difference-in-difference design to better capture the before and after effect. We find that after one year, firm respond to thin capitalization rule by lowering both of its conforming tax avoidance and non-conforming tax avoidance. Furthermore, we find that after three years, firms maintained its conforming tax avoidance level. This study shows that thin capitalization rule change firms tax avoidance strategies, where the change itself vary between different time horizon.

Keywords: conforming tax avoidance; difference-in-difference; Indonesia; non-conforming tax avoidance; taxation

1. INTRODUCTION

Managers make decisions that maximize the firm's profit (Hubbert, 1998) in order to increase firm's value (Asiri et al., 2020). Tax is one of the factors managers have to consider in decision making because it affects firm profit through tax expense (Graham, 2000; Gordon & Lee, 2001; Fuest & Hemmelgarn, 2005). To that end, some firms take action to the extent of tax avoidance in order to minimize firm's tax expense, maximizing its profit (Armstrong et al., 2015). These arguments are also supported by agency theory which explain that tax avoidance and earning management are necessary for managers to meet both principal expectation and their own expectation (Arieftiara et al., 2019). This paper narrows the discussion of tax avoidance to thin capitalization context, mainly because thin capitalization practices have been gained worldwide attention since 1982 (Blouin et al., 2014). Furthermore, there is a chance to further investigates thin capitalization in Indonesia after the issuance of thin capitalization rule through PMK 169/PMK.010/2015 (Indonesia Ministry of Finance, 2015).

Thin capitalization is a method used by firm to avoid tax through debt exploitation, enabling them to lower the income tax through bigger interest expense (Haufler & Runkel, 2012; OECD, 2012). Therefore, thin capitalization rule is needed to prevent such circumstances. Much attention has been focused on confirming the effectiveness of thin capitalization rule (Buettner et al., 2012; Ramadhan, Frandyanto, & Riandoko, 2017; Syahidah & Rahayu, 2018; Pramajaya et al., 2019). However, the literature provides little evidence of how thin capitalization rule affect firms tax avoidance strategies as already indicated by agency theory-tax management framework (Wilde & Wilson, 2018).

This study examines the impact of thin capitalization rule to firm's tax avoidance strategies. Furthermore, we test whether the impact is different between one and two years of enforcement. We use Badertscher et al., (2019) conforming and non-conforming tax avoidance to classify firm's tax

avoidance strategies. Using 2015-2018 financial data from Indonesia's publicly-traded firms, we apply DID design to further isolate the effect of thin capitalization rule for the better result.

We find that thin capitalization rule negatively affects conforming tax avoidance and insignificant to non-conforming tax avoidance. We also find that in accordance to thin capitalization rule, firms have different short-run and long-run tax avoidance strategies. This study also highlights the use of quasi-experimental study through DID method in accounting research for future study which want to focus on the before-after effect of tax rules.

2. HYPOTHESIS DEVELOPMENTS

Our hypothesis is developed based on Wilde & Wilson (2018) proposed agency theory-tax management framework which gives an idea about agency costs, implementation costs, and outcome costs as a consideration of managers to obtain the optimum tax avoidance level. Thin capitalization rule can add firm's implementation costs as well as outcome costs of thin capitalization practices, especially for high-leverage firms. Therefore, we expect that the affected firms will change its strategy after thin capitalization rules applied. The change of firm tax avoidance strategy after a tax rule applied also supported by previous researches (Kim et al., 2019; Song et al., 2020) as also indicated by previous thin capitalization researches which found the decrease of firm DER after thin capitalization rules applied (Buettner et al., 2012; Ramadhan et al., 2017; Saragih, 2018).

Badertscher et al., (2019) specify two types of tax avoidance strategies which are conforming tax avoidance and non-conforming tax avoidance. Conforming tax avoidance strategy cannot be reflected by the book-tax differences, hence thin capitalization which expropriate tax avoidance via interest expense is considered as one. After the thin capitalization rules applied, the ability of firms to avoid tax by conforming strategy is expected to be decreased. In addition, the affected firms are expected to switch for non-conforming tax avoidance. Therefore, our hypothesis are as follows:

H1: after thin capitalization rules applied, affected firms will lower its conforming tax avoidance

H2: after thin capitalization rules applied, affected firms will higher its non-conforming tax avoidance

3. METHODOLOGY

Our research samples are firms indexed by IDX within the 2015-2018 fiscal years. We do not include the 2019 fiscal year due to the potential effects of the pandemic. We exclude firms which are from financial industries, as well as firms which has final income tax. Furthermore, we exclude firms which join tax amnesty program to better isolate the thin capitalization rules effect. Finally, we exclude firms which has missing financial information. Our research consists of 376 firm-year samples.

We use quasi-experimental design through DID in order to capture the before-after effect of thin capitalization rules to the tax strategies. We have two research models which are as follows:

$$CTA = \alpha_a + \alpha_i POST + \alpha_z TREATMENT + \alpha_{iz} POST \times TREATMENT + \alpha_s SIZE + \alpha_c CAPINT + \alpha_g SGROWTH + \alpha_a AGE + \varepsilon \quad (1)$$

$$NCTA = \alpha_a + \alpha_i POST + \alpha_z TREATMENT + \alpha_{iz} POST \times TREATMENT + \alpha_s SIZE + \alpha_c CAPINT + \alpha_g SGROWTH + \alpha_a AGE + \varepsilon \quad (2)$$

We have two dependent variables which represent conforming tax avoidance (*CTA*) and non-conforming tax avoidance (*NCTA*). We use Badertscher et al., (2019) measurement of conforming tax avoidance which is the residuals of total tax avoidance model. We use book-tax difference as a measurement of non-conforming tax avoidance as it is considered one the most effective non-conforming tax avoidance measurement in Indonesia research context as stated by Efendi et al., (2021). *CTA* normally has opposite interpretation to *NCTA*, thus we multiply the value of *CTA* by -1 so that both *NCTA* and *CTA* has the value which are in line with the magnitude of tax avoidance.

Our variable of interest is $POST \times TREATMENT$ which is the interaction between the dummy variables for thin capitalization rule implementation, which has 1 value for firms in 2016-2018 ($POST$) and the dummy variables of high leverage firm, which have above-average DER value compared to their industries ($TREATMENT$). We also add control variables to the model which are the natural logarithm of firm's total assets ($SIZE$), fixed assets to total assets ($CAPINT$), difference in revenues scaled by total assets ($SGROWTH$), and the firm's age (AGE) as these variables often included in tax avoidance researches (Rego, 2003; McGuire et al., 2012; Taylor & Richardson, 2013; Shen et al., 2021).

4. RESULTS & DISCUSSIONS

First, we ensure the goodness of the model. We conduct pesaran test and find that cross-sectional dependence exists in our model, hence we perform a panel regression with Driscoll & Kraay standard error to control cross-sectional dependence, which also mitigates heteroscedasticity problem (Hoyos & Sarafidis, 2006). Furthermore, we perform VIF test and does not find any multicollinearity problem. Overall, we can argue that our model is appropriate, so we keep all 376 of our observations.

We use time-fixed effect regression with Driscoll & Kraay Standard Error to control cross-sectional variation as well as time variation from our panel data. The results of our regression can be seen in table 1 below.

Table 1. Regression results.

Variables	Dependent Var: CTA		Dependent Var: NCTA	
	2015-2018	2015-2016	2015-2018	2015-2016
$POST$	0.063 (0.238)	0.028 *** (0.000)	-0.367 * (0.073)	0.043 *** (0.000)
$TREATMENT$	0.007 * (0.064)	-0.042 *** (0.000)	0.029 ** (0.016)	0.025 *** (0.000)
$POST \times TREATMENT$	-0.004 * (0.069)	-0.012 *** (0.000)	-0.028 (0.90)	-0.016 *** (0.000)
$SIZE$	-0.005 (0.346)	-0.015 *** (0.000)	0.07 ** (0.024)	-0.015 *** (0.000)
$CAPINT$	0.021 ** (0.019)	-0.013 *** (0.000)	0.083 (0.833)	0.025 *** (0.000)
$SGROWTH$	-0.041 *** (0.002)	0.036 *** (0.000)	-0.05 *** (0.006)	0.035 *** (0.000)
AGE	-0.019 (0.251)	-0.028 *** (0.000)	0.122 * (0.077)	-0.032 *** (0.000)
N Observation	376	188	376	188
Prob > F	0.006	0.000	0.081	0.000
R-Squared	0.2301	0.2100	0.0751	0.2100

Notes: *** p < 0.1; ** p < 0.05; *** p < 0.01

We use Driscoll & Kraay Standard Error in all of our regressions. Beside using FE regressions, we also compare it with RE and POLS regressions and get similar results.

We find that thin capitalization rule gives negative impact on both conforming and non-conforming tax avoidance after one year of issuance. This happens because, at first, managers consider it as a signal from the government to increase tax regulations and supervisions. From the agency-tax management framework point of view, this perception made by managers lead to both implementation cost and outcome cost increase, reducing the optimum level of both conforming and non-conforming tax avoidance, which is in line with our results. After three years, thin capitalization rule still has negative impact for conforming tax avoidance, yet no longer significant for non-conforming tax avoidance.

This result shows that firms, from time to time, always try to improvise in order to meet its optimum tax avoidance level as already explained by Kim et al., (2019). Thin capitalization rule provides restrictions for firms to expropriate interest expense as one of the tax avoidance method, which limit affected firm ability to optimize conforming tax avoidance, even after three years after the issuance. Meanwhile, firms no longer consider thin capitalization rule as one of the factors to determine its non-conforming tax avoidance strategies, as this rule does not directly affect non-conforming tax avoidance strategies. Furthermore, after three years of thin capitalization rule issuance, it is expected that those affected firms has already grasp all of the information about thin capitalization rule as well as create alternative tax avoidance strategies to overcome the rule.

5. CONCLUSION

Thin capitalization is a is one of tax avoidance strategies which get worldwide attention, therefore thin capitalization rule is necessary to overcome this circumstance. A lot of scattered evidence, supported by Wilde & Wilson (2018) agency-tax management framework leads to the possibility of changes in firms tax avoidance strategies after thin capitalization rule applied. Unfortunately, there are no studies which address this problem as previous studies put more focus on how effective thin capitalization rule for decreasing firms debt level. This study tends to find and explain changes that occur after thin capitalization rule issued.

Using Badertscher et al., (2019) conforming and non-conforming tax avoidance to classify tax avoidance strategies, and DID design to capture before-after effects of thin capitalization rule, we find that thin capitalization rule has negative impact on conforming tax avoidance and has no impact on non-conforming tax avoidance. We also find that overtime, firms tend to adjust its tax avoidance strategies, as our study shows difference in one year and three years regressions result.

Our paper is subject to several limitations. First, we only use one case of thin capitalization rule, whereas there are some variations of thin capitalization rule mechanism between nations which can probably change how it affects firm tax avoidance strategies. Future research shall address this matter. Second, we exclude year 2019 from our observations due to potential bias caused by Covid-19. Future research shall not only include year 2019 as their observations, but also explain how Covid-19 can moderate the effect of thin capitalization rule to firms tax avoidance strategies. Finally, We only use DID design. Future study shall use alternative quasi-experimental design such as DIDID, PSM, and CITS for robustness checking.

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COVID19 Domestic Travel Intention: A model of goal-directed behavior

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ABSTRACT

Although tourism and travel are the world's worst-affected industries due to the COVID-19 pandemic, they are expected to lead the economic recovery. As a result, Indonesia as an archipelagic country with a large population, it is expected to revive the country's economy through the domestic tourism industry. This study develops an extended model of goal-directed behavior to comprehensively explain the future travel intention during the pandemic domestically. Specifically, the extended model incorporates the critical constructs of situational dependent factors (i.e., perception of COVID-19, and willingness to adopt the Non-Pharmaceutical Intervention) into the original Model of Goal-directed Behavior (MGB). Furthermore, the critical constructs known as situational-dependent factors to measure the intention to use Self-Service Technology (SST) in airport. A total of 334 respondents were obtained through an online questionnaire. The structural equation modeling method was then used to evaluate the hypothesis. The model discovered that the perception of COVID-19 affected travel intentions, nonetheless through the willingness to adopt the NPI and the intention to use SST had a positive impact on the desire to travel. In practical terms, this study aligns with the COVID-19 issue further with findings and its implications, offering valuable advice to the airport operator to increase travelers' confidence in domestic travel during the pandemic.

Keywords: COVID-19; Model of Goal-directed Behavior (MGB); Non-Pharmaceutical Intervention; Self-Service Technology; SEM-AMOS; Travel Intention

1. INTRODUCTION

Amid global travel restrictions, travel and tourism are one of the industries most impacted by a drastic drop in international demand, with many borders being closed to combat the virus. International Civil Aviation Organization (ICAO) reported a reduction of 60% (million passengers) of the total world's passengers with an estimated loss of approximately USD 371 billion from gross airline passenger operating income (ICAO, 2020). Gössling, Scott, and Hall (2020) stated that after COVID-19, the tourism and travel industry is supposed to lead the economic recovery. In particular, the role of domestic tourism in the long-term recovery and transition to more resilient destinations (Gössling et al., 2020). Despite the importance of air traffic in the tourism industry, little is known about how tourists' decision-making process of travel during this COVID-19 pandemic. Among socio-psychological theories, the Theory of Reasoned Action (TRA) and Theory of Planned Behavior (TPB) are considered representative theories used in previous studies (Ajzen, 1991). Perugini & Bagozzi proposed a broadening theory from TRA & TPB, named Model of Goal-directed Behavior (MGB), by adding new constructs. MGB incorporates desire, anticipated emotions, and past behaviors along with the original factors in the TPB. These new constructs play important roles in decision-making (Perugini & Bagozzi, 2001). Reisinger & Movondo revealed that culture, personality, and travel motivation have a significant effect on the perception of travel risk, anxiety, and security. To such an extent, the perceived risk and perceived severity of a pandemic will impact the choice of travel destinations, delay or even cancel tourist visits (Reisinger & Mavondo, 2016). For this cause, prospective tourists will accept or be prepared to follow Non-Pharmaceutical Intervention (NPI) Treatments to reduce the risk of COVID-19 infection while traveling. The NPI is preventive: improving personal hygiene while traveling, wearing masks, washing hands, and to avoid suspected persons or locations, and using social distance (Das &

Tiwari, 2020; Gössling et al., 2020; Kantor & Kantor, 2020; Lee, Song, Bendle, Kim, & Han, 2012; Taglioni et al., 2013). Situational dependence in this study refers to the degree to which a person is regarded to rely on a given technology due to its situational factors. Understanding and predicting tourist behavior, especially during a pandemic, is a major issue for tourism marketers. In this study, it is not to define the technology readiness of the SST itself on the airport, however to examine the intention of using the SST. Therefore, this research expands MGB by incorporating critical constructs (i.e., perception of COVID-19 and the willingness to adopt NPI) also known as situation-dependent factors, to measure the intention to use SST and to study human behavior on travel intention in domestic flight during COVID-19 by obtaining insights from Lee et al. (2012).

1.1 Research Hypothesis Development

MGB explains that attitude, subjective norms and PBC indirectly influences intention by desire, and desire has been suggested as a significant variable in the establishment of behavioral intention (Esposito, van Bavel, Baranowski, & Duch-Brown, 2016; Meng & Choi, 2016). Thus, H1: Attitude has a positive impact with desire for travel, H2: Subjective norms has a positive impact with desire for travel, H3: PBC has a positive impact with desire for travel, H4: PBC has a positive impact with travel intention. Anticipated emotions represent a form of counterfactual (pre-factual) thought processes where the emotional consequences of achievement; Positive Anticipated Emotions (PAE) and failure; Negative Anticipated Emotions (NAE) are appraised (Kovacova Holevova, 2018). PAE is prompted with the hope of success or benefit by doing a certain behavior, whereas NAE arises from the presumption of failure or loss by not conducting a behavior (Das & Tiwari, 2020). Thus, H5: PAE has positive impact with desire for travel, H6: NAE has negative impact with desire for travel. The frequency of past behavior (FOP) is usually referred to as a proxy of habits, and research agrees if an individual performs a particular behavior frequently and habitually, this behavior will increase individual desires (Meng & Choi, 2016). Kan & Fabrigar, mentioned in their research, that strong past behaviors/habits have been found to sometimes outperform intentions in predicting behavior (Kan & Fabrigar, 2017). Thus, H7: Past behavior has a positive impact with desire for travel, H8: Past behavior has a positive impact with intention for travel.

Desire is proximal to the cause of purpose in MGB (Perugini & Bagozzi, 2001). Whereas, before affecting aim, MGB considers other antecedents as remote triggers mediated by desire. Therefore, be inferred that desire has a positive impact on the intention to travel, thus H9: Desire has positive impact with travel intention. Perception arises on account of the individual's knowledge, information, and experiences that are responsive to their cognition of objects, behavior, and events. Lee at all (2012) in their research stated that perceived risk supports a possible association between the perception of influenza, desire, and intention (Lee et al., 2012). Weinstein demonstrated that a high perceived severity of disease causes proactive health-protection behaviors (Weinstein, 2000). They may be able to practice personal NPIs before, during, and after their trip to reduce their perception of risk without prescription protection from vaccines (Kement, Çavuşoğlu, Demirağ, Durmaz, & Bükey, 2020). Thus, H10: Perception of COVID-19 has a negative impact with desire to travel, H11: Perception of COVID-19 has a positive impact with willingness on adopting NPI, H12: Perception of COVID-19 has negative impact with travel intention, H13: Willingness to adopt NPI has positive impact with travel intention.

Situational dependency has a direct impact on the usage or intention to use SSTs in real life. It defined as the degree to which people view it as helpful to rely on SST due to situational considerations such as time, use methods, and task processing (Yoon & Choi, 2020). Touchless facilities lower the risks and encourage the visitors to experience the new era of the tourism and hospitality industry. Thus, H14: Perception of COVID-19 has positive impact with the intention to use SST, H15: Willingness to adopt NPI has positive impact with the intention to use SST, H16: The intention to use SST behavior have a positive influence on desire.

2. RESEARCH METHODOLOGY

Quantitative primary data collection in this study was conducted by distributing surveys in the form of questionnaires to respondents. Target population were Indonesians with the aim of traveling

domestically during COVID-19 or after travel restrictions have been lifted and who has been travel before COVID-19. An unrestricted, self-selected survey was conducted using online survey tool. This is a convenience sampling method (as a non-probability approach). To ensure the questionnaire's understandability, scholars and domestic travelers were asked to assess the measurements as the first test. Afterwards, conducting a pretest with 30 respondents. The pre-test conducted through the validity test and reliability test with parameters such as Cronbach Alpha and Kaiser-Meyer-Olkin (KMO) Measure. The questionnaire distributed to 334 respondents. Collected data were analyzed with AMOS 24. The structural equation modeling used a two-step hybrid method by specifying a measurement model in the confirmatory factor analysis and testing a latent structural model developed from the measurement model (Lee et al., 2012).

3. RESULT

3.1 Pre-test

The pre-test was conducted by distributing questionnaires to 30 respondents to determine whether the questionnaire feasible to use in this study. The collected data is processed using IBM SPSS 25. All variables with Cronbach Alpha ranging from 0.691 to 0.966 meaning it has passed the validity test and KMO ranging from 0.477 to 0.846. On the PC variable the KMO value is only 0.477, yet the loading items on this variable are above 0.5. This value is sufficient to indicate that an indicator is valid and can be used. Supported by the previous journal of Prasetyo, Masrukan, and Sunawan (2019) due to the limited number of respondents in the pre-test (30 people) so that the results are small. It is hope will be improved in main test (Prasetyo, Masrukan, & Sunawan, 2019). Therefore, no indicators were changed or eliminated.

3.2 Demographic Characteristic

The total respondents that filled in the questionnaire are 334 respondents that has been distributed through social media for 1 week (4 – 11 April 2021). The demographic profile of respondents' summary such as, the proportion of male and female respondents was 51.5% and 48.5% respectively, most respondents (57.19%) were aged 30-39 years, and university graduates predominated (68.86%). The majority marital status (66.77%) was married. Most respondent occupation level (63.47%) was employed, and most respondents (46.41%) indicated that leisure was their main reason for travel. The model was analyzed using AMOS 24 to establish the degree of reliability and validity of the confirmatory factor analysis which was composed of 46 observed variables and 10 latent variables.

3.3 Measurement Model

Construct	Confirmatory Factor Analysis												
	AT	SN	PAE	NAE	PBC	DE	PC	NPI	SST	TI	CR	AVE	
Attitude (AT)	<i>0.866</i>										0.947	0.750	
Subjective Norm (SN)		<i>0.793</i>	<i>0.895</i>								0.941	0.802	
Positive Anticipated Emotion (PAE)			<i>0.626</i>	<i>0.622</i>	<i>0.965</i>						0.982	0.931	
Negative Anticipated Emotion (NAE)				<i>0.411</i>	<i>0.387</i>	<i>0.486</i>	<i>0.911</i>				0.951	0.829	
Perceived Behavioral Control (PBC)					<i>0.595</i>	<i>0.65</i>	<i>0.616</i>	<i>0.323</i>	<i>0.806</i>		0.900	0.650	
Desire (DE)						<i>0.62</i>	<i>0.651</i>	<i>0.644</i>	<i>0.409</i>	<i>0.598</i>	<i>0.950</i>	0.973	0.902
Perception of COVID-19 (PC)							<i>-0.423</i>	<i>-0.496</i>	<i>-0.248</i>	<i>-0.218</i>	<i>-0.354</i>	<i>-0.418</i>	<i>0.690</i>
Non-Pharmaceutical Intervention (NPI)								<i>0.01</i>	<i>-0.044</i>	<i>0.099</i>	<i>-0.061</i>	<i>0.063</i>	
Self-Service Technology (SST)									<i>-0.01</i>	<i>-0.069</i>	<i>0.026</i>	<i>-0.016</i>	
Travel Intention (TI)										<i>-0.016</i>	<i>0.068</i>	<i>0.135</i>	
											<i>0.354</i>	<i>0.859</i>	
												0.932	
												0.738	
												0.983	
												0.935	

Figure 1. Results of measurement model.

Confirmatory Factor Analysis are estimates using AMOS 24

CR: Construct Reliability; AVE: Average Variance Extracted

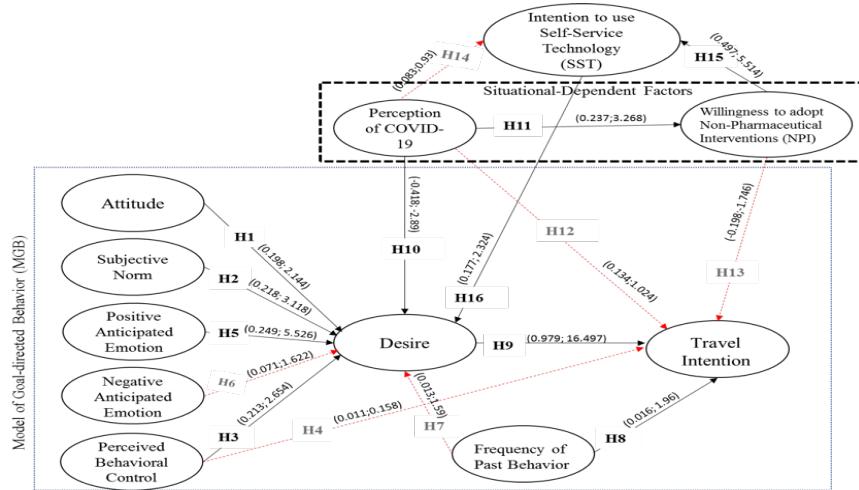
Frequency of past behavior was not included in the measurement model because it was single indicator

Reliability test can be seen below in Figure 1, we can conclude that all variables (CR and VE) passed the reliability testing. Only one variable on Perception of COVID-19 (PC) that has VE Score 0.476. According to Fornell and Larcker (1981), the variable of Perception of COVID-19 the AVE below 0.50 could be considered if CR is above 0.70 and the result of this study of CR in Perception of COVID-19 is 0.811. Hence, the variable of Perception of COVID-19 was retain and considered as reliable. Discriminant validity which is verified if the square root of the AVE for the construct is higher than its correlation with all other latent variables (Fornell & Larcker, 1981). Figure 1, shows that the square roots of the extracted AVE for each latent variable are all above the values for the correlation between the constructs. This ensures that the measurement model has discriminant validity.

4. Hypothesis Testing

HYPOTHESIS	VARIABLE	Estimate	S.E.	C.R./t. value \geq 1.96	P < 0.05	RESULT
H1	DE <--- AT	0.198	0.092	2.144	0.03	Significant
H2	DE <--- SN	0.218	0.07	3.118	0.00	Significant
H3	DE <--- PBC	0.213	0.08	2.654	0.01	Significant
H4	TI <--- PBC	0.011	0.072	0.158	0.88	Not Significant
H5	DE <--- PAE	0.249	0.045	5.526	***	Significant
H6	DE <--- NAE	0.071	0.044	1.622	0.11	Not Significant
H7	DE <--- FOP	0.013	0.008	1.59	0.11	Not Significant
H8	TI <--- FOP	0.016	0.008	1.96	0.05	Significant
H9	TI <--- DE	0.979	0.059	16.497	***	Significant
H10	DE <--- PC	-0.418	0.145	-2.89	0.00	Significant
H11	NPI <--- PC	0.237	0.073	3.268	0.00	Significant
H12	TI <--- PC	0.134	0.131	1.024	0.31	Not Significant
H13	TI <--- NPI	-0.198	0.114	-1.746	0.08	Not Significant
H14	SST <--- PC	0.083	0.089	0.93	0.35	Not Significant
H15	SST <--- NPI	0.497	0.09	5.514	***	Significant
H16	DE <--- SST	0.177	0.076	2.324	0.02	Significant

Figure 2. Results of hypothesis testing



Chi Square/df: 1.8331; RMSEA: 0.050; GFI: 0.813; CFI: 0.94; NFI: 0.88; TLI: 0.935; IFI: 0.941; PGFI: 0.712; PNFI: 0.802

As shown in fig.2, five predictor variables (attitude, subjective norm, PAE, PBC, and the intention to use SST) in the EMGB were positively associated with desire to travel domestically. This means an individual's desire is influenced by these five predictor variables. However, the findings indicate that NAE, and FOP did not have a significant influence on desire. Thus, hypothesis H1, H2, H3, H5, H16 were accepted but H6 and H7 were rejected. And to note on Hypothesis 10, the findings is influence negatively because the t values is -2.89 so the Hypothesis from Perception of COVID19 has a negative impact with desire to travel become Perception of COVID19 has a positive impact with desire to travel. Thus, hypothesis H10 were accepted. The relationships between the perception of COVID-19 and NPI were found positive and significant. Therefore, H11 was supported. The relationship between perception of COVID-19 and intention to use SST, were found negative and not significant, thus H14 were rejected. The relationship between NPI and the intention to use SST were found positive and significant, thus H15 were accepted. Two predictor variables (desire and FOP) were positively associated with intention to travel domestically. Thus, hypothesis H8 and H9 were accepted. Three predictor variables (PBC, perception of COVID-19 and NPI) were negatively associated with intention to travel domestically. Thus, hypothesis H4, H12, and H13 were rejected.

4. CONCLUSION

From this study, it was found that the Extended Model of Goal-directed Behavior (EMGB) which includes the construct of desire as mediator, which took into account volitional factors (attitude and subjective norm), non-volitional factors (PBC, perception of COVID-19, and NPI), emotional factors

(PAE and NAE), and past behavior frequency. The result found are Attitude, Subjective Norms, PAE, PBC and intention to use SST have a significant effect on desire which plays important role to the intention to travel on domestic trips during the COVID19 pandemic. It also found that the FOP has a positive impact on travel intention. Therefore, it was discovered that the FOP has a favorable effect on travel intention. This research is complex and tortuous, essentially the tendency to fear being exposed to COVID-19 in Indonesia is high so that the desire is low towards the desire to travel intention. However, if we look at the theoretical framework that explain the decision-making process, it was found that PAE played an important role with an estimate value of 0.249 and a t-value/C.R of 5.526, this demonstrates that people can make the decision to travel by anticipating the risks that present in the COVID-19 situation. It is also found that NPI significantly impacted intention to use SST that directly influence desire and indirectly impacted intention to travel. Therefore, it is important for stakeholders to emphasize PAE by increasing communication and educating potential travelers about traveling during the COVID-19 pandemic by obeying self-mitigation with the NPI and by using SST at the airport. For example, by educating prospective travelers about the health protocol footage of COVID-19 on social media owned by stakeholders, also Health protocols using SST. So that, potential travelers may feel safe while traveling by establishing a tight NPI protocol and SST that can assist them in self-check-in, self-baggage, and self-service.

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Identification of Financial Statement Fraud Using F-Score Analysis

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ABSTRACT

This study aims to examine the elements of fraud stated in the Pentagon Fraud Theory to detect a fraud in a company's financial statements. In this study, fraud pentagon is proxied by ten variables consisting of four elements of pressure (external pressure, financial stability, financial targets, and personal financial need), three variables of opportunity (ineffective monitoring, nature of industry, and quality of external audit), one variable of rationalization (change of auditor), one variable of capability (change of directors), and one variable of arrogance (frequent number of CEO's picture displays). The variables are hypothesized to have influences on the occurrence of fraudulent financial statements. This study uses F-Score to determine fraud in financial statements. The population of this study is manufacturing companies listed in Indonesian Stock Exchange in the period of 2015 - 2017. The sampling technique is a purposive sampling of 103 companies. Furthermore, the hypothesis was tested using t-test. The results show that financial targets, financial stability, external pressure, ineffectiveness in monitoring, external auditor quality, auditor turnover, change of directors, number of displayed CEO photographs have significant and positive effects on the existence of fraudulent financial statements.

Keywords: Financial statement fraud, fraud pentagon, F-scores, change of directors, number of photos displayed.

1. INTRODUCTION

Financial statements are an organization's information on its accounting results to be communicated with the organization's internal and external parties. In case that there is a misrepresentation in the financial statements due to fraud, the information becomes irrelevant to be used as a basis for decision making since the information is false. There are many contributing factors of fraud, and each researcher holds different perceptions toward it. Cressey (1953) presented three driving elements of fraud, namely pressure, opportunity, and rationalization. Those three elements were coined as Fraud Triangle Theory. Handersen (2004) develops the Fraud Triangle Theory into Fraud Diamond Theory by adding an element of capability. Crowe (2011) expands the Fraud Diamond Theory by adding one more element, i.e. arrogance. The Theory is then renamed into Fraud Pentagon Theory. The aim of this study is to analyze whether financial stability, external pressure, financial target, nature of industry, ineffective monitoring, quality of external audit, change of auditor, change of directors dan frequent number of CEO's picture displays can be used to detect financial statement fraud.

2. THEORETICAL REVIEW AND HYPOTHESIS DEVELOPMENT

2.1 Agency Theory

Jensen and Meckling (1976) explains that Agency Theory is a contract involving one or more people where a principal delegates his authority to make the best and accurate decisions to a manager as an agent. The conflict of interests between principal and agent occurs due to the possibility of agent to act not in accordance with the principal's expectation, which is to gain maximum profit (Norbarani, 2012).

2.2 Financial Statement Fraud

Australian Auditing Standard (AAS) defines financial statement fraud as a deliberate act or negligence in disclosing financial statements to deceive the financial statement users (Brennan & Mary, 2007). Additionally, American Institute of Certified Public Accountants (2002) states that financial statement fraud is a negligence or intentional act resulting in a misrepresentation of financial statements to deceive the financial statement users.

2.3 Fraud Pentagon

This theory was established by Howart in 2011. Fraud Pentagon Theory is an expansion of Fraud Triangle Theory which was previously created by Cressey in 1953, and Fraud Diamond Theory developed by Wolfe and Hermanson in 2004. Fraud Pentagon Theory adds two more elements to fraud, namely competence and arrogance (Herviana, 2017). The reason for developing this theory is that this current era's fraud is more equipped with vast information and more access to the enterprise assets which did not take place during the Cressey's era (Kurnia & Anis, 2017). Fraud pentagon consists of five elements: pressure, opportunity, rationalization, capability, and arrogance

In accordance to Loebbecke, Eining, and Willingham (1989), SAS No. 99 (AICPA, 2002) states that when a company's financial stability condition is threatened by an economic, industrial, or another situation, the management as an agent responsible to manage the company's assets will face pressure or temptation which might lead them to manipulate the financial statements related to assets. Based on the assumption, the hypothesis of this research is formulated as follows. H1: Financial stability positively affects the potential of financial statement fraud. One of the external pressure sources is the condition when there is a need to increase the company financial source for the performance improvement, but the company struggles with the credit requirements and concerns if it cannot repay the debts when they are mature (Skousen *et al.* 2008). Based on the description, the next hypothesis is H2: External pressure positively affects the potential of financial statement fraud. SAS No. 99 (AICPA, 2002) explains that financial target exerts an extensive risk for the management in reaching a specific target financially which has been set up by the board of directors, including the target of incentives from sales and profit. Referring to the description above, the hypothesis is formulated as follows. H3: Financial target positively affects the potential of financial statement fraud.

Nature of industry is an ideal condition of an enterprise in the industrial environment. One of the nature of industry elements is company receivables condition and each company manager might have different responses corresponding to it. Nature of industry can lead to potential financial statement fraud, which means that the higher the nature of industry value, the stronger the possibility of financial statement fraud conducted by the management. The description above underlies the following hypothesis. H4: Nature of industry positively affects the potential of financial statement fraud. Ineffective monitoring is a form of weak supervision which opens an opportunity for a manager to conduct fraud and unethical behaviour. SAS No. 99 states that ineffective monitoring by a party that is responsible for the financial reporting and internal control management can trigger fraud. Lack of control from a company becomes an opportunity for several parties to manipulate the financial statement data. Based on the abovementioned explanation, the hypothesis is as follows. H5: Ineffective monitoring positively affects the potential of financial statement fraud. Audit quality can be defined as an auditor's capability to locate fraud in a client's financial statements and report the fraud. (De Anggelo in Siddiq *et al.* 2017). In this study, the variable of external audit quality is proxied with the reputation of auditors, namely *Big Four* and *Non-Big Four*. Lennox and Pittman (2010) in Siddiq *et al.* (2017) assume that if a company uses the service of one of the *Big Four*, it is very likely that financial statement fraud can be detected because the *Big Four* have more capable human resources. The description thus becomes the basis of the hypothesis formulation as follows. H6: Quality of external audit positively affects the potential of financial statement fraud.

Rationalization is a self-justifying behaviour for a wrongdoing perpetrated. In this study, rationalization is proxied with change of auditor. Change of auditor is a substitution for an external auditor in a company to audit the company. From the audit process, a fraudulent company can be detected. If a company does not substitute the previous auditor, it is likely that the auditor understands the company's

business risks and processes, and he can even detect any possible fraud perpetrated by the company. Based on the assumption, the hypothesis is formulated as follows. H7: Change of auditor positively affects the potential of financial statement fraud. This change can also be intended as a particular political interest to dethrone the former board of directors (Tessa & Harto, 2016). Therefore, the change of board of directors might be an attempt of a company to rule out the board of directors which might find out the fraud perpetrated by the company. This assumption underlies the next hypothesis. H8: Change of directors positively affects the potential of financial statement fraud. Frequent number of CEO's picture displays is the perpetual displays of a CEO of a company, which may also take different forms other than picture, such as profile, achievement, or other information related to the CEO track record, in the company's annual financial statements (Crowe, 2011). Tessa and Harto (2016) argue that the frequency of CEO picture display in a company's annual report may represent the level of arrogance or superiority of the CEO. This conforms the element of a theory introduced by Crowe (2011), namely arrogance. The high level of arrogance can lead to a fraud because this indicates that a CEO will do anything to defend his current position (Tessa dan Harto, 2016). This argument becomes the basis of the hypothesis as follows. **H9:** Frequent number of CEO's picture displays positively affects the potential of financial statement fraud.

3. RESEARCH METHOD

The population of this study is all financial statements of all manufacturing companies listed in Indonesian Stock Exchange during 2015-2017. The reason the researcher chooses manufacturing companies listed in Indonesian Stock Exchange as the object of research is because manufacturing companies are larger-scale companies when compared to other companies. The sampling technique is purposive sampling. Using the criteria as follows: (1) Manufacturing company listed in the Indonesian Stock Exchange period of 2015-2017; (2) Having published its annual financial statements on the company website or Indonesian Stock Exchange website during 2015-2017; (3) Having disclosed the data related to the research variables which are completely available in the publications of the period 2015-2017; (4) Not being delisted from Indonesian Stock Exchange during the period 2015-2017; and (5) Not changing sector during the observation period of 2015-2017.

Table 1. Research variables

Variable	Proxy	Reference
Potential of fraud	$F\text{-SCORES} = Accrual\ Quality + Financial\ Performances$	
Financial stability	$ACHANGE = (Total\ Assets\ t - Total\ Assets\ t-1) / Total\ Assets\ (t-1)$	Skousen, etc. (2008)
External pressure	$Debt\ to\ Assets\ Ratio = Total\ Debt / Total\ Assets$	Skousen, etc. (2008)
Financial target	$ROA = Earnings\ After\ Interest\ and\ Tax / Total\ Assets$	Skousen, etc. (2008)
Nature of industry	$Inventory = Inventory_t / Sales(t) - Inventory_{t-1} / Sales(t-1)$	Ardiyani and Utaminingsih. (2015)
Ineffective monitoring	$BDOUT = Total\ Independent\ Boards / Total\ Boards$	Sihombing and Raharjo. (2014)
Quality of external audit	If the company uses the auditing service from one of BIG 4 Public Accountant Firms, it will be coded 1, otherwise it will be coded 0.	Siddiq et al. (2017)
Change of auditor	If there is a change in the appointment of Public Accountant Office, it will be coded 1, otherwise it will be coded 0.	Tiffani and Marfuah. (2015)
Change of directors	If there is a change in the structure of the company board of directors, it will be coded 1, otherwise it will be coded 0	Sihombing & Raharjo. (2014)

<i>Frequent Number of CEO's Pictures</i>	Code 1 (no display of directors' pictures), code 2 (1 to 4 pictures), code 3 (5 to 8 pictures), code 4 (9 to 12 pictures), and code 5 (13 to 16 pictures).	Tessa and Harto, (2016)
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Regression Analysis

The hypothesis testing in this study used multiple regression analysis. The relations between fraud pentagon and financial statement fraud was estimated using the equation below.

$$FRAUD : \alpha + \beta_1 LEV + \beta_2 ACHANGE + \beta_3 ROA + \beta_4 BDOUT + \beta_5 REC + \beta_6 AUD + \beta_7 CPA + \beta_8 DCHANGE + \beta_9 CEO's Pictures + e$$

The goodness of fit value of the model was estimated using F-test, determinant test, and T-test.

DATA ANALYSIS FINDINGS

The research population is manufacturing companies listed in Indonesian Stock Exchange of the period 2015 – 2017. The sample consisted of 103 companies with the number of observation 309. Below is the recapitulation table of the hypothesis testing results.

Table 1. Recapitulation of Hypothesis Testing Results

Hypothesis	Statement	B	Sig	Result
1	Financial stability (<i>ACHANGE</i>) positively affects financial statement fraud (<i>FRAUD</i>).	.640	.000	Supported
2	External pressure (<i>Lev</i>) positively affects financial statement fraud (<i>FRAUD</i>).	.001	.037	Supported
3	Financial targets (<i>ROA</i>) positively affect financial statement fraud (<i>FRAUD</i>).	.003	.823	Not supported
4	Nature of industry (<i>INV</i>) positively affects financial statement fraud (<i>FRAUD</i>).	.001	.849	Not supported
5	Ineffective monitoring (<i>BDOUT</i>) positively affects financial statement fraud (<i>FRAUD</i>).	.320	.049	Supported
6	Quality of external audit (<i>CPA</i>) positively affects financial statement fraud (<i>FRAUD</i>).	.187	.487	Not supported
7	Change of auditor (<i>AUD</i>) positively affects financial statement fraud (<i>FRAUD</i>).	.268	.362	Not supported
8	Change of directors (<i>DCHANGE</i>) positively affects financial statement fraud (<i>FRAUD</i>).	.275	.349	Not supported
9	Frequent number of CEO's picture displays (<i>CEO</i>) positively affects financial statement fraud (<i>FRAUD</i>).	.377	.031	Supported

Based on the results in the table above, the regression equation of the model is:

$$\begin{aligned} \text{FRAUD} = & 1.042 + 0.001 \text{ LEV} + 0.640 \text{ ACHANGE} + 0.003 \text{ ROA} + 0.320 \text{ BDOUT} + 0.001 \text{ REC} + 0.268 \\ & \text{AUD} + 0.187 \text{ CPA} + 0.275 \text{ DCHANGE} + 0.377 \text{ CEO's Picture} \end{aligned}$$

CONCLUSION

Referring to the analysis results, it can be concluded that financial stability, external pressure, ineffective monitoring, frequent number of CEO pictures displays positively affect the potential of financial statement fraud, while financial targets, nature of industry, quality of external audit, change in auditor, change in directors do not affect the potential of financial statement fraud.

This study is expected to benefit for agencies there needs to be an appropriate punishment for deviant employee behavior. Appropriate punishment will reduce a person's intention to take actions that tend to be accounting fraud. The existing penalties are expected to provide a different effect on the perpetrators of fraud so that it will reduce the occurrence of fraudulent acts in the company or agency, the investors as a basis to make an investment decision since the aspects can be used to measure the capability of an enterprise to yield profits in return for the investment already invested in the company. In addition, the research findings are to benefit the creditors as a consideration to ponder for credit grant to a company.

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The Effect of Concentration of Ownership and CEO Characteristics on the Disclosure of Sustainable Development Goals (SDGs)

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ABSTRACT

The Sustainable Development Goals (SDGs) have attracted the attention of various business organizations and become an important issue in corporate sustainability communication to the stakeholders. This study investigates the effect of ownership concentration and characteristics of CEO such as gender, age, expertise, and tenure on the SDGs Disclosure and whether the effects are different between High-Profile Industry and Low-Profile Industry. To measure SDGs disclosure, this study used content analysis of the Sustainability Report by mapping with the SDGs target. Using Indonesian context from 2017 to 2020, this study finds that concentrated ownership and younger CEO has a significant effect in increasing SDGs disclosure. For companies in the High-Profile Industry, the concentration of ownership and CEO has an educational background in financial accounting and/or business experience in the same industry as the company's industry that has a significant influence. This study implies that company size, intangible assets, and commitment to sustainability are important factors in SDGs disclosure.

Keywords: SDGs Disclosure, Concentrated Ownership, CEO Leadership, Industry Type, Sustainability Reporting

1. INTRODUCTION

Ownership structure can explain corporate governance issues including managerial power, monitoring of shareholders, and corporate disclosure policies and decisions. Concentrated ownership with dominant control obtained through the number of shareholdings is considered to have more control over the policies taken by management (Jensen & Meckling, 1976) that shareholders with a large amount of ownership will have incentives and the ability to control and monitor managers. Disclosure significantly reduces the risk of information asymmetry associated with ownership concentration for companies with management-controlled ownership structures (Alves et al., 2015; Jiang et al., 2011).

Business organizations have a higher likelihood of SDG engagement if there is a commitment to a sustainability framework and external assurance (Rosati & Faria, 2019). This indicates the owner's or shareholder's commitment to support sustainability practices and SDGs disclosure. Shareholder commitment which has been proven to have a significant effect shows the role of the owner in the SDGs needs to be investigated more deeply to find out what ownership characteristics are influential, and also in the context of Indonesia which has a high concentration of ownership (Claessens et al., 2000), whether the more concentrated organizational ownership will be increase the disclosure of the SDGs? In Indonesia, the SDGs are still voluntary, based on Presidential Regulation (PERPRES) Number 59 Year 2017 on the Implementation of Sustainable Development Goals, involvement of business organizations against SDGs called philanthropy, so this research contributes to see the role of the owner/shareholder in committed with SDGs.

In the organization's business processes, governance plays a role in identifying risks and opportunities, strategies and resource allocation arrangements, measuring performance in order to achieve the vision

and mission that has been set to produce business process outputs that have an impact (outcomes) on the SDGs (Adams, 2020). The importance of top management such as CEO which is one of the governance components that influence SDGs initiatives (van der Waal & Thijssens, 2020), so it is necessary to further investigate the characteristics of CEOs that affect the SDGs, and CEO is one component of governance that can be tested in all industries. Executive leaders such as CEOs affect the company's sustainability performance (Naciti, 2019), and associated with Upper Echelons Theory/UET (Hambrick & Mason, 1984) that company performance results from executive strategic decisions (including sustainability practices) which are influenced by their psychological attributes such as age, business experience, education, tenure. Representation of women in leadership related to corporate social responsibility can help companies in improving their social goals and can explain their future social performance (Jiang et al., 2011; Lu & Wang, 2021).

Industry classification can capture systematic relationships between industry characteristics (Roberts, 1992), companies in High-Profile Industry (such as communication services, energy, health care, industrials, chemicals, construction materials, paper & forest products) with characteristic such as high consumer visibility, tight competition, high regulatory risk, high and unique social pressures are expected to have social responsibility with higher disclosures, and Low-Profile Industry on the contrary. Characteristics such as company size, and industry sector drive the corporate social responsibility reporting agenda (Reverte, 2009). Industry type is considered to be able to influence the disclosure of SDGs, and also indicates that the influence of ownership concentration and CEO characteristics will be different, can be stronger, weaker, or not influential, depending on the type of company industry.

Further discussion is needed on whether ownership concentration and CEO characteristics (such us gender, age, expertise, and tenure) have different effects on the disclosure of SDGs in certain types of industries because each type of industry has unique differences which will be tested with the High-Profile Industry and Low-Profile Industry Sub-Sample approach using listed firm in Indonesia Stock Exchange (IDX).

2. HYPOTHESIS DEVELOPMENT

Agency theory predicts agency problem-information asymmetry (Jensen & Meckling, 1976), thus business organizations will perform corporate disclosure to reduce that matter. Disclosure of SDG which provides quantitative information along with the narrative is a tool to overcome the information asymmetry between them which is expected to strategically improve long-term outcomes for the business and also normatively a socially responsible thing to do. Concentrated ownership through dominant voting rights can influence and force management in the practice of disclosing the SDGs. Therefore, the following testable hypothesis: *H₁: Concentrated Ownership has a positive effect on the SDGs disclosure.*

Stewardship Theory (Davis et al., 2018; Donaldson & Davis, 1991) views that managers are not motivated by their individual goals and behave in harmony with the owner's goals, UET explains that organizational performance comes from the strategic decisions of corporate executives which are influenced by their psychological attributes such as age, other career experiences, education. It can be assumed that a Steward CEO will make strategic decisions, including the SDGs, which will have an impact on the interests of stakeholders and the company's performance. To understand why a business organization has the motivation to engage in corporate social responsibility, it is necessary to consider the character of the individual who makes the decision (Harjoto et al., 2020), and also women's representation helps companies achieve corporate social goals. The following testable hypothesis: *H₂: Female CEO leadership has a positive effect on the SDGs disclosure.*

Younger CEOs are more likely to take business risks (Faccio et al., 2016), and invest in corporate social responsibility, especially in the diversity and humanitarian categories (Borghesi et al., 2014). Younger CEOs are more likely to favour corporate social responsibility initiatives and reach out to their managers and employees for innovative ideas that are worth research, development, and investment. CEO's business experience can also be measured by age, older CEOs have additional experience, appropriate

decision-making skills (Bantel & Jackson, 1989), thus making them concentrate on safe ways of doing business and are reluctant to take any business risks such as creative business ideas. corporate social responsibility activities (Vroom & Pahl, 1971). Therefore, the following testable hypothesis: H_{2b} *CEO age has a negative effect on the SDGs disclosure.*

Consistent with the Upper Echelon Theory framework that educational background is considered an important determinant of personal values and cognition, and both the level and type of education should have an impact on an individual's patterns of thinking and affective reactions (Wei et al., 2018). expertise in this research is seen from those who have business experience in the same industry as their company's industry and/or have an educational background in financial accounting. Expert CEOs tend to be more aware and understand corporate practices and disclosures of sustainability to achieve legitimacy goals and also have a high probability of supporting stakeholder perspectives. interests related to sustainability. Therefore, the following testable hypothesis: H_{2c} *Expertise of CEO has a positive effect on the SDGs disclosure.*

CEOs who have a long relationship with the company are more likely to build good relationships with stakeholders over time and accumulate power. Strong CEOs are more involved in corporate social responsibility practices to benefit themselves and their companies as did (Wei et al., 2018). Certain periods/times spent in certain positions make them more responsible, organized, confident, autonomous, and strategically aware (Malik et al., 2020). In terms of use, it can be assumed that older CEOs will maintain good relations with stakeholders and seek to improve their welfare through long-term impacts on the company and stakeholders. Therefore, the following testable hypothesis: H_{2d} *Tenure of CEO has a positive effect on the SDGs disclosure.*

Legitimacy Theory (Dowling & Pfeffer, 1975) explain that the company is under legitimate pressure from the environment/industry of the company. Companies with high industry profiles are expected to have social responsibility with higher disclosures (Reverte, 2009; Roberts, 1992), which indicates that the type of industry affects the disclosure of the SDGs and also has an impact on the effect of ownership concentration and CEO characteristics, different, getting stronger or weaker, and may not have an effect depending on the type of industry. Therefore, the following testable hypothesis: H_3 *The effect of concentrated ownership on the SDGs disclosure differs between industry types;* H_{4a} *The effect of female CEO on the SDGs disclosure differs between industry types;* H_{4b} *The effect of CEO age on the SDGs disclosure differs between industry types;* H_{4c} *The effect of Expertise of CEO on the SDGs disclosure differs between industry types;* and H_{4d} *The effect of Tenure of CEO on the SDGs disclosure differs between industry types.*

3. RESEARCH METHODOLOGY

3.1 Sample Selection

The sample for this study use companies listed on the IDX over the 2017-2020 periods (adjusted to implementation the SDGs in Indonesia which began in 2016 and disclosed in 2017), not include state-owned enterprises (SOE), and publishes Annual Reports and the Sustainability Report (SR) using the Global Reporting Initiative (GRI) reporting framework. Industries refer to the GICS (Global Industry Classification Standard). Determining the type of industry by combining previous research (Roberts, 1992; Sembiring, 2006), which is grouped into High-Profile Industry and Low-Profile Industry. Of 686 companies there, the final sample obtained by 67 companies in various industry types, 46 companies in the High-Profile Industry, and 21 companies in the Low-Profile Industry, some of them do not always publish SR every year so that unbalanced panel data is obtained.

3.2 Research Design

This study uses data panel regression. Content analysis of the SR was performed for the dependent variable, and independent variables were collected from Annual Report and Thomson Reuters database. Consider the time lag between explanatory factor measures and the SDGs disclosure (Roberts, 1992) as they relate to meeting the long-term interests of stakeholders, and the fact that social disclosure relates primarily to past social responsibility activities, to examine the effect among ownership

concentration, characteristic of CEO to SDGs Disclosure and the difference in their effect on High-Profile Industry dan Low-Profile Industry with the following model (1):

$$SDGD_i,t = 0 + 1CON_i,t-1 + 2FemCEO_i,t-1 + 3AgeCEO_i,t-1 + 4ExpCEO_i,t-1 + 5TenCEO_i,t-1 + \beta_6FirmAGE_i,t-1 + 7LnTA_i,t-1 + 8EBITDA_i,t-1 + 9TQi,t-1 + 10EAsi,t-1 + 11ISFi,t-1 + i,t-1 \quad (1)$$

Regarding the multicollinearity problem when moderating the Industrial Type Dummy, testing the influence of the industry type was carried out using a Sub-Sample approach (High-Profile Industry and Low-Profile Industry) to see the difference in the effect of the independent variable on the dependent variable between industry types (testing the model with the interaction of dummy Industry variable has been done previously and got omitted results on several independent variables and indicated high multicollinearity problems).

3.3 Measurement of Variables

Variable ***SDGD*** is SDGs Disclosure index, measured by several steps. First, perform mapping the disclosed GRI Standards linked to SDGs (see <https://www.globalreporting.org>). For example, SDGs No. 1 is represented by seven GRI Standards: 202-1; 203-2; 207-1 207-2 207-3 207-4; and 413-2. Each GRI Standard disclosed is given a score of 1 (one) and a score of 0 (zero) otherwise. Second, sum up the disclosures in the first stage then divided them by the number of GRI Standards that measure each of the SDGs. For example, to calculate SDGs No. 1, if only three GRI Standards are disclosed (e.g. 201-1, 203-2, 413-2), the score is $3/7 = 0.43$. Third, adjusting the score in the second step with the disclosure of material topics of the GRI Standards. Overall, there are eighty material topics. The material topics disclosed are given a score of 1 (one) and a score of 0 (zero) otherwise. The proportion of material topics is calculated by the number of material topics disclosed by the company divided by the total material topics. This proportion in this measurement considers that most of the companies in the sample use the Core Option (only presenting relevant GRI Standards) so that the disclosure is highly dependent on the number of material topics selected, the greater number of material topics, more SDGs indicators that can be expressed in the SR. The final stage calculates the SDG disclosure index by multiplying the value in the second stage by the proportion of material topics in the third stage. The larger index showing the greater SDGs disclosure.

Variable ***CON*** is concentrated ownership, consistent with previous research (Jiang et al., 2011), measured with formula ***CON= i=InSi2***, where ***n*** is the top five largest shareholders including financial institutions, shareholders in companies (directors and executives) and other outside block shareholders; ***S*** is the percentage of shares owned by each of the top five largest shareholders in the annual report. Larger values indicate more concentrated ownership. Characteristic CEO based on the Upper Echelon Theory framework which is measured by the psychological attributes of the CEO (Liu & Nguyen, 2020; Wei et al., 2018; Zhou et al., 2021; Zona, 2014). ***AgeCEO*** is executive age, ***ExpCEO*** is dummy variable that 1 for CEO with a financial accounting education background and/or business experience in the same industry as the company's industry, and 0 otherwise. ***FemCEO*** is a dummy variable that 1 for females and 0 otherwise, the presence of female CEOs can help companies achieve corporate social goals (Harjoto et al., 2020), and ***TenCEO*** is CEO tenure. Several independent variables such as ***AgeCEO*** and ***TenCEO*** are converted into Natural Logarithmic forms to reduce excess digits.

Control variable refers to previous studies (Roberts, 1992; Rosati & Faria, 2019; Van Marrewijk & Werre, 2003) and considers the suitability of the variable with various industries, (1) Company Size as measured by company age (***FirmAGE***), ***EBITDA*** and Natural Logarithm of Total Assets (***LnTA***). (2) Intangible Assets measured using Tobin's Q (***TQ***), this measure is an indicator of a superior organization and is difficult to codify, making it difficult to obtain, develop, and replicate internally and by other organizations. (3) Sustainability Commitment as measured by additional sustainability frameworks (***SF***) such as the Carbon Disclosure Project (CDP), United Nation Global Impact (UNGC), International Finance Corporation's (IFC's) Sustainability Framework, and external verification/assurance (***EAs***) in the SR.

4. EMPIRICAL RESULT

4.1 Descriptive Analysis

Based number of disclosure, SDG No. 9 was the most disclosed by companies on average, followed by SDG No. 4 and SDG No. 11. Based on industry profiles shows companies in the High-Profile Industry have a higher number of disclosures than companies in the Low-Profile Industry, in line with previous research that companies in the High-Profile Industry have a higher level of disclosure (Roberts, 1992). The two industry profiles also have relatively the same disclosure pattern. Descriptive statistics show that the average SDGD index is 1,726, the highest index is 8,513 and the lowest index is 0.079. From the High-Profile Industry, the average index of 1,952 is higher than the All Industry sample, and the average index of the Low Profile is 1,125 lower than the All Industry and High-Profile Industry samples.

4.2 Regression Analysis

The results of hypothesis testing are in table 1. Using the entire sample (all industries) shows that Concentrated Ownership has a positive effect on the disclosure of SDGs, thus the results provide support for H_1 . This is in line with previous research that disclosure significantly reduces the risk of information asymmetry associated with ownership concentration for companies with management-controlled ownership structures (Alves et al., 2015; Jiang et al., 2011). This finding also proves the effect of concentrated ownership through the perspective of Agency Theory that SR is a tool to prevent information asymmetry between shareholders and management, that concentrated ownership through dominant voting rights can influence management in the disclosure of SDGs in the company's SR. Female CEOs were found to have no effect, thus not support for H_{2a} . CEO age was found to have a positive effect thus provide support for H_{2b} , while CEO's Expertise and CEO tenure did not affect so that does not support H_{2c} and H_{2d} . Some result in line with UET that the company's performance including the disclosure of SDGs is the result of the collective choice of company executives as decision makers which can be measured through psychological attributes, and also in line with previous research that CEO affects the company's sustainability performance (Naciti, 2019).

Sub-Sample testing found different things. The effect of Concentrated Ownership with the disclosure of SDGs is only found in the High-Profile Industry, thus provide support for H_3 . Female CEOs were found to no effect on both types of industry so that H_{4a} is not proven. CEO age was found only affect the Low-Profile Industry, so H_{4b} is proven. CEO with financial accounting education level and/or business experience in the same industry as his company's industry is proven to affect only on High-Profile Industry so that support for H_{4c} . The CEO tenure is proven to only affect the Low-Profile Industry so that support H_{4d} . The difference in the effect of independent variables between industries may be influenced by the different characteristics of the industry as in previous research (Roberts, 1992) that the level of competition, visibility, regulatory risk, social responsibility activities, and social pressures causes these effects are different between industry types.

Table 1. Regression Result

Variables	Hypotheses (Expected)	All Industries			Hypothesis (Expected)	Sub-Sample	
			SDGD			High-Profile Industry	Low-Profile Industry
CON	H1 +	1.376	** (0.002)	H3	?	1.213** (0.006)	0.618 (0.239)
FemCE O	H2a +	0.291	 (0.116)	H4a	?	0.355 (0.065)	-0.049 (0.448)
AgeCEO	H2b -	7.324	* (0.015)	H4 b	?	4.967 (0.125)	2.211* (0.023)
ExpCEO	H2c +	1.516	(0.127)	H4c	?	3.843*** (0.000)	0.278 (0.253)
TenCEO	H2d +	-0.061	(0.342)	H4 d	?	-0.077 (0.361)	-0.398* (0.010)
FirmAG E	?	0.408	** (0.004)		?	0.531** (0.002)	-0.044* (0.010)
LnTA	?	-1.649	*		?	-2.070* (0.028)	-0.048 (0.406)

<i>EBITDA</i>	?	0	(0.118)	?	0	(0.293)	0	(0.450)
<i>TobinQ</i>	?	0.305	*	?	-0.274	(0.254)	0.029	(0.247)
<i>EAs</i>	?	1.159	**	?	0.988	(0.084)	0.699	(0.089)
<i>SF</i>	?	-0.071	(0.391)	?	0.117	(0.393)	0.905**	(0.006)
<i>_cons</i>		5.143	(0.41 1)		22.97	(0.231)	-4.61	(0.302)
N		150			109		41	
R-sq		0.356			0.400		0.646	
adj. R-sq		0.304			0.332		0.515	

*p-values in parentheses, * p<0.05, ** p<0.01, *** p<0.001. Differences in the effect of ownership concentration and CEO characteristics on the disclosure of SDGs between industry types tested statistically by testing the regression coefficients between sample groups (Wooldridge, 2013). With the help of the STATA "Suest Command" software (Fragment et al., 2016), it shows that the independent variables have the same average in each type of industry so that it can be concluded that in both the High-Profile Industry and Low-Profile Industry, the effect of concentrated ownership and CEO characteristics have the same effect on the disclosure of the SDGs..*

Source: Author, 2021.

5. CONCLUSION

The results of research based on all industries show that companies with concentrated ownership and have younger CEOs can increase the disclosure of SDGs. With the Sub-Sample approach, there are differences in the effect of ownership concentration and CEO characteristics on the disclosure of the SDGs, each having a different effect and but not yet supported statistically through the regression coefficient difference test between sample groups. In the context of Indonesia which has a tendency to have concentrated ownership, it shows that the company has a good commitment in achieving the SDGs which shows the transparency of the company's non-financial information. Sustainability report readers can identify the achievement of SDGs and information transparency based on the characteristics of the owner.

Companies need to pay attention to the age of the CEO so that the company's disclosure of SDGs can be increased because younger CEOs are more likely to take business risks and invest in corporate social responsibility, prefer corporate social responsibility initiatives that can increase disclosure. SDGs. Regarding the influence of company size "assets", this is related to the activities of business organizations related to organizational planning as outlined in the company's vision and mission. Organization should consider allocating its resources such as a budget for assets so that business processes produce outputs that have an impact on contributing to the SDGs. So that the SDGs to be achieved and expressed by the organization must be included in the organization's business planning through the budget for company assets

This study has several limitations. First, measurement of SDGD index using content analysis only uses a disclosure quantity approach and considers different material topics between industries. Further research can expand the measurement using disaggregation quality (DQ) which can capture the quality of disclosure (Chen et al., 2015). Second, the index measurement is done independently, which may contain subjectivity. It is recommended that measurements are also repeated by several competent and independent parties. Third, concentrated ownership and some CEO characteristics have not been shown to affect certain types of industries, there may be other variables that have a significant influence that is not accommodated in the model, and the type of industry used may not reflect conditions at the time of observation. For further research, new references are needed, especially in grouping industry profiles that consider cross-disciplinary theories such as economic theory and also consider country-level SDGs determinants.

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The Effect of Foreign Ownership on the Potential Of A Stock Crash on the 150 Largest Capitalized Stock in Indonesia Stock Exchange

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ABSTRACT

Abstract: This thesis discusses the effect of foreign ownership on the potential for crashes of 150 large-cap stocks on the Indonesian stock exchange. Using Ordinary Least Square (OLS) regression analysis, the authors find that changes in foreign ownership have a significant negative effect on the potential for crashes of 150 stocks with the largest capitalization on Indonesia Stock Exchange (IDX). This is likely due to many brokers and information that can be accessed by foreign and public investors, which makes all information and conditions related to the company become transparent for both foreign and domestic investors. Therefore, bad news hoarding, which is the leading cause of stock crashes, rarely occurs for these stocks, making foreign ownership negatively correlate with the fall of 150 stocks with the largest capitalization on the stock exchange.

Keywords: Crash, Foreign ownership, Buy and sell, Domestic investor, Stock price

1. INTRODUCTION

Several reasons motivate this research to conduct this research. First, although there is a lot of literature and theory related to stock crash risk, research or application of the theory is still minimal. Second, based on the journals the writer has read, few researchers raise the issue of crash risk or the fall of stocks in Indonesia. Therefore, The writer took the initiative to conduct more in-depth research on stock crash risk in Indonesia

This research was conducted to determine the relationship between foreign ownership and the potential for a crash of 150 stocks with largest capitalization in Indonesia stock exchange. In Indonesia, the portion of foreign ownership in the stock market has a fairly dominant portion, reaching 43.44% at the end of 2020, with the total trading value in early 2021 reaching Rp148.6 trillion. The enormous transaction value from foreign investors eventually led to assumptions from domestic investors, who considered that this significant foreign share ownership would lead to price changes in the shares.

This research is expected to be able to contribute to various parties. First, the public expects this research to increase their knowledge. Second, this research is expected to become a reference for regulators to make policies related to stock trading to prevent stock price manipulation by certain parties. Third, This research is also expected to be useful for practitioners, to not only rely on the number of foreign ownership to determine the direction of stock movement.

2. LITERATURE REVIEW

The risk of falling stock prices (crash risk) is a decline in stock prices that occurs in an extreme and significant manner in a day. This unique phenomenon is still the main attraction for researchers, investors and regulators in the last few decades. Although it has been discussed in various pieces of literature that use crash risk as a determining factor, what and how foreign investors affect crash risk is still unclear.

Research from Xuan Vinh Vo (2018), which analyzes the effect of foreign share ownership and crash risk on the Chinese stock exchange, found that changes in foreign ownership (foreign ownership) have a positive effect on the potential for future stock price falls (price crash risk). Mainly due to information asymmetry in emerging markets. Thus, we come up with the following hypothesis:

H1: Changes in foreign investor ownership have a positive effect on the potential for the price to fall of 150 shares with the largest capitalization in the Indonesian stock market

H2: Changes in foreign investor ownership have a negative effect on the potential for the price to fall of 150 shares with the largest capitalization in the Indonesian stock market

3. DATA, VARIABLE AND RESEARCH DESIGN

3.1 Data

This research is quantitative, where the author will use secondary data to perform data analysis. The data sources were obtained through Thomson Reuters, the official website of the Indonesia Stock Exchange at www.IDX.co.id and the official website of the Indonesian Central Securities Depository (KSEI) at www.ksei.co.id which will then be processed using the e-views 11 application and Microsoft excel.

The sample used in this study is 150 companies that have the largest capitalization in Indonesia stock exchange from 2016-2020. After excluding banking shares and some error data, the remaining data in this research is as follows:

Table 1. Data used for research

Description	Number of Shares
150 stocks with the largest capitalization	150
Stocks with incomplete data	(26)
Banking stocks	(25)
Number of remaining shares	99

Source: Processed by the author

3.2 Variable

3.2.1 DUVOL

To find out the week of decline or fall in a particular, fiscal year, the author uses DUVOL, known as down-to-up volatility (An and Zhang 2013; Kim et al. 2014). For each stock, the authors calculate the average standard deviation of firm-specific weekly returns to determine up weeks, which is a situation where weekly stock returns are above the average. Furthermore, the author also determines down weeks, a condition where firm-specific weekly returns are below the average. The formula for calculating DUVOL is as follows:

$$\text{DUVOL}_{n,t} = \ln(nu-1)\text{down W}_{n,t}^2(nd-1)\text{up W}_{n,t}^2 \quad (1)$$

In this indicator, the greater the value of DUVOL, the stock return distribution will be left skewed and the risk of crash risk is higher.

Table 2. Variable definitions

Variable	Definitions
Duvol	The down-to-up volatility
Lev	The ratio of total asset and total liability.
Size	The measure of the company's size
Liq	The ratio used to measure how often a company's shares are purchased

Source: Processed by the author

3.2.2 Foreign investor

Foreign here is one of the variables used to determine the relationship between foreign transactions and crash risk. Foreign referred to is the total foreign transactions, both buying and selling for a certain period. Foreign ownership is the accumulation of all foreign ownership, both individual and institutional, for each share in a certain period divided by the number of outstanding shares multiplied by one hundred percent.

The formula for calculating FOREIGN is as follows:

$$\text{FOREIGN}_{n,t} = \text{Foreign ownership}_{n,t} / \text{Outstanding shares}_{n,t} \times 100\% \quad (2)$$

3.3 Research Design

To find out the relationship between these two things, the following regression model will be used.

$$\text{DUVOL}_{n,t} = \alpha + \text{Foreign}_{n,t} + \sum_j \text{Controls}_{n,t}^j + \varepsilon_{n,t} \quad (3)$$

Where n and t are shares of stock n and year t . CRASH $_{n,t}$ is a stock crash indicator, as discussed earlier. Foreign is the proportion of all foreign ownership, for each share in a certain period divided by the number of outstanding shares multiplied by one hundred percent.. Then controls n, t is a number of control variables used to determine the potential for a stock to experience crash risk.

4. RESULT

After performing the ordinary least square regression test with a fixed-effect model, we managed to get the regression coefficient and standard error for each variable, as follows:

Table 3. OLS regression analysis with fixed model

Variable	Coefficient	Std.error	T-statistic	prob
C	-0,33	1,20	-2,76	0,00
FOREIGN	-0,00	8,45	-2,02	0,04
LEV	0,13	0,13	0,97	0,32
LIQ	-0,09	0,61	-0,15	0,88
SIZE	0,10	0,03	2,75	0,00
			F-statistic	1,90
			Prob. f-stat	0,00

Source: eviews 11

From the results of the regression output summarized in the table, it can be seen that the foreign ownership (FOREIGN) coefficient value is -2.02 with a t-count probability value of 0.04. The probability value of t-count is lower than the 5% significance level, indicating that the individual foreign ownership (FOREIGN) variable significantly affects the probability of a crash in the 150 largest capitalized stocks on the stock exchange.

While the coefficient value of foreign ownership (FOREIGN) is -2.02. This shows that every time there is an increase in foreign ownership (FOREIGN), it will cause a potential decrease in crash risk of -2.02%. This shows that the hypothesis that there is a positive and significant effect of the foreign ownership variable (FOREIGN) on the potential crash of 150 stocks with the largest capitalization is not proven.

5. CONCLUSION

Based on the research that has been done, it can be concluded that the foreign ownership variable has a significant adverse effect on the potential for crash risk in the 150 stocks with the largest capitalization on the IDX. This follows the research results by Jeong-Bon et al. (2019), which states that the entry of foreign investors does not increase the potential for stocks to experience crash risk, but can result in a decrease in the risk of falling stocks. This study shows that foreign investors can optimize the

performance of local companies, from the quality of financial reports, management to corporate decision making.

Xuan Vinh Vo (2018), in his research entitled Foreign Investors and Stock Price Crash Risk: Evidence from Vietnam, found that foreign investors have a positive relationship with future stock price crash risk. This may be because Vinh vo uses data from the Ho Chi Minh City Stock Exchange, most of which are in the category of high price volatility, lower institutional quality, and poor corporate governance, causing these stocks to have a high potential for stock crashes. This is inversely proportional to the authors who use selected stocks that are ranked as the 150 stocks with the largest capitalization on the Indonesian stock exchange, thus causing an increase in the number of foreign ownership (foreign ownership) having a negative correlation with the potential for crash risk in 150 stocks with the largest capitalization on BEI.

The subsequent research is expected to use several different regression methods and research tools so that more accurate results can be found. Regarding data, it is better if the data used is not limited to foreign ownership but also includes various other data that can affect stock crashes, such as price volatility, good corporate governance, institutional quality, and others.

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Potential Financial Statement Fraud: Hexagon Fraud Analysis

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ABSTRACT

Fraudulent financial statement in Indonesia still occur, including several state-owned companies. This study aims to examine whether the six factors in the hexagon fraud theory can be used as an early detection tool for potential financial statement fraud. The potential of fraudulent financial statements is measured by the F-Score Model. The method of determining the sample used is a non-probability sampling method with purposive sampling technique. The number of state-owned companies that listed on the IDX in 2015 – 2019 that met the criteria were 16 companies with a total of 80 observations. The analysis method used in this research is panel data regression method. The results show that the **financial stability, capability, and collusion** have a positive effect on the potential for fraud in financial statements. meanwhile the **opportunity** has a negative effect on the potential for fraudulent financial statements. So that the financial stability, capability, and collusion can be used as a preventive detection system for fraudulent financial statement.

Keywords: capability; collusion; financial stability; financial statement fraud

1. INTRODUCTION

Financial statement fraud is the deliberate misrepresentation of the financial condition of an enterprise accomplished through the intentional misstatement or omission of amounts or disclosures in the financial statements to deceive financial statement users.”(ACFE 2016). According to AICPA (2002) financial statement fraud can be done by (a) manipulating, falsifying, or changing accounting records and supporting documents of financial information; (b) deliberately misrepresenting the financial statements of transactions or other information, and (c) applying incorrect accounting principles with regard to amounts, classifications, presentation or disclosure methods.

Financial reports, which are the media for reporting the company's financial condition, are still presented incorrectly. This is done with the aim that the company's performance is assessed as good by the stakeholders. There are also Indonesian SOEs that commit fraudulent financial statements, for example PT Asuransi Jiwasraya in 2018. Public Accounting Firm Pricewaterhouse Coopers, expressed an unfair opinion on Asuransi Jiwasraya's 2017 financial statements, because the recording of debt is smaller than it should be.. If stakeholders can detect fraudulent financial statements early, this will greatly help these stakeholders. Research on the analysis of fraud theory in detecting fraudulent financial statements has been widely studied by Beasley et al. (2000), Siddiq et al (2017), Sari et al. (2020), Tessa (2016), Triyanto (2019). The results obtained are still not consistent. So, it is necessary to do further research. This study uses the fraud hexagon theory in detecting fraudulent financial statements. Whether the fraud hexagon theory can be used as an early detection tool for financial statement fraud, this is the main issue in this study.

The purpose of this study is to prove (1) the effect of pressure on the potential for fraudulent financial statements, (2) the effect of opportunity on the potential for fraudulent financial statements, (3) the effect of rationalization on the potential for fraudulent financial statements, (4) the effect of capability on the potential for fraudulent financial statements, (5) the effect of arrogance on the potential

fraudulent financial statements, and (6) the effect of collusion on the potential for fraudulent financial statements.

2. LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

Hexagon fraud theory or SCCORE Model is a theory put forward by Georgios L. Vouzinas in 2019. This theory is a refinement of the previous theory, namely the triangle fraud theory proposed by Cressey in 1953, and the diamond fraud theory developed by Wolfe and Hermanson in 2004. In 2011, Crowe made improvements with the pentagon fraud theory.

2.1 Pressure

Pressure drives a person to commit fraud. Pressure can be financial and non-financial. There are several conditions that make a person feel depressed and motivate the occurrence of fraud, namely Financial Stability, External Pressure, and Financial Target. The results of research by Pratiwi et al. (2018), Ozcelik (2020), prove that financial stability has a positive effect on the potential for fraudulent acts of financial statements. The results of research by Skousen et al. (2009), prove that external pressure and financial targets have a positive effect on the potential for fraudulent financial statements. The hypothesis can be formulated as follows:

H1: Financial Stability has a positive effect on the potential for fraudulent financial statements.

H2: External pressure has a positive effect on the potential for fraudulent financial statements.

H3: Financial targets have a positive effect on the potential for fraudulent financial statements.

2.2 Opportunity

According to Aghghaleh et al (2014) in Mardianto et al. (2019), that perpetrators of financial statement fraud do not commit fraud if there is no opportunity. Research conducted by, Putriasisih et al. (2016), Faradiza et.al. (2019), and Sari et al.(2020) that opportunity affects financial reporting fraud. The hypothesis is:

H4: Opportunity has a positive effect on the potential for fraudulent financial statements.

2.3 Rationalization

Rationalization is an act of justification for fraud committed by the perpetrator. When there is a change of auditors, it is a critical period and can trigger financial statement fraud. Research that supports this is research conducted by Siddiq et al (2017), Septriani et al. (2018). Then the following hypothesis can be formulated:

H5: Rationalization has a positive effect on the potential for fraudulent financial statements.

2.4 Capability

Changes in directors can cause a stress period that increases the risk of someone committing fraud. Research results that support this are Manurung et al. (2015), and Septriani et al. (2018). Then the following hypothesis can be formulated:

H6: Capability has a positive effect on the potential for fraudulent financial statements.

2.5 Arrogance

CEO's picture is a factor that supports the nature of arrogance and has a significant positive effect on the potential for fraudulent financial statements. Research results that support this are Crowe (2011) in Tessa (2016), Sari et al. (2020). Then the following hypothesis can be formulated:

H7: Arrogance has a positive effect on the potential for fraudulent financial statements.

2.6 Collusion

Collusion is a deviant act carried out by two or more people by working together to achieve their goals that only benefit them. This triggers the potential for fraudulent financial statements. The research results that support this are Vouzinas et al. 2019, Susandra et al. (2017), Sari et al. (2020). Then the following hypothesis can be formulated:

H8: Collusion has a positive effect on the potential for fraudulent financial statements.

3. RESEARCH DESIGN

3.1 Sample and Data Collection

The sample in this study is a State-Owned Enterprise (BUMN) listed on the Indonesia Stock Exchange in 2015 – 2019, which publishes annual financial reports in rupiah currency, which did not experience delisting during the study period. The number of samples that meet the criteria are 16 companies. Total for 5 years there are 80 observations.

3.2 Definition and Measurement of Variables

The dependent variable, in this study is the potential for fraudulent financial statements calculated by the formula of (Skousen et al. 2009), as follows.

$$F - Score = Accrual\ Quality + Financial\ Performances \quad (1)$$

An F-Score value of more than 1 means that it has the potential to commit financial statement fraud.

An F-Score value of less than 1 means that there is no potential for fraudulent financial statements.

Accrual quality is calculated using RSST accrual.

$$RSST\ accrual = (\Delta WC + \Delta NCO + \Delta FIN) / Average\ Total\ Assets \quad (2)$$

Where:

- $WC = (Current\ Assets - Current\ Liabilities)$
- $NCO = (Total\ Assets - Current\ Assets - Investment\ And\ Advances) - (Total\ Liabilities - Current\ Liabilities - Long\ Term\ Debt)$
- $FIN = (Total\ Investment - Total\ Liabilities)$
- $Average\ Total\ Assets = (Beginning\ Total\ Assets + End\ Total\ Assets) / 2$

$$Financial\ Performance = Change\ In\ Receivables + Change\ In\ Inventories \\ + Change\ In\ Cash\ Sales + Change\ In\ Earnings \quad (3)$$

For banking companies, there is a modified formula for calculating change in cash sales and change in inventories. Because the banking company does not have an inventory account, the change in inventory value of the banking company is 0. As for the sales component, it is replaced with total operating income.

Independent Variables

Table 1. Independent Variables

Variables	Measurement	Source
1 Financial Stability (FS)	$CHANGE = (Total\ Assets\ t - Total\ Assets\ t-1) / Total\ Assets\ (t-1)$	Beasley et al. (2000), Sari et al (2020), Pratiwi et al (2018), Siddiq et al. (2017), Manurung et al. (2015), Tessa et al. (2016)
2 External Pressure (EP)	$Debt\ to\ Assets\ Ratio = Total\ Debt / Total\ Assets$	Skousen et al. (2009), Sari et al (2020), Pratiwi et al (2018), Manurung et al. (2015), Tessa et al. (2016)
3 Financial Target (FT)	$Return\ on\ Assets = Earnings\ After\ Interest\ and\ Tax / Total\ Assets$	Skousen et al. (2009), Sari et al (2020), Manurung et al. (2015), Triyanto (2019)
4 Opportunity (OP)	$Receivable = Receivable\ (t) / Sales\ (t) - Receivable\ (t-1) / Sales\ (t-1)$	Skousen et al. (2009), Sari et al. (2020), Manurung et al. (2015), Triyanto (2019)
5 Rationalization (RA)	Change in Auditor	Skousen et al. (2009), Sari et al. (2020), Pratiwi et al (2018), Siddiq et al. (2017), Manurung et al. (2015)
6 Capability (CP)	Change of Directors	Wolfe & Hermanson (2004), Sari et al (2020), Pratiwi et al (2018), Siddiq et al. (2017), Manurung et al. (2015), Triyanto (2019)

7	Arrogance (AR)	Frequent number of CEO's picture	Crowe (2012), Pratiwi et al (2018), Sari et al (2020), Siddiq et al. (2017), Tessa et al. (2016), Triyanto (2019),
8	Collusion (COL)	Cooperation with government project	Vousinas (2019), Sari et al (2020)

3.3 Hypotheses Testing Model

The model used is a panel data regression model, with the following formula:

FR	= Fraud	CP	= Capability
FS	= Financial Stability	AR	= Arrogance
EP	= External Pressure	COL	= Collusion
FT	= Financial Target	β_0	= Constanta
OP	= Opportunity	$\beta_1 - \beta_5$	= Regression coefficient
RA	= Rationalization	ϵ_{it}	= Error

4. RESULTS

4.1 Descriptive Statistical Analysis

Table 2. Descriptive Statistical Analysis Results

Variable	n	Minimum	Maximum	Mean	Std. Deviation
F-SCORE	80	-11,5598	1,8363	0,1660	1,5217
ACHANGE	80	-0,0991	1,4166	0,2255	0,2493
LEV	80	0,0976	0,9193	0,6304	0,1936
ROA	80	-0,0474	0,2118	0,0339	0,0432
RECEIVABLE	80	-11,9144	4,9087	-0,0315	1,4963
NUMBER OF CEO'S PICTURES	80	1,00	26,00	5,15	3,9397

Source: Data processed 2020

Table 3. Descriptive Statistical Analysis Results - Variable Dummy

Variable	n	Variable Dummy	
		1	0
AUDCHANGE	80	22%	78%
DCHANGE	80	69%	31%
GOVPROJECT	80	91%	9%

Source: Data processed 2020

4.2 Hypothesis Testing

The following are the results of panel data regression analysis, with the Fixed Effects model

Table 4. Hypothesis Test Results

Variable	Coefficient	Prob.	Results
Constanta	0.329374	0.8410	
H ₁	1.034842	0.0026	Hypothesis supported
H ₂	-0.735971	0.7336	Hypothesis not supported
H ₃	1.700044	0.7818	Hypothesis not supported
H ₄	-0.223699	0.0054	Hypothesis not supported
H ₅	0.344650	0.2328	Hypothesis not supported
H ₆	0.393140	0.0051	Hypothesis supported
H ₇	-0.020181	0.7591	Hypothesis not supported
H ₈	0.178617	0.0078	Hypothesis supported

Source: Data processed 2020

From the analysis, it is evident that financial stability (H1), capability (H6), and collusion (H8) have a positive effect on the potential for fraudulent financial statements. This means that the higher the financial stability in the company, the higher the potential for fraudulent financial statements.

Meanwhile, external pressure (H2), financial target (H3), opportunity (H4), rationalization (H5), and arrogance (H7) were not proven to affect the potential for fraudulent financial statements.

What is interesting is that the pressure factor as measured by 3 variables, namely financial stability, external pressure, and financial target, turns out to have a positive effect on the potential for fraudulent financial statements, only financial stability as measured by the ratio of changes in total assets. The higher the growth in total assets, the greater the potential for fraudulent financial statements.

4.3 Regression Coefficient Test

The adjusted R² value shows 0.867271 or 86.72%. This shows that the dependent variable can be explained by the independent variable in this study of 86.72%. While the remaining 13.28% is explained by other variables that are not used in this study.

5. CONCLUSION

Based on the research above, it can be concluded that financial stability, capability, and collusion have a positive effect on the potential for fraudulent financial statements. So users of financial statements must be careful of companies with high asset growth, companies that frequently change their board of directors, and companies that have collaborative projects with the government.

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Success Measure of MonsoonSIM for Accounting Students: DeLone and McLean Model

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ABSTRACT

MonsoonSIM is an award-winning business simulation and gamification education platform. It is a unique and fun business simulation game. Students will learn how to compete with each other to manage and become the best virtual company. DeLone and McLean success model employs variables: system quality, information quality, service quality, usage, user satisfaction, and net benefits. The purpose of this study was to determine the effect of these variables on the use of MonsoonSIM. Respondents were 131 Accounting students at the Islamic University of Indonesia. The primary data used was obtained by distributing online questionnaires. Data was analyzed use Structural Equation Model. The results of this study indicate that the quality of service and the quality of information have a significant effect on user satisfaction, the quality of information has a significant effect on use, use and user satisfaction have a significant effect on net benefits. While the quality of the system does not affect the use and user satisfaction, and the quality of service does not affect the use of MonsoonSIM.

Keywords: system quality; information quality; service quality; usage; user satisfaction

1. INTRODUCTION

Learning with gamification is an effective and motivating thing in overcoming the boredom of today's students in the world of education (Pradana, Bachtiar, and Priyambadha, 2018). The term gamification emerged from Nick Pelling in 2002 which is a learning approach using elements in games or video games with the aim of motivating students or students in the learning process and maximizing feelings of enjoyment and engagement with the learning process. In addition, it can also be used to capture things of interest so that it inspires them to continue learning (Jusuf, 2016). Gamification can also be done to provide education and training like a company because it consists of players, thinking activities, abstract challenges, rules, interactivity, feedback, measured results, and emotional reactions (Sambung, Sihkabuden, and Ulfa, 2018). Several researchers have also shown that gamification can improve student learning environments (Rogers, Singhal, and Quinlan, 2019). According to Sakamoto *et al.* (2017), the benefits and values generated from gamification are informative value, empathetic value, persuasive value, economic value, and ideological value that can directly improve student learning.

Gamification can be done in various ways. One of them is using MonsoonSIM which is a learning development gamification platform from ERP (enterprise resource planning). Through this business simulation game, students will learn and unknowingly compete with each other to manage and become the best virtual company. This platform has been used in business education since 2013 and has hosted many competitions both at national and international levels (Monsoon Academy, 2020). In MonsoonSIM, participants can manage a company including resources, perform long-term analysis for the company, and analyse market and competitor needs (Ariyani, Fatimah, and Ariesta, 2020).

Accounting Undergraduate Program, Faculty of Business and Economics, Universitas Islam Indonesia has implemented learning using ERP software. Previously, students were required to take accounting information systems courses. The use of MonsoonSIM as a learning enrichment in the Accounting

Study Program is certainly in line with the designed curriculum structure. This is evident from the success of students from the Accounting Study Program at the Islamic University of Indonesia in winning various MonsoonSIM competitions at national and international levels.

The use of the DeLone and McLean models, especially in e-learning environments, is still limited. Research by Dorobat (2014) and Tariq, Ishak and Mohd. Nafi (2018) is still limited to the theoretical study that produced the DeLone and McLean – extensions model. However, this model is still a proposed model and has not been proven empirically.

Research by Awang, *et. al.* (2018) regarding the Virtual Learning Environment (VLE) concludes that all variables in the Delone and Mclean models have a positive and significant effect. The development of the Delone & Mclean system success model theory was based on the beginning in 1992. This model started from six measurements of information system success. The six elements or measurement factors of this model are: (1) System quality, (2) Information quality, (3) Usage, (4) users, (5) Individual impact, and (6) Organizational impact (DeLone and McLean, 2003). In 2003, DeLone and McLean have updated the D&M model which was introduced in 1992. The expansion that has been carried out by DeLone and McLean is to include service quality variables, so that the success of information systems has 6 main variables, namely system quality, information quality, service quality., , usage, user satisfaction and net benefits (Septianita, Agus Winarno, and Arif, 2014).

Seta, *et. al.* (2018) combines the DeLone and McLean models and the e-learning success model. The results show both the use and satisfaction of the e-learning system have an impact for individual performance. This research also found that educational system quality and technical quality are the main factors that encourage user satisfaction with e-learning system, while the use of e-learning system that is influenced by content & information quality, also user perceived satisfaction for e-learning system. Pringgandani, *et. al.*(2018) studies mentioned that it was not able to explain the cause of success, because the variables of service quality, system quality and quality of information have no significant effect on the intentions of use and user satisfaction.

Based on the above explanations, the use of DeLone and McLean Success Model is still required in the e-learning environment especially for higher degree education. Thus, this study intends to measure MonsoonSIM implementation use DeLone and McLean Success Model in Accounting Undergraduate Program, FBE UII.

Figure 1. Research Framework

1.1 Research Hypothesis

- H1: Systems quality of MonsoonSIM has a positive effect on the use of MonsoonSIM
- H2: Systems quality of MonsoonSIM has a positive effect on the MonsoonSIM user satisfaction
- H3: Information quality of MonsoonSIM has a positive effect on the use of MonsoonSIM
- H4: Information quality of MonsoonSIM has a positive effect on the MonsoonSIM user satisfaction
- H5: Service quality of MonsoonSIM has a positive effect on the use of MonsoonSIM
- H6: Service quality of MonsoonSIM has a positive effect on the MonsoonSIM user satisfaction
- H7: Use of MonsoonSIM has a positive effect on its Net Benefit
- H8: MonsoonSIM user satisfaction has a positive effect on its Net Benefit

2. METHODOLOGY

The specific criteria for the sample were students who had participated in MonsoonSIM activities. The number of students who have participated in MonsoonSIM activities were 200 people. The minimum number of samples needed in this study is 10 times the largest number of measurement indicators in one of the variables (Hair, *et.al.*, 2017). Thus, the minimum number of samples needed is 110.

The following is table 1 which shows the number of indicators for each variable adopted in the questionnaire used and their references.

Table 1. Number of indicators and references

Variable Name	Variable Type	Number of Indicators	References
Systems Quality	Exogenous	11	Saputro, Budiyanto, dan Santoso (2016), Hudin dan Riana (2016), Agustina dan Sutinah (2019)
Information Quality	Exogenous	6	Saputro, Budiyanto, dan Santoso (2016), Hudin dan Riana (2016), Agustina dan Sutinah (2019)
Service Quality	Exogenous	5	Saputro, Budiyanto, dan Santoso (2016), Hudin dan Riana (2016), Agustina dan Sutinah (2019)
Use	Intervening	5	Saputro, Budiyanto, dan Santoso (2016), Hudin dan Riana (2016), Agustina dan Sutinah (2019)
User Satisfaction	Intervening	6	Saputro, Budiyanto, dan Santoso (2016), Hudin dan Riana (2016), Agustina dan Sutinah (2019)
Net Benefit	Endogenous	5	Saputro, Budiyanto, dan Santoso (2016), Hudin dan Riana (2016), Agustina dan Sutinah (2019)

Source: research method

The research model can be written in the following equation:

$$Z_1 = a_1 + b_1 X_1 + b_2 X_2 + b_3 X_3 + e_1 \quad (1)$$

$$Z_2 = a_2 + b_4 X_4 + b_5 X_5 + b_6 X_6 + e_2 \quad (2)$$

$$Y = a_3 + b_7 Z_1 + b_8 Z_2 + e_3 \quad (3)$$

The data analysis method used in this study is the Partial Least Square (PLS) method. The stages of analysis using the PLS method according to Hair, *et.al.* (2017) are: 1) Analysis of path diagrams to interpret PLS software output, 2) Analysis of measurement models (outer models or also known as measurement models) to evaluate the relationship between construct variables and indicators or manifest variables, 3) Structural analysis (inner model) to evaluate the estimated results of the path coefficient parameter and its level of significance.

3. RESULTS

3.1 The outer model

3.1.1 Convergent validity

The results show that all items match each of the factors and have a loading factor value > 0.5, as shown in the following table:

Table 2. Convergent validity

Variable	Item Code	Loading Factor	AVE
Systems Quality (KS)	KS1	0.686	0.590
	KS2	0.767	
	KS3	0.748	
	KS4	0.611	
	KS5	0.552	
	KS6	0.631	
	KS7	0.720	
	KS8	0.642	
	KS9	0.696	
	KS10	0.639	
	KS11	0.578	
Information Quality (KI)	KI1	0.739	0.539
	KI2	0.780	
	KI3	0.701	
	KI4	0.801	
	KI5	0.837	

KI6	0.743	
Service Quality (KP)	KP1	0.735
	KP2	0.648
	KP3	0.769
	KP4	0.827
	KP5	0.676
Use (P)	P1	0.745
	P2	0.675
	P3	0.849
	P4	0.816
	P5	0.649
User Satisfaction (KPe)	KPe1	0.854
	KPe2	0.893
	KPe3	0.867
	KPe4	0.827
	KPe5	0.845
	KPe6	0.848
Net Benefit (MB)	MB1	0.782
	MB2	0.811
	MB3	0.814
	MB4	0.856
	MB5	0.811

Source: Research Result, 2020

3.1.2 Discriminant Validity and Reliability Test

Table 3. Latent Variable Correlations and Reliability Test

	KPe	KI	KP	KS	MB	P	Composite Reliability	Cronbach Alpha	Criteria	
KS	0.734	0.657	0.725	0.831			0.892	0.866	0,7	Reliable
KI	0.766	0.768					0.896	0.861	0,7	Reliable
KP	0.691	0.715	0.734				0.853	0.787	0,7	Reliable
P	0.666	0.701	0.597	0.624	0.751	0.763	0.865	0.804	0,7	Reliable
KPe	0.856						0.943	0.927	0,7	Reliable
MB	0.764	0.774	0.636	0.663	0.815		0.908	0.874	0,7	Reliable

Source: Research Result, 2020

Based on Table 3 it can be concluded that the value of the square root of AVE for all constructs is greater than the correlation between constructs and other constructs, so that all variables have high and valid discriminant validity. It is also known that the composite reliability and Cronbach alpha values of each research variable all have a value of > 0.7. Thus, it can be concluded that all variables have a high level of reliability.

3.2 The Inner Model

3.1.1 Goodness-fit Model

Table 4. R- Square

Construct	R Square
User Satisfaction (KPe)	0.641
Use (P)	0.511
Net Benefit (MB)	0.700

Source: Research Results, 2020.

Table 4 shows the R-Square value on User satisfaction, Use, and Net benefit. This shows that the values in the table are among 0,33 to 0,66 and qualified as moderate (Ghozali dan Latan, 2015).

3.1.2 Hypothesis Testing and Discussion

Hypothesis testing in the study was carried out by looking at the t-statistical value and the p-value. The hypothesis is supported if the t-statistical value > t-table and the p-value <0.05. The results of data processing hypothesis testing can be in the following table:

Table 5. Results of Path Coefficients

Hypothesis	Path	Original Sample	T Statistics	P Values	
H1	KS → P	0.057	0.42	0.675	Not Supported
H2	KS → KPe	0.218	1.524	0.128	Not Supported
H3	KI → P	0.525	3.764	0.000	Supported
H4	KI → KPe	0.417	2.793	0.005	Supported
H5	KP → P	0.18	1.67	0.096	Not Supported
H6	KP → KPe	0.235	2.381	0.018	Supported
H7	P → MB	0.457	4.056	0.000	Supported
H8	KPe → MB	0.459	3.924	0.000	Supported

Source : Research Results , 2020.

4. DISCUSSION/CONCLUSION

Systems quality cannot determine for both use and user satisfaction of MonsoonSIM. This might be because the main motivation of the students in using MonsoonSIM was due to the opportunity to win the award rather than the systems quality. While the information quality has positive effect on both use and user satisfaction of MonsoonSIM. This may suggest that information quality provided by MonsoonSIM is required to conduct the business analysis during the game. Service quality also has no effect on whether students will use the system or not due to their objective is to win the game no matter the service that they received. However, this service quality effect student satisfaction on MonsoonSIM. Moreover, result also suggest that the more frequent use and satisfaction from MonsoonSIM, student get more benefit from this system.

5. RECOMMENDATIONS

MonsoonSIM should continue to be used as a learning tool in Accounting undergraduate program, FBE UII because students feel the benefits of this gamification. However the management should also maintain a good communication with the Monsoon Academy in order to improve the quality of service which eventually increase student satisfaction as users.

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Impact of ESG Certification on Cost of Equity

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ABSTRACT

Disclosure of non-financial information, especially those related to Environment, Social, and Governance (ESG), as evident through ESG certification, has an increasingly important role for shareholders in making investment decisions. The increasing number of ESG-certified companies affirms that ESG certification is valuable for equity capital providers. However, so far there is limited study has specifically investigated the relationship between ESG certification and the cost of equity, although previous research has examined the relationship between ESG certification and firm value. This study aims to examine the impact of ESG certification on the company's cost of equity in the context of Southeast Asian developing countries. The analysis in this study is conducted using panel data regression towards samples of 140 non-financial companies in Indonesia, Malaysia, the Philippines, and Thailand that have got ESG certification based on the Refinitiv Eikon database from 2008 to 2018. The results of this study prove that ESG certification has a negative and significant relationship with the cost of equity, indicating that obtaining an ESG certification is an effective way to reduce the cost of equity.

Keywords: emerging countries; nonfinancial disclosure; panel data regression; Southeast Asia; sustainability

1. INTRODUCTION

Disclosure of non-financial information is increasingly important for investors because it provides information that is not disclosed in the company's financial statements so that it may reduce information asymmetry between the company and shareholders (Raimo et al., 2020). The increasing awareness of the importance of corporate governance and sustainability disclosures has encouraged more and more companies to publish sustainability reports that disclose various ESG (Environment, Social, Governance) activities of companies around the world in recent decades (Xie et al., 2019). The combination of ESG information can provide the ability for investors to assess the opportunities, risks, transparency, and future performance of the company (Albarak et al., 2019). The availability of ESG information will give companies a competitive advantage so that investors will be able to differentiate between good and bad performing companies (Xie et al., 2019). The combination of ESG disclosure is reflected by the ESG certification, which is issued by a third-party rating company by considering various aspects, including the company's sustainability report (Refinitiv Eikon, 2021).

Previous studies have shown that there is a relationship between sustainability-related certifications in general and company performance or increasing company value (Brotóns & Sansalvador, 2020; Del Giudice et al., 2018; Holtermans & Kok, 2019; Porumb et al., 2020; Wong et al., 2021). In the context of ESG certification, Amel-Zadeh and Serafeim (2018) and Hoang (2018) argue that ESG information is substantial enough for investors to see the company's financial performance. In addition, ownership of ESG certification has been proven to increase the value of the company which is indicated by the increase of company's financial performance (Wong et al., 2021). In the context of Malaysia, Wong et al. (2021) prove that ESG certification is related to the cost of capital and Tobin's Q. ESG certification, as a non-financial factor, has an important influence on the company's financial performance, through access to capital, saving costs and improving operational efficiency, risk management, sales growth and

market expansion, brand value and prestige (Hoang, 2018). Thus, there is a direct relationship between environmental, social and governance (ESG) performance and the long-term profitability of the company (Hoang, 2018).

From the shareholder perspective, the minimum return on investment in a particular project or company is reflected in the cost of equity, as defined by Ross et al. (2012). One of the main factors determining the cost of equity is risk (Botosan, 2006; El Ghoul et al., 2011), where one of the common risks encountered is information asymmetry. ESG certification is one of the factors found to significantly reduce the occurrence of information asymmetry (Hoang, 2018; Wong et al., 2021). This happens because ESG certification helps access, process, and analyze information more accurately and effectively (Hoang, 2018). ESG certification provides more detailed information related to environmental, social and corporate governance activities. Thus the provider of equity capital will reduce the minimum rate of return required by investors to provide capital to the company (Botosan, 2006; El Ghoul et al., 2011). Previous studies have shown that equity investors strongly consider certification and support activities that are useful for maintaining such certification (Dahlin et al., 2020; Wong et al., 2021). Thus, ownership of an ESG certification will help increase the transparency and reliability of the information provided to investors so that it will attract more international investors (Hoang, 2018). Although Wong et al. (2021) have found a positive and significant relationship between ESG certification and cost of capital and Tobin's Q, but the effect of ESG certification on the cost of equity has not been studied specifically. Therefore, this study aims to examine the relationship between ESG certification and the cost of equity.

2. METHODOLOGY

This is a quantitative research using balanced panel data which is analyzed using regression analysis to see the relationship between ESG certification and the cost of equity. In this study, the model used to examine the impact of ESG certification on the cost of equity is as follows.

$$COE_i = \beta_0 + \beta_1 ESGCER_{it} + \beta_2 SIZE_{it} + \beta_3 LEV_{it} + \beta_4 MTBR_{it} + \beta_5 INFLA_{it} + u_{it}$$

The population of this research is all companies located in developing countries in Southeast Asia. The samples used in this study are all companies that received ESG certification in 2018 except for the financial sector in Malaysia, the Philippines, Thailand, and Indonesia, which accounts for 140 companies (see Table 1 below for details). This study uses data with a fairly long span of 11 years (2008-2018), with the aim of being able to see the effect of time and better show the impact of ESG certification on the cost of equity. The sample selection was carried out using a purposive sampling method, the purpose of which was to select a sample with certain considerations (Gujarati, 2004).

Table 1 Detail of Study Sample Based on Country

No	Country	No. of Company
1	Malaysia	48
2	Philippines	21
3	Thailand	35
4	Indonesia	36
	Total	140

This study uses secondary data obtained from Refinitiv Eikon, World Bank, and Statistics Indonesia (BPS). Specifically, the ESG certification, company size, leverage, and Market To Book Ratio are collected from Refinitiv Eikon, the inflation data for Malaysia, the Philippines, and Thailand are obtained from World Bank data stream, and Indonesia's inflation data are gathered from Statistics Indonesia (BPS). In this study, the authors use the PEG ratio as a measurement of the COE variable which is also highly recommended by Easton (2004) when the research topic is related to the relationship between financial/non-financial disclosures and the cost of equity. ESG certification (ESGCER) indicates whether the company has been covered by a third party ESG rating company or

not. Firm size is measured by Ln (natural logarithm) of total assets (Rustam et al., 2020; Wong et al., 2021). Leverage is calculated using the ratio between total debt and total assets (idowu Adeniyi & Adebayo, 2018). Market to Book Ratio is obtained by dividing the market value of equity at the end of the fiscal year by the book value of equity at the end of the fiscal year (Raimo et al., 2020). The inflation rate is defined as a country's annual inflation rate for firm 'i' in year 't' (Hail & Leuz, 2006; Gupta et al., 2018; de Moura et al., 2020).

3. RESULTS

The regression results prove that ESG certification is significantly related to the cost of equity at a significance level below 1% (see Table 2 below for details). This is supported by the coefficient of the ESGCER variable which is negative. The results of this test show that the hypothesis is proven that ownership of ESG certification is effective in reducing the company's cost of equity. The results of this study are consistent with previous research which found that in the context of developing countries, ownership of ESG certification is material for investors and potential investors in making investment decisions (Wong et al., 2021). Investors consider that ESG certification can reduce information asymmetry between companies and investors. This is in accordance with signalling theory where ESG certification can help investors distinguish between good and bad performing companies. Especially in developing countries, there are still very few companies that have ESG certification, so when a company has an ESG certification, it becomes an important signal for investors to assess the company's reputation (Brammer & Pavelin, 2008; Higginson et al., 2006; Patten, 2007). 1992; Wong et al., 2021) and set a lower cost of equity.

Table 2 Regression Results

Variable	Expected Sign	Coefficient	Z-stat	Prob z
ESGCER	-	-0.0319451	-2.89	0.002***
SIZE	-	-0.0499086	-4.19	0.000***
LEV	+	0.2488871	4.36	0.000***
MTBR	-	-0.0077374	-4.40	0.000***
INFLA	+	-0.0014111	-0.73	0.233
R= 9.66%				
Prob F= 0.0000				

***significant at $\alpha=1\%$, ** significant at $\alpha=5\%$, * significant at $\alpha=10\%$ (*one tailed*)

The test results are also in line with the resource based view theory, that ESG certification is a resource that can become a sustainable competitive advantage for the company (Barney, 1991). Investors can see the company's commitment to ESG activities that can improve the company's overall performance in the future so that investors set a lower cost of equity (Albarak et al., 2019; Xie et al., 2019; Dahlin et al., 2020) . Based on the results above, it is evident that in the context of developing countries in Southeast Asia, investors appreciate companies with ESG certification ownership by setting a lower cost of equity.

The results are also consistent with the findings of previous studies where in the larger companies, investors will set a lower cost of equity. This is evidenced by the SIZE prob which is less than 1% (prob=0.000) and the coefficient is -0.0499086. The larger the company, the greater the company's financial ability to integrate ESG activities with the company's strategy to produce better financial performance in the future (Dahlin et al., 2020; Duque-Grisales & Aguilera-Caracuel, 2019). In addition, larger companies can also provide more information for investors (Botosan & Plumlee, 2005; Cavaliere & Costa, 1999).

Leverage also significantly shows a relationship that is in accordance with the initial expectations and in line with previous studies that leverage is negatively and significantly related to the cost of equity (prob=0.000, coefficient=0.2488871). Investors view that companies with high leverage tend to be riskier and therefore charge a higher cost of equity ((Modigliani & Miller, 1958). In addition, companies

that have higher leverage are less likely to engage in ESG activities due to debt commitments that must be paid.

Finally, the results also prove that in accordance with previous research, investors in developing Southeast Asian countries associate a higher Market to Book Ratio with higher profits and growth opportunities (Mazzotta & Veltri, 2014) so that investors set a lower cost of equity for investment in companies with a higher Market to Book Ratio (Raimo et al., 2020). This is evidenced by the test results which show a significant prob of the MTBR variable (0.000) and a coefficient of -0.0077374. Meanwhile, the inflation variable was found not to significantly affect the cost of equity in the context of developing countries in Southeast Asia.

4. DISCUSSION AND CONCLUSIONS

This study aims to examine the impact of ESG certification on the cost of equity in companies listed in developing countries in Southeast Asia. Based on the results and analysis described in the previous section, it can be concluded that ESG certification has a negative and significant effect on the cost of equity. Companies that have an ESG certification provide more non-financial information than companies that do not have an ESG certification, considering that the existence of an ESG certification can be a reflection of the company's activities in activities related to environmental, social and governance aspects. The availability of more relevant information for investors reduces information asymmetry, thus helping investors or potential investors to make the right investment decisions. In addition, by having an ESG certification provided by a third party (for example, in this case Refinitiv), it gives a positive signal to investors and potential investors that the company is an entity with a good reputation, at least in relation to ESG aspects. With the reduced risk arising from the information asymmetry and the strengthening of the positive signal on the company's reputation, the expected rate of return expected by investors is reduced. Thus, with the ESG certification, the company's cost of equity is getting lower.

For companies in developing countries, especially those listed on stock exchanges, the results of this study show evidence that ESG certification is a substantial thing to obtain because it is proven to be significant in reducing the company's cost of equity. With a lower cost of equity, companies can raise funds from capital owners at a lower cost. Therefore, the findings of this study will further encourage companies to engage in ESG activities and publish sustainability reports, thereby increasing opportunities for companies to obtain ESG certification from third parties.

For investors, the findings of this study provide evidence that ESG certification is an important source of information in determining investment decisions. Companies that have ESG certification are more attractive to investors as investment destinations because they reduce information asymmetry and provide signals related to a good company reputation. In the future, with more and more companies acquire ESG certification, investors will have more choices for their investment destinations, which will allow investors to diversify their investment so as to increase their returns.

For future research, some research suggestions are as follows: (i) examine the impact of ESG certification on the cost of equity by breaking down according to business sector, to see the difference in the effect of ESG certification on the cost of equity between business sectors; (ii) examine the impact of ESG certification on the cost of equity using data from several third party rating agencies; and (iii) examine the factors that affect ESG certification. A more complete understanding of the factors that affect ESG certification will further enrich knowledge and can provide wider implications for the academic and practical world.

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The impact of sensory brand experience and personal involvement on brand equity: the role of consumer brand engagement

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ABSTRACT

Indonesia is one of the countries with the largest coffee consumption in the world. The number of coffee shop businesses operating in Indonesia's capital city has increased rapidly in recent years. Coffee shops are known for their sensory experience and personal involvement with their customers. This study aims to determine whether sensory brand experience and personal involvement have positive effects on brand equity through cognitive, emotional, and behavioral consumer brand engagement. A survey was administered to 250 customers of coffee shops in Jakarta, and the data gathered was analyzed using structural equation modelling (SEM). The empirical findings suggest that both sensory brand experience and personal involvement have positive indirect effects on brand equity through affection and activation, but they do not have any direct effects on brand equity. The results provide a comprehensive guideline for coffee shop businesses to manage sensory aspects of consumer-brand interactions in order to build sustainable consumer-brand relationships.

Keywords: Sensory brand experience; brand equity; consumer brand engagement; cognitive processing; affection; activation; brand relationship; coffee shops

INTRODUCTION

Nowadays, coffee shops are a big part of most people's everyday life. People go to coffee shops not only to get their daily caffeine fix but also to get snacks and meals, to socialize, to work and study, and to hold meetings. Before the modern age of large chain coffee shops like Starbucks, the coffee shop culture dates back to the 1500s in the Middle East when coffee houses started opening for business in Mecca (Intile, 2007). Middle Eastern coffee merchants started selling take-out coffee and introducing coffee beverages to European travelers (Hattox, 1985) and since then, coffee houses had taken over Europe. By the 1700s, at least two thousand coffee houses had started operating for business in London and other big cities in Europe like Vienna, Venice, and Paris (Pendergrast, 1999).

According to TOFFIN (2020), a coffee business platform in Indonesia, the coffee shop culture in Indonesia started in the early 1990s when large chain coffee shops like Starbucks and The Coffee Bean and Tea Leaf opened their first stores in Jakarta, Indonesia. The coffee shop culture in Indonesia rapidly elevated in the 2010s when local artisan coffee shops like Tanamera and Guyanti Coffee Roastery joined the industry. Since then coffee shops became a lifestyle and the younger market started consuming coffee regularly as the result of young people's interest in category innovations, coffeehouses experiences with innovative concepts, as well as innovative products (Euromonitor, 2016) like the RTD (ready-to-drink) coffee trend like Toko Kopi Tuku, Kopi Kenangan, and Fore Coffee.

In modern day coffee shops, one of the things people enjoy in coffee shops are the ambience and scent, as it is proven that the scent of coffee improves the performance of daily activities (Madzharov *et al.*, 2018). It is also proven that the scent of coffee facilitates the early stages of information processing and can increase the perception of sensitivity (Snel *et al.*, 2000). Hence coffee shops became an ideal spot for people to work and study. Consumers are actively involved in the physical environment of the store when making purchase decisions (Jeong *et al.*, 2017).

It is also very common for customers to develop a personal involvement towards their favored coffee shops. Zaichkowsky (1985) states that involvement can be defined as a person's perception of an object based on inherent needs, values, and interests. Consumers with a higher level of involvement are also shown to be more affected by brand knowledge, trust in stores, and brand satisfaction (Lockshin *et al.*, 2001). Personal involvement has also been shown to be one of the elements affecting consumer brand engagement (Dwivedi, 2015; France *et al.*, 2016; Hollebeek, 2011a; Hollebeek *et al.*, 2014).

A previous study by Hepola *et al.*, (2017) entitled, "The effect of sensory brand experience and involvement on brand equity directly and indirectly through consumer brand engagement" examines sensory brand experience and personal involvement which affect brand equity, through three components of consumer brand engagement which are cognitive processing, affection, and activation, on consumers of a tableware brand in Finland. The difference between this research and the theoretical model used in Hepola *et al.* (2017) is the previous research used a construct to unite the components of consumer

brand engagement including cognitive processing, affection and activation, while this research model does not use a construct to unite the consumer brand engagement components and cognitive processing, affection, activation all stand as their own variables.

The current research is titled 'The Impact of Sensory Brand Experience and Personal Involvement on Brand Equity: The Role of Consumer Brand Engagement'. It examines sensory brand experience and personal involvement's effect on brand equity through the components of consumer brand engagement which are cognitive processing, affection, and activation, at coffee shops located in Jakarta, Indonesia. Coffee shops in Jakarta are chosen specifically as the research object. It was specifically chosen because coffee shops use sensory experiences as part of their selling point. Coffee shops sell their ambience, the dimmed lighting, the slow music playing in the background, the scent of coffee in the air as consumers walk into the store, and the overall environment of the coffee shop. The object was also chosen because of a certain phenomenon occurring in Jakarta's coffee shop scene during the past decade. In the early 2010s, South Jakarta became a hotspot of local, neighborhood artisan coffee shops where people can get their daily caffeine fix and also as a place to meet people. As time went by, a number of these coffee shops expanded their geographic reach by opening up new stores in other parts of Jakarta like the North and the West side of the city. A decade later, Jakarta now can be considered as a playground for coffee connoisseurs, with a high number of coffee shop businesses start operating every year. Hence, the object of this research is coffee shops located in Jakarta.

LITERATURE REVIEW

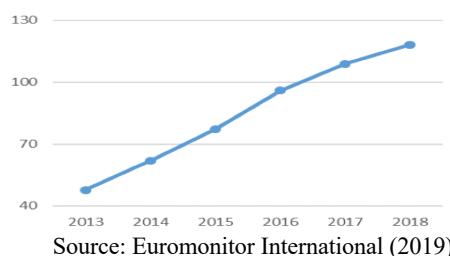
Brief History of Coffee Consumption in Indonesia

As one of the countries with the largest coffee consumption in the world, the International Coffee Organization (ICO) states that Indonesia's coffee consumption has been growing rapidly each year in the last few years. The Global Agricultural Information Network also released an annual data on Indonesia's coffee consumption in 2019 and this data stated that the projected domestic coffee consumption in Indonesia from 2019 to 2020 reached 294,000 tons, or an increase of 13.9% when compared to Indonesia's domestic coffee consumption from 2018 to 2019 which only reached 258,000 tons. The United States Department of Agriculture reported in the latest Foreign Agricultural Service report in June 2020, that the domestic coffee consumption in Indonesia was at 4,300 thousand bags with 60 kg of each bag, which had increased by 740 thousand bags from 2017.

From the business perspective, since the 1980s to the modern era that we currently live in, Indonesia's coffee shop business has always been increasing each year. A well-known cafe goods and service business solution provider company in Indonesia, TOFFIN (2020), divides the levels of development of the coffee shop business in Indonesia from time to time in four waves.

The first wave (1980 - 1990) was when the majority of Indonesians at this time were already familiar with coffee drinks but in the form of instant packs packaged in sachets. Famous coffee sachet manufacturers at that time were ABC, Kapal Api, Torabika, and Nescafe. Traditional brewed coffee had also begun to be marketed, but it was still not very popular and was mostly produced without a brand. The second wave (2000). At this time, coffee underwent a change from a drink to freshen up, into a form of lifestyle; especially when done in modern coffee shops. It was also during this time that the household-named coffee shop chains like The Coffee Bean & Tea Leaf (2001) and Starbucks (2002) entered the Indonesian coffee shop business. The third wave (2010 - 2015). This period marks the drastic increase of Indonesians' interest towards the coffee shop culture. Drinking coffee in a coffee shop was not just a necessity, but rather started to transform into a hobby. People were getting interested in the proper coffee making process in a coffee shop. This era also gave birth to several well-known artisan coffee brands in Indonesia, such as Tanamera. The last but not least, the fourth wave (2016 - present). Coffee shop business in Indonesia experienced a very significant increase during this period. This began with the emergence of the Toko Kopi Tuku, which was considered to be the pioneer of coffee shops selling RTD or coffee-to-go coffee with light snacks for take away. The increasing number of online motorcycle taxi service users such as Gofood and Grabfood also made it easier for consumers to order coffee and snacks to be sent home or to the office. With the expansion of the takeaway coffee shop market, many young people started takeaway coffee shop businesses which led to tens to hundreds of franchised branches throughout the country.

Sales of Ready-to-Drink (RTD) Coffee Products in Indonesia in 2013 - 2018
(in million liters)



Source: Euromonitor International (2019)

According to Euromonitor International (2019), the coffee shop business in Indonesia has been increasing rapidly in the era of ready-to-drink (RTD) coffee. In 2013, the retail sales volume of RTD coffee in Indonesia was 50 million liters. Five years later, in 2018 the number jumped to 120 million liters. The number of coffee shops in Indonesia as of August 2019 was reported to have reached more than 2,950 outlets, an increase of almost three times compared to 2016, as reported by TOFFIN (2020).

Sensory Brand Experience

According to Brakus et al. (2009), sensory brand experience is a sensation generated by stimuli related to the brand, which is part of the brand's design and identity, packaging, communication, and environment. These sensory stimuli are related to the senses of smell, hearing, sight, taste, and touch (Hultén, 2011; Fenko et al, 2010). According to Hepola et al. (2017), the sensory dimension can be seen as the main dimension of brand experience because consumers always use their senses to see products. The physical environment of the store provides a sensory and affective experience to consumers, and encourages consumers to be more positive about the brand (Schmitt, 2003). And according to Fenko et al. (2010), when consumers buy a product, the sense of sight is the most dominant sensory element, while the sense of touch becomes a more important element at a later stage. Sensory branding is a successful marketing tool in promoting consumers to choose a certain over other alternatives for dining, relaxation, study, and meeting purposes, and most coffee shops use sensory tools to increase customer attractiveness (Dodamgoda and Amarasinghe, 2019). Sayadi et al., (2015) explained that customers are driven to a particular brand because the experience and sensory branding used can trigger the consumer's subconscious to influence consumer perceptions and choices. Sayadi et al., (2015) also prove that current customers do not have enough time to be attracted to products through advertising, and therefore sensory branding is an important element to enrich the brand experience. Altaf et al., (2017) in their research proved that brand experience has a significant positive influence on brand image and brand awareness. Brand experience was also found to have a significant positive effect on satisfaction, brand trust and brand loyalty (Sahin et al., 2011). Xie et al., (2017) also stated that positive brand experiences improve the quality of brand relationships, thereby encouraging consumer behavior towards brands.

It was scientifically proven that the scent of coffee at coffee shops, as part of the coffee shop's sensory brand experience, has the ability to improve a customer's daily performance (Madzharov et al., 2018). When a consumer acquires a brand experience, the experience helps consumers to become more prepared to store memories about the brand (Legendre, Cartier and Warnick, 2019). Sensory expression can be a creative source of inspiration and insights (Hultén, 2011), that will improve the level of brand-related cognitive processing (Hepola et al., 2017). Therefore, we propose the following hypothesis:

H1a. Sensory brand experience has a significant positive impact on cognitive processing.

A research conducted by Moreira, Fortes and Santiago (2017) avoves that brand sensory stimulation can affect consumers' positive feelings towards brands. Sensory experience can be a predictor of an individual's dependence which will provide the individual with emotional benefits (Beckman et al., 2013). Sensory stimuli like congruent visual and music can evoke strong emotional feelings and experiences (Baumgartner et al., 2006). Based on these findings, we propose this following hypothesis:

H1b. Sensory brand experience has a significant positive impact on affection.

According to Brakus et al., (2009), when customers are experiencing a certain sensation, it is very most likely that they are willing to receive the same certain stimulation from the related brand or product. According to Moreira, Fortes and Santiago (2017), brand sensory stimulation can affect consumers' desire to do something related to the brand. Previous research has also proven that a sensory brand-related experience affects how much a customer wants to revisit a brand or product related to the brand (Hepola et al., 2017). Accordingly, we propose this hypothesis:

H1c. Sensory brand experience has a significant positive impact on activation.

Sayadi et al., (2015) prove that modern customers do not have enough time to be attracted to products through advertisement, and therefore sensory branding is an important element to enrich the brand experience. Brand experience is considered to be an important part in the formation of the quality of the relationship between consumers and brands (Ahn and Back, 2018). The sensory experiences that customers encounter can help customers to differentiate the brand in their minds (Hultén, 2011). If customers wish to re-experience these sensory experiences, customers must re-interact with the related brand, which will create motivational forces toward the brand (Hepola et al., 2017). Therefore, we propose this following hypothesis:

H2. Sensory brand experience has a significant positive impact on brand equity.

Personal Involvement

Consumer involvement can be divided into two sources; situational sources and intrinsic sources which are part of consumer characteristics. In this case, consumer involvement has a role to influence consumer consumption activity for a particular product (Celsi and Olson, 1988). Meanwhile, personal involvement itself can be defined as a motivational variable, which will influence consumer behavior such as seeking information about a product (Zaichkowsky, 1985; Laurent and Kapferer, 1985). According to previous research, personal involvement has also been shown to be one of the elements that affect consumer brand engagement (CBE) (Dwivedi, 2015; France et al., 2016; Hollebeek, 2011a; Hollebeek et al., 2014).

When consumers succeed in achieving their desires, they will feel positive emotions (Roseman, 1991; Bagozzi et al., 1999; Johnson and Stewart, 2005), such as feeling happy and pleasant. To present a positive emotional response from consumers, the situation must also be relevant to the state of the consumer (Bagozzi et al., 1999). If the end result of a moment is in accordance with the desires and needs of consumers, then the positive emotions of consumers who have personal involvement will increase (Nyer, 1997).

Consumer participation and involvement greatly helps consumers to understand the brand better, thus enabling the development of a stronger bond with the brand (Koay et al, 2020). At the affective level, high consumer involvement can increase consumers' views of brands to be more attractive, charming and increase the positive experiences experienced by consumers (Gummerus et al., 2012). A study from Harrigan et al., (2018) proves that consumer involvement affects the cognitive processing that consumers go through. Based on these findings, we propose this following hypothesis:

H3a. Personal involvement has a significant positive impact on cognitive processing.

According to Harrigan et al., (2018), consumer involvement is proven to predict components of consumer brand engagement which includes affection. At the affective level, high consumer involvement can increase consumers' views of brands to be more attractive, charming and increase the positive experiences experienced by consumers (Gummerus et al., 2012). The involvement that consumers have with a brand has been shown to be affected by the attitude that consumers have towards the brand (Su et al., 2019). A customer's involvement towards a brand will affect how high their engagement is with the brand (Dwivedi, 2015; France et al., 2016); Hollebeek, 2011a; Hollebeek et al., 2014). Accordingly, we propose this following hypothesis:

H3b. Personal involvement has a significant positive impact on affection.

Activation is related to consumer confidence in purchasing a brand (Delbaere, Michael, and Phillips, 2020). At the activation level, when consumer involvement in the brand increases, consumers will feel an urge to engage more deeply with the brand (Gummerus et al., 2012). Consumer involvement has been proven to affect components of consumer brand engagement, including activation (Harrigan et al., 2018). Hence, we propose this following hypothesis:

H3c. Personal involvement has a significant positive impact on activation.

Consumer involvement with a brand can increase consumer behavior towards the brand (Su et al., 2019). Consumer participation is considered to be very helpful for consumers to understand the brand better, thus enabling the development of a stronger bond with the brand (Koay et al., 2020). Personal involvement has a resemblance in an improved level of brand equity (Hepola et al., 2017). Based on these findings, we propose this following hypothesis:

H4. Personal involvement has a significant positive impact on brand equity.

Consumer Brand Engagement

Consumer brand engagement can be defined as a consumer's mental activation process in regard to a brand (Risitano et al., 2017). In this process, consumers make significant interactions with the brand and form a certain attitude towards the brand. According to Hollebeek et al., (2014), consumer brand engagement has three dimensions:

Cognitive Processing

Cognitive processing is the level of processing consumer thoughts related to brands, as well as the elaboration of interactions between consumers and a particular brand (Hollebeek et al., 2014). Cognitive processing involves the consumer's cognitive thought processes. Cognitive processing is supported by one of three aspects of consumer characteristics according to Watono and Watono (2011), named head or knowledge. This characteristic aspect of head or knowledge states that consumers over time will form a cumulative belief in a brand.

The formation of memories and thoughts experienced by consumers from a brand experience can trigger the formation of positive behavior (Legende, Cartier, and Warnick, 2019). A strong brand personality increases brand perception and perceived value (Arora and Stoner, 2009). When consumers form positive thoughts about a brand, it will affect the brand associations that consumers have with the brand (Bilro et al., 2018). The cognitive elaboration that consumers go through with a brand affects the formation of the quality of the relationship a consumer has with the brand involved (Ahn and Back, 2018). Brand associations are stored in memory-based brand networks that influence consumer decision-making processes (Su and Tong, 2015). Accordingly, we propose this following hypothesis:

H5a. Cognitive processing has a significant positive impact on brand equity.

Affection

Affection is the level of positive influence associated with a brand in a brand-consumer interaction (Hollebeek et al., 2014). Affection describes how a brand or product can affect consumers emotionally so that consumers can have positive feelings for the brand or product. Affection is related to one of the aspects of consumer characteristics according to Watono and Watono (2011), named the heart, where consumers form feelings of liking and emotional relationships with products or brands.

Brand-engaged consumers experience bigger emotional, functional, and social value; thus, the brand creates more positive associations for them and leads to increased brand loyalty and brand equity (Kuvykaite and Piligrimiene, 2014), in which one of the subcomponents of consumer brand engagement is affection (Hollebeek et al., 2014). Positive emotions that are formed during interactions in customer engagement with a brand are very important and contribute positively to the brand (Bilro et al., 2018). Customer affective elaboration is involved in establishing the quality of brand relationships and consumer behavior towards brands (Ahn and Back, 2018). As for customers who have a strong emotional engagement, they are more likely to feel proud using the brand, show their excitement when using the brand and perceive the brand as more meaningful than other brands (Zainol et al., 2016). Although a customer's experience in a relationship with a brand and the emotional connection established toward a relationship with a brand both have the ability to indicate the strong bond developed in between the customer and the brand, the latter approach (emotional connection) is most likely to be able to provide the overall level of engagement between the customer and the brand (Schraft and Micu, 2010). Therefore, we propose the following hypothesis:

H5b. Affection has a significant positive impact on brand equity.

Activation

Activation is the level of energy, effort, and time that consumers spend on a brand in an interaction with the brand. Activation is related to the behavioral aspects of consumer engagement, which is how consumers respond to the benefits and convenience that consumers get from the brand in the form of positive, dynamic energy, and also the time they spend interacting with the brand (Hollebeek et al., 2014). The activation dimension relates to one of the characteristics of consumers, named the hand, where consumers form an intention to do something with related brands (Watono and Watono, 2011).

Activation represents the energy, determination, and effort that consumers have regarding a particular brand, and is also related to consumer confidence in making a purchase of a brand (Delbaere, Michael, and Phillips, 2020). If consumers feel they really enjoy and like a brand and then take an action related to the brand, it will have a positive effect on the value of the brand in the eyes of consumers (Bilro et al., 2018). Thus, we propose this following hypothesis:

H5c. Activation has a significant positive impact on brand equity.

Brand Equity

According to Yoo and Donthu (2001), brand equity is a customer's willingness to pay a price for purchasing a product from a brand. Meanwhile, according to Pappu, Quester, and Cooksey (2005), brand equity is the monetary or financial value added to a brand, but separate from the property of the company that owns the brand. Keller (1998) argues that brand equity can be defined as the added value given to a brand as a result of past investment in brand marketing. The added value of a brand is created in the minds of consumers as a result of perceived performance in various marketing dimensions. Altaf et al., (2017) found that a positive brand experience can lead to stronger brand equity. Brand equity is considered to represent different responses and preferences to the marketing efforts obtained by a product as a result of its brand identification, and after-sales service is considered an important factor in shaping brand credibility and brand loyalty (Habib and Sarwar, 2020).

Brand equity is a surplus effect in consumers' reactions to a brand, beyond the product and its characteristics, to understand the brand personality and build consumer brand relationships (Su and Tong, 2015). A strong brand personality increases brand perception and perceived value (Arora and Stoner, 2009). The symbolic conceptual association given by the customer to a brand helps to create a brand personality, which is a component of brand image. Brand associations are stored in memory-based brand networks that influence consumer decision-making processes (Su and Tong, 2015).

According to Keller and Brexendorf (2019), the basic understanding of brand equity is that the power of a brand lies in the minds of consumers and what they have experienced and learned about the brand over time. Brand equity can be perceived as the added value given to a product in consumers' personal perspective. Brand equity provides a useful strategic function for marketing decisions; hence it is important for marketers to fully understand the sources of brand equity, how they affect outcomes of interest and how these sources and outcomes change over time. Brand equity sources help managers understand and focus on what drives their brand equity; brand equity results help managers understand exactly how and where brands add value (Keller and Brexendorf, 2019).

Altaf et al., (2017) have found that a positive brand experience can lead to stronger brand equity. Brand equity is considered to represent different responses and preferences to marketing efforts obtained by a product as a result of its brand identification, and after-sales service is considered an important factor in shaping brand credibility and brand loyalty (Habib and Sarwar, 2020). Brand equity owned by consumers towards brands is proven to be influenced by the brand's sensory stimulation experienced by consumers (Moreira, Fortes and Santiago, 2017). A unique and strong brand association is believed to be able to build a positive brand image, which will create prejudice or bias in the minds of consumers, thereby increasing brand equity as well (Beig and Nika, 2019). The third element is perceived quality. According to Zeithaml (2000), perceived quality can be defined as a consumer's assessment of the superiority of a product. With a high level of perceived quality, a brand becomes unique that differentiates it from other competing brands, so that the brand can be priced at a more premium price in the market (Aaker, 1991). The last element is brand loyalty. According to Aaker (1991), brand loyalty is the attachment that a customer has to a brand. By building consumer loyalty to the brand, the threat of competition from competitors is reduced (Aaker, 1991).

Based on the descriptions and explanations that have been presented, the research model is as follows:

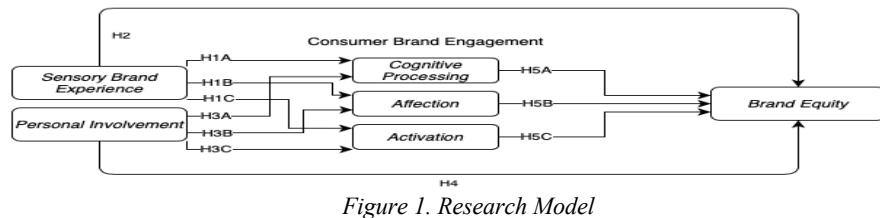


Figure 1. Research Model

RESEARCH METHOD

This research applied a quantitative research method. Creswell (2002) noted that quantitative research is the process of collecting, analyzing, interpreting, and writing the results of a study, while qualitative research is the approach to data collection, analysis, and report writing differing from the traditional, quantitative approaches. The samples used in this research were chosen based on a non-probability sampling, purposive sampling in particular, because the samples were drawn using certain criteria. The criteria and characteristics of respondents in this study were consumers who have known and visited a coffee shop in the Jakarta area. Previous studies also used consumers as the samples because consumers tend to actively interact with a store's physical environment when making a purchase decision (Jeong et al., 2017).

The questionnaire used in this study was distributed online using Google Forms, and the 28-item questionnaire was adapted from previous studies conducted in sensory brand experience, personal involvement and consumer brand engagement. Sensory brand experience scales were adapted from Brakus et al., (2009). Personal involvement scales were adapted from Zaichkowsky (1985). Cognitive processing, affection, and activation scales were all adapted from Hollebeek et al., (2014). Brand equity scales were adapted from Hepola et al., (2017). All items were measured using the 6-point Likert scale (1 = "strongly disagree"; 6 = "strongly agree"). Data was collected from 250 respondents who had known and visited a coffee shop in Jakarta. The data was analyzed using structural equation modeling using the AMOS software.

Latent Construct	Item	Validity Test			Reliability Test	Conclusion	Item Source
		KMO MSA	Bartlett Test of Sphericity	Factor Loading			
Sensory Brand Experience	SBE1	0,737	0,000	0,726	0,855	Valid & Reliable	Brakus et al. (2009)
	SBE2			0,893			
	SBE3			0,897			

	SBE4			0,815			
Personal Involvement	PI1	0,824	0,000	0,742	0,942	Valid & Reliable	Zaichkowsky (1985)
	PI2			0,772			
	PI3			0,86			
	PI4			0,915			
	PI5			0,88			
	PI6			0,912			
	PI7			0,903			
	PI8			0,738			
	PI9			0,792			
	PI10			0,729			
Consumer Brand Engagement Cognitive Processing, Affection, Activation	CBE1	0,566	0,000	0,564	0,962	Valid & Reliable	Hollebeek et al. (2014)
	CBE2			0,886			
	CBE3			0,624			
	CBE4			0,952			
	CBE5			0,937			
	CBE6			0,933			
	CBE7			0,956			
	CBE8			0,933			
	CBE9			0,914			
	CBE10			0,941			
Brand Equity	BE1	0,760	0,000	0,963	0,943	Valid & Reliable	Hepola et al. (2017)
	BE2			0,984			
	BE3			0,921			
	BE4			0,875			

Table 1. Pretest Validity and Reliability Test Results

RESULTS AND DISCUSSION

The majority of the respondents in this research were females (142; 56,8%), between 25 to 34 years old (135; 54%), and had monthly expenditures of between Rp. 5.000.001 to Rp. 10.000.000 (85; 34%). In terms of education, most respondents were bachelor's degree graduates (210; 84%).

No	Items		Frequency	(%)
1.	Coffee Shops Respondents Have Visited and Consumed in Jakarta (8 Brands Most Mentioned by Respondents)	Anomali Coffee Djournal Coffee Dua Coffee Fore Coffee Giyanti Coffee Roastery Kopi Kenangan Starbucks Toko Kopi Tuku Other brands	4 9 6 9 10 14 68 11 119	3.1 6.9 4.6 6.9 7.6 10.7 51.9 8.4
2.	Gender	Female Male	142 108	56.8 43.2
3.	Age	18 – 24 years old 25 – 34 years old 35 – 44 years old ≥ 45 years old	100 135 10 5	40 54 4 2
4.	Academic Background	High School Associate's degree Bachelor's degree Master's degree	11 8 210 21	4.4 3.2 84 8.4
5.	Average Monthly Expenditure	≤ Rp. 3.500.000 Rp. 3.500.001 – Rp. 5.000.000 Rp. 5.000.001 – Rp. 10.000.000 > Rp. 10.000.000	57 82 85 26	22.8 32.8 34 10.4
6.	Average Monthly Coffee Consumption	≤ Rp. 100.000 Rp. 100.001 – Rp. 300.000 Rp. 300.001 – Rp. 500.000 > Rp. 500.000	28 103 83 36	11.2 41.2 33.2 14.4
7.	Frequency of Coffee Shop Visits Per Month	Once per month 2 – 3 times per month > 3 times per month	21 91 138	8.4 36.4 55.2
8.	How Long Has the Respondent Been Consuming Coffee	Less than the past year The past 1-3 years More than the past 3 years	32 85 133	12.8 34 53.2
9.	The Most Important Factor in a Coffee Shop	Taste of the coffee Menu prices are affordable Diverse menu choices Adequate location Fun atmosphere and ambience	92 24 13 10 106 5	36.8 9.6 5.2 4 42.4 0.8

10.	Alternative Choice of Coffee Shops Respondents Have Visited and Consumed in Jakarta (8 Brands Most Mentioned by Respondents)	Anomali Coffee	8	7.1
		Dua Coffee	6	5.4
		Fore Coffee	9	8.0
		Janji Jiwa	15	13.4
		Kopi Kalyan	11	9.8
		Kopi Kenangan	16	14.3
		Starbucks	21	23.2
		Toko Kopi Tuku	26	18.8
		Other brands	138	

Table 2. Demographics of Respondents

Based on the validity test results included in the appendix, all indicators' Standardized Loading Factor (SLF) values are above 0,5 which means all indicators are statistically valid and can explain the latent variables that will be used. According to Hair et al., (2014), a variable can be stated as reliable if the Construct Reliability (CR) value is above 0,6 and the Variance Extracted (VE) value is above 0,5. Based on the test results, all variables' CR and VE values are above the cut-off values so all variables can be statistically stated as reliable.

To assess the proposed model, the Goodness of Fit Index (GOFI) values were examined. Most of the results of the first goodness of fit test didn't meet the cut-off values. To improve the results, the model modification indices were examined to see if there were paths that could be added to improve the fit of the model. After the paths had been added, the second test results met the cut-off value. The Goodness of Fit (GFI) is a part of the absolute fit measure, and the GFI value starts from 0 as poor fit and 1 as perfect fit. If a GFI value is above 0,90 it provides a good fit, and if it's between 0,8 and 0,9 it is considered as marginal fit. The GFI in this model is 0,793, which is below 0,8 and considered as poor fit. The Root Mean Square Error of Approximation (RMSEA) value is another part of the absolute fit measure. When a RMSEA value is below 0,05 it is considered as close fit. If the RMSEA value is between 0,05 and 0,08 it is considered as a good fit, and when a RMSEA value is between 0,08 and 0,10 it provides a marginal fit. The RMSEA of this model is 0,083, thus the RMSEA has a marginal fit. All of the incremental fit measures like the Normed Fit Index (NFI), Comparative Fit Index (CFI), Relative Fit Index (RFI), and Tucker-Lewis Index (TLI) values are between 0,80 and 0,90, thus considered as marginal fit.

The marginal fit of the model fit test was not obtained due to various factors. According to Hu and Bentler (1999), one of the issues that often occurs in the measurement of model fit is determining the adequacy of the fit index under model conditions that are often found in practice. These conditions include the sensitivity of the fit index to model specification errors, small sample bias, the effect of the estimation method, the effect of violations of normality and independence, and the bias of the fit index used to evaluate the fit model. Researchers often question the adequacy of conventional boundary criteria due to lack of empirical evidence and insufficient reasons for the rules that have always been used.

A study conducted by Marsh and Hau (1996) investigated several goodness of fit indices and cutoff value rules based on these indices by comparing parsimonious and non-parsimonious simplex models. Their research has proven that cutoff value rules such as RMSEA, NFI, and the parsimony index may be useful under some conditions but often lead to inappropriate cutoffs in others. In another study, Hu and Bentler (1997) also proved that the cutoff value that has become the rule does not work as well with various types of fit indices, sample sizes, estimators, and distributions. The cutoff value level used is also often suitable for one model, but does not work as effectively when applied to other models.

The research model was analyzed using the structural equation modeling through AMOS. The statistical results can be seen below.

Hypothesis Path			Estimate	C.R	P-value	Result
H1a SensoryBrandExperience	□	CognitiveProcessing	0,391	7,539	***	Supported
H1b SensoryBrandExperience	□	Affection	0,184	4,139	***	Supported
H1c SensoryBrandExperience	□	Activation	0,361	6,062	***	Supported

H2	SensoryBrandExperience	<input type="checkbox"/>	BrandEquity	-0,103	-1,359	0,174	Not supported
H3a	PersonalInvolvement	<input type="checkbox"/>	CognitiveProcessing	0,718	11,029	***	Supported
H3b	PersonalInvolvement	<input type="checkbox"/>	Affection	0,806	11,648	***	Supported
H3c	PersonalInvolvement	<input type="checkbox"/>	Activation	0,653	8,918	***	Supported
H4	PersonalInvolvement	<input type="checkbox"/>	BrandEquity	0,069	0,497	0,619	Not supported
H5a	CognitiveProcessing	<input type="checkbox"/>	BrandEquity	0,128	1,328	0,184	Not supported
H5b	Affection	<input type="checkbox"/>	BrandEquity	0,211	2,294	0,022	Supported
H5c	Activation	<input type="checkbox"/>	BrandEquity	0,562	5,900	***	Supported

Table 3. Hypothesis testing results

The table above shows that all sensory brand experience hypotheses are supported, except one hypothesis, H2, which was not supported and not significant. There are also two other hypotheses that are not supported, which are H4 and H5a. All unsupported hypotheses are the ones directly affecting brand equity.

The first hypothesis is Hypothesis 1a which states that sensory brand experience has a positive effect on cognitive processing. Based on the results, it can be seen that a p-value of 0,000 is obtained, which indicates that there is a significant positive effect between sensory brand experience on cognitive processing. The estimated coefficient on this relationship is 0,391, which means that the higher the sensory brand experience experienced by customers in a coffee shop, the higher the level of cognitive thought processes by customers for the coffee shop brand. This positive and significant relationship has been found in several previous studies. According to previous research conducted by Han et al., (2019), the sensory and affective experiences that customers go through are the main aspects that influence the customer's decision-making thought process related to the coffee shop being visited. This result is also supported by research from Legendre, Cartier and Warnick (2019) which states that when a consumer gets a brand experience, the experience can help consumers to become more prepared to store memories about the brand. In addition, other research that supports this result is Zha et al., (2021) which states that the intrinsic processing in sensory brand experience affects the thought processes that consumers go through exteroceptively and interoceptively. Hepola et al., (2017) also stated that the sensory experience experienced by a customer can affect cognitively what the customer does to the brand in question.

The second hypothesis is Hypothesis H1b, which states that sensory brand experience has a positive effect on affection. Based on the results, it can be seen that a p-value of 0,000 is obtained, which indicates that there is a significant positive influence between sensory brand experience and affection. The estimated coefficient of this relationship is 0,184, which means that the higher the level of sensory brand experience experienced by customers in a coffee shop, the higher the level of affection that customers have and form for the coffee shop brand. This positive and significant relationship between sensory brand experience and affection can be found in several previous studies. The results from the research of Moreira, Fortes and Santiago (2017) are also similar, which states that sensory stimulation of brands can affect consumers' positive feelings towards brands. Then, Legendre, Cartier and Warnick (2019) also prove that the brand experience that a consumer goes through can help consumers become more involved and find meaning in the experience they go through.

The third hypothesis is Hypothesis H1c, which states that sensory brand experience has a positive effect on activation. Based on the results, it can be seen that a p-value of 0,000 is obtained, which indicates that there is a significant positive influence between sensory brand experience on activation. The estimated coefficient of this relationship is 0,361, which means that the higher the level of sensory brand experience experienced by customers in a coffee shop, the higher the level of customer desire to carry out an activity related to the coffee shop brand. The results of this structural equation modeling are in accordance with several previous studies related to the influence of sensory brand experience on activation. According to Moreira, Fortes and Santiago (2017), brand sensory stimulation can affect consumers' desire to do something related to the brand.

The fourth hypothesis is Hypothesis H2, which states that sensory brand experience has a positive effect on brand equity. Based on the results, it can be seen that a p-value of 0,174 which is above the cut-off value of 0,05, and it indicates that there is no significant influence between sensory brand experience and brand equity. The estimated coefficient of this relationship is -0,103, which means that the higher the level of sensory brand experience experienced by customers in a coffee

shop, it does not affect the level of brand equity owned by customers in the coffee shop. The statistical results that are different from previous studies can be caused by changes in consumer behavior during the COVID-19 pandemic. The frequency of consumers coming to coffee shops to consume coffee is reduced by the consumer's capability to make online orders from home and does not require consumers to come to the physical store of the coffee shop. Consumers are attracted to the online food delivery mode during the pandemic because traveling is a difficult thing for most people to do (Kumar, 2020).

Due to competitive market conditions, international brand businesses in the coffee shop industry are increasingly looking for innovative ways to make a positive impression in the long term (Kim et al., 2016). For example, Starbucks as an international coffee shop brand that also sells its brand as part of a lifestyle, emphasizes that its brand prioritizes experience over other aspects (Michelli, 2007). During the current pandemic brands want the safety and health of their customers to always be maintained. By providing a safe experience for customers during the pandemic through delivery services using third party applications, brand companies are able to provide services that can meet consumer wants and needs while maintaining customer health. The study of Grębosz & Wrońska (2013) shows that sensory cues have a positive impact on consumer preferences, but that the combination of different cues together can build up an even worse impact that can lead to damaging product or environmental evaluations. In addition, research from Pentz and Gerber (2013) shows negative results because sensory branding has made consumers reduce their preferences because of too much appeal. Pentz and Gerber (2013) said that for certain product categories, consumers may experience sensory overload and therefore a reduced consumer experience.

The fifth hypothesis is Hypothesis H3a, which states that personal involvement has a positive effect on cognitive processing. Based on the results, it can be seen that a p-value of 0,000 is obtained, which indicates that there is a significant positive effect between personal involvement on cognitive processing. The estimated coefficient of this relationship is 0,718, which means that the higher the level of involvement a customer has with a coffee shop, the higher the level of cognitive thought processes by the customer for the coffee shop brand. The results are in accordance with the results of previous research. Hollebeck et al., (2014) prove that customer involvement with a brand can influence and reflect a deeper level of cognitive processing related to the brand. In a study conducted by Leckie et al., (2016), consumer involvement has a positive effect on consumer cognitive processing. Other studies that support the results of this study also state that at the affective level, high consumer involvement can increase consumers' views of brands to be more attractive, charming and increase the positive experiences experienced by consumers (Gummerus et al., 2012). Research from Harrigan et al., (2018) also proves that consumer involvement affects the cognitive processing that consumers go through.

The sixth hypothesis is Hypothesis H3b, which states that personal involvement has a positive effect on affection. Based on the results, it can be seen that a p-value of 0,000 is obtained, which indicates that there is a significant positive influence between personal involvement and affection. The estimated coefficient of this relationship is 0,806, which means that the higher the level of involvement a customer has with a coffee shop, the higher the level of affection that customers have for the coffee shop brand. Previous similar studies related to personal involvement and affection have proven similar results. A research from Su et al., (2019) also states that the involvement that consumers have with a brand is proven to be affected by the attitude that consumers have towards the brand. Gummerus et al., (2012) proved that at the affective level, high consumer involvement can increase consumers' views of brands to be more attractive, charming and increase the positive experiences experienced by consumers. Then according to Harrigan et al., (2018), consumer involvement is proven to predict the components of consumer brand engagement which includes affection.

The seventh hypothesis is Hypothesis H3c, which states that personal involvement has a positive effect on activation. Based on the results, it can be seen that a p-value of 0,000 is obtained, which indicates that there is a significant positive effect between personal involvement on activation. The estimated coefficient of this relationship is 0,653, which means that the higher the level of involvement a customer has with a coffee shop, the higher the level of customer desire to do an activity related to the coffee shop brand. According to Delbaere, Michael and Phillips (2020), activation is proven to be related to consumer confidence in purchasing a brand. Gummerus et al., (2012) stated that at the activation level, when consumer involvement in the brand increases, consumers will feel an urge to engage more deeply with the brand. Then Harrigan et al., (2018) stated that involvement is proven to affect the components of consumer brand engagement including activation.

The eighth hypothesis is Hypothesis H4, which states that personal involvement has a positive effect on brand equity. The results show that the p-value is 0,619, which is above the cut-off value of 0,05, and it indicates that there is no significant influence between personal involvement on brand equity. The estimated coefficient on this relationship is 0,069. With no significant effect as evidenced by the results of this hypothesis, apparently there are several previous studies related to personal involvement and brand equity that produced similar test results. With no significant effect as evidenced by the results of testing this hypothesis, apparently there are several previous studies related to personal involvement and brand equity that produced similar test results. According to Greve (2014), an individual's level of involvement with a brand that is too high has a tendency to reduce the brand impression received by consumers, and can reduce the level of consumer loyalty to the brand. As described by Aaker (1991), brand loyalty is one of the main components of brand equity.

The ninth hypothesis is Hypothesis H5a, which states that cognitive processing has a positive effect on brand equity. Based on the results, it can be seen that a p-value of 0,184 is obtained, which indicates that there is no significant effect between cognitive processing on brand equity. The coefficient of estimation in this relationship is 0,128. Although the results do not match the hypothesis, some previous studies that discuss cognitive processing with brand equity have similar results. In a study conducted by Kaushik and Soch (2021), it has been proven in his research that cognitive processing does not have a significant effect on brand equity. Leckie et al., (2016) also proved in their research that cognitive processing does not have a significant effect on brand loyalty, where brand loyalty is one of the main components of brand equity (Aaker, 1991).

The tenth hypothesis is Hypothesis H5b, which states that affection has a positive effect on brand equity. Based on the results, it can be seen that a p-value of 0,022 is obtained, which indicates that there is a significant influence between affection on brand equity. The coefficient of estimation in this relationship is 0,211. This proves that the higher the level of affection formed by customers for the coffee shop brand, the higher the coffee shop brand equity in the perspective of consumers. The results of this hypothesis is similar to previous studies related to affection and brand equity. Other studies have also stated that positive emotions that are formed during interactions in customer engagement with a brand are very

important and contribute positively to the brand (Bilro et al., 2018). Ahn and Back (2018) also state that customer affective elaboration is involved in the formation of brand relationship quality and consumer behavior towards brands.

The last hypothesis, the eleventh hypothesis is Hypothesis H5c, which states that activation has a positive effect on brand equity. Based on the results, it can be seen that a p-value of 0,000 is obtained, which indicates that there is a significant positive effect between activation and brand equity. The estimated coefficient in this relationship is 0,562, which means that the higher the level of customer desire to do an activity related to the coffee shop brand, the higher the level of brand equity that customers have towards the coffee shop. These results are in accordance with previous similar studies. Activation is proven to represent the energy, determination, and effort that consumers have regarding a particular brand, and is also related to consumer confidence in making a purchase of a brand (Delbaere, Michael, and Phillips, 2020). Bilro et al., (2018) also prove that when consumers feel they really enjoy and like a brand and then take an action related to the brand, it will have a positive effect on the brand value in the eyes of consumers.

The summary of hypothesis testing results can be seen in Figure 2.

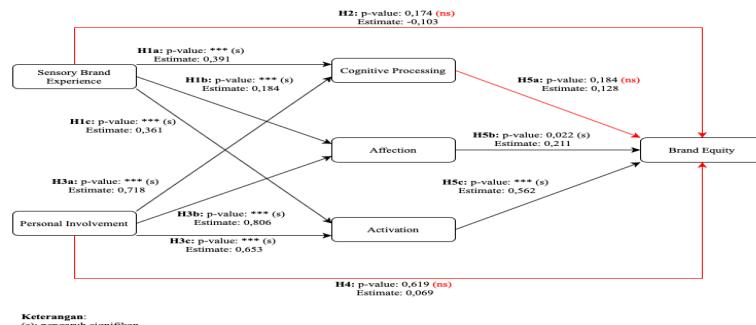


Figure 2. Hypothesis testing results

(s): significant

(ns): non-significant

This study is to examine the factors which play an important role in brand equity. Therefore, this study attempts to identify the impact of sensory brand experience and personal involvement on brand equity and the role of 3 components of consumer brand engagement which are cognitive processing, affection, and activation. Based on the results, it has been proven that sensory brand experience has positive significant effects on all three components of consumer brand engagement; cognitive processing, affection and activation. It is in line with a previous study conducted by Mazdharov *et al.*, (2018), that proved the scent of coffee in a coffee shop as part of a coffee shop's sensory experience, has the ability to improve customers' daily performance. Baumgartner *et al.*, (2006) has proven that visuals and music in an environment have the ability to improve a customer's strong emotional feelings. Milliman (1982, 1986) has also proven that music with varying tempo in a room affects a customer's purchase decision and behavior.

It has also been proven that personal involvement also has positive significant effects on cognitive processing, affection, and activation. It is in line with a study by Celsi and Olson (1988) and Greenwald and Leavitt (1984) that has shown if a brand is perceived as relevant to customers, they are likely to exert greater cognitive effort in terms of analyzing object-related situations and analyzing them in detail. Customer involvement with a brand will affect how high their engagement with the brand is (Dwivedi, 2015; France et al., 2016; Hollebeek, 2011a; Hollebeek et al., 2014). Kroeber-Riel (1979) also has proven that the level of customer motivation for the product or brand is important in determining how high their level of activation for the product or brand.

Although it was proven that both sensory brand experience and personal involvement have positive effects on cognitive processing, affection and activation, nonetheless, they don't have direct effects on brand equity. The different statistical results can be caused by changes in consumer behavior during the COVID-19 pandemic. The frequency of consumers going out and coming to coffee shops is reduced by the government's national regulation. Consumers' capability to make online orders from home doesn't require consumers to come to the store to consume coffee from their favorite coffee shops. Consumers are relying more on online food delivery during the pandemic because most people are not allowed to go out and their mobility is highly reduced (Kumar, 2020). With customers not visiting the coffee shop in person, the customer does not experience the sensory experience in the coffee shop environment. A previous research by Zarantonello and Schmitt (2010) proved that sensory brand experience is different from consumer brand concepts like brand involvement and brand attachment. Brakus *et al.*, (2009) and Calder *et al.*, (2009) stated that other types of experience may have better ability to predict consumer behavior towards brands.

There are also several previous studies related to personal involvement and brand equity that produced similar test results. According to Greve (2014), an individual's level of involvement with a brand that is too high has a tendency to reduce the brand impression received by consumers, and can reduce the level of consumer loyalty to the brand, which according to Aaker (1991), loyalty is one of the main components of brand equity. Greve (2014) also states that there are two types of customer involvement, offline and online, and although offline involvement is the real essence of engagement, these two types of consumer involvement have different effects. The pandemic that is currently undergoing, is forcing consumers to limit their mobility so they are unable to travel as often as usual. That way, customer involvement with the brand is not as intense as before when customers were able to visit a coffee shop to experience a direct and offline interaction and engagement.

The results in this research also indicate that two out of three components of consumer brand engagement, affection and activation, have positive significant effects on brand equity. This result is in line with a previous study conducted by Zainol *et al.*, (2016), which proves that customers who have strong emotional attachment will tend to have more pride when using a certain brand, will show a sense of joy when using the brand, and also perceive the brand as having more meaning than other competing brands. It is also in line with a study by Kumar *et al.*, (2010) which stated that customers who have high involvement will show four types of customer behavior including buying behavior, referrals, influence, and knowledge. However, one of the components of consumer brand engagement, cognitive processing, was found to have no significant effect on brand equity. This result is in line with a previous study by Kaushik and Soch (2021) which proved that cognitive processing does not have a significant effect on brand equity. Leckie *et al.*, (2016) also proved that cognitive processing does not have an effect on brand loyalty, in which brand loyalty is one of the main essences of brand equity.

CONCLUSIONS AND IMPLICATIONS

This study analyzes the influence of sensory brand experience and personal involvement on brand equity through three components of consumer brand engagement; cognitive processing, affection, and activation. Based on the results of the analysis and discussion, it can be concluded that sensory brand experience affects cognitive processing, affection, activation, but no direct effect on brand equity. Personal involvement affects cognitive processing, affection, activation, but no direct effect on brand equity. Affection and activation both affect brand equity, but cognitive processing does not affect brand equity.

Coffee shop business owners who want to increase their brand equity should increase the activation aspect that consumers have towards the coffee shop. Brand equity is proven to be influenced by activation and affection, but activation has a greater influence with an estimated coefficient of 0,562. The two indicators that have the largest loading factor in activation are AC2 with loading factor of 0,89 and AC1 with loading factor of 0,81. The AC2 indicator states that, "When I want to drink coffee, I often choose to buy coffee from [coffee shop I have consumed]". Meanwhile, the AC1 indicator states that, "I consume more coffee [from coffee shop I have consumed] than products from other coffee shops". Therefore, coffee shop business owners must be able to increase the activation that consumers have towards coffee shop brands. With consumers stating they consume coffee more often from a certain coffee shop than from others, it shows that consumers have made the coffee shop as a personal preference. Coffee shop owners must be able to maintain and improve the quality and services provided to consumers, so consumers see the coffee shop as their personal choice.

The activation variable is also greatly influenced by sensory brand experience and personal involvement. Among the two variables, the variable that has a greater influence on activation is personal involvement, with an estimated coefficient of 0,653. In personal involvement, the indicators with the largest estimated coefficient are PI3 which states, "In my opinion, the brand [coffee shop I have consumed] is irrelevant/relevant" with an estimated coefficient of 0,89; the PI9 indicator which states, "In my opinion, the brand [coffee shop I have consumed] is uninvolving/involving" with an estimated coefficient of 0,87; and indicators PI5 and PI8 which state, "In my opinion, brand [coffee shop I have consumed] is meaningless/meaningful" and "In my opinion, brand [coffee shop I have consumed] is worthless/valuable" with the same estimated coefficient of 0,81. Therefore, to increase the personal involvement that consumers have towards the coffee shop, coffee shop business owners should focus more on creating strategies that involve more consumers.

This can be done by providing facilities in the coffee shop environment. For example, Starbucks Reserve outlets provide special slow-bar tables where customers can watch and interact while the barista is doing a special manual brewing process. This involvement will give the impression of a personal involvement to consumers. Another example that can be applied is by holding a 'Bring Your Own Tumblr' campaign where customers are encouraged to bring their own drinking tumbler. It increases consumer engagement with the coffee shop and it also promotes environmental awareness, because the coffee shop will automatically reduce their plastic waste. Coffee shops can also sell merchandise, like how Toko Kopi Tuku sells tumblers and t-shirts, to create a deeper engagement between customers and the coffee shop. Not only does it provide valuable products to customers, it also increases customers' brand awareness of the coffee shop brand, and the profit earned from the sales of these merchandise can also provide an even bigger benefit for the coffee shop, which can be used to provide an even better experience and service for customers.

Not only personal involvement, activation is also influenced by sensory brand experience. In sensory brand experience, the indicators with the largest estimation coefficients are SBE3 and SBE4, which state, "[Coffee shop I have consumed] appeals to me sensorially", and "[Coffee shop I have consumed] appeal to me", with estimated coefficients of 0,88 and 0,87. Therefore, to increase the sensory brand experience that consumers encounter, coffee shop owners must improve the overall sensory experience consumers encounter when they are in the coffee shop environment. According to Wirtz and Lovelock (2016), ambient conditions or sensory elements perceived by consumers are part of the three components of the *servicescape*, alongside space and functionality, as well as signs and symbols. To improve the sensory experience experienced by consumers, coffee shop owners should adjust the lighting and color schemes, the size and shape of the room, sounds (including music and noise), room temperature, and the scent that can be detected in the room (Wirtz and Lovelock, 2016). When it comes to sounds, coffee shop owners must be able to adjust the volume of the music played so it does not get too noisy and still provides enough quietness so consumers can still talk and feel at ease in the coffee shop. In terms of aroma, coffee shop owners have to make sure that the space has a pleasant scent that isn't too strong or too overwhelming for consumers. The presence of the right scent in the right amount can have a strong impact on consumers' feelings and even in-store purchases (Wirtz and Lovelock, 2016).

In terms of color, the color chosen as the atmospheric theme should be considered very carefully, and the color should be perceived well in the coffee shop environment. Warm toned colors will give a happy atmosphere, but it increases anxiety - while cool toned colors reduce the level of arousal, but it creates a calming emotion. And lastly in terms of room layout, a coffee shop must be arranged neatly and coffee shop owners have to pay full attention to spatial aspects such as floorplans, furniture sizes, and the placement of the machines & equipment needed to create a comfortable ambience and maintain the aesthetics of the retail space.

LIMITATIONS AND FUTURE RESEARCH DIRECTIONS

Based on the research, there are several limitations that can be considered for future researchers to further refine their research. First of all, the number of respondents used in this research was 250 people. The number of researchers can be enhanced to further develop in future research to describe the situation more effectively. The core object of the research was also only focused on coffee shops geographically located in the DKI Jakarta area. If the research is conducted outside of DKI Jakarta, the results may differ and provide deeper insights into sensory brand experience, personal involvement and brand equity. The coffee shops used in this research also were not separated between the dine-in coffee shops and the takeaway coffee shops. The data collection in this research was conducted through questionnaires, which sometimes does not accurately indicate the respondents' true opinion. This is due to different personal thoughts, assumptions and understandings of each respondent. And last but not least, the research was conducted in the midst of a pandemic, where consumers' ability and mobility to visit coffee shops in person was very limited and prohibited by the government.

Further researchers who will conduct research based on similar topics should increase the number of respondents used. They can also conduct similar research outside the DKI Jakarta area, because demographic differences can lead to the possibility of differences in the research results. If the future researchers use coffee shops as the research object, the coffee shops should be separated and divided between the dine-in coffee shops and the takeaway ones. Future research can also be applied to other service sectors outside the food & beverage industry, such as the salon and beauty industry. According to Republika.co.id (2021), the beauty industry has been significantly increasing in Indonesia, with a large number of salons providing the likes of nail art and polish, waxing, and eyelash extension services, opening for business in the past recent years, and even the industry has single-handedly reached a revenue of Rp. 99,33 billion as per 2020 (BPS.go.id, 2020).

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Appendix

Validity and Reliability of Constructs

Variables Items	Sources	SLF	Error	CR	VE	Result
Sensory Brand Experience				0,9	0,86	Reliable
[The coffee shop that I have consumed] is impressive to look at.	Brakus et al., (2009)	0,75	0,32			Valid
[The coffee shop that I have consumed] gives a pleasing aroma.		0,67	0,45			Valid
[The coffee shop that I have consumed] appeals to me sensorially.		0,88	0,14			Valid
[The coffee shop that I have consumed] is interesting to me.		0,87	0,15			Valid
Personal Involvement				0,94	0,91	Reliable
In my opinion, [the coffee shop that I have consumed] is: Unimportant / important	Zaichkowsky (1985)	0,74	0,4			Valid
Boring / interesting		0,75	0,26			Valid
Irrelevant / relevant		0,89	0,87			Valid
Unexciting / exciting		0,75	0,29			Valid
Meaningless / meaningful		0,81	0,32			Valid
Repulsive / appealing		0,79	0,22			Valid
Mundane / exceptional		0,75	0,4			Valid
Worthless / valuable		0,81	0,32			Valid
Uninvolving / involving		0,87	0,52			Valid
Not needed / needed		0,78	0,35			Valid
Cognitive Processing				0,88	0,85	Reliable
Consuming coffee from [the coffee shop that I have consumed] makes me think of [the coffee shop that I have consumed].	Hollebeek et al., (2014)	0,91	0,17			Valid

I often think of [the coffee shop that I have consumed] when I consume coffee from [the coffee shop that I have consumed].	0,89 0,19	Valid
Consuming coffee from [the coffee shop that I have consumed] makes me want to find out and learn more about [the coffee shop that I have consumed].	0,75 0,51	Valid
Affection	0,9 0,87	Reliable
Hollebeek et al., (2014)		
I feel very positive when consuming coffee from [the coffee shop that I have consumed].	0,86 0,24	Valid
Consuming coffee from [the coffee shop that I have consumed] makes me happy.	0,89 0,19	Valid
I feel comfortable when I consume coffee from [the coffee shop that I have consumed].	0,88 0,16	Valid
I feel proud when I consume coffee from [the coffee shop that I have consumed].	0,7 0,59	Valid
Activation	0,87 0,82	Reliable
Hollebeek et al., (2014)		
I consume coffee from [the coffee shop that I have consumed] more often than from other coffee shops.	0,81 0,37	Valid
When I want to consume coffee, I often choose to buy from [the coffee shop that I have consumed].	0,89 0,18	Valid
When I want to consume coffee, I always consume coffee from [the coffee shop that I have consumed].	0,79 0,37	Valid
Brand Equity	0,9 0,86	Reliable
Hepola et al., (2017)		
It makes sense for me to consume coffee from [the coffee shop that I have consumed] rather than coffee from other coffee shops.	0,74 0,42	Valid

Even if other coffee shops are of the same quality as [the coffee shop that I have consumed], I will still consume coffee from [the coffee shop that I have consumed].

0,89 0,26 Valid

If there is another coffee shop that has the same quality as [the coffee shop that I have consumed], I will still consume coffee from [the coffee shop that I have consumed].

0,89 0,24 Valid

If other coffee shops are no different from [the coffee shop that I have consumed], I will still consume from [the coffee shop that I have consumed].

0,84 0,36 Valid

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The Effect of Financial Performance, Leverage and Corporate Governance on Corporate Risk Disclosure in Pharmaceutical Industry

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ABSTRACT

This research was conducted to examine factors that influence the practice of corporate risk disclosure. The factors were profitability, leverage, auditor reputation, managerial ownership, and risk committee in the context of pharmaceutical industry in Indonesia and Malaysia. Country was tested as a control variable. Number of the samples collected was 110 firm-observations from year 2015 to 2019. Purposive method of sampling was used to determine the sample. It used multiple linear regression to test the model by SPSS24. The result showed that the adjusted R squared was 85.2%; this indicates that the regression model was good. The hypothesis testing told that auditor reputation and risk management committee were having a significant positive relationship with risk disclosure index. The insignificant results in profitability, leverage and managerial ownership were believed because the lack of samples number and pool sample from Indonesia and Malaysia which may influence the relationship between independent variables and dependent variable. This study contributes to fill the lack of risk-disclosure reporting issues in developing countries which were not extensively explored.

Keywords: Corporate-risk-disclosure, auditor-reputation, managerial-ownership, risk-committee

INTRODUCTION

Publishing financial statements annually is mandatory for corporations listed in capital market. According to SFAC No.1 paragraph 50, the information within financial reporting should contain how management used the enterprise's resources. The disclosure of financial statements is used to measure the corporate's accountability to the stakeholders and so for making investment, credit decisions and other financial decisions.

Corporate risk defined as condition that is able to impact corporations in the future or had already affected the corporation which can be any opportunities or any hazards, dangers, exposures (Linsley and Shrvies, 2006). Hence, by disclosing risk information, a corporation tried to be more transparent in providing information to stakeholders. So far, risk management and risk disclosure have gained heightened research attentions, however most empirical research conducted in developed countries and there is a dearth in emerging countries (Habtoor, Ahmad, Mohamad, & Haat, 2017).

In Indonesia and Malaysia, there are several regulations that maintain corporations to disclose risk information in annual reports, particularly for corporations that listed in the Stock Exchange (IDX and MYX). Both Indonesia and Malaysia follow SFAS 60: Financial Instrument: Disclosure and Decision of Capital Market Supervisory Agency.

This research is intended to examine factors that influence the practice of corporate risk disclosure. The factors are leverage, profitability, auditor reputation, managerial ownership, and risk committee in the context of pharmaceutical industry in Indonesia and Malaysia. Country was involved as a control variable. The research object is pharmaceutical industry because it includes drug and food companies

that have a big responsibility to society so that they are expected to relate to the risk disclosures. Besides, Mazumder and Hossain, 2018 mentioned that pharmaceutical industry is frequently facing challenges from internal and external parties; such as lawsuits risks, regulations and inquiry to comply with strict standards, lack of skilled manpower, and swirls of disruptive technology to continuously make product innovations and some advancements in R & D.

THEORETICAL FRAMEWORK

Agency theory can be utilized as the basic understanding of risk disclosure practice, while signalling theory underlies voluntary disclosure. In this study, both theories were used as the basis to understand the concept of corporate governance in corporations.

Research Methodology

Corporate Risk Disclosure (CRD)

Corporate risk disclosure is the dependent variable that measured by content analysis with disclosure index approach. The score of 1 will be given if a corporation disclosed information as determined in the checklist index and 0 if the corporate did not disclose the information. The items of disclosure check list were adopted from the study of (Achmad, Faisal, & Oktarina (2017), which referred to the Indonesia Financial Services Authority (OJK). There are six categories of risk, including financial risk, operational risk, empowerment risk, information processing and technology risk, integrity risk and strategic risk with total 37 risk details from all categories. The index is formulated as follow:

$$\text{Risk Disclosure Index (RDI)} = \frac{\text{number of items disclosure}}{37}$$

Profitability (PRO)

Profitability is corporate's ability to utilize its resource to generate income (Sjahrial and Purba, 2011). This study picked Net Profit Margin (NPM) to measure the level of profitability. The formula for Net profit margin is as follow:

$$\text{Net Profit Margin (NPM)} = \frac{\text{Net Profit (before tax)}}{\text{Sales}} \times 100$$

Leverage (LEV)

Leverage is determined as a ratio that states the relationship between debt and total equity or corporate's asset (Habtoor et al., 2017). It measures the ability of both long-term debt and short – term debt used to finance a corporate's activities. used to measure the leverage based on (Habtoor et al., 2017) is:

$$\text{Leverage} = \frac{\text{Total Liabilities}}{\text{Total Asset}}$$

Good Corporate Governance (GCG)

GCG is defined by Monks and Forum for Corporate Governance Indonesia (cited in Latupono & Andyani, 2015) as a governance system that explains the relationships of various participants in determining the direction and performance of the corporate. In this study, the corporate governance determined by auditor reputation, managerial ownership, and risk committee.

Auditor Reputation (AR). According to Jensen & Meckling (1976), external auditors have a strong influence in mitigating agency conflicts between managers and investors through enhancing corporate disclosure. In this study, auditor reputation is indicated by whether a company uses a big accounting firm as the external auditor. The big accounting firm is denoted to the Big Four accounting firms. The dummy variable is used. Companies that use one of the Big 4 Accounting firm get 1 point and 0 for companies that do not.

Managerial ownerships (MO). According to Weisbcah (1988) as cited in Kamardin (2014) managerial ownerships works as direct encouragements for managers to act in line with shareholders' interests. Managerial ownership is the ratio of shares owned by all managers to total shares outstanding (Ruan & Tian, 2011). It is determined:

$$\text{Managerial ownerships} = \frac{\text{Number of Shares Own by Managers}}{\text{Total Outstanding Shares}}$$

Risk committee (RMC) is an independent committee that responsible for the risk management policies (Kallamu, 2015). Meanwhile, risk committee establishment is still voluntarily. RMC is measured using dummy variable, if the companies have RMC it will get 1 point and get 0 for companies that do not.

HYPOTHESIS DEVELOPMENT

According to agency theory, corporate's managers with high profit margin tend to provide deeper risk information due to show their shareholders that managers already performed in the best interest of shareholders (Linsley & Shrives, 2006). This proven by studies conducted by Achmad et al., (2017). The first hypothesis is proposed as: **H₁: There is positive influence between profitability and the practice of corporate risk disclosure.**

Leverage shows a corporate's ability to fulfil its financial obligations. Corporate with high leverage tend to have greater motivation to provide more risk disclosure in favour to assure debt holders and creditors regarding the corporate ability to manage risks arise from debt and fulfil their obligation. Thus, the leverage level of corporate is a factor that influence to practice of corporate risk disclosure. A study conducted by Utomo & Chariri, (2014) proved that leverage have positive significant effect to risk disclosure. Hence, the second hypothesis stated as **H₂: There is positive influence between leverage and the practice of corporate risk disclosure.**

The agency theory suggests that external auditors have a strong influence in mitigating agency conflicts between managers and investors through enhancing corporate disclosure (Jensen & Meckling, 1976). When corporations are audited by auditor of one Big 4 audit firm, the corporation could enhance information disclosure specially risk. The auditor of the Big 4 audit firm will assist the internal auditor to improve the quality of corporate risk assessment and supervision. Thus, risk disclosure can be disclosing in annual report. Previous studies by Dey et al. (2018) and Habtoor et al. (2017) found that auditor reputation had positive relation to the extent of risk disclosure. The third hypothesis is: **H₃: There is positive influence between auditor reputation and the practice of corporate risk disclosure.**

Achmad et al., (2017) stated that companies that have higher managerial ownership composition incline to disclose less information to shareholders. Since the managers has lower encouragements to meet the demands of shareholders through voluntary risk disclosure. A study done by Achmad et al., (2017) found that there was negative association between managerial ownership and corporate disclosure. Thus, the fourth hypothesis proposed is: **H₄: There is negative influence between managerial ownership and the practice of corporate risk disclosure.**

Risk management committee is responsible to monitor the risk strategies, policies and risk tolerance level as well as reviewing the sufficiency of risk management policies (Kallamu, 2015). The formation of risk management committee within a corporate governance may enhance the practice of risk disclosure. In addition, it may help corporate to give a signal regarding the risk, which might be happen in the future. A study by Al-Hadi et al. (2016) got that there was positive significant influence between the size of risk committee on market risk disclosure. The hypothesis is: **H₅: There is positive influence between the existence of risk committee and the practice of corporate risk disclosure.**

RESULTS AND DISCUSSION

Population of this study is annual report of pharmaceutical corporations listed in the Indonesia and Malaysia Stock Exchange during the year 2015 – 2019. Purposive method of sampling was used to determine the sample. Number of the samples collected was 110, tested by SPSS24.

It used multiple linear regression to test the effect of five independent variables: profitability, leverage, auditor reputation, managerial ownership and risk management committee to the dependent variable corporate risk disclosure; while country used as a control variable. The research model is as follows:

$$CRD = \alpha + \beta_{PRO} + \beta_{LEV} - \beta_{AR} + \beta_{MO} - \beta_{RMC} + \beta_{CON} + \varepsilon$$

Table 1 presents the result of descriptive statistics test. It reports the results of normalization based on skewness and kurtosis. The values for skewness and kurtosis must fall between -2 and 2. Meanwhile,

all the classic tests assumptions Heteroscedasticity and Pearson Correlation are met the criteria. Table 2 describes the Tolerance Coefficients and the VIF for Multiple Regression. Moreover, result of the t-test using Levene Test of five independent variables on dependent variable is reported in Table 3. Table 3 tells that only auditor's reputation, managerial ownership and risk management committee are having a significant relationship with risk disclosure index. Lastly, Table 4 shows the result of the hypothesis testing with multiple linear regression. All the tables are presented bellows.

Table 1. Descriptive Statistics

	CDR	PRO	LEV	MO	AR	RMC	2015	2016	2017	2018	2019	Coun t
Minim	0.27	-2.11	.000	.000	0	0	0	0	0	0	0	0
Maxim					1	1	1	1	1	1	1	1
Mean	.220	1.02	.401	.214	-	-	.20	.20	.20	.20	.20	.45
	5	7	5	8								
St Dev.	.194	7.33	.363	.320	.48	.209	.402	.402	.402	.402	.402	.500
	6	8	0	7	6							
Skewn	.307	-.091	4.66	1.40	-	-4.43	1.52	1.52	1.52	1.52	1.52	.185
			3	9	.53		1			1		
					4							
Kurtos i	-1.40	3.46	3.27	.435	-	1.79	.318	.318	.318	.318	.318	-
	0	4			1.7	1						2.002
					5							

Note: This table shows the results for correlation analysis for a sample of 110 firm-year observations.

Table 2. The Tolerance Coefficients and the VIF for Multiple Regression

Variables	Tolerance	VIF
Profit Profitability (PRO)	.845	1.183
Leverage (LEV)	.954	1.048
Managerial Ownership (MO)	.780	1.283
Auditor Reputation (AR)	.902	1.109
Risk Mangt Committee (RMC)	.960	1.042

Note: This table shows the results for a sample of 110 firm-year observations

Table 3. Multiple Regression for Risk Disclosure Index

	Beta	T-test
Constant	.152	(2.051)***
Profitability	-.001	(-.974)
Leverage	.006	(.312)
Auditor Reputation	.067	(3.435)***
Mngr. Ownership	-.020	(-.799)
Risk Mgt. Committee	.110	(3.097)***
Country	-.323	(-16.842)***
Adjusted R Square	.852	
F-stat	63.840***	

Note: ***Correlation is significant at the 0.01 level (1-tailed); **Correlation is significant at the 0.05 level (1-tailed); *Correlation is significant at the 0.10 level (1-tailed).

Table 3 can be interpreted as follows:

The value of adjusted R squared found good at 85.2%. This indicates that the regression model is well explained the relationship between independent variables and dependent variable. Eventually, results of the hypothesis testing showed that the first hypothesis is found that profitability has a negative relationship with risk disclosure index. It could be the lack of information being disclosed by the company as to cover the incompetence of management to stakeholders. This is inconsistent with

previous study by Achmad et al. (2017). Moreover, the result is not significant. Therefore, in this study H1 is not supported.

Meanwhile, leverage is found to be positively related to risk disclosure index. It is consistent with a study conducted by Utomo & Chariri, (2014). They proved that leverage had positive significant effect in risk disclosure. Thus, the leverage level of corporate is a factor that influence to practice of corporate risk disclosure. Nevertheless, the result is insignificant. Hence, H2 is not supported.

On the other hand, auditor reputation is found in this study to have a significant positive relationship with risk disclosure index. This is consistent with previous studies by Dey et al. (2018) and Habtoor et al. (2017) which proved that auditor reputation has positive relationship with risk disclosure. The agency theory suggests that external auditors have a strong influence in mitigating agency conflicts between managers and investors through enhancing corporate disclosure (Jensen & Meckling, 1976). Thus, H3 is supported in this study.

Managerial ownership, on the other side, is found to be negatively and insignificant related to risk disclosure index. This study is supported by Achmad et al., (2017), but inconsistent with Sultisyaningsih and Gunawan (2016), which they found a positive significant relationship. Finally, H4 is not supported.

Finally, the last hypothesis is found to have significant positive relationship between risk management committee and risk disclosure index. The result is consistent with past study done by Al-Hadi et al. (2016). They documented that there was positive and significant relationship between the sizes of risk committee on the market risk disclosure. Hence, in this study H5 is supported.

CONCLUSIONS, LIMITATION AND CONTRIBUTIONS

From the analysis, only auditor reputation and risk management committee are having a significant positive relationship with risk disclosure index. Meanwhile, the insignificant results in profitability, leverage and managerial ownership are believed come from the limited number of samples, since this study has only 110 firm-year observations that may influence the results of this study. Furthermore, the insignificant results could be due to the pool sample from Indonesia and Malaysia, which may influence the relationship between independent and dependent variable.

This study was among the few that explored risk disclosure in developing countries. Some previous studies observed that this topic mostly conducted in developed economic environments such as UK, Canada, Japan, Singapore and Australia (Demir & Min, 2019). Results of this study contribute to fill the lack of risk-disclosure reporting issues in developing countries.

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The Perceived Usefulness of Interactive Video to Improve Student Learning Experience during ODL

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ABSTRACT

In the year 2020, it has witnessed that COVID-19 outbreak has changed our daily life substantially and forces the government to realign many sectors in Malaysia including the education system. Due to this pandemic, the education system in Malaysia has a rapid transition from face-to-face to open and distance learning (ODL) classes. This situation gives greater challenges to educators whereby they need to find a better method to teach students effectively especially during the online class. Therefore, the objective of this study is (1) to identify the students' difficulties experience of learning during ODL and (2) to recognize the perceived usefulness of interactive video in ODL. An e-survey has been conducted among accounting students in UiTM Perak branch, Tapah campus to know their perception regarding these issues. Based on 320 responses, the results indicated that one of the difficulties experienced by most accounting students throughout ODL was the need to increase study effort. In addition, there is a need for the use of interactive videos during the ODL classes since it gives many benefits in enhancing online learning. Hence, it is important to address the problems among students during ODL to increase their motivation as well as to improve student-educators' engagement that will lead to an effective teaching and learning process.

Keywords: Interactive videos, perceived usefulness, education, open and distance learning, Covid-19

1. INTRODUCTION

The Covid-19 outbreak has hit almost every country worldwide including Malaysia. Due to this situation, all schools and both public and private higher education institutions have been closed due to the Movement Control Order (MCO) announced by the government. Alternatively, the schools employed home-based learning, and student's performance is evaluated through continuous assessment scores. Online learning is a type of distance learning in which students and lecturers are in different locations but may still communicate over the Internet (Bartley & Golek, 2004). It provides students with a flexible learning environment in which they can engage in online lectures, tutorial discussions, and even take tests and final assessments from wherever they are. ODL can bring several advantages to educators and learners. According to Ghosh, Nath, Agarwal and Nath (2012) ODL may give benefits in terms of 1) improving the knowledge and skills of teacher educators both in higher education and educational agencies, 2) using in out-of school programmes where it is able to educate children and youth who are unable to attend ordinary schools due to disabled, suffering long-term illness, living in remote area or living oversea and 3) playing an important role for the human development especially in providing online hands-on training in the field of technical and vocational education. However, there are some challenges that both educators and students may face, such as difficulty accessing online classes due to poor internet access, financial issues, time constraints, poor technical skills, inadequate infrastructure, and even a lack of institutional strategies and support (Girik, 2020 & O'Doherty, Dromey, Lougheed, Hannigan, Last, and McGrath, 2018). Due to these problems, it may affect students' motivation to learn as well as reduce their engagement especially during the class session. Therefore, the use of interactive video in learning is possible to help students and educators to overcome these

scenarios. In response to the current situation, in which most educational institutes throughout the world have transitioned to e-learning because of Covid-19, this study aims to fill in this gap to acquire a clearer insight from the students' perspective, particularly in Malaysia. Thus, the objectives of this study are:

- To identify the students' difficulties experience of learning during ODL;
- To recognize the perceived usefulness of interactive video in ODL among the Accounting students.

The remainder of the paper is organized as follows. Section 2 includes previous literature on ODL including the method and the use of videos. Section 3 describes the research methodology that includes data and samples. Section 4 presents the empirical analysis and discussion on the findings and section 5 provides the summary and conclusion of the study.

2. LITERATURE REVIEW

The open and distance (ODL) concept in education has been widely used after the development of radio and television in the 1950s where people found the new delivery system outside the traditional classroom. According to American Association for Distance Learning (UDSLA), ODL means "the process of acquiring knowledge through a variety of media used to transfer education and information, including all types of technology and various forms of education for distance learning." In addition, Singh and Thurman (2019) defined online learning as learning experiences either in synchronous or asynchronous environments through different technologies so that students can learn and interact with teachers anywhere and share the ideas with their friends simultaneously.

2.1 The Method of Teaching during ODL

Online learning includes several instructional environments and approaches. The synchronous approach enables both educators and students to meet virtually during content delivery via video conferencing for examples Google Meet, Zoom, Jitsi, Microsoft Team, and Cisco Collaboration Solutions (Md Saidi, Sharip, Abd Rahim, Zulkifli & Md Zain, 2021). Though it allows two-way communication in real-time, students who experienced poor internet access and inadequate electronic devices will not benefitting online classes. The asynchronous environments provide learning material in the form of video, leaflets, articles, and PowerPoint presentations by the use of the Learning Management System (LMS) (Rindaningsih, Findawati, Hastuti & Fahyuni, 2021). There are various platforms available for online learning such as Blackboard, Canvas, Moodle, Google Classroom, Schoology or Docebo. According to Chung, Subramaniam, and Dass (2020), the majority of students preferred pre-recorded lectures posted to Google Classroom and YouTube since they could repeat the recorded videos several times to acquire a better understanding of the topic. Similarly, some students prefer to have asynchronous online learning because they can study at their own productive time (Wei, Kuah, Liew, Lee & Koh, 2021). In order to review student's knowledge and increase their engagement in the online classes, the educators can utilize online formative assessment tools such as Kahoot!, Quizizz and Google Forms (Kadar, Johan & Abu Bakar, 2020). The use of LMS also makes ongoing assessment possible where Google Classroom or uFuture is used to disseminate instructions and receive submissions of assignments, group projects, quizzes, tests and final assessments. In return, educators can evaluate student performance with online marking through Doc Hub, Kami, Xodo or Inkodo. Other than those mentioned above, chat applications such as WhatsApp, Telegram, Email, Facebook, Instagram, and Twitter also serve as a platform for students to interact with their peers and educators. Md Saidi et al. (2021) have confirmed that both the educators and students prefer WhatsApp as a medium of interaction during ODL. It might be because students feel free to express themselves and ask questions without fear of being judged.

2.2 The Use of Interactive Video and Its Effectiveness

For the past forty years, there has been a significant expansion in the availability of a wide range of technologies with the potential to improve the quality of teaching and learning in higher education (Taylor CJ, 1995), i.e. from the first generation until the fourth. It is important to note that the delivery technologies are simply packages of information and instruction to give students access to educational experiences. However, what really matters is the quality of the instructional message, rather than any inherent characteristics of the instructional medium used. The need in education to differentiate clearly

between the medium and the message was highlighted by Clarke (1983) as quoted by Schrum, Thompson, Maddux, Sprague, Bull and Bell (2007), who made the point that educational technologies are "mere vehicles that deliver instruction but do not influence student achievement any more than the truck that delivers our groceries causes changes in our nutrition". A part of feeling anxiety and despair, Web-based distance education is a relatively new form of teaching which requires new technologies. It is a favourite format in educational settings due to its flexibility and adaptability to students' needs (Allen & Seaman, 2016). Having these innovative elements embedded within the educational teaching procedure shall be able to increase the success rate in ODL and may help to bridge the educational gap during this pandemic environment. This has been supported by a study done by Hakkarainen (2011), using video production which supported the Program Based Learning model to be more effective and meaningful learning. In this study, the students reported their emotional involvement in learning using the video was positively toned (Kort & Reilly, 2002; Pekrun et.al, 2002) which synthesis as having an enjoyable learning environment (Strobel & Van Barneveld, 2009), hence resulted to be beneficial for their motivation to learn, their learning process and outcomes (Meyer & Tuner, 2002).

3. RESEARCH METHODOLOGY

The information for this study was acquired from students pursuing Diploma in Accountancy and Diploma in Accounting Information System in UiTM Perak branch, Tapah campus. Out of total population of 1,370 accounting students, 320 were managed to give response towards the survey that represented a response rate of 23.36%. This response rate is considered as sufficient as according to Aaker, Kumar and Day (2001), the effective response rate was approximately 24%. The survey was generated using Google Form and sent out to respondents over Whatsapp. The research method used in collecting the data is an online questionnaire that includes the two factors that are being measured: student's online learning experience and perception of using interactive videos. The questionnaire items were adapted and modified from Taat and Francis (2020) and Valenti, Feldbush, and Mandernach (2019), respectively. Using a four-point Likert scale, ranging from 1 denoting strong disagreement to 4 denoting strong agreement. In the questionnaire, questions were asked to determine the difficulties that students have in online learning and how they perceive the use of interactive videos will help them in having a better learning experience.

4. FINDINGS AND DISCUSSIONS



Figure 1. Students' difficulties experience of learning during ODL

Figure 1 shows that most respondents (92%, n=294) had significant experience with ODL sessions, which required them to double their effort for learning preparation. Students' workload has substantially increased since they are expected to complete assignments and submit via online while having difficulties with technology (Aldulaimi, Abdeldayem, Abo Keir, and Al-Sanjary, 2021). Apart from the need to increase student effort, 76% (n=243) respondents agreed that ODL allows them to determine their learning time at their own pace. Asynchronous online learning may provide learning material in the form of video using Learning Management System (LMS) (Rindaningsih et al., 2021) that allows a flexible learning time for students (Wei et al., 2021). Furthermore, respondents have also faced difficulty remembering (74%, n=236) and understanding the material they had studied (72%, n=229), hence, they agreed to change their way of study with the hope that it will enhance their learning process during an online class.



Figure 2. Students' feedback on the perceived usefulness of interactive video during ODL

Figure 2 shows the students' perceived usefulness of interactive video during ODL. Watching interactive videos and followed by referring to reading materials such as textbooks or lectures notes was found as the most rated (96%, n=306) perceived usefulness of interactive video that may help them understand better. This is supported by Noetel, Griffith, Delaney, Sanders, Parker, Cruz and Lonsdale (2021) when they found that integration of interactive video and existing teaching methods is found to be effective to enhance the student learning experience. Next, 95% of respondents perceived that a summary of the lesson at the end of the video would help students learn better. Using interactive video allows the student to use interactive elements like stopping, replaying, reversing, or altering speed to adjust to the pace of the video, resulting in more efficient ways of learning (Schwan & Riempp, 2004). Thus, students can pause the video for a while to any part that they would like to read more. The last two perceived usefulness of interactive video are capturing students' attention. 90% of respondents who agreed that the use of picture and sound may help students to focus, and the other 88% of respondents agreed that video will efficiently hold their attention during the teaching and learning process.

While an ODL provides for an asynchronous environment with flexible learning experiences (Singh & Thurman, 2019), interactive video allows students to manage the video by clicking on supplied links and accessing more information (Papadopoulou & Palaigeorgiou, 2016). Thus, during ODL, students can choose their own time when they can really focus on what they are learning. They may watch the video and just click on the section they want to study the most for a better understanding. Furthermore, Mayer (2014), as quoted by Koc Januchta, Hofer, Prechtl, and Leutner (2020), argued that learning with a combination of images and texts resulted in greater understanding than learning solely with words. ODL provides a flexible teaching and learning environment where both educators and students can choose the best approach of teaching and learning they prefer. The approach used must, above all, outweigh the student benefit too. Indeed, the integration of interactive learning components in videos provides students with a sense of control over their own learning (Gedera & Zalipour, 2018). Thus, there is a need for the use of interactive videos during the ODL classes since it gives many benefits in enhancing online learning.

5.0 CONCLUSION

In exploring the nexus between interactive videos and student's learning experience in an online learning environment, we aimed to first understand students' perceptions on how useful this alternative could be, compared to the traditional text-based learning materials. This study found that students hold positive views on the use of interactive videos in their online learning, where most of them agreed that they are benefitting them in many ways especially in terms of understanding and memorizing things. This directly creates awareness of students' preferences and thus alerting the academia of the need for more incorporation of engaging and purposeful interactive videos. It also suggests that interactivity can be a valuable means to improve learning effectiveness in online learning. Future research might explore the impact of using interactive videos in teaching on students' academic performance.

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Design Of Accounting Information System Expenditure Cycle With FAST Method (Study Cases at PT. XYZ)

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ABSTRACT

Companies can take advantage of their information technology as an opportunity for growth in competitive market. One that supports the use of information technology in the company is the accounting information system. These can help businesses to understand the company's financial condition to make decisions in the future. The expenditure cycle as one of the components in the accounting information system is an important part of the financial process. The expenditure cycle that is carried out ineffectively causes problems within the company that have an impact on losses, such as inaccurate information on reports related to purchasing activities, and inventory records. The purpose of this study is to design an accounting information system for the expenditure cycle based on the FAST (Framework for the Application of System Thinking) method at PT. XYZ, an Educational Services Company. The stages of the FAST method used consist of scope definition, problem analysis, requirements analysis, logical design, and interface design. Result of this research is that the design of the system can make it easier for users to make the purchasing process integrated and organized. The proposed accounting information system design is expected to help PT. XYZ to be more efficient and effective.

Keywords: FAST (Framework for the Application of System Thinking), Expenditure Cycle, Accounting Information System

1.0 INTRODUCTION

1. Background

Technology is one of the main things that support the company's primary activities. In Indonesia itself, there are still many companies or organizations that have not maximized the use of information technology. Based on the Cornell University Survey, INSEAD and the World Intellectual Property Organization (WIPO), Indonesia's 2020 Global Innovation Index (GII) ranking ranks 85 out of 131 countries surveyed. This shows the importance of progress in infrastructure development, the use and skills of human resources in utilizing information technology. So that institutions and organizations in Indonesia are expected to implement innovation, namely the application of information technology.

PT XYZ is a company engaged in educational services with its main business being training data science. PT XYZ has two main business lines, namely B2B (Business to Business) and B2C (Business to Consumer). The B2B services offered are training services in-house for corporate customers which usually take a short duration of 2-15 days in 1 training session and are located at the customer's company. The B2C services offered are general training services, where PT XYZ opens classes publicly intended for individual customers with a long duration of 14 – 56 days in 1 training session and is located in a place provided by PT XYZ.

Along with the rapid development of PT XYZ where the greater the interest and the more training provided, it directly improves the process of operational activities which causes purchasing activities to also increase. Meanwhile, there is no adequate accounting information system and procedures in the expenditure cycle, because all records are still manual. This results in errors in its operations, such as

recording errors in purchasing procedures. Supported by the results of interviews with managers at PT XYZ, where the manual system makes management inefficient in conducting business activities. Therefore, an accounting information system is needed as a tool in storing transaction data and summarizing the calculation time with the increasing number of transactions in PT XYZ's business activities.

2. Problem Formulation

1. How can the design of the expense cycle accounting information system be appropriate and be used based on the FAST method?
2. What are the recommendations for internal control in *Control Activities* and *Risk Assessments* based on the 2013 COSO framework?

3. Scope of Research

1. This research at PT XYZ uses a systems development method approach, namely the FAST method (Framework for the Application of System Thinking) with five stages including scope definition, analysis problems, requirements analysis, logical design, and user interface design.
2. The problem scope approach and problem analysis will use the PIECES framework (Performance, Information, Economics, Control, Efficiency, Services). For analysis business requirements, this study uses a model use case.
3. Internal control that will be used in this study uses the COSO 2013 framework, which is focused on activity control and risk assessment.
4. The research is only limited to the design of an accounting information system about the expenditure.

2.0 THEORY REVIEW

1. Accounting Information System

Accounting information system has a very important role in supporting its operational activities, to ensure the recording of every financial event that can be recorded in a very structured manner by system. Romney (2020) conveys that five components in accounting information system: (1) The people who operate the system and perform various functions. (2) The procedures and instructions, both manual and automated, involved in collecting, processing, and storing data about the organization's activities. (3) The data about the organization and its business processes. (4) The software used to process the organization's data. (5) The information technology infrastructure.

2.2 Expenditure Cycle

Expenditure grouped into two, purchase and cash payment transactions. The main function of the expense cycle is to facilitate the movement of cash to suppliers for needed goods and services. The expenditure cycle has four main activities: (1) ordering materials, supplies and services; (2) receiving supplier invoices; (3) approving supplier invoices; and (4) cash disbursements. There are some documents required in the expenditure cycle, including purchase requisition, purchase order, vendor lists, purchase invoices, good packing slips, receiving report, and remittance advice.

3. Framework for the Application System Thinking (FAST)

Whitten and Bentley (2007), the FAST method consists of: (1) Scope Definition/ Scope of the Problem; (2) Problem Analysis; (3) Requirements Analysis; (4) Logical Design; (5) Decision Analysis; (6) Physical Design & Integration; (7) Construction & Testing; and (8) Installation & Delivery.

4. Risk Assessment and Control Activities

Table 1. Several Principles of Risk Assessment and Control Activities

Risk Assessment	Control Activities
Organization defines objectives with sufficient clarity to allow identification and assessment of risks associated with the objectives.	Organization selects and develops control activities that contribute to risk mitigation of achieving objectives at an acceptable level.

The organization identifies risks to achieving its objectives across the entity and analyses risks as for determining how risks should be managed.	The organization selects and develops general control activities over technology to support the achievement of objectives.
Organizations consider the potential for fraud in assessing the risks to the achievement of objective.	Organizations deploy control activities through policies that define what is expected, and procedures that put policies into action.
The organization identifies and assesses changes that could have a significant impact on the internal control system.	

Source: COSO (2013)

3. RESEARCH METHOD

3.1 Data Collection Techniques

This study case using three methods of data collection, the first is an interview. Interviews were conducted with five representatives approved by PT XYZ, namely one director, one financial manager, one project manager, one operational staff and one finance staff. In addition, by direct observation, the author will get a clearer and more complete picture of the process of the expenditure cycle at PT. XYZ is carried out starting from ordering or purchasing activities, approval of purchase invoices and also cash disbursements in the company. Finally, documentation is used to obtain additional data, such as written documents, photos or other notes. This serves to strengthen the data collection itself.

4.RESULT

Table 2. Result based on PIECES

<i>Performance</i>		
No	Component	Description
1	Cause	There are many miscommunications in the expenditure cycle activities. For example, in the receiving process, many registered goods have not been received even though the goods are already in the warehouse. This happens because anyone can sign the receipt of the shipment of goods.
	Effect	Data integration has not been carried out in the expenditure cycle business processes.
2	Cause	Documents in the purchasing process and purchasing reports are still manual. That's because of the expenditure cycle information system that is currently being run by PT. XYZ is still manual.
	Effect	It is difficult to obtain accurate information on expense reports related to purchasing activities because the transaction recording process is still manual. Some notes are recorded in a ledger manually. This makes financial report makers require a long period of time so that they are not efficient in making these reports.
3	Cause	Recurring errors such as an incorrect order in the purchasing activity process. No validation of purchase approval.
	Effect	The difference between the costs listed on the purchase statement and the checking account.
<i>Information</i>		
No.	Component	Description
1	Cause	Purchase data information has not been presented in an accurate, relevant and timely manner as well as an evaluation system that can support proper management.
	Effect	When the director, as the main leader of the company who receives the financial statements, feels the expense cycle report is not relevant to the events that occur.
2	Cause	Lack of system procedures in purchasing activities. That is in the ordering process. An example is the process of ordering a certificate which is a part of the purchasing operations in the expenditure cycle. The recorded data is different between purchase data and receipt data.

	Effect	There are complaints or complaints that affect the company's reputation from external parties. For example, PT. XYZ often receives complaints about certificates received by clients because of frequent misprints.
Information		
No.	Component	Description
3	Cause	data files and documents are separate so that periodic checks cannot be carried out which results in weak supervision of the reception section, namely the warehouse.
	Effect	From the results of the interview, it was stated that there were irregularities in the inventory receiving process. For example, cases where some items are lost, such as training merchandise in large quantities.
Economic		
No.	Component	Description
1	Cause	There has not been any control over the use of the budget, so it cannot be measured. One of the causes that often occurs is that there are some products that were wrongly made by the supplier but have already been paid for and cannot be refunded. This happens because of repeated order errors and because there is no control in the budget, the customer can buy goods repeatedly.
	Effect	This also results in an excess of unneeded goods in the warehouse and increases the cost of expenses.
Control		
No.	Component	Description
1	Cause	Anyone can input data. In addition, because it is manual, there are weaknesses in the monitoring process.
	Effect	There is no protection against data so that data and goods loss often occurs.
2	Cause	Anyone can make edits such as delete and input data repeatedly.
	Effect	Purchase data is inconsistent due to lack of control in the process of input and edit data.
Efficiency		
No.	Component	Description
1	Cause	After the observation activity, it resulted in the input that there were very many paper documents from the purchasing activities carried out at PT XYZ.
	Effect	Data and transaction records are still stored in paper-based files. So prone to data loss and human error in manual integration. Not efficient.
Services		
No.	Component	Description
1	Cause	From the interviews, it was found that the absence of standards and information systems for the purchasing process resulted in each department having a different purchase submission format.
	Effect	Inefficient and ineffective in making financial statements.

Source: Data Processed

5. CONCLUSION AND SUGGESTIONS

5.1 Conclusion

The company does not yet have an integrated system, causing a lot of errors in the expenditure cycle, coupled with the absence of a clear job description for each worker.

5.2 Suggestions

Fix the job description of PT XYZ to avoid irregular work in running the company's income system. Each section is expected to carry out its work in accordance with the procedures established by the company so as to minimize problems. PT XYZ must design Accounting Information System using the FAST Method or makes *coding* programs from the revenue system application design and to

reduce the problems that exist in the current manual system. After that, PT XYZ should conduct a trial run, then socialize it first to the *Finance & Accounting side* so that they can run the system application.

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Factors Influencing Muslim Community's Decision-Making in Monetary Donations through Online-Based FinTech Crowdfunding Platforms

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ABSTRACT

This study aims to investigate the factors behind Muslim community's decision making to donate using financial technology crowdfunding platforms. The factors include brand awareness, religiosity, financial reporting accountability, income, trust, accessibility, and social commitment. This study employed a quantitative approach which used survey as its tool for investigation. The convenience sampling technique is used to obtain the data. The subjects of this study were Muslim people who work in the Special Region of Yogyakarta. This study reveals that brand awareness, religiosity, trust and social commitment have positive influences in respondents' decision making to donate using financial technology crowdfunding platforms. Meanwhile, financial reporting accountability, income and accessibility do not have any influences in respondents' decision making to donate using financial technology crowdfunding platforms.

Keywords: Brand Awareness, Religiosity, Financial Reporting Accountability, Income, Trust, Accessibility, Social Commitment, Financial Technology, Crowdfunding.

1. INTRODUCTION

Technological development is a great help for users to carry out their activities in all walks of life, including business and economic sectors. Some companies have made the best use of technological development to create innovative brand-new services widely known as financial technology or fintech. Fintech refers to an innovation in the financial sector, which is inseparable from modern technological innovation (Ansori, 2019). Innovations in the field of information technology have been broadly used for several activities, including social charities or fundraising

There has been a long record of crowdfunding practices in Indonesia. This fact is apparent from the establishment of several well-known crowdfunding platforms, such as Joint Venture.com, Kitabisa.com, Ayopeduli.com, Zakat House, Quick Response Action, Hand in Hand, Dompet Dhuafa and many more (Rasyid, Setyowati & Islamiyati, 2017). The financial report information of these platforms indicates an annual constant rise in their total revenue from fundraising. This fact pinpoints those technological advances in the form of fintech crowdfunding services can help people's lives and can promote enthusiasm in using these services.

This study aims to determine the factors that influence Muslim community's decisions making in channeling their monetary donations through an online-based crowdfunding fintech platforms. This study uses brand awareness, religiosity, financial reporting accountability, income, trust, convenience, and social activism as independent variables.

2. LITERATURE REVIEW

This section explains the theories employed in this study and also previous studies that are important for this study.

2.1 Theories

This study employed several theories. TAM theory is able to explain and predict a person's acceptance of a technology based on the influence of several factors, namely perceived usefulness and perceived ease of use (Davis, 1989). This study also used Theory of Planned Behavior (TPB). TPB was initially developed by Ajzen (1985). The TPB theory denotes that behaviour is influenced by one's interests, collectively by attitudes, subjective norms and perceived behavioural control. Crowdfunding is an alternative form of funding generated from loans/funding that applies the same principle as conventional funding: openness to anyone, the ability to provide both small scale and large scale of financing, and the involvement of technological processes of the Internet. Furthermore, crowdfunding mechanism is expected to facilitate and accelerate the flow of funding information to reach a broader scale of community which requires a high frequency (Sitanggang, 2017).

2.2 Possible Factors Influencing Community' Decision-Making in Monetary Donations through Online-Based FinTech Crowdfunding Platforms

This section discusses possible factors that can influence community's decision-making in monetary donations through online-based fintech crowdfunding platforms.

The first factor is brand awareness which is defined as the degree of customer recognition of a product by its name. A brand is a name, sign, symbol, logo, term, or design and a combination of these that is used by an individual or group of sellers or service providers to identify the goods or services of the individual/group and distinguish them from those of competitors (Sari, Ridwan & Sugianto, 2019).

From an Islamic point of view, religiosity is a religious direction or guideline for a person to carry out all activities with the aim of fully complying with the religious provisions. Islam has called for an order for every Muslim to pay for zakat if their income has met certain criteria and conditions. The better understanding in religious provision corresponds to the positive direction on community decisions in donating their money through the system (Aziz et al., 2019). Islam teaches Muslims to share with those in need. On this basis, Muslims donate part of their income which are lawful and meet the principle of halal for the needy, including through the crowdfunding system (Salmawati & Fitri, 2018). Hence, income is also a possible factor.

Similar to income, accountability is also a likely factor. The literature and perspective emphasize that the principle of accountability is formed by the perceived importance of transparency. The principle of accountability in financial reporting reflects the good corporate governance of a company or organization (Septiarini, 2016).

The next factor is trust. Customers' trust refers to customer's attainment to a particular product out of the many other possible choices, with various risks because the product can meet his/her expectations and can provide positive results for these customers (Khairunnisa et al., 2020). Ease of use also an important factor. It is often related to accessibility, such as convenience, ease of control and less burdensome. This fact is attributed to the close relation between ease of use and the use of technology (Li, Zhao, Ato & Pu, 2020). Meanwhile, social activism is also a possible factor. According to Aziz, et al. (2019), social activism is a principle represented by empathy and high social responsibility.

2.3 Research Hypotheses Development

This study developed the following hypotheses:

H1: Brand awareness positively influences decisions for monetary donation through online-based crowdfunding fintech platforms.

H2: Religiosity positively influences decisions for monetary donation through online-based crowdfunding fintech platforms

H3: Accountability positively influences decisions for monetary donation through online-based crowdfunding fintech platforms.

H4: Income positively influences decisions for monetary donation through online-based crowdfunding fintech platforms.

H5: Trust positively influences decisions for monetary donation through online-based crowdfunding fintech platforms.

H6: Ease of use positively influences decisions for monetary donation through online-based crowdfunding fintech platforms.

H7: Social activism positively influences decisions for monetary donation through online-based crowdfunding fintech platforms.

3. RESEARCH METHODS

3.1 Population and Samples

The sample of this study consists of Muslims with a particular level of income, including: entrepreneurs, private employees, civil servants, Indonesian Army/Police Officers, freelancers, and students living in the Special Region of Yogyakarta as the population. A convenience sampling technique was used and obtained a total of 160 samples.

3.2 Data Collection

A survey method was employed by distributing online questionnaires. The questionnaire contains items that are measured using a 4 points Likert scale as follows: Strongly Disagree (STS), Disagree (TS), Agree (S), Strongly Agree (SS).

4. DATA ANALYSIS AND DISCUSSION

This section explains the data analysis conducted and interpretation of the results followed by discussion of the findings.

4.1 Validity and Reliability Test

The validity test was conducted by calculating the Pearson's correlation coefficient r . The results indicate that the calculated r value is greater than the table r value (higher than 0.1552). Thus, each item of the questionnaire questions for each of these variables is valid. For reliability, the results of Cronbach's Alpha value of the eight variables are greater than 0.6. In conclusion, this study has met the reliability test and all questions employed to measure each of the variables investigated, are reliable.

4.2 Classical Assumptions Tests

A Kolmogorov-Smirnov test conducted indicates that the 2-tailed asymptotic significance value of 0.09, which is higher than the significant level of 0.05. From those results, it can be inferred that the residuals of data in this study are normally distributed. For multicollinearity, the VIF (Variance Inflation Factor) value of the seven independent variables is less than 10 and the tolerance value of the seven independent variables is higher than 0.10. In other words, the regression model in this study does not show a tendency of multicollinearity. The scatterplot graph of the data of this study indicates a particular pattern of spreading data points above and below or around the number 0. In addition, there are no points that form a wavy pattern that widens, narrows, and widens again. As a result, the regression model in this study indicates no heteroscedasticity.

4.3 Multiple Regression Analysis

Multiple regression analysis was used to determine the relationship between one dependent variable and the independent variable. The significant level set in this study is 5% or 0.05. The regression model obtained from this study is as follows:

$$Y = 2,348 + 0,134 X_1 + 0,203 X_2 + 0,060 X_3 + 0,022 X_4 + 0,155 X_5 + 0,046 X_6 + 0,223 X_7$$

Furthermore, the regression analysis results indicate that the adjusted R-Squared (R^2) value of this study is 0.418. or 41.8%. As for the F test, the value of calculated F is 17,313, with sig. = 0.000. Since the sig value is less than 0.05 and calculated F value is greater than the F table of 2,071, hence, it can be concluded that the regression F value of this study is statistically significant. For the hypotheses testing, the results demonstrate that X1 (brand awareness), X2 (religiosity), X5 (trust) and X7 (social activism) are significant and X3 (accountability), X4 (income) and X6 (ease of use) are not significant.

4.4 Discussion

When associated with the TPB, the findings on brand awareness, religiosity, trust and social activism are in line with attitudes toward behavior. If a brand of fintech crowdfunding is already known and trusted by the public or donors, it can have an influence on the individual's attitude which can build an interest in behavior to carry out donation activities through the fintech crowdfunding platforms. The findings on religiosity are in line with perceived behavior control. If a person's perception of carrying out the religious teachings is easy, then it can lead to an interest in behavior to carry out donation activities through the fintech crowdfunding platforms. From the TAM perspective, the results of this study can be related with perceived usefulness. From that perception, an individual would believe that fintech crowdfunding are useful for them and enhance their performance of donating online. Concerning social activism, the results of this study are parallel with subjective norms of TPB which can influence behavioral interest of decision to donate online. Social life is the indicator that the respondents of this study consider as an indicator that influences the community to participate in channeling donations through online-based crowdfunding. Thus, social spirit can be established from subjective norms which are the forming factors of behavioral interest, namely the decision to donate through the fintech crowdfunding platforms.

5. CONCLUSION

The analysis and discussion of this study indicate that brand awareness, religiosity, trust, and social activism are positively and significantly related with the decision-making for monetary donation through an online-based fintech crowdfunding platforms by the Muslim community. Meanwhile, financial reporting accountability, income and ease of use apparently do not affect the decision-making for monetary donation through the online-based crowdfunding fintech platforms.

6. RESEARCH IMPLICATIONS

The results of this study can provide an academic support in the provision of relevant information regarding decision making for monetary donation through online-based fintech crowdfunding platforms. The online fintech crowdfunding platforms themselves can also benefit from this study since they will be able to formulate and improve their strategies and innovations based on the results of this study. Lastly, this study can provide information about the financial technology crowdfunding for the Muslim community, which may influence the decision making and future necessary actions to be taken.

7. RESEARCH LIMITATIONS

This study is dominated by millennial Muslim respondents between 21 to 30 years old. Hence, the findings of this research cannot be generalized to all age groups of Muslims in the Special Region of Yogyakarta. The number of samples of this study is only 160 people, thus, the number may not be proportional to the total population of the Special Region of Yogyakarta.

8. FUTURE RESEARCH

Further researches are expected to expand the scope of respondents by adding respondent criteria or increasing the number of samples to enable generalization.

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Risk Management and The Role of Internal Audit in Risk Management in The Financial Intelligence Unit

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ABSTRACT

The objectives of this paper are to evaluate the implementation and the role of internal audit in risk management in Institution X using ISO 31000:2018. Institution X, as public sector, is a financial intelligence unit, has a central role in the prevention and eradication of money laundering and terrorism financing. In carrying out its duties, Institution X has considerable threats and risks. Institution X receives and manages financial transaction data from the reporting party and is confidential. The research type is descriptive qualitative using a case study approach and used the interview and document analysis for data collecting. The results show that referring to ISO 31000:2018, Institution X has not been effective in implementing risk management. This study also provides evaluation results and suggestions for improvement of risk management. In addition, the role of internal audit must be improved significantly.

Keywords: financial intelligence unit, internal audit; key risks; public sector; risk management

1. INTRODUCTION

Organizations face challenges in every changing situation of political dynamics condition, technological developments and the development of payment systems or instruments as well as with the current COVID-19 pandemic which can pose greater risks and uncertainties and can threaten the achievement of organizational goals. Government Regulation of the Republic of Indonesia Number 60 of 2008 concerning the Government's Internal Control System requires an application of risk management within government agencies as the public sector, namely that the leadership of government agencies is required to carry out a risk assessment consisting of risk identification and risk analysis. In addition, the realization of the role of the apparatus's ineffective government internal supervision is one of the ways to provide early warning and increase the effectiveness of risk management. The implementation of risk management at Ministries/Agencies is included in priority projects to strengthen the management of bureaucratic reform and accountability of organizational performance through Presidential Regulation (PP) of the Republic of Indonesia No. 18 of 2020 concerning the National Medium Term Development Plan (RPJM) 2020-2024. Therefore, the implementation of risk management in the public sector or government is an urgent matter and needs attention.

Risk for ISO 31000:2018 is defined as the effect of uncertainty on objectives. Risk management defined as coordinated activities to direct and control an organization with regard to risk. In the implementation of risk management, an organization needs a framework for implementation as a basis so that it can become a management tool that is tailored to the needs of the organization. The organization should evaluate existing risk management practices and processes within the organization and evaluate and address any gaps with the framework. The effectiveness of the management of governance of risk management determines the objectives of the organization's effectiveness in achieving an organization (Susilo & Kaho, 2018). Risk Management based on ISO 31000:2018 consists of risk management principles, frameworks, and processes (iso.org). Risk management is built with the aim of creating and protecting organizational values which will ultimately improve performance, encourage organizational innovation, and support goals.

Institution X is a financial intelligence unit tasked with preventing and eradicating criminal acts of money laundering and terrorism financing (X2, 2021). Money laundering and terrorism financing are crimes that not only have an impact on economic stability but also endanger the life of the nation and state, therefore these crimes must be seriously prevented and eradicated. Institution X has a strategic role with its duties and authorities related to law enforcement and the economy. The existence of Institution X has the aim of maintaining financial stability and integrity and assisting law enforcement efforts in Indonesia. Indonesia is the only G20 country that has not been included in the FATF. Institution X together with other ministries/agencies and stakeholders are fighting for Indonesia's entry as a full member of the Financial Action Task Force (FATF) to have a strategic role as a country to participate in determining international policies. In June 2001, Indonesia was blacklisted as NCCTs (Non-Cooperative Countries and Territories) by the FATF. However, in 2005 Indonesia managed to get out of the list of countries and territories that were not cooperative in combating money laundering, terrorism financing, and financing the proliferation of weapons of mass destruction after various efforts made by the Indonesian government in the anti-money laundering and terrorism financing regime.

Cases of a series of terrorist bombings that occurred in Indonesia can increase the threat and fear for the community and cause unfavourable impacts for the community and the state. Terrorism cases are related to funding to finance these terrorist acts. Financing for acts of terror can come from legitimate sources through donations or membership dues or can come from unauthorized sources, namely the proceeds of other crimes. Institution X as financial intelligence unit which has the task of preventing and eradicating the Financing of Terrorism (TPPT) based on Law Number 9 of 2013 concerning the Prevention and Eradication of Terrorism Financing.

In the Strategic Plan Report 2020 – 2024 (X, 2020) Institution X revealed the weaknesses in achieving the Institution's vision and mission, the highest risk of which is the organizational structure that is no longer able to balance the implementation of tasks and functions, implementation of risk management. Institution X in carrying out its duties receives and manages confidential data. Based on statistical data, there are 572,053 suspicious transaction reports, 33,009,769 cash transaction reports, 51,117,563 International Fund Transfer Instruction Reports, and others. The data transaction is confidential. Therefore, Institution X has the risk of information leakage and risks that can damage the organization's reputation which will disrupt the organization's sustainability if risk management is not well implemented. Institution X's products are Analysis Results and Examination Results, based on data that the follow-up to the results of the analysis and examination results is low. A low level of usefulness of the results of the analysis and examination results can increase the risk of failure to achieve goals.

Given the problems with these weaknesses that can have an impact on Institution X as well as for all stakeholders, risk management is needed through optimizing the implementation of effective risk management that can increase organizational value in achieving the goals, vision, and mission of Institution X. This research is expected to provide suggestions recommendations as well as optimization efforts based on the results of the analysis of the implementation of risk management to be applied in Institution X.

Several previous studies have shown that the implementation of risk management in the public sector in Indonesia is still not effective. Yeremias in his research reveals that risk management for institutions in Indonesia is very important to achieve goals effectively, various types of risks must be identified and then analysed and managed to improve overall performance (Keban, 2017). Research has been conducted by (Rajagukguk, 2015) with the results of research that the risk management division in the Strategic Management and Governance Department as the location in the research case study shows that the risk management system has not been effective because of the absence of a risk appetite and in conducting risk assessments. there are no existing guides or instructions. In 2020 research on the application of risk management was also carried out by (Sari, 2020) who researched at the PQR Institute and (Eda, 2020) at Ministry X with the results of risk management that the public sector organization was still not effective and still needed improvement. There is research from (Jauhari, Cita, & Mulyani,

2021) that examines how the process of implementing risk management and critical success factors in government agencies at the Ministry of Finance is. The results of this study indicate the development of risk management in the Ministry of Finance as well as critical success factors that influence the development of risk management in the Ministry of Finance. By increasing, leadership and management commitment, as well as knowledge about risk management, will be able to encourage government agencies in implementing risk management.

This research is intended to see and know in more depth how the facts and phenomena of the application of risk management in Institution X and the role of internal audit in the implementation of risk management. The research was conducted through the collection of information, regulations and policies, reports, documents, and working papers related to the implementation of risk management at Institution X which will be analysed based on applicable international risk management standards and best practices, namely ISO 31000:2018. The role of internal audit is included as material for analysis because internal audit has a significant role in evaluating, implementing, and developing risk management in Institution X.

2. METHODOLOGY

The research method in this paper uses a case study. The selection of the case study method in this study was used to find out and see more clearly related to the implementation of risk management in Institution X and how the role of internal auditors in the three-line model related to risk management. This research uses the descriptive qualitative method.

The type of data used in the research can be either primary data or secondary data. This study uses primary data and secondary data, from interviews and document analysis. This is used to know the implementation of risk management with case studies in Institution X. Data collection through interviews was carried out to obtain information and data directly from sources related to research. Documents used in this study include reports, regulations, official notes, and working papers related to risk management.

3. RESULT AND ANALYSIS

Implementation of risk management principles in Institution X as the foundation for implementing the framework and risk management process. There are 8 (eight) principles of risk management according to the ISO 31000:2018 standard: (1) integrated, (2) structured, and comprehensive, (3) customized, (4) inclusive, (5) dynamic, and (6) best available information, (7) human and cultural factors, (8) continual improvement. The application of these principles in the implementation of risk management in Institution X is as follows: the integration of risk management has not yet reached a comprehensive stage and covers all organizational activities in Institution X and business processes in Institution X. The ideal condition is that everyone in an organization is responsible for risk management. Therefore, the integration of risk management in Institution X needs to be improved so that it can be comprehensive. Formal frameworks and policies have been established within the organization and have considered both external and internal contexts and are in line with laws and regulations with the existing rules and guidelines at Institution X. Adjustments to updated standards related to risk management have been carried out by Institution X by drafting changes regulations related to risk management in 2020 adjust to the latest standards. However, the application of the best available information principle has not materialized, as indicated by the updating of risk register data and risk management reporting which are not carried out regularly and on time.

The application of the risk management framework in the implementation of risk management in Institution X is as follows: leadership and commitment in Institution X play a significant role in the implementation of risk management. The leadership in Institution X has established formal risk management regulations and policies, allocated resources related to risk management, formed a risk management unit, and involved leadership in every risk management discussion. To realize the integration framework, need more efforts so that risk can be managed by the entire organizational structure and everyone in the organization is responsible for risk management. In implementing the design and implementation framework, Institution X has established the structure and responsibilities

for the implementation of risk management. In 2020, there is the establishment of a risk management unit under the Human Resources Department so that the risk management structure is in accordance with a three-line model approach that distinguishes the functions and responsibilities of risk management. In the implementation, risk-aware culture, and overall implementation to everyone in the organization is still constrained. The application of the components of the evaluation framework in Institution X has not been optimal and cannot be carried out regularly. For the improvement framework, the implementation at Institution X in 2020 has increased, including the existence of risk management certification for several employees, inviting speakers from practitioners or professionals in focused group discussions and meetings.

Implementation of the risk management process includes communication and consultation, setting scope, context, and criteria, a risk assessment: that includes risk, risk analysis, and evaluation, assessment, monitoring, and reporting as well as assessment and assessment. In the risk management process at Institution X the scope, context, and criteria have been determined. In 2020, the type of risk or risk category established 13 categories. The criteria of occurrence are set as very unlikely, slight, feasible, likely, very likely. The level of impact consists of insignificant, minor, moderate, significant, and very significant. Then there is based on the mapping risk, the risk level is categorized into five levels, namely very high, medium, low, and very low. For risk appetite in 2020, risks with very high and high levels of risk need to be mitigated. The number of risks identified by all units as risk owners are 283 risks with details of 5 very high risks, 24 high risks, 97 risks, 74 low risks, and 83 very low risks. Risk treatment or risk mitigation that is determined is reducing the possibility, reducing the impact, sharing the risk, avoiding the risk, and accepting the risk. In its implementation, the risk mitigation plan and the realization of risk mitigation have not yet been implemented in Institution X. Improvements and evaluations related to risk mitigation are needed for the main risks that have a significant impact on the organization. Communication and consultation in the risk management process at Institution X are carried out through periodic, incidental, and focus group discussions. Reports carried out in the risk management process have not been carried out regularly and on time. Then in the framework of monitoring and recording as well as reporting, implementation in Institution X is still not optimal because the risk management unit was formed in 2020. The implementation of risk management in Institution X is in the stage of infrastructure development with the establishment of a risk management unit in the risk management structure, formulation of formal regulations and policies in the form of a risk management design that has been adapted to the latest standards. To increase the effectiveness of risk management in Institution X, it is necessary to develop risk awareness for everyone, establish a separate risk management unit from the operational function in the Human Resources Department and integrate risk management in the organization's activities. Currently, the key performance index in Institution X has not considered the risk management component as an assessment, so the KPI needs considered risk management. Training of Trainers (TOT) can be carried out to improve the develop.

The role of internal audit in Institution X in risk management. There is an internal audit role related to risk management by the IIA Position Paper in the title The Role of Internal Auditing in Enterprise-wide Risk Management (IIA, 2009) which is a role that must be carried out by internal audit, which is the core role of internal audit, a role that can be carried out with safeguards, then there is the role of internal audit that should not be to do related to risk management. The role of internal audit-related to risk management at Institution X that has been carried out is in the core role which includes that internal audit X has provided assurance on the risk management process of Institution X and that the risk has been evaluated correctly and has carried out an evaluation process on the management process Institution X. In its core role, internal audit has not evaluated and reviewed the management of key risk mitigation in Institution X. There should still be several internal audit roles that can be carried out with certain safeguards, but this role has not been carried out by internal audit at Institution X.

In the three-line model approach, internal audit acts as the third line, the risk management unit is the second line, and the risk owner is the first line (IIA, 2020). In the application of risk management in Institution X, the roles and structures are by the three-line defence model approach, namely the risk

owner unit is responsible for managing risk, then the risk management unit carries out supervision and internal audit plays a role in risk management evaluation. However, the role of internal audit in risk management in Institution X, if based on the IIA position paper, is still not optimal or not significant. For the three-line model approach, it is emphasized that between the roles of the second and third lines there must be harmony, communication, coordination, and collaboration. The evaluation of the main risk reporting and the review of the main risk management have not been carried out by internal audit. Internal audits in Institution X need to plan resource allocation and increase competence related to risk management. To keep the independence in the duties and functions of the internal audit through assurance and consulting roles, it is possible to separate the assurance work team and the consulting work team.

4. CONCLUSION

The results show that referring to the ISO 31000:2018 standard, Institution X has not been effective and optimal in implementing risk management which includes risk management principles, risk management frameworks, and risk management processes. Institution X is at the stage of building infrastructure through the establishment of a risk management structure and infrastructure of regulations and policies. The planning and realization of risk mitigation, especially for the main risks, have not yet been implemented. The main risks are a significant threat to the Institution because they can have a fatal impact on the continuity of Institution X. Socialization related to risk management to the individual level in Institution X is needed to improve the cultural awareness of risk in Institution X so that everyone is in charge of risk and risk management in the work unit can be in line with Institution goals and can increase value and so that the overall integration can run optimally coupled with integrated tools or applications for risk management. Components of implementing risk management can be included in the KPIs system in Institution X. Internal audit in Institution X has not played an optimal role in the implementation of risk management in Institution X by the role of internal audit according to the IIA Position Paper. In its core role, internal audit in Institution X has assured the risk management process and that the risks have been properly evaluated and has carried out an evaluation process on the risk management process for Institution X. However, internal audit has not yet conducted an evaluation and review on the management of key risks in Institution X. There is still a role for internal audit that should still be done so that risk management can be optimal. The risk management structure in Institution X divides the functions and responsibilities on the first line, second line, and third line is by the three-line model approach. However, the harmony, communication, coordination, and collaboration that should be carried out between lines have not run optimally. This research implies that it can provide suggestions for improvement for Institution X to optimize the implementation of risk management in the Institution to increase value and achieve organizational goals more effectively and provide an overview of the importance of implementing governance and risk management in the public sector.

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Evaluating Students' Motivation in Learning Taxation during Open and Distance Learning (ODL)

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ABSTRACT

The COVID-19 pandemic has badly affected the worldwide sectors including education sector. According to the UNESCO Monitoring Report, there were 192 countries had implemented nationwide closure of schools and higher education institutions in response to the pandemic. Due to this situation, the Malaysian government has shifted the direction from the traditional class to the open and distance learning (ODL) class since the Movement Control Order (MCO) has been enforced in Malaysia on 18 March 2020. The transition to the new normal of education system involved unpredictable expectation as it requires engagement and full supports from students and educators. Nevertheless, level of motivation of students in e-learning environment could be diminished due to certain reasons either intrinsic or extrinsic factors. Hence, this study attempts to evaluate the students' motivation in learning during ODL classes particularly in taxation subject. A questionnaire was distributed among the undergraduate students to evaluate their motivation in learning taxation. Based on 306 respondents, the results showed that students' motivation in learning taxation would be affected due to self-efficacy, active learning strategies, tax learning value, performance goal, achievement goal and learning environment stimulation. The results of the study provide greater insight for educators in planning and strategizing the online learning in contributing to the successful of the teaching and learning process.

Keywords: engagement, motivation, open and distance learning, taxation, education

1. INTRODUCTION

The Covid-19 pandemic has created a large impact globally. Almost all sectors are affected including the tertiary level of education. Open and distance learning (ODL) have been imposed since the Movement Control Order was enforced on 18 March 2020 in Malaysia. The purpose is to provide continuous education without the risk of contracting the disease. Currently, it has been three academic sessions since ODL has been implemented. There are several cases reported in which students drop out or apply for a special leave from their studies. These incidents may suggest that the students' motivation and engagement in learning are at a declining rate due to multiple reasons. Being left unattended, it may have an adverse effect in fulfilling the policy of Graduate-On-Time (GOT). Under the GOT policy, 90% of diploma students are required to complete their studies within five semesters. Failure to do so, the universities are considered as not being able to achieve Key Performance Index as stated by the Ministry of Higher Education Malaysia.

Nevertheless, the students' motivation and engagement in their learning are unknown. Therefore, this study is carried out to evaluate the motivation and engagement of accounting diploma students in particular for tax papers. The particular subject is chosen for this study as they are offered during the final year of diploma that is semester four and five. Should the students fail this paper, there is a high probability of them extending their studies, hence jeopardizing the faculty to achieve the policy of GOT. The remainder of the paper is organized as follows. Section 2 provides previous literature relating to this study. Section 3 describes the research methodology that includes data and samples. Section 4

presents the empirical analysis and discussion on the findings and section 5 highlights the summary and conclusion of the study.

2.0 LITERATURE REVIEW

2.1 Motivation and Engagement in Learning

Previous studies in several countries showed an increased motivation leads to a better engagement in learning. These studies used gamification to increase students' motivations. Regardless of types of samples and location of studies, the findings are similar; there are positive impacts on students' engagement in learning due to an increased motivation. Turan et al. (2016) and Papp (2017) used academic performance as an indicator of enhanced engagement due to an increase in motivation in learning. This could be achieved when the students' perceived learning was fun. Competitive elements via a rewards system may yield a similar outcome. For instance, the use of leader boards encouraged the participants to engage more in learning. As reported in the studies, participants of Turan et al. (2016) were more motivated and engaged in learning technologies and software courses while participants of Papp (2017) performed better in the business communication and mathematics classes.

On the other hand, Gressick and Langston (2017) used other indicators to highlight a better engagement in learning due to an increase in students' motivation. Firstly, there was an increased number of attendees in morning classes although no extra marks were provided. Secondly, there was active participation during class discussions. Students felt encouraged to communicate to each other to complete tasks provided to them to be completed via collaborative learning. The students were also less stressful as their focus was more on learning and future growth instead of their mistakes in completing the tasks provided.

2.2 The Open and Distance Learning

Open and distance learning (ODL) has been implemented in universities to cope with the epidemic of covid-19. It is different from the traditional learning environment. Firstly, there is a heavy reliance on the use of the internet, gadgets, and applications. Secondly, new pedagogies such as pre-recorded sessions for lectures. Thirdly, students are also assigned more tasks to ensure their engagement in learning as suggested by Holmes (2017). Finally, the students must learn from homes instead of staying on campus causing them to feel isolated as their peers and lecturers are not physically present (Kaufmann and Vallade, 2020). Data from Table 1 showed that there was an increasing trend in the number of students who applied for special leave and drop out between academic sessions 20202/20204. There are several reasons for this trend such as personal problems, economic backlash due to the pandemic, poor internet connectivity, lack of compatible laptop or PC and students' inability to adapt to ODL. During the current academic session (20212), the number of cases for special leave and drop out is reduced. The plausible reason for this is first, the number of new student intake is small due to the postponement of major examinations in secondary schools; and second, the problematic senior students are either still on special leave or have been withdrawn from their studies. Nevertheless, the increasing trend of special leave and drop out cases in the first two academic sessions may highlight the need for a study on students' motivation in learning in an ODL setting.

Table 1: Number of Students of UiTM Perak Branch, Tapah Campus on Special Leave and Drop Out
No. of students

Academic session	Special leave	Drop out	Total
20202	8	39	47
20204	9	43	52
20212	4	9	13

Source: Academic Affairs Office, UiTM Perak Branch, Tapah Campus, 2021.

2.3 The Self-Determination Theory

According to Ryan and Deci (2000), self-determination theory refers to the ability of a person to make their own choices and manage their own life. This theory relates to the motivation that drives a person to make choices. In general, motivation can be divided into two, which are intrinsic and extrinsic. Extrinsic motivations are like awards, the respect and admiration of people and the grading system, while intrinsic motivation is our sense of morality, curiosity, interest, self-enjoyment, including our core values. Ryan and Deci (2017) found that intrinsic motivation is positively associated with academic achievement and increases students' satisfaction in learning. Online education needs to build strong students' engagement and optimize the student learning environment because when the students lack self-motivation, they will act irresponsibly. The students are motivated by contextual factors such as the lecturer, peers, and surroundings (Ryan & Deci, 2017). Additionally, Chiu (2021) found that supporting motivation from the teacher is vital to help students with psychological needs during online learning. It could lead to a high quality of students' engagement and increase the students' competence to achieve the desired outcome.

3.0 RESEARCH METHODOLOGY

The samples of this study were collected from students who taking subject TAX267 (Taxation 1) and TAX317 (Taxation 2), which consists of students from two programs that are Diploma in Accountancy (AC110) and Diploma in Accounting Information System (AC120). Out of total population of 752 taxation students, 306 were managed to give response towards the survey that represented a response rate of 40.69%. This response rate is considered as sufficient as according to Aaker, Kumar and Day (2001), the effective response rate was approximately 24%. Hence, this study has obtained more than enough response rate from the respondents. The survey was conducted by using online questionnaires adapted from the study done by Tuan et al, (2005) which to identify the students' motivation towards learning science by using six scales factors. Additionally, the motivation is further classified into three categories which are high, moderate, and low. Tuan et al, (2005) found that students with high motivation showed significantly difference compared to moderate and low moderation students. Some of the items in the questionnaires were adjusted to suit our research objective which is to measure the students' motivation in learning taxation. The online questionnaires were distributed through Google Form with the help of all the taxation teaching lecturers. The online questionnaire consists of two sections. The first section requires respondents to fill in their demographic information, such as age, gender, current semester and university program. The six factors of motivation as presented in Table 2 are being measured which are listed in another section. The respondents are required to indicate their opinion by using a five-point Likert scale, ranging from 1 denoting strong disagreement to 5 denoting strong agreement.

Table 2: Summary of the variables and their measurements

Motivation factors	Definition	No. of Items
Self-efficacy	Students believe in their own ability to perform well in tax learning tasks or assignments.	7
Active Learning Strategies	Students take an active role in using a variety of strategies to construct new knowledge based on their previous understanding.	8
Tax Learning Value	The value of tax learning is to let students acquire problem-solving competency, experience the inquiry activity, stimulate their own thinking and find the relevance of tax with daily life.	5
Performance Goal	The student's goals in tax learning are to compete with other students and get attention from the teacher.	4
Achievement Goal	Students feel satisfaction as they increase their competence and achievement during tax learning.	5
Learning Environment Stimulation	Learning environment surrounding students such as curriculum, teachers' teaching and student interaction.	6

Source: Adapted from Tuan et al., 2005.

4.0 ANALYSIS AND FINDINGS

4.1 Descriptive Statistics and Analysis

Table 3 shows the demographic characteristics of the respondents that had taken part in the survey. Based on this table, most of the respondents were female (79.7%) and fall into the age category of 20 and below (91.8%). Majority of the respondents are also students from Diploma in Accountancy (93.8%) and most of them currently study in semester 4 (95.1%).

Table 3: Demographic characteristic of respondents (N = 306)

Demographic Characteristic	Items	Number of Respondents	Percentage (%)
Programs	AC110 - DIA	287	93.8
	AC120 - DAIS	19	6.2
Current Semester	Semester 4	291	95.1
	Semester 5	8	2.6
	Others (Extended semester)	7	2.3
Gender	Male	62	20.3
	Female	244	79.7
Age	20 and below	281	91.8
	21 – 30	25	8.2

Table 4 presents the descriptive statistics for six factors of motivation in learning taxation among the accounting students. Based on the results, the mean scores for self-efficacy, active learning strategies, tax learning value, performance goal, achievement goal and learning environment stimulation are 2.7694, 4.0531, 4.1961, 3.0408, 3.9657 and 3.8083 respectively. These mean scores are all above mid-point value of the scale that is 3 except for self-efficacy and performance goal. This indicates that the accounting students have relatively high motivation in terms of active learning strategies, tax learning value, achievement goal and learning environment stimulation but moderate motivation in terms of self-efficacy and performance goal. This result is consistent with the study done by Au, Li and Wong (2018) who found that high-level students will be motivated by the practical use of what they had learned. The accounting students might be considered as high-level students whereby the most common motivation for them is completing their diploma study on time. Thus, they had never considered to give up the course. However, the students might have less confidence in their ability to perform well in taxation. They also did not feel so much to compete with their friends and get attention from their teachers whenever they learn in taxation subject. Therefore, these two factors need to be explored further so that motivation among accounting students will be improved from time to time especially during the ODL environment.

Table 4: Descriptive statistics for motivation factors

	N	Min	Max	Mean	SD
Self-efficacy	306	2.00	5.00	2.7694	0.52736
Active Learning Strategies	306	3.00	5.00	4.0531	0.41678
Tax Learning Value	306	3.00	5.00	4.1961	0.49811
Performance Goal	306	1.00	5.00	3.0408	0.76392
Achievement Goal	306	1.00	5.00	3.9657	0.58887
Learning Environment Stimulation	306	1.00	5.00	3.8083	0.57522

4.2 Reliability Analysis

Table 5 shows the Cronbach's coefficient alpha for each factor. According to Hair et al. (2007), a scale is reliable if the coefficient value is more than 0.6. Based on the table below, the reliability coefficients of the six motivation factors exhibit consistency: Self-efficacy factor with 7 items yield a coefficient value of 0.665, Active Learning Strategies factor 0.820 (8 items), Tax Learning Value factor 0.870 (5 items), Performance Goal factor 0.776 (4 items), Achievement Goal factor 0.8521 (5 items) and Learning Environment Stimulation factor of 6 items exhibit coefficient value of 0.835. The

measurements for all motivation factors were considered as high as it shows greater than 0.6. This indicates that all questions used in this survey were reliable to be tested among the respondents.

Table 5: Results for Reliability Analysis

	Number of Items	Cronbach's Coefficient Alpha
Self-efficacy	7	0.665
Active Learning Strategies	8	0.820
Tax Learning Value	5	0.870
Performance Goal	4	0.776
Achievement Goal	5	0.851
Learning Environment Stimulation	6	0.835

5.0 DISCUSSION AND CONCLUSION

In exploring the nexus between the six factors that may affect the motivation in learning taxation during ODL situation, the results revealed that accounting students have high motivation in terms of their learning strategies, learning value, achievement goal and learning environment stimulation. These results were consistent with the Self Determination Theory whereby the students able to understand, plan and develop their own strategies including self-adapting during online learning environment to achieve their target and goals. However, another two factors of motivation which are self-efficacy and performance goal need to be improved since it shows that accounting students have moderate motivation on these factors. The results of this study can help educators in formulating and improving learning effectiveness in online learning so that it can create interest and competitiveness among students towards e-learning. It is also suggested that to include elements of fun in learning such gamification, interactive videos and audios as well as allowing students' creativity that will attract students' attention. Hence, if educators can properly develop pedagogy in which fun elements are included as required and in accordance with type of students and nature of subject, it will show positive impacts indeed (Kutty & Joy, 2018). Besides that, future research also might be considered to look forward the effect of motivation factors towards the academic performance of the students so that the results can provide better view and insights to the academicians.

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Behavioral Bias And Beginning Investor Decision Making In Share Investment In The Covid-19 Pandemic

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ABSTRACT

This study aims to determine whether the confirmation bias, self-attribution bias, overconfidence bias, cognitive dissonance bias, and herding bias have an effect on making stock investment decisions for novice investors during the Covid-19 pandemic. In this study, the sample used was beginner investors from March to December 2020. The technique used for sampling was purposive sampling and selected 161 respondents. The results of data analysis show that self-attribution bias and overconfidence bias are proven to have a significant positive effect on stock investment decision making during the Covid-19 pandemic, while confirmation bias, cognitive dissonance bias, and herding bias have no significant effect on stock investment decision making during the pandemic covid-19. The results of this study are in accordance with the behavioral finance theory, that there is the influence of psychological factors in a person's financial behavior that causes investors to act irrationally in the midst of uncertainty.

Keywords: Stock investment decisions; Confirmation bias, Self-attribution bias; Overconfidence bias; Cognitive dissonance bias.

1. INTRODUCTION

The Covid-19 pandemic which was detected in Indonesia in March 2020 has had an impact on the country's economy and has also forced us to survive amid uncertainty (Tambunan, 2020). This uncertain situation was marked by the composite stock price index touching its lowest level of 3,937.63 at the closing session of trading on March 24 2020. This figure decreased by 37.49% compared to the position at the end of last year. This became the second deepest composite stock price index correction in history after being minus 50.6% during the 2008 global financial crisis due to the Subprime Mortgage case in the United States (Sidik, 2020).

Information in the midst of the fluctuating composite stock price index trend was captured as an opportunity and attracted novice investors to invest. This is because sentimental factors play an important role. This is also supported by Town's (2020) statement that investing or buying shares during the covid-19 pandemic is the right choice because stock prices are very cheap. What is interesting is that of the 9 stock sectors in the capital market, not all sectors were corrected due to the COVID-19 pandemic. This means that this can be an opportunity for investors to get the expected return when there is a national economic recovery.

The Efficient Market Hypothesis (EMH) theory is used by researchers in traditional finance. The Efficient Market Hypothesis theory assumes that if an individual investor has the goal of maximizing returns in investing with decisions that are not influenced by psychological or emotional factors, then he can be called a rational investor (Fama, 1991). However, researchers cannot fully accept this theory. The phenomenon of individuals who behave irrationally is more often found today (Handoyo et al., 2019).

Irrational behavior is called behavioral bias which causes lost opportunities to get the expected return on investment. This can lead to an inefficient stock market (Seto, 2017). Behavioral bias consists of

cognitive factors and emotional factors. Pompian (2006) explains that cognitive bias is a deviation from the process of understanding, processing, and making decisions on information or facts. There are four types of cognitive biases, namely confirmation bias, self-attribution bias, overconfidence bias, and cognitive dissonance bias. In addition to cognitive factors and emotional factors, social factors are also considered to be able to influence investment decisions, namely herding bias (Fityani & Arfinto, 2015).

This research is a development of Afriani & Halmawati's (2019) research. Afriani & Halmawati's research (2019) only uses 3 independent variables, namely cognitive dissonance bias, overconfidence bias, and herding bias. The author adds confirmation bias and self-attribution bias variables because both behavioral biases are related to overconfidence bias. Therefore this study aims to determine whether the confirmation bias, self-attribution bias, overconfidence bias, cognitive dissonance bias, and herding bias have an effect on making stock investment decisions for novice investors during the Covid-19 pandemic.

2. LITERATURE REVIEW AND HYPOTHESES

Confirmation bias in a person raises a tendency to pay attention and prefer information that supports their opinion but will ignore information that contradicts their opinion. This can give rise to indications of poor investment decision making because investors do not have complete information for investment decision making (Verma, 2016). Mahina & Bashaija's research (2018) concludes that confirmation bias plays a positive and significant role in the frequency of trading in the stock market.

H1: Confirmation bias has a positive effect on beginner investor decision making in stock investment during the covid-19 pandemic

Self-attribution bias is a type of cognitive bias behavior that considers investment success purely due to his ability, intelligence, and sharpness as an investor in predicting and analyzing, and making investors think that they have good abilities and knowledge (Hirschey & Nofsinger, 2008). The research of Mahina et al. (2018) stated that self-attribution is a significant cause that makes people perceive their success as an internal strength of themselves and their failure in stock investment is caused by external forces.

H2: Self-attribution bias has a positive effect on the decision making of novice investors in stock investment during the covid-19 pandemic.

Overconfidence bias is a type of cognitive bias behavior in which investors have a tendency to underestimate risk, overestimate their knowledge and ability in terms of control over what happens, such as predictions and information they have in making decisions (Utami & Kartini, 2016). Investors who are indicated to be overconfident will admit that their abilities and knowledge are better than other investors, even though this is not necessarily true. Even according to (Sieck & Arkes, 2005), investors with overconfidence bias also have a tendency to ignore information that may be useful that can increase the level of prediction of their investment.

H3: Overconfidence bias has a positive effect on beginner investor decision making in stock investment during the covid-19 pandemic

Cognitive dissonance bias is a situation in which people are uncomfortable with the new information they get, which raises doubts about their previously received understanding (Pompian, 2006). Because of this tendency, cognitive dissonance bias in investment decisions causes irrational investor decision making (Setiawan et al., 2018). According to Pompian (2006) the occurrence of cognitive dissonance is an effort to reduce discomfort by convincing oneself because of the new information received.

H4: Cognitive dissonance bias has a positive effect on beginner investor decision making in stock investment during the covid-19 pandemic

Herding bias is a social variable that affects investment decisions found in research (Fityani & Arfinto 2015). Herding in a financial context occurs when an investor in a financial market imitates the behavior of another investor or a larger group of investors. Research by Novianggie & Asandimitra (2019) shows that the herding bias variable has a positive effect on investment decisions because most respondents

tend to consider the advice given by their friends or brokers in deciding to invest and get profits in the future.

H5: Herding bias has a positive effect on beginner investor decision making in stock investment during the covid-19 pandemic.

3. RESEARCH METHODS

The population of this study is novice stock investors who registered themselves as investors during the covid-19 pandemic between March-December 2020. The selection of the month was based on the consideration that the COVID-19 pandemic was first discovered in Indonesia in early March 2020 and considerations for December. because as the closing month of the year. Based on that time period, there were 471,077 thousand registered novice stock investors. By using purposive sampling method, 161 respondents were selected as research samples.

The data of this study are primary data collected by using a questionnaire. The analysis used to test the research hypothesis is multiple linear regression with the following formula:

$$DEC = \beta_0 + \beta_1 CONF + \beta_2 SELF + \beta_3 OVER + \beta_4 COGN + \beta_5 HERD + e$$

Note: DEC: Decision Making on Stock Investment; CONF: Confirmation Bias; SELF: Self-attribution Bias; OVER: Overconfidence Bias; COGN: Cognitive Dissonance Bias; HERD: Herding Bias; β_0 : Constant; $\beta_1-\beta_5$: Regression Coefficient; dan e: error term.

4. RESULTS AND DISCUSSION

The results of hypothesis testing using multiple linear regression analysis are presented in table 2 below:

Table 1. Hypothesis Test Results

Model	Predictions	Coefficient	T statistic	Sig.
(Constant)		3,660	11,773	,000
CONF	+	-,002	-,062	,950
SELF	+	,363	5,492	,000*
OVER	+	,131	2,772	,006*
COGN	+	-,065	-1,221	,224
HERD	+	-,042	-,864	,389

Sources: Processed research data, 2021

4.1 Confirmation Bias and Novice Investor Decision Making

The results of hypothesis testing show that confirmation bias has not proven to have a significant effect on stock investment decision making for novice investors during the COVID-19 pandemic. This study is not in accordance with the research Mahina & Bashajja (2018), and Cho & Chalid (2020) who concluded that confirmation bias plays a positive and significant role in trading frequency in the stock market. Confirmation bias limits investors from making sound decisions based on reality which can sometimes result in over- or under-trading. Therefore, investors should note this bias and consult widely before making investment decisions.

However, the results of this study are in accordance with the research of Babajide & Adetiloye (2012) and Gupta (2016). This finding indicates that novice investors in stock investment during the Covid-19 pandemic need complete information before making stock investment decisions. The results of this study support the research of Sembiring (2005) which states that accurate, timely and complete information can make investors make rational decisions so that the returns obtained will be as expected.

4.2 Self-Attribution Bias and Novice Investor Decision Making

The results of hypothesis testing prove that self-attribution bias has a significant positive effect on stock investment decision making for novice investors during the COVID-19 pandemic. The results of this study are in accordance with the research of Mahina et al. (2018) stated that self-attribution bias has a significant effect on investors' investment in the Rwan Stock Exchange because it was found that self-attribution bias is a significant cause that makes people perceive their success as an internal strength of themselves and their failure in stock investment. caused by external forces from themselves. This can affect the ability to estimate the true ability of him. Therefore, investors who have self-attribution biased behavior when their investment choices are successful, will believe that their success is due to their acumen as investors.

4.3 Overconfidence Bias and Novice Investor Decision Making

The results of hypothesis testing prove that overconfidence bias has proven to have a significant positive effect on stock investment decision making for novice investors during the COVID-19 pandemic. The results of this study are in accordance with the research of Novianggie & Asandimitra (2019) which found that there is a relationship between the overconfidence variable and investment decisions which can be seen from respondents who are too confident in their investments. The higher the overconfidence, the higher the investment decisions taken. This can make investors increase their ambition in investing.

The results of the research on the overconfidence bias variable are in accordance with the behavioral finance theory which explains that investors have a tendency or sometimes make mistakes in taking information related to investment decisions because of psychological factors. Psychological factors are even considered to cause the loss of self-control of an investor which is characterized by making himself pessimistic or even overconfident (Nofsinger, 2010).

4.4 Cognitive Dissonance Bias and Novice Investor Decision Making

The results of hypothesis testing indicate that H4 is not supported. This means that cognitive dissonance bias has not been proven to have a significant effect on stock investment decision making for novice investors during the COVID-19 pandemic. The results of this study are not in accordance with Seto's research (2017) stated that 95.24% of the 21 individual investors who have cognitive dissonance bias say that they have held investments that should have been sold. This means that cognitive dissonance can lead to irrational behavior in making investment decisions.

However, this study is in accordance with the research of Setiawan et al. (2018) which states that cognitive dissonance bias has no effect on investment decisions because investors' cognitive factors are not always the mainstay. In addition, investors also do not use the initial information received as the basis for making investment decisions, so there is no longer any doubt when getting new information from other parties. This makes investors will receive full and rational information that can be used as material for analysis if the return is not as expected. Beginner investors tend to have less intuition in investing, so their investment decisions tend to be rational.

4.5 Herding Bias and Novice Investor Decision Making

The results of hypothesis testing indicate that H4 is not supported. This means that herding bias has not been proven to have a significant effect on stock investment decision making for novice investors during the COVID-19 pandemic. The results of this study are not in accordance with the research of Novianggie & Asandimitra (2019) which found that the herding bias variable has a positive effect on investment decisions. The findings of Novianggie & Asandimitra (2019) show that the more respondents follow the advice of their broker, friends, family, or group, the more likely they are to decide to invest.

However, the results of this study are in accordance with the research of Setiawan et al. (2018) which states that herding bias has no effect on investment decisions because the behavior of novice investors has a tendency to analyze, receive, and pay attention to fundamental information properly when buying

shares. This is a sign that investors have behaved rationally because the noise in the market and the investment decisions of other investors do not affect their investment decisions.

5. CONCLUSION AND SUGGESTION

Based on the results of data analysis, it was concluded that self-attribution bias and overconfidence bias proved to have a significant positive effect on the decision making of novice investors in Stock Investment during the Covid-19 Pandemic Period. Meanwhile, confirmation bias, cognitive dissonance bias, and herding bias have no significant influence on the decision making of novice investors in stock investment during the COVID-19 pandemic.

The results of this study have contributed to investors that in conditions of uncertainty such as during the COVID-19 pandemic, there are still opportunities to invest in the stock market. The results of this study confirm the behavioral finance theory which states that there is an influence of psychological factors in a person's financial behavior that causes investors to act irrationally in the midst of uncertainty. Further researchers are advised to examine other behavioral bias variables, such as representativeness bias, anchoring and adjustment bias, availability bias, or mental accounting bias so as to explain the effect of bias on stock investment decision making during the COVID-19 pandemic.

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Determinants of Relationship Quality and Customer Loyalty in the Malaysian Airline Industry

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ABSTRACT

COVID-19 has caused a huge impact on the global economy, especially the airline service sector in Malaysia. This has led to a significant decline in the demand of airline services which has caused most airline companies to face a challenge for their business operations, such as financial distress or liquidation of business. As such, it is important that airline companies understand their consumers' interest in this special situation and fulfil the market needs during the COVID-19 pandemic. This study aims to examine the relationship quality that influences consumer loyalty in the Malaysian airline industry. The relationship quality has been used as a predictor comprising trust, satisfaction, and commitment which can explain the influence of the overall relationship quality on customer loyalty. The study used the convenience sampling technique to collect data from 140 respondents via an online survey. The statistical package for social sciences 26 was used to test the proposed relationships. The empirical results indicate that trust and commitment play a significant role in the determination of customer loyalty on airline service. The results also reveal that satisfaction is an insignificant predictor of customer loyalty. The results support the relationship quality model that trust and customer commitment establish a strong bond relationship which forms the determinant of customer loyalty. On the practical standpoint, these findings provide new strategic insights to airline management that trust and customer commitment do influence customer loyalty. Airline business operators should consider developing various strategies for improving customer loyalty to achieve superior financial performance for future business sustainability. An effective strategy can enhance customer loyalty in alleviating the chances of business failure due to the current economic downfall.

Keywords: commitment; customer loyalty; relationship quality model; satisfaction; trust

1. INTRODUCTION

The rapid global spread of COVID-19 has seriously impacted the market economy, especially the airline industry as travel restrictions were announced by many countries' governments (Deloitte, 2020a). The crisis has led to countless government policies and restrictions arising to the border aviation and cross-country traveling. As such, it has directly caused a dramatic fall in the demand for airline services (OECD, 2020). For instance, for the Australian air service performance of the second busiest flight route from Sydney to Melbourne, the number of passengers had reduced from 7 million in Jan 2019 to 0.5 million in June 2020 (ACCA, 2020). Moreover, Maneenop and Kotcharin (2020) studied the impact of COVID-19 on the global airline industry, and they found that the airline performance significantly declined after the COVID-19 outbreaks outside from China to Thailand, Italy and the United States. The airline industry has been hit hard and is vulnerable to the pandemic risk (Airline Ratings, 2020; IATA, 2020). Several airlines, such as Flybe (UK), Compass Airlines (US), Virgin Airline (AU), Trans States Airline (US), and Avianca (CO) have already collapsed due to the virus outbreak (Slotnik, 2020).

The results of Jahmani (2017), and Murugesan and Perumulsamy (2016) showed that the service quality perceived by a passenger is related to the passenger's flight experience, satisfaction level, and post-behaviour. It is important to reduce the gap between the passenger's expectation and the service

provided by airline service providers. A study conducted by Tai et al. (2015) showed that inefficiency in the time taken for companies to recover from shock events negatively impacts on consumers' confidence. As such, it indirectly causes loss of customers' loyalty, and, at the same time, a negative impact on business performance. Given this backdrop, the understanding of the market change can create competitive advantages to businesses by fulfilling markets or consumers' interests. Although businesses might have a temporary disadvantage in the short-term, they will gain a winning reputation (consumer loyalty) in the long-run, especially after the crisis. Hence, to prevent consumers from switching their behaviour towards the company brand, it is important to examine the determinants of relationship quality and customer loyalty on the airline service in Malaysia. The empirical findings of this study will enable airline companies to ensure that the consumers can repurchase their services after crisis instead of replacing their choices with other airline companies (Deloitte, 2020b).

1.1 Problem Statement

In Malaysia, AirAsia has dominated Malaysia's domestic market and international market with an effective strategies and the slogan of "*Now Everyone Can Fly*". This has driven AirAsia's rapid growth in the market share and achievement of profitability (CAPA, 2019). AirAsia was awarded as the "best lowest-cost carrier" by Skytrax in 2019 and continued for 11 consecutive years with the lowest cost per ASK for any carrier across the world. However, the impact of COVID-19 has brought enormous loss to the company but the founder of AirAsia remains optimistic with a belief that they will overcome these obstacles soon (ET Travel World, 2020). On the other hand, Malaysia Airlines announced that they were struggling with financial difficulties due to the economic fallout (New Straits Times, 2020). Besides that, the failure of operation improvement in Malaysia Airlines has caused a significant low consumers' rating as compared to other Malaysia airline competitors such as AirAsia and Malindo (Li, 2019). Those matters have indirectly influenced the service perceived by the business's clients.

However, compared to international competitors such as Singapore Airlines, Malaysia Airlines' service quality provided is unbelievably miserable (AirlineRatings, 2020). The study of Tai et al. (2015) showed that Malaysia Airlines received massive complaints from their clients as they failed to fulfil their consumers' expectations in terms of in-service quality. Whereas, AirAsia received complaints from customers for poor service such as flight delay. Failure to fulfil consumer expectations would directly cause a negative impact on customer's satisfaction and loyalty (An & Noh, 2009). In addition, this may lead to the further extension of the impact on consumers repurchase intentions (An et al., 2010).

Previous studies found that service quality is the key determinant amongst other determinants that directly influence customer loyalty. Firstly, passengers will have expectations (i.e., commitment) towards the service perceived before gaining the flight experience. Secondly, they will compare it with their expectations and make a conclusion which directly influences the satisfaction level. Thirdly, a domino effect, such as satisfaction and trust, will be gained if consumers perceive that excellence service quality has been provided by airline companies. Finally, customer loyalty is established (Hasim et al., 2018). Abudullah and Manaf (2007) conducted variables measurement using the SERVQUAL model by subtracting the expectation from performance to determine the excellence of the delivered service quality. Their findings demonstrated that the passengers gave the rating in ascending order to empathy, tangible, assurance, reliability, and responsiveness. However, the adoption of the SERVQUAL model consists of the limitation of the inaccuracy variables' measurement. Thus, this study used the relationship quality model to examine the relationship between relationship quality (i.e., trust, satisfaction, and commitment) and customer loyalty on airline service in Malaysia.

1.2 Purpose of the Study

This study has examined the impact of relationship quality, particularly trust, satisfaction, and commitment on customer loyalty in the Malaysian Airline industry.

2. LITERATURE REVIEW

2.1 Theoretical Background

The relationship quality model was introduced in 1985 to examine the relationship between customer satisfaction and experience whilst driving consumer loyalty (Viera et al., 2008). Agbor (2011) used the relationship quality model to evaluate the strength of the customer relationship in a competitive market. The results showed that customers' experiences may influence their relationship with suppliers in the process of gaining confidence (trust) on the future reputation if they obtain a strong bond relationship. If businesses can retain a strong bond relationship with their consumers, they may succeed into attracting and retaining their customers due to superior consumers' experiences. Lagace et al. (2013) also asserted that trust and satisfaction are sufficient to build up strong bond relationships between a company and its consumers.

However, Moorman et al. (1992) claimed that trust, perceived quality, involvement, and commitment are factors that influence the establishment of a customer loyalty relationship. In contrast, Raueyren and Miller (2007) studied customer loyalty in a B2B context, they found that customer loyalty was influenced by trust, service quality, commitment and satisfaction. Past researchers have different perspectives toward the components of the relationship quality model. Despite this, the majority of the researchers have a common view when examining consumer loyalty. The most frequently used variables in the relationship quality model are trust, satisfaction and commitment.

Hence, this study has aimed to examine the relationship quality that influences consumer loyalty in the Malaysian airline industry. The relationship quality has been used as a predictor comprising trust, satisfaction, and commitment which can explain the influence of the overall relationship quality on customer loyalty.

2.2 Customer Loyalty

Most marketing strategies intend to attract new potential customers, and, at the same time, to retain the current customers for future purchases. Therefore, it is important to understand consumer behaviour, such as customer loyalty (Reibstein, 2002). Businesses typically examine the customers' behaviours to determine how consumers repay the company with their loyalty. They can use this information to improve the services provided in gaining customer loyalty, which, in turn, may enhance the businesses' performances, and ultimately, the financial returns. Developing a strong relationship with customers has a direct impact on customer loyalty as it can assist a company to gain a competitive advantage in the global market (Polas et al., 2018). In addition, consumer loyalty is expressed as "*one's feelings of devoted attachment to the loyalty objective, rather than repeated commercial transactions*" (Abualhaija et al., 2018, p.106). This brings a positive impact on the profit maximisation through reducing the advertising cost and increasing marginal earnings even without marketing advertisement to promote the company (Gandomi & Zolfaghari, 2013).

3. HYPOTHESES DEVELOPMENT

3.1 Trust and Customer Loyalty

Trust is the willingness of consumers to believe in or rely on a company's reputation (Nguyen et al., 2013). Honesty and reliability are the factors contributing to building up trust between an individual or a company (Leninkumar, 2017). Trust assists companies to maintain a relationship with their potential or current consumers which takes part in the exchange process, such as acquiring goods or services and loyalty. Trust improves the credibility, integrity, and benevolence of a company as consumers are satisfied with their past purchases or perceive a good consumption experience. Hence, this will motivate them to have repurchase intentions. Companies have more ability to fulfil their client needs or be honest with them will obtain more trust (Upamannyu et al., 2015). This can help a company to build up not only its reputation, but also, to encourage endless support by repurchasing the service, and hence, to achieve profit maximisation. Hence, the hypothesis is stated as below:

H₁: Trust possesses a positive relationship to influence consumer loyalty in an airline service.

3.2 Satisfaction and Customer Loyalty

Satisfaction is the orientation of an individual when needs are satisfied, or the experience perceived on the service exceeds his or her expectations. The satisfaction level depends on the response of the consumer after purchasing, and whether the consumption achieves or exceeds his or her expectations (Motefakker, 2016). Lee et al. (2016) concluded that consumers have a variety of needs, preferences, purchasing behaviours, and price intentions, but the final relationship which influences consumer satisfaction are the perception (image), expectation, perceived quality, and perceived value. Khairawati (2019) stated that as customer satisfaction increases, it can bring long-term sustainability to the business because satisfaction constructs a positive impression on a consumer's perception towards a company. Additionally, it can result in increasing repurchase intention and building up a strong relationship between a company and its consumers, which ends up forming consumer loyalty. Thus, the next hypothesis is:

H₃: Satisfaction possesses a positive relationship to influence consumer loyalty in an airline service.

3.3 Commitment and Customer Loyalty

Commitment is a behaviour which is attached to individuals to freely follow their hearts to take certain actions to reflect specific circumstances (Mercurio, 2015). The more commitment is involved, the higher the loyalty of the consumers towards the businesses (Keiningham et al., 2015). Marshall (2010) reported that commitment is an antecedent to customer retention. Their results revealed that customers have the repurchase intentions from the supplier if commitment has been presented. The power of commitment allows companies to possess the ability to contribute to consumer loyalty and products to be continuously repurchased. It can also lead to free marketing advertisement. For example, consumers might introduce a company that they perceive is good to their family members or friends. Overall, commitment can strongly influence the habit of an individual to switch his or her purchase behaviour and loyalty towards another brand (Wali et al., 2015). As such, the above literature leads the H₃:

H₃: Commitment possesses a positive relationship to influence consumer loyalty in an airline service.

4. METHODOLOGY

4.1 Data Collection and Sample Size

This study used a non-probability sampling, which is convenience sampling, in selecting the respondents who were passengers in Malaysia with those possessing at least one time and above of flight experiences over the last three years. This is because loyalty is a long-term contributing behaviour. The survey was not conducted physically at the airport because of the airport restrictions and Conditional Movement Control Order related to COVID-19. The population size was unidentified due to the online survey being distributed via social media platforms. Tai et al. (2015) stated that the sample size may depend on the number of survey questions. Any sample size between the range 1:4 and 1:10 of the questions will be acceptable. There were a total of 20 questions prepared in this survey. Therefore, the ideal range of the sample size was in between 80 to 200. The minimum sample size of 100 respondents was deemed sufficient.

4.2 Measurement of Variables

All four constructs of this study were measured with scales adopted from previous studies. This study adopted the 5 items customer loyalty developed by Dehghan and Shahin (2011). Trust was assessed using 5 items taken from Chonsalasin et al. (2020); Briliana (2018); and Gures et al. (2018). The satisfaction scale used 5 items developed by Namukasa (2013) and Gures et al. (2014). Commitment was examined using 5 items developed by from Mosavi et al. (2012); Chonsalasin et al. (2020); and Briliana (2018). All the instruments used the 5-point scale (1=strongly disagree to 5=strongly agree).

4.3 Data Analysis

The IBM Statistical Package for Social Sciences version 26 was used to test the proposed relationships.

5. RESULTS

5.1 Demographic Profiles

The data collection was carried out through an online survey and yielded 140 usable samples. The 140 respondents possessed flight experiences in the past, 62 were females (44.3%) whereas 78 were males (55.7%). 8 out of the 140 respondents were between 18 to 20 years old (5.7%), 90 respondents were between 21 to 30 years old (64.3%), 20 respondents were between 31 to 40 years (14.3%), 10 respondents were in the 41 to 51 years old category (7.1%), and the remaining 12 respondents were above 50 years old (8.6%). Whilst 66 respondents (47%) selected AirAsia as their first choice to travel, 37 respondents (27%) selected Malaysia Airline as their first choice. 20 respondents (14%) and 17 respondents (12%) selected Malindo Airline and Firefly as their first choices to travel.

5.2 Goodness of Measures

There are two methods to examine the goodness of measure, namely the factor analysis and reliability analysis. This study conducted a factor analysis and the KMO value was 0.909 and Barlett's test of sphericity was significant at a 0.000 level. Anti-image correlation values were above 0.50 and Eigen values were greater than 1. The factor loadings ranged from 0.505 to 0.877. The results from communalities ranged from 0.65 to 0.866, which were greater than the threshold limit of 0.50. This study employed Cronbach's alpha to assess the internal consistency reliability. The results of the Cronbach's alpha values ranged from 0.881 to 0.908, which were all higher than the required 0.70 value.

This study employed Pearson correlation to examine bivariate relationship between all study variables, the findings showed that trust ($r=0.734$), satisfaction ($r=0.632$), and commitment ($r=0.782$) correlated significantly with customer loyalty. The correlation between all the variables were significant for further analysis. Thus, a multiple regression was carried out to examine the proposed hypotheses.

5.3 Regression Analysis

The R^2 and adjusted R^2 values were 0.735 and 0.729. The findings revealed that trust, satisfaction, and commitment explained 73.50% of the changes in the level of consumer loyalty. The other 26.5% can be explained by other variables that were not considered in this study. The finding of Durbin-Watson was 2.110, indicating that there was no autocorrelation. Based on the ANOVA findings, the F value was 125.923 significant at the 0.000 level. This indicated that trust, satisfaction, and commitment had significant relationships with customer loyalty. As shown in Table 1, all the variance inflation factor (VIF) values were lower than 5, thus, collinearity was not an issue.

Table 1 shows the findings of the direct path relationships. The results of the regression analysis showed a significant relationship existing between trust and customer loyalty ($\beta=0.376$, $t=4.662$, $p=0.000$). The relationship between commitment and customer loyalty was found to be significant ($\beta=0.562$, $t=8.677$, $p=0.000$). Thus, hypotheses H1 and H3 were supported. However, satisfaction was found not a significant predictor of customer loyalty. Thus, hypothesis H2 was not supported.

Table 1. Hypothesis Testing for Direct Relationship.

No	Relationship	Path Coefficient	Std Error	t-value	p-value	VIF	Decision
H1	Trust -> Customer Loyalty	0.376	0.089	***4.662	<0.000	3.344	Supported
H2	Satisfaction -> Customer Loyalty	-0.019	0.082	-0.258	0.797	2.871	Not Supported
H3	Commitment -> Customer Loyalty	0.562	0.064	***8.677	<0.000	2.155	Supported

Note: *** $p<0.01$ (One-tailed)

5.6 Discussion And Conclusion

The current study has focused on the determinants of relationship quality and customer loyalty on airline service. This study investigated three potential drivers of relationship quality to achieve this research

goal: trust, satisfaction and commitment. The finding confirmed that trust was significantly and positively linked with customer loyalty. This finding is supported by Nguyen et al. (2013), consumer trust can influence consumer loyalty differently in various forms of social identity. Upamannyu et al. (2015) also claimed that the stronger the consumer trust, the more strongly it influences consumer loyalty, and it further affects the repurchase intentions of consumers. Additionally, Martínez and Bosque (2013) also pointed out that it is vital to mediate trust as it could indirectly influence perceived corporate social responsibility, and build consumer loyalty.

A direct relationship between customer satisfaction and consumer loyalty was found to be insignificant. This result seems to be in line with Al-Msallam (2015) who found that customer loyalty was not influenced by customer satisfaction due to satisfaction often arising from service quality. However, service quality does not have an impact on consumer loyalty. Similarly, Maisya et al. (2019) also found insignificant result between satisfaction and customer loyalty. They believed that satisfaction has no direct impact on consumer loyalty but it does have an indirect impact on consumer loyalty. They argued that satisfaction might be different in service industry due to the service perceived might be different every time.

The finding also evidenced that customer loyalty was significantly and positively influenced by commitment. The result is concurred with Bhatti (2020) as commitment is a key predictor of consumer loyalty because it has a high impact on consumers' intentions to create long-term relationships with service providers. Likewise, Fullerton (2003) also addressed the idea that customer bonds can be enhanced if marketers understand the commitment of the consumers. The reason is that commitment is an antecedent of customer loyalty because it allows companies to create value for their customers (Bricci et al., 2016).

This study makes two contributions. From the theoretical standpoint, this study extends the previous academic literature by applying a relationship quality model to address the idea that trust and customer commitment establish a strong bond relationship which forms the determinants of customer loyalty. Next, this study has managerial implications. The findings provide new strategic insights for airline management that trust and customer commitment are determinants that impact on customer loyalty in the airline business. Airline business operators should consider developing more effective strategies to improve customer loyalty to achieve superior financial performance. There are two limitations to this study that could be addressed in future research. First, the present research model examined three determinants of relationship quality which can explain the influence of overall relationship quality on customer loyalty. Future research could look into other determinants that influence customer loyalty. Second, the results are restricted to the Malaysian context. Future researchers can compare Malaysian airline service with other countries, such as Thailand and Singapore, to add to literature on service quality and customer loyalty.

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Does Top Management Diversity Increase the Likelihood of Corporate Reputational Risk Awareness? The Case in Indonesia Banking Industry

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ABSTRACT

This research aims to analyse the effect of top management team (TMT) diversity on the likelihood of corporate reputational risk awareness in Indonesia banking industry. TMT diversity is based on certain characteristics, such as gender, age, foreign nationality, and tenure. Hypotheses testing were conducted by using a panel data logistic regression model with a sample of 40 banks listed on the Indonesia Stock Exchange for the period 2015-2019. Reputational risk awareness is measured using a text-mining approach to calculate the frequency of reputation risk keywords in the annual report. This research found that female gender in TMT increases the likelihood of corporate reputational risk awareness, while foreign nationality decreases the likelihood. This study did not find that age and tenure diversity in the TMT could increase the likelihood of corporate reputational risk awareness. However, this study needs to be improved by finding another TMT characteristic to be measured. Also, it needs another measurement besides using text-analysis approach to measure reputational risk awareness.

Keywords: age, gender, foreign, reputation, tenure

1. INTRODUCTION

Reputation is a valuable asset for a company which is hardly achieved but can easily disappear whenever it is not maintained (Schuppener, 2011). Reputation is also known as the perception of one group – stakeholders – regarding the commercial name of an entity (Larkin, 2003). Unfortunately, so many firms cannot manage their reputations well. Also, companies tend to focus on how to handle the threat of reputation instead of taking some preventive actions (Eccles et al, 2007). Reputation risk is the kind of risk that comes from negative issues or news about a company that could damage its image and its financial performance. As mentioned by the Financial Service Authority in regulation no. 18/POJK.03/2016, reputation risk should be managed well, especially for those who are in the banking industry.

The importance of reputation risk was mentioned by the Global Survey by Deloitte (2015), which surveyed 300 executives and found that 87% of participants considered reputation risk to be more important than any other corporate risk. Moreover, 41% of respondents mentioned that reputation risk could cause financial damage to a company. For instance, negative issues related to Maybank Indonesia cases in 2020 was suspected to be one of the causes of the decrease in the number of customers in that year.

Deloitte also found that managing reputation risk has become part of the C-suite roles. According to the percentage, 36% thought it was the Chief Executive Officer's (CEO) responsibility, 21% thought it was the Chief Risk Officer's (CRO), 14% thought it was the Board of Directors' (BOD), and 11% thought it was the Chief Financial Officer's (CFO). Also, as mentioned by Dowling (2006), reputation risk has become TMT's responsibility, which is also included in their performance.

Reputation risk should be managed by TMT which are aware of it. According to Heidinger & Gatzert (2018), reputational risk awareness has become an important factor in a company's reputation risk management. This study included insurance and bank samples from the United States and Europe, and it stated that awareness was becoming a significant factor, particularly in the banking and financial services industry, which was built on customer trust. And one of the factors that might affect a company's awareness is the one who manages the company, which is the board of directors itself. Based on the upper echelon theory by Hambrick & Mason (1984), diversity in characteristics and background has an impact on how TMT make decisions and strategy for the company. This means that the characteristics of TMT members will affect the likelihood of corporate reputational risk awareness.

This study will focus on the effect of diversity on TMT characteristic on the likelihood of reputational risk awareness which will look from demographic and cognitive perspectives, such as age, gender, nationality, and tenure. It served the purpose of providing additional information, particularly for the banking industry, which is based on trust. The research object will be all banks listed on ISE during 2015 until 2019, which information will be gained from annual reports published by companies or ISE, which total is 40 banks that will be limited to those who have been listed at least in 2015.

2. RESEARCH DESIGN

2.1 Hypothesis Development

In some cases, diversity is believed to add some color to organizations (Mishra & Jhunjhunwala, 2013). The more diverse the TMT, more opinions and alternatives the company could receive. Though some believe that the possibility of conflict has become bigger, Carter et. al (2003) believe that it could give added value to a company. The diversity on the board of directors could be categorized from two perspectives: demographic and cognitive. Gender, nationality, status, and roles are all factors to consider from a demographic standpoint. Meanwhile, the cognitive perspective consists of knowledge, education, value, and personal characteristics of a person (Kartikaningdyah & Putri, 2017).

Diversity in gender is one of the important factors described by the existence of women director in TMT. Based on Innayah et al (2021), the existence of women in TMT will increase corporate performance through good corporate governance. Furthermore, because women tend to avoid risk, credit risk in a company has a negative correlation with women's directors. Women were thought to have a higher risk awareness than men, as well as a higher risk aversion. Women could make decisions more precise and low impact risk (Kusumastuti et al, 2007). Thus, it assumes that women in TMT could increase the likelihood of reputation risk awareness levels in a company.

Based on Kusumastuti et al (2007), the older one was considered the wisest one. However, as a person gets older, their physical ability declines. It is in-line with Hambrick & Mason (1984), who mentioned that younger leaders have better mental and stamina, also more innovative than older. Older leaders tend to be conservative in every decision they make due to fear of inaccuracy of information that could be risky for their position (Ali & Taylor, 2014). As a result, the hypothesis will be age of TMT could increase the likelihood of corporate reputational risk awareness.

Foreign directors are believed to give new values, perspective and culture that increase competency and bring more. It is stated that foreign directors are more open to information transparency (Zulkarnain & Mirawati, 2019). It is consistent with Alshirah et al. (2019), who stated that foreign directors are more likely to disclose risk information because they are capable on gathering more comprehensive information and have better networking outside of the organization. Thus, it assumes the existence foreign directors in TMT could increase the likelihood of the reputation risk awareness level in the company.

The tenure of directors is predicted to have an impact on the reputation's risk awareness level. Based on Al-Magzhom et al (2016), the tenure of directors will give more experience and knowledge of business. Based on Ali & Taylor (2014), the longer the tenure, TMT will be more cautious since they

need to maintain their position in company. Thus, tenure of directors could increase the likelihood of corporate reputational risk awareness.

2.2 Research Methods

This research will analyze company reputational risk awareness by using their annual reports. It takes 40 banks as a sample which are listed on the Indonesia Stock Exchange and already existed in 2015, since our research period is 2015 – 2019. We took out all the sharia banks and local development banks from our sample. The selection of these companies purely assumes that the listed banks should manage their reputation risk by showing their awareness through their annual reports to stakeholders.

The dependent variable in this research is the likelihood of corporate reputational risk awareness (RRA). To compute corporate reputational risk awareness, this study will use text-mining analysis by calculating how many words, such as *reputation, reputation(al) risk awareness and reputation(al) risk management*, have been mentioned in annual reports (Heidinger & Gatzert, 2018). Text-mining analysis will use specific software for calculating those keywords. Aside from dependent variables, there are some determinants or independent variables that are predicted to have some impact on the likelihood of RRA. Those variables are age, gender, nationality, and tenure. For age, the calculation for this variable will be an average director age that will be converted to a natural logarithm. For gender, it will be calculated by finding the proportion of women directors in a company. It was also the same as nationality, which looked at the percentage of foreign directors in the company. As for tenure, the calculation will be an average of the director's tenure in the company. This study will employ two variable controls: firm size (calculated using Total Asset for each year) and profitability (calculated using Return on Asset for each company, each year). To summarize all variables in this research, please refer to Table 1 below:

Table 1. Measurement Variables

Acronym	Variables	Measurement
RRA	Reputation Risk Awareness	Measured by number reputation risk-related words in annual reports, which value 1 if it is above or equal to median and 0 if it is below median
WOMEN	Gender	Measured by the proportion of women directors
AGE	Age	Measured by natural log of average age directors
WNA	Nationality	Measured by the proportion of foreign directors
TENURE	Tenure	Measured by natural log of average tenure directors
SIZE	Firm Size	Measured by natural log of total asset
ROA	Firm Profitability	Measured by percentage of return on asset

Source: processed by Researcher

For measuring the relationship between independent and dependent variables, we use logistics regression where the dependent variable is dichotomous (Nachrowi & Usman, 2005). It will be valued as 0 if the RRA is below the median or the likelihood is considered low. On the other side, it is valued at 1 when RRA is greater than or equal to the median, or that the likelihood is considered high. In this study, the regression model was used as follows:

$$\ln \text{RRA}_t = \beta_0 + \beta_1 \text{WOMEN}_t + \beta_2 \text{AGE}_t + \beta_3 \text{WNA}_t + \beta_4 \text{TENURE}_t + \beta_5 \text{ROA}_t + \beta_6 \text{SIZE}_t \quad (1)$$

3. CONCLUSIONS

To ensure our variables were worth to test, we did normality test, multicollinearity test and goodness of fit test. We ensure that there were no variables that had skewness above standard. For all variables, we already ensured that they were passed normality test. For goodness of fit model (Pearson *chi-square*), we found that the value was 0.5110, higher than significance level. It meant the model was already fit and could describe independent variables in the model itself. Also, for multicollinearity test, we found no multicollinearity symptoms of independent variables by using Variance Inflation Factors

(VIF) method. We found that VIF was 1.62 for this model and nothing above 10 for every independent variable.

Based on regression results on Table 2, we found that nationality (WNA) factor affects significantly to RRA. Since the correlation with WNA is a negative correlation, it means the more foreign directors in a company, the lower likelihood of reputational risk awareness in a company, which is contrary to many previous studies. As mentioned by Alshirah et al. (2019), the presence of foreign directors should have a positive impact on risk disclosure because foreign directors are more capable of delivering more comprehensive information and have a larger network. Thus, the existence of foreign directors should increase the likelihood of corporate reputational risk awareness, mentioned as hypothesis. Since the result is contradictive with hypothesis, we conclude that hypothesis was not supported by this research

Table 2. Logistic Regression Result

	Expected Sign	Odds Ratio	Coefficient	Prob.	Standard Error
WOMEN	(+)	3.4241	1.2308	*0.086	0.9000
AGE	(+)	19.6424	2.9776	0.338	7.1011
WNA	(+)	0.1248	-2.0809	**0.037	1.1655
TENURE	(+)	0.9468	-0.0546	0.157	0.0542
ROA	(+)	0.0435	-3.1336	0.402	12.5338
SIZE	(+)	4.8912	1.5874	*0.000	0.2815
LR Chi2	57.09				
Prob > Chi2	0.0000				
Pseudo R2	0.2061				

Source: processed by Researcher (2021)

Total sample is 200. RRA = likelihood of reputation risk awareness level, which valued 1 if it is equal or higher than median and 0 if it is below median, WOMEN = proportion of women directors, AGE = average of directors' age, WNA = proportion of foreign directors, TENURE = average tenure of directors, SIZE = firm size measured by using total assets, ROA = company profitability

**) Significant value $\alpha = 5\%$ (one-tailed)

*) Significant value $\alpha = 10\%$ (one-tailed)

Besides nationality (WNA), gender (WOMEN) is also marginally significant to RRA. It means, gender had quite significant influence on the likelihood of corporate reputational risk awareness. Positive correlation indicates the more women in TMT, the higher likelihood of reputational risk awareness in company. This result is in-line with study from Kusumastuti et al (2007), which is positively affect the likelihood. It stated that women are tend to more aware of risk and avoid risk. While for other independent variables, there is no significant influence on the likelihood of corporate reputational risk awareness since the p-value is higher than the significant level of 5% and 10%. It means that any changes in the proportion of AGE and TENURE of TMT will not affect the likelihood of the reputation risk awareness level in a company. Thus, we could conclude that only certain characteristic, such as gender and nationality that could affect the likelihood of corporate reputational risk awareness, while others had no impact.

This study showed that shareholders should be aware whenever they need to appoint new TMT especially in banking industry. Since reputation matters for banks, TMT characteristic such as gender and nationality that significant will affect the level of awareness on reputational risks. Also, it would help regulator on doing due diligence to ensure reputational risk management properly held by management. However, this study has limitation such as the measurement used by doing text-analysis approach rather than scoring. Also, next study needs to emphasize more TMT characteristic, other than age, gender, nationality, and tenure.

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The determinants to become a whistleblower among tax officers in central Jakarta DGT regional office

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ABSTRACT

This study aims to analyze the effect of the seriousness of fraud, retaliation, procedural justice, and trust in the organization on the intention to become a whistleblower. Respondents of this study were employees at the Regional Office of the Directorate General of Taxes (DGT) Central Jakarta. The results of this study indicate that the level of seriousness of fraud, retaliation, and procedural justice have a significant positive effect on employee intentions to become whistleblowers. Meanwhile, trust in the organization has a positive but not significant effect, which means it has no effect on the intention to become a whistleblower. The study findings imply supporting the Prosocial Organizational Behavior Theory and Expectancy Theory.

Keywords: fraud, retaliation, fairness, trust, whistleblower

1. INTRODUCTION

Indonesia is a country with a high level of fraud (Ugaz, 2015). The fraud that occurred was caused by corruption cases in the government and the private sector, one of which was at the Directorate General of Taxes at the Ministry of Finance. The number of corruption cases involving tax officials has resulted in the weakening the reputation of the government. One of the corruption cases committed by tax officials was carried out by Gayus Tambunan. The corruption case carried out by Gayus was accepting bribes worth Rp. 925 million (Lumbanrau, 2016). Apart from the case carried out by Gayus, another case was carried out by a civil servant namely Dhana Widyatmika. Dhana was proven to have received bribes from PT Mutiara Virgo for managing tax underpayments and from that case Dhana was sentenced to 14 years in prison (Lumbanrau, 2016). One of the efforts that can be done by the government to eradicate corruption cases is the existence of a whistleblower. Whistleblower is a people who will disclose a fraud. Whistleblower can reduce the level of fraud (Permana & Rohman, 2016) (Vivi, 2013).

1.

Whistleblowers is very important, accordingly many studies examine the factors that influence the intention to become a whistleblower. In Indonesia, studies on the determinants of intention to become a whistleblower in government agencies are mostly conducted with civil servant respondents (Aida, Helmy, & Setiawan, 2019); (Bagustianto & Nurkholis, 2015); (Dianingsih & Pratolo, 2018); (Lestari & Yaya, 2017) and (Safitri & Silalahi, 2019). Different with previous research, this study examines the intention of tax office employees to become whistleblowers.

Three factors that influence employee intentions to become whistleblowers are: 1) level of seriousness of fraud (Aliyah & Marisan, (2017), Sutrisni & Coryanata, (2018), Dianingsih & Pratolo, (2018), Safitri & Silalahi (2019), Aida, et al., (2019), and Primasari & Fidiana (2020)); 2) retaliation (Aulia, Primasari, & Azhar, (2019), Efendi & Nuraini, (2019), and Della, Rodiah, & Azmi, (2020)); 3) procedural justice (Tan Girala & Ramanujam, (2008), Permana, & Rohman, (2016) and Jaya, (2018)). Results of research on the relationship among the three factors above on the intention to do whistleblowing are inconsistent so that it opens up opportunities for new research. The fourth variable

that affects whistleblowing is trust in the organization ((Permana, & Rohman, 2016). Compared to other variables, trust as a determinant of whistleblowing is rarely studied. Therefore, this study aims to analyze whether the level of seriousness of fraud, retaliation, procedural justice, trust has an effect on the intention to become a whistleblower.

2.THEORETICAL BASIS

The first theory used in this study is Prosocial Organizational Behavior Theory that aims to improve the welfare of individuals, groups, or organizations carried out by members in an organization ((Brief & Motowidlo, 1986). The second theory used is the Expectancy Theory of motivation proposed by Victor Vroom in 1964 (Robbins & Judge, 2015). The logical basis for expectancy theory is that motivation depends on the size of our desire for something and how likely we think we are to get it (Moorhead & Griffin, 2013).

3.HYPOTHESIS

The seriousness of fraud is the perception of how one ranks the problem, and also how one perceives the negative impact that the problem might have. Organizations will also be affected by greater harm from more serious wrongdoing than from less serious wrongdoing. This is in accordance with the Prosocial Organizational Behavior Theory described by (Brief & Motowidlo, 1986). Research conducted by Aida et al., (2019) and Primasari & Fidiana (2020) which stated that the level of seriousness of fraud had a positive effect on intentions as a whistleblower. Based on these considerations, the first hypothesis is formulated as follows:

H1: The level of seriousness of fraud has a positive effect on employee intentions to become whistleblowers

A very high level of retaliation will increasingly influence employees to remain silent because it allows a negative impact to be received by the whistleblower. Aulia et al., (2019) found that retaliation has a negative effect on interest in whistleblowing. Based on these considerations, the second hypothesis was formulated as follows:

H2: Retaliation has a negative effect on employees' intentions to become whistleblowers

Expectancy Theory explains that an employee will be motivated to become a whistleblower with procedural justice created within the organization through fair procedures and policies and in accordance with the expectations and goals of the employee (Robbins & Judge, 2015). Research conducted by Permana & Rohman (2016) show that procedural justice has a positive effect on intentions to become a whistleblower. And also, research conducted by Jaya (2018) proves that procedural justice has a positive effect on employee loyalty work. This description underlies the proposed third hypothesis that was developed, namely

H3: Procedural justice has a positive effect on employee intentions to become whistleblowers

Expectancy Theory explains that trust in organizations embodies a sense of pride and care for the survival of their organization, so that with the aim and hope of saving the organization from fraudulent acts, they are motivated to become whistleblowers (Robbins & Judge, 2015). Research conducted by Permana & Rohman (2016) show that trust in organizations affects interest in becoming a whistleblower. Therefore, the review underlies the proposed fourth hypothesis to be tested, namely:

H4: Trust in the organization has a positive effect on employee intentions to become whistleblowers

4.RESEARCH METHODS

4.1 Sample of the study

This study uses primary data, obtained from respondents' answers to the questionnaire. Respondents are employees who work at the Regional Office of the Directorate General of Taxes, Central Jakarta.

4.2 Operational definition and measurement

The seriousness level of fraud is the existence of a violation, both financial and non-financial, which is the impact that arises due to the seriousness of the fraud (Lestari & Yaya, 2017). The measurement of the seriousness of fraud is seen from the level of materiality. Retaliation is a threat of revenge from the party who committed the violation to the reporting party (Putri, 2012). Retaliation is measured by the threat that the whistleblower may receive; trust between employees; and security in the fraud reporting system. Procedural justice is perceived justice related to the existence of organizational regulations or policies, in relation to whistleblowing reporting (Putri, 2012).

Procedural justice is perceived justice related to the existence of organizational regulations or policies, in relation to whistleblowing reporting (Leventhal, 1980). Measurement of justice in the form of supporting policies; reporting procedures that encourage fraud reporting; easy and fast procedure; consistent procedures; the existence of procedures regarding security guarantees and intimidation; procedures regarding the protection of witnesses and reporters; as well as procedures regarding the security of the reporter's identity. Trust is the trust of employees on organizational behavior that values them (Paillé, Bourdeau, & Galois, 2010). Trust is measured by organizational commitment to eradicating corruption; the organization has high capability; organization has high quality in setting strategy. Intention to do whistleblowing is a plan of behavior that will be carried out in the event of a fraud violation (Near & Miceli, 1985); measured by having the intention to report the fraud; earnestly attempt to report the fraud; have a plan to report the fraud. The answers to each instrument item using 4 Likert scales have an arrangement from strongly disagree to strongly agree

5.ANALYSIS

5.1 Description of research object

Questionnaires sent to 162 employees. Questionnaires returned 78 or 48% of the total questionnaires distributed. The data shows that the majority of respondents are male as many as 55 people or 70.5%. While the female respondents were 23 or 29.5%. Most of the respondents had the latest bachelor's degree education as many as 40 people or 51.3%.

5.2 Descriptive statistic

The average score of the variable is intention to be whistleblowing, the level of seriousness of fraud, retaliation, procedural justice, and trust in the organization are 26.23; 12.38; 22.12; 16.26; and 28, respectively.

5.3 Validity and reliability test

Item correlation values with variable scores for intention to become a whistleblower, seriousness level of fraud, retaliation, procedural justice and trust in the organization, is 0.893 to 0.956; 0.466 to 0.830; 0.569-0.806; 0.836-0.938; r 0.811-0.911, respectively. As for Cronbach alpha research variables between 0.630-0.980.

5.4 Classic assumption test results

The regression model fulfills the classical assumption test of normality, multicollinearity and heteroscedasticity.

Regression results

Table 1 Regression

Model	Unstandardized Coefficients		t	Sig.
	B	Std. Error		
(Constant)	-2,263	3,525	-.642	,523
Seriousness of Fraud	,494	,209	2,361	,021
Retaliation	,241	,119	2,026	,046
Procedural Justice	,703	,161	4,370	,000
Trust	,200	,111	1,807	,075

Source: Processed by author

Based on the test results in table 1, it can be concluded that the level of seriousness of fraud has a positive and significant effect on an employee's intention to become a whistleblower. So that the first hypothesis in this study is supported. And the results of this study are in line with the Theory of Prosocial Organizational Behavior. The results of this study also support research conducted by Primasari & Fidiana (2020). Furthermore, the test results show that the coefficient of retaliation variable is 0.241 and has a significance value of 0.046, it can be concluded that retaliation has a positive and significant effect on an employee's intention to become a whistleblower. Thus, the second hypothesis is not supported.

Table 1 show that the coefficient of procedural justice variable is 0.703 and has a significance value of 0.000. it can be concluded that procedural justice has a positive and significant effect on an employee's intention to become a whistleblower at the Central Jakarta DGT Regional Office. So that the third hypothesis in this study is supported. The results of this study are in accordance with research conducted by Permana and Rohman (2016) and Jaya (2018). Where the procedural justice variable has a positive and significant effect on the intention to become a whistleblower.

Finally, the test results indicate that the coefficient of trust in the organization is 0.200 and has a significance value of 0.075. it can be concluded that trust in the organization has a positive but not significant effect on an employee's intention to become a whistleblower at the Central Jakarta DGT Regional Office. So the fourth hypothesis in this study is not supported. And the results of this study are not in line with the expectancy theory which explains that the higher the trust in the organization created in an organization, the higher the intention to become a whistleblower. The results of this study are not in line with previous research conducted by Permana and Rohman (2016) that the trust variable in the organization has a significant effect on the intention to become a whistleblower.

6.CONCLUSIONS AND LIMITATIONS

Based on the data analysis that has been described, it can be concluded that seriousness of fraud and procedural justice has a significant positive effect on the intention to become a whistleblower. Contrary to our prediction, retaliation has a significant positive effect on the intention to become a whistleblower. Finally, trust in the organization has a positive but not significant effect on the intention to become a whistleblower.

The following are the limitations of this study. The data collection method in this study used primary data using questionnaire distributed through Google Form. So that the data is not well distributed, the data collected is only 78 of the total 162 employees. And also, the time of distributing the questionnaire coincides with the reporting of the tax period. This study only uses a population of tax employees in one tax office, namely the Central Jakarta DGT Regional Office.

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Determinants of Disclosure of the Province Government's Financial Statements in Indonesia

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ABSTRACT

This study aims to determine the effect of the human development index, legislative size, deviation level and level of dependence on the disclosure of provincial government financial statements in Indonesia. The research was conducted in the period 2016-2018. Government Regulation No. 71 of 2010 explains that the users of regional financial reports are the community, people's representatives, supervisory agency, and government. In this study, the researchers used independent variables in the form of the human development index, legislative size, deviation level and the level of dependence on the central government. The research data was processed using multiple regression. The results showed that the human development index variable have positive effect on financial statement disclosure. While the legislative size, the deviation level and the level of dependence have no effect on the disclosure of financial statements. The results of the study indicate that human quality can encourage the provincial government to prepare financial statement disclosures more broadly.

Keywords: human development index, legislative measure, deviation level, level of dependence, disclosure of financial statement

1. INTRODUCTION

The existence of regional autonomy policies affects regional financial management. This is reinforced by Law no. 33 of 2004 concerning Fiscal Balance between the Central Government and Regional Governments which makes local governments (provincial governments and district/city governments) obliged to report their responsibilities, one of which is in the form of financial reports. Based on Government Regulation no. 71 of 2010 concerning Government Accounting Standards, government financial reporting provides useful information for users in assessing accountability and making decisions both economic, social, and political decisions. Transparency and accountability are forms of disclosure in government financial statements.

The research that has been done regarding the level of disclosure of the provincial government's financial statements is still relatively small, because there are many studies that take the City/Regency as the object. Several previous studies include Hendriyani & Tahar (2015) with an average disclosure of 41.76%; Agnecia et al. (2015) of 38.32%; Hilmi & Martani (2011) amounted to 44.56%; Qoyimah (2016) by 64%; and Rahmayanti (2018) of 58.35%. Based on the results of previous studies, it can be said that the average disclosure is still fluctuating, so the researchers want to do research again. This research is expected to provide information about the level of disclosure of provincial government financial statements in Indonesia.

According to Government Regulation No. 71 of 2010 (2010), users of provincial government financial statements include the public; people's representatives; supervisory agencies as well as government. Several previous studies have not covered all users of financial statements, namely in a study conducted by Rahmayanti (2018), Hendriyani & Tahar (2015). Based on this, the researchers decided to carry out a research renewal, using independent variables related to all users of provincial government financial statements. From the community side, researchers used the Human Development Index to be used as

an independent variable. From the side of the people's representatives, the researcher uses Legislative Size to be used as an independent variable. From the supervisory agency's side, the researcher uses the Deviation Level to be used as an independent variable. From the government side, researchers used the Dependency Level to be used as an independent variable. This research aims to determine the effect of the human development index, legislative size, deviation level and level of dependence on the disclosure of provincial government financial statements in Indonesia.

2. HYPOTHESIS DEVELOPMENT

Transparency and accountability are things that are needed by the public as users of these financial statements. The quality of life of the community affects public awareness of the importance of financial statements. The Human Development Index is used as a benchmark for people's quality of life . The higher the Human Development Index, the higher the public awareness of the level of disclosure of financial statements.

Research conducted by Qoyimah (2016), Setyowati (2016) states that the human development index has a significant influence on the level of disclosure of financial statements. This is possible because people with high education and prosperity will be more aware of information, rights, and obligations from the government, so that people will be more aware of monitoring government performance. Based on the explanation above, the hypotheses used in this study are:

H1 = Human Development Index has a positive effect on the level of disclosure of provincial government financial statements in Indonesia.

The role of the legislature as a financial supervisor is expected to be able to control regional financial policies economically, efficiently, effectively, transparently, and accountably. The greater the number of legislative members, it is expected that the greater the level of supervision carried out by legislative members, so that it can encourage local governments to make greater disclosures (Rahayu & Mardiana, 2016). Based on research conducted by Setyaningrum & Syafitri (2012), the more number of legislative members will encourage local governments to increase the level of disclosure of financial statements. The same thing was also expressed by Marliani et al. (2018), the legislature is an institution that has a strategic potential and role in the supervision of regional finances. The greater the number of legislative members, it is expected that the greater the level of supervision carried out by members of the legislature.

H2 = Legislative Size has a positive effect on the level of disclosure of provincial government financial statements in Indonesia.

The level of deviation is one of the factors in the disclosure of financial statements. According to the results of research by Hilmi & Martani (2016), the level of deviation has a positive and significant effect on the level of disclosure of the provincial government's financial statements. This could be because the Supreme Audit Agency encourages the provincial government to disclose more based on the audit results of the State Audit Board.

H3 = The level of deviation has a positive effect on the level of disclosure of the financial statements of the provincial government in Indonesia.

The more funds that the central government disburses to the regions illustrates the high level of dependence on local governments. To reduce the asymmetry that occurs between local governments and the central government, it is necessary to have accountability and transparency in the management of regional finances as a form of accountability for funds provided by the central government. This provides explanations to the central government that funds used by local governments are not misused (Putri & Arza, 2019).

H4 = Dependency level has a positive effect on the level of disclosure of the financial statements of the provincial government in Indonesia.

The following is the model of this research :

3. METHODOLOGY

3.1. Population and Sample

In this study, the population used is the Financial Statements of the Provincial Government in Indonesia from 2016 to 2018. The financial statements used are financial statements that have been audited by the State Audit Board (BPK). The sampling method was carried out using a purposive sampling technique with the following: a). The Financial Statements of the Provincial Government in Indonesia for the 2016-2018 period which have been audited by the State Audit Board (BPK). b). Obtaining an unqualified and reasonable opinion with an exception from the results of the audit by the State Audit Board (BPK). c). The Provincial Government Financial Report has complete data on the variables in this study. d). Provides complete data on the 2016-2018 Human Development Index for each province. e). Provide complete data on the number of legislative members for 2016-2018 for each province. By using these criteria, all provincial financial reports meet the criteria, so there are a total of 34 provinces, the research period is 3 years, so there are a total of 102 samples.

3.2. Research Variable

In this study, the dependent variable used is the level of disclosure of the financial statements of the provincial government in Indonesia. The level of disclosure of financial statements in question is in the form of a comparison between the disclosures that have been presented in the Provincial Government Financial Statements with the disclosures that should be presented in the Notes to Financial Statements in accordance with the applicable Government Accounting Standards. According to Government Regulation No. 71 of 2010, the checklist used in this study includes 34 disclosure items that should be in the Notes to Financial Statements. The following formula is used to measure the Level of Disclosure of Provincial Government Financial Statements in Indonesia:

DISC = Disclosure in Financial Statement Disclosure in Government Accounting Standard

In this study, the independent variables are the Human Development Index, Legislative Size, Deviation Level and Level of Dependence. Human Development Index data for each province in Indonesia is obtained by downloading data from the Central Statistics Agency website at www.bps.go.id. Legislative size is measured using the number of legislative members in each province. The data used for the level of deviation is obtained from the Audit Result Report that has been carried out by the State Audit Board (BPK). The deviation rate is obtained by comparing the nominal deviation with the total expenditure. The level of dependence is calculated from the transfer income from the central government divided by the total income. Total income is obtained from Regional Original Income plus transfer income and other legitimate income (Priharjanto & Wardani, 2017). The research data was processed using multiple regression.

4. RESULT AND DISCUSSION

4.1. Descriptive Statistics Analysis

Table 1 : Descriptive Statistics analysis

	DISC	HDI	LEG	DEV	DEPEND
N	102	102	102	102	102
Mean	0,801	69,766	63,88	0,016	0,624
Median	0,794	69,985	55,50	0,001	0,634
Minimum	0,559	58,05	35	0,00002	0,284
Maximum	0,971	80,47	106	0,364	0,950

4.2. Classic Assumption Test

Based on the results of the autocorrelation test, the Durbin-Watson value is 1.811, which is higher than the dU value in the Durbin-Watson table for 4 variables with 102 research objects, which is 1.7596. The Durbin-Watson value obtained is also lower than 4-dU (4-1.7596) which is 2.2404, so it can be concluded that this study there is no autocorrelation. Based on the results of the multicollinearity test, it is known that the Tolerance value obtained for 4 variables is more than 0.10, while the VIF value

obtained for 4 variables is not more than 10. It can be concluded that this study did not occur multicollinearity.

From the results of the heteroscedasticity test, it is known that the value of Sig. all variables are more than 0.05. Based on the values obtained, it is concluded that this study does not occur heteroscedasticity. The Kolmogorov-Smirnov test results show that the Asymp value. Sig. (2-tailed) is 0.092, so it can be concluded that the residual value or the confounding variable is normally distributed.

4.3. Regression Analysis

Table 2 : Regression Result

Variable	B	Sig
Constant	0,049	0,856
Human Development Index (HDI)	0,009	0,002
Legislative Size (LEG)	0,000	0,427
Deviation Level (DEV)	-0,222	0,157
Dependency Level (DEPEND)	0,119	0,179

Based on the results of multiple regression analysis, the regression model used are:

$$DISC = 0.049 + 0.009 HDI + 0.000 LEG - 0.222 DEV + 0.119 DEPEND$$

4.4. Coefficient of Determination Test Results

Based on the results of the coefficient of determination (R2) by regressing the human development index, legislative size, deviation level and dependency level, the Adjusted R-Square value is 0.10. This shows that the variables of the human development index, legislative size, level of deviation and level of dependence affect the level of disclosure of provincial government financial statements in Indonesia by 10%, while the remaining 90% is influenced by other variables outside the model.

4.5. Hypothesis Testing

4.5.1. Human Development Index

Based on the results of hypothesis testing, it can be seen that the significance value of the Human Development Index (HDI) variable obtained is 0.002, with a significance level of = 0.05 (5%) . This shows that the Human Development Index (HDI) has a positive effect on the level of disclosure of provincial government financial statements in Indonesia. Thus, it can be concluded that H1 is supported. This result means that if the Human Development Index (HDI) of a province increases, the level of disclosure of financial statements in that province will also increase. The higher the quality of society, it will encourage the government to further increase the disclosure of its financial statements. The public will demand the government to be transparent and accountable in the disclosure of financial statements. The results of this study are also in line with research conducted by Qoyimah (2016) and Setyowati (2016).

4.5.2. Legislative Size

Based on the results of the hypothesis test, the value of sig. legislative size variable (LEG) is 0.427. This indicates that the legislative size (LEG) has no significant effect on the level of disclosure of provincial government financial statements in Indonesia, so the second hypothesis (H2) is not supported. The results of this study indicate that the number of legislative members of a provincial government will not affect the level of disclosure of the provincial government's financial statements. The results of this study show different results from research conducted by Setyaningrum & Syafitri (2012) and research conducted by Marlani et al. (2018).

4.5.3. Deviation Level

Based on the results of hypothesis testing, it can be seen in the table of sig values. Variable Deviation Level (DEV) obtained is 0.179, with significance level = 0.05 (5%). This shows that the level of deviation (DEV) has no effect on the level of disclosure of provincial government financial statements in Indonesia. Thus H3 is not supported. In accordance with the signaling theory in which a provincial government will give a signal to users of financial statements by providing complete information

disclosure without being affected by the large or small level of deviation that occurs in the province. It is possible that the recommendations and corrections given by the State Audit Board (BPK) as an effort to increase financial statement disclosure have not been fully followed up properly.

The results of this study are also in line with research conducted by Priharjanto & Wardani (2017). In this study, Priharjanto & Wardani (2017) stated that the level of deviation had no significant effect on the level of disclosure of the provincial government's financial statements. While the research conducted by Hilmi & Martani (2016) showed different results from the results of this study.

4.5.4. Dependency Level

Based on the results of hypothesis testing, the significance value of the dependency level variable (DEPEND) was 0.157. This shows that the dependency level variable (DEPEND) has no effect on the level of disclosure of provincial government financial statements in Indonesia. Thus the fourth hypothesis (H4) is not supported. In this study, it can be concluded that the amount of transfer funds obtained by a provincial government from the central government does not affect the disclosure of the provincial government's financial statements. This is probably because the central government does not require the disclosure of provincial government financial statements. The results of this study are supported by research conducted by Hilmi & Martani (2016) and Priharjanto & Wardani (2017) which states that the level of dependence does not affect the level of disclosure of the provincial government's financial statements.

5. CONCLUSION

5.1. Conclusion

From the research conducted, it can be concluded that the Human Development Index has positive effect on the level of disclosure of provincial government financial statements in Indonesia. Meanwhile, the legislative size, the level of deviation and the level of dependence have no effect on the level of disclosure of the financial statements of the provincial government in Indonesia.

5.2. Limitations and Suggestions

Based on the results of the coefficient of determination (R2), the Adjusted R-Square value is 0.10. This shows that the variables of the human development index, legislative size, level of deviation and level of dependence only have an effect of 10% on the level of disclosure of provincial government financial statements in Indonesia. For further research, it is hoped that other variables other than the variables used in this study will be used.

5.3. Implication

The results showed that the human development index (HDI) variable had a positive effect on the level of disclosure of provincial government financial statements in Indonesia. Based on the results of the study, the highest HDI with a score of 80.47 and the lowest HDI with a score of 58.05. The relatively large difference in scores between the highest and lowest HDI is expected to encourage the government to equalize development in Indonesia.

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Forensic Accounting in Tracing the Proceeds of Crime in the Indonesian FIU

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ABSTRACT

The development of technology advances criminals in modifying their strategies from simple to sophisticated ones. As a response to such modern tactics, there is a greater need to improve the ways of combating crime by law enforcement. The Indonesian Financial Intelligence Unit (FIU) plays a vital role in improving the crime prevention and eradication scheme by applying the financial intelligence approach in tracing the proceeds of crime. However, the current issue that emerged regarding this approach is how effective law enforcement has utilised the information to support the investigation process. This study delineates to what extent the application of strategy in tracing crime proceeds through forensic accounting method. To address the question, this study applies a case study approach to explore the content of the analysis report in which support the investigation undertaken by law enforcement, including the implementation of the ‘follow the money’ concept, the observation on linkages among persons of interests and the analysis of time frame. Thus, this study shows the importance of forensic accounting techniques in the process of exploring the criminal database and resulting in high-quality intelligence reports to disseminate to respective law enforcement agencies.

Keywords: Forensic accounting, fraud, follow the money, proceeds of crime, financial intelligence unit

1. INTRODUCTION

The development of technology makes people easier to conduct financial transaction globally. These conveniences make people more comfortable to carry out financial transaction which are come from legal money as well as illegal money (Jung & Lee, 2017). Based on research conducted by ACFE regarding fraud crimes in 2020, as many as 53% of the methods used by criminals to hide their crimes were to alter or create electronic documents (ACFE, 2020). Not all fraud crimes can be prevented, even in the most secure companies, the system still has the possibility of fraud committed by employees. Furthermore, by understanding what methods fraudsters use to conceal their crimes, companies can effectively detect and prevent similar fraud schemes in the future (ACFE, 2020).

The Financial Intelligence Unit (FIU) as vocal point to preventing and eradicating money laundering crimes, recorded that the number of LTKM received by the FIU tends to increase. In addition to receiving reports from the reporting parties, the FIU also analysing the reports to produce intelligence report, such as Analysis Result (AR). The AR is an independent, objective, and professional analysis which will be sent and followed up to the next stage in the form of an examination or submitted directly to the relevant investigator. The analysis process by the Indonesian FIU can be carried out proactively or upon request (inquiry) through tactical analysis and operational analysis. The analysis itself is a process of gathering information and identifying reports and information on financial transactions with indications of money laundering and other criminal acts (FIU, 2013). The following are a graph of the development of the number of STR received by FIU and a table the level of follow-up AR by investigators from year to year:



Figure 1. The Number of LTKM per Year

Source: FIU (2021)

Table 1. Follow-up Level of Inquiry Analysis Result

Years	Inquiry			Proactive		
	Total	Followed Up	%	Total	Followed Up	%
2015	244	117	47,95%	112	29	25,89%
2016	332	193	58,13%	105	53	50,48%
2017	280	95	33,93%	132	41	31,06%
2018	335	114	34,03%	163	41	25,15%
2019	437	129	29,52%	195	41	21,03%
Grand Total	1.628	648	39,80%	707	205	29,00%

Source: FIU (2021)

Based on table 1, it is known that the level of follow-up AR submitted by the FIU to investigators is still quite low. However, inquiry for information from investigators on AR from year to year tend to increase, this can be seen in Table 1 which states that the number of Inquiry AR from year to year continues to increase and the highest demand was in 2019 as many as 437 AR. In addition, the results of the proactive analysis from the FIU have an average follow-up of 29%. It becomes a problem faced by the FIU, why the results of the analysis they convey are not followed up by the investigators. Thus, this research is expected to provide input to the Indonesian FIU regarding the strategy to increasing the effectiveness of AR by law enforcement to support the investigation process.

2. LITERATURE REVIEW

2.1 Financial Crime

Financial crimes can occur independently or can also involve other types of crime, it can be financial crimes or non-financial crimes (Jung & Lee, 2017). The definition of a financial crime varies depending on the jurisdiction and context, but the IMF states that a financial crime is a non-violent crime that results in financial loss. One type of financial crime is financial fraud (IMF, 2001). In the other hand, The Association of Certified Fraud Examiners (ACFE) categorizes fraud with the term “fraud tree”, namely corruption, misappropriation of assets, and fraud in financial statements (ACFE, 2020). In committing fraud, the motive is to get money, for himself, or for someone else, or for the organization. Even if the perpetrator tries to give the impression that he is not involved, there must be a flow of money or funds to the final destination (Tuannakotta, 2010)

2.2 Forensic Accounting

Briefly, the definition of forensic accounting is the use of accounting for legal purposes. Extensively, forensic accounting is the act of identifying, recording, resolving, extracting, sorting, reporting, and verifying past financial data or other accounting activities to resolve current or future legal disputes or using such past financial data to project financial data in resolving legal disputes (Crumbley, Heitger, & Smith, 2015).

Forensic accounting is broader in scope than fraud examination, which includes matters related to assessing the assets of a divorce, determining the value of a loss experienced by the property business, and calculating profit and loss (Tuannakotta, 2010). As a profession, forensic accountants always work in a legal environment, therefore forensic accountants must have knowledge and understanding of the legal system in a country (Hopwood, Leiner, & Young, 2008). In Indonesia, a series of forensic accounting is carried out in several agencies, namely the Supreme Audit Agency (BPK) as the government auditor, Financial and Development Supervisory Agency (BPKP) as the government's internal supervisor, court institutions, law enforcement, and the FIU. The FIU is an important institution for revealing the perpetrators by tracing financial transactions from various sources without having to prove the origin crime. The following are some forensic accounting techniques that can be used in tracing the proceeds of crime (Crumbley et al., 2015):

1. Timeline analysis
Can be used to show the chronology of a difference or dispute from start to time target. Timeline analysis helps forensic accountants communicate the events in the case as well as summarize them.
2. Tracing schedule
Can be used to show the flow of funds from bank to bank, from bank to entity, from one entity to another, or from person to person.
3. Link analysis
Analysis that shows linkages among persons of interests and data.
4. Net worth method
Net worth method is an indirect calculation of a person's wealth based on their tax reports.
5. Evidence based research

This approach helps companies detect and prevent fraud by using sophisticated tools to analyse and visualize the linking patterns and showing the relationship between the entities who committed the fraud and also to gathering information from external and internal database.

Forensic accounting also provide support for litigation and investigative processes in detecting modern frauds such as embezzlement, financial crimes, and money laundering. Several studies have proven that forensic accounting can effectively detect and prevent fraud, especially in the public sector (Hussein, 2020)

2.3 Previous Research

In previous research, it is known that forensic accounting can be applied and can be effectively used as a function to prevent fraud (Wuysang, Nangoi, & Pontoh, 2016). Firman Rizki, Purnamasari, & Lestira Oktarozza (2017) also said forensic accounting and investigative auditing have a positive effect in detecting white-collar crimes. However, based on the table 1 and 2, the follow-up to the results of the Analysis Report is still quite low. Hasani (2015) in his research also stated that the intelligence analysis conducted by the Indonesian FIU failed. One of the reasons for this failure was the incomplete content of the Analysis Results, such as the profile of the party suspected of committing a criminal act was unclear and the indications of the crime were not well defined. Thus, this study aims to see how the application of forensic accounting methods and techniques in tracing the proceeds of crime at the FIU.

3. METHOD

In this study, the case study is one of the methods which can be used to identify and understand the application of forensic accounting in more depth in Indonesia FIU. A case study is a study of the specificity and complexity of a case, which comes from understanding its activities under important conditions (Stake, 1995). Unlike other research methods, case studies do not yet have a standard catalogue in designing a case study (Yin, 2018).

After getting 24 AR which cases have been followed up by the investigators into permanent legal force in 2015-2020 period, these cases will be observed to see the analytical techniques used by analysts in compiling the results of the analysis. Before the observation, researcher will confirm all 24 AR into Supreme Court website to find the legal force document. And we find out there are only 12 AR which cases have permanent legal force. Then, interviews were conducted with 12 analysts who produced the AR to confirm the use of these analytical techniques and ensure that the results of the analysis were proactive.

The data analysis technique used in this study is pattern matching where the matching process will focus on the application of forensic accounting. The pattern matching technique is one of the most widely used

techniques in case study analysis. In addition, if the case study is descriptive, pattern matching is still relevant, as long as the descriptive predictive pattern has been determined before data collection is carried out (Yin, 2018). The analytical techniques used in those AR will later be clustered into 4 group (timeline analysis, tracing schedule, link analysis, and net worth method) by the similarities output of the analysis technique with those forensic accounting techniques. This analysis using Microsoft Excel as a tool to conduct pattern matching analysis.

4. RESULT AND DISCUSSION

The analysis conducted by the FIU consists of 2 types, proactive and inquiry analysis. Proactive analysis is an analysis triggered by reports that received by the FIU that is Suspicious Transaction Report (STR), Cross-Border Cash Carrying Report (CBCC), whistleblowing, or based on public interest (public concern) as directed by the Head of FIU. The reports will be received by the system and distributed to the Analysts. In the other side, reactive analysis is prepared based on an inquiry letter from the requesting parties or FIU of other countries. In this research, AR proactive will be examine as an origin product of FIU.

In conducting the analysis, the FIU has had an Analysis Technique Manual (ATM) which can be used by the analyst as a guide for conducting the analysis. The ATM consist of template of AR, template of correspondence letter, an explanation of the stages of how financial transaction analysis is carried out, as well as the types of databases and tools that Analysts can use to support the analysis process. Based on ATM, the following is the analysis process carried out by the Analysts:

1. Data processing is the main activity of the analyst in compiling the results of the analysis. It includes profiling, exploring related financial product, exploring the owner of the asset, exploring the sources and purposes of using funds, and matching the profile with the transaction.
2. Field research are activities in the form of coordination, retrieval, validation, clarification, confirmation and/or verification of data that are carried out directly to the reporting party (bank or non-bank). These activities are carried out in the context of accelerating the fulfilment of information, the case has a high level of urgency, or the case being handled is a complex case that requires intensive coordination with the reporting parties.
3. Conclusions are drawn when indications of a criminal act have been identified by the Analyst.
4. Temporary partially/fully suspension transaction recommendation. If the Analyst finds a pattern that is very significant and requires a partially/fully suspension of the financial transaction, the Analyst will make a recommendation to the reporting party to suspense the financial transaction.
5. Interception recommendation. Based on Article 44 paragraph (1) letter h of the Money Laundering Law, the FIU can also provide recommendations to law enforcement officials to conduct interception. The recommendation is based on the results of the analysis which clearly states that a criminal act will or is taking place.
6. Freezing recommendation. Analysts can provide recommendations for freezing account related to funds suspected of being linked to terrorism financing.

Twelve AR have been analysed using pattern matching to see the application of forensic accounting techniques. From this analysis, we categorize techniques analysis based on the similarities output with timeline analysis, tracing schedule, link analysis, and net worth method. The result says that 100% AR are using follow the money, 50% using link analysis, and 33% using timeline analysis. Obviously, follow the money is a technique that has been commonly used by analysts in tracing the proceeds of crime as well as link analysis. The analyst also makes a visualization of the scheme of the flow of funds from one entity to another by using software such as I2 or Microsoft Visio. With this visualization, the recipient of AR can easily understand the flow of funds and the linkage. Another technique is timeline analysis that turns out some analysts are familiar with and use this technique. It is used as an explanation of the time span of the occurrence of suspicious transactions and then compared with the profile of the perpetrator at certain time. Thus, they can see any peculiarity in behaviour at certain periods.

Net worth method is the only forensic accounting technique that is not used. Actually, by using net worth method, analysts can see taxpayers' total assets or total expenses that have exceeded the total income based on their tax report (Eisenberg, 2018). Yet, the net worth method becomes a difficult technique to use when the access of taxation database is limited.

Based on the interviews, it is known that there are 6 analysts who do not know or have never studied forensic accounting. The six analysts carried out the analysis in accordance with existing procedures and according to their experiences. While the other 6 analysts, they know forensic accounting but do not explore the techniques in the analysis process. Moreover, the average length of work for the analysts is 3.42 years. The length of time the analyst works does not affect the application forensic accounting techniques used in the analysis process.

5. CONCLUSION

The FIU has an ATM as a guidance for analysts in conducting analysis and compiling AR. ATM also includes a general analysis process so the analysts can easily understand and follow the steps. Based on research, it is known that follow the money is a forensic accounting technique that has been used and understood by analysts in compiling the results of the analysis. This also apply for link analysis and timeline analysis. Although in ATM there is no explanation regarding the use of forensic accounting techniques, it turns out that in practice the analyst has applied forensic accounting techniques.

In addition, 6 of the 12 Analysts interviewed did not know and did not understand Forensic Accounting. Thus, the use of forensic accounting techniques is not used properly or optimally. In fact, forensic accounting techniques are an effective technique used in preventing fraud (Wuysang et al., 2016). To increase the follow-up rate of the proactive AR, the FIU should use forensic accounting techniques by utilizing the data they have so that the analysis results produced can be more targeted and sharper. Things that can be added include:

1. Completing ATM with the explanation of accounting forensic techniques.
2. Provide adequate training to analysts on forensic accounting techniques.

This study does not include the results of a proactive analysis that is not followed up by law enforcement, so the causes of the low follow-up rate cannot be explored in depth. In addition, further research can also involve law enforcers to be able to see the other side of why the results of the AR of the FIU are of low value.

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Managing and reporting of Shari'ah Non-Compliant Income in Malaysian Islamic banks: The bank's key functions perspective

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ABSTRACT

The Shari'ah compliance and governance framework is essential to guide the banks on the regulatory requirement hence supports the growth and development in the Islamic Financial Institution (IFI). As stated under Section 28(1) and Section 28(3) of the Islamic Financial Services Act 2013 (IFSA 2013), IFI is compulsory to comply with the Shari'ah principles at all times in all of their activities, besides managing and reporting the Shari'ah Non-Compliance (SNC) incidents. One of the examples of SNC incidents is Shari'ah Non-Compliant Income (SNCI), an unblessed income that should be de-recognized from the bank's income. This study was embarked to explore SNCI besides investigating the end-to-end process of managing and reporting SNCI in Malaysian Islamic banks (IBs). Therefore, in-depth interviews were conducted with the bank's control functions which comprised of the Shari'ah Risk Management (SRM) and Shari'ah Review (SR), assisted by the Shari'ah Research & Advisory (SRA) of ten IBs licensed by Bank Negara Malaysia (BNM). The output from the interviews was recorded verbatim and transcribed before The Six Phases of Reflexive Thematic Analysis was applied to develop an understanding of the patterned meaning across the datasets, eased by Atlas.ti software. From the feedback of the key functions, it was found that the people are the main factor that contributes to the occurrence of SNCI in Malaysian IBs, with similar practices of managing and reporting SNCI in ten IBs. However, there is a slight difference in purification and disposal of SNCI between IBs due to there is no clear guideline by the regulator. This study believed with the infused of prudence to the Stewardship Theory would better explain the end-to-end process of managing and reporting of SNCI in Malaysian IBs. It should be inculcated into the guideline of best practice of managing and reporting SNCI in Malaysian Islamic banks to benefit the industry, the policymaker, and the multiple stakeholders.

Keywords: Shari'ah Non-Complaint Income; financial reporting; Islamic banks; The Six Phases of Reflexive Thematic Analysis

1. INTRODUCTION

Due to a dire study on the end-to-end process of managing and reporting Shari'ah Non-Compliant Income (SNCI) incidents in Islamic banks, a basic study is conducted to generate more knowledge and understanding on the incident. Although the term and the incident are not new to the bankers, the findings of this research are believed to be value-added knowledge and impart the understanding of the multiple users and stakeholders on financial reporting of Islamic banking institutions (IBIs) in Malaysia. SNCI can be defined as any earnings derived from any event, contract and, product, or alike that prohibits the principles of Shari'ah and should be de-recognized from the bank income (Johari et al., 2021). It is the outcomes of SNCR that arise from whether (1) the contract contains some elements of interest, gambling, or uncertainty; (2) the area of the formulation and implementation mechanism of the product prone to Shari'ah non-compliance risk, or (3) the process of the structured product is not implemented as advised by the board (Hassan et al., 2017). Therefore, the bank's key functions are required to manage and report the incidents to fulfill the requirement by the regulator, the Bank Negara

Malaysia (BNM). This paper purports to investigate the managing and reporting of SNCI in Malaysian Islamic banks from the bank's key functions perspective that was obtained through the in-depth interview with the personnel in the control functions and Shari'ah Research and Advisory of ten IBs.

1.1 Research Objectives

To obtain a better understanding of the issue of SNCI a review of relevant literature on SNCI was undertaken, followed by a literature review on issues in managing and reporting SNCI. The research objectives of this study were developed based on Section 28 (3) of IFSA 2013 that emphasizes on Islamic bank (IB) to carry on their business, affair, or activity in a manner that complies with Shari'ah or the advice of its Shari'ah committee or the advice or ruling of the Shari'ah Advisory Council. This study purports; (1) to understand the occurrence of SNCI incidents in Malaysian Islamic banks, (2) to explore the current practices in managing and reporting of SNCI by relevant key functions in Malaysian Islamic banks and, (3) to investigate the current process in rectification, purification, and disposal of SNCI by Malaysian Islamic banks. These objectives were achieved through a multiple-case study to be more compelling and robust than a single study (Stake 1995; Yin 2014).

2. LITERATURE REVIEW

Most of the studies on SNCI were concerned with the transparency and disclosure of SNCI in the bank's annual financial statements (Mat Nor & Sawari, 2020; Masruki et al., 2020a; 2020b; Shafai & Engku Ali, 2019; Puneri et al., 2019, Rosman et al., 2017). Few studied the shortcomings in the practice of the SNCI treatment (Abdul Ghani, 2019; Omar & Hassan, 2019), especially with the absence of clear regulatory guidelines on SNCI incidents or matters (Hanefah et al., 2020; Kamaruddin et al., 2020). On the other hand, some other researchers were investigating obscure guidelines on the purification of SNCI (Hanefah et al., 2020; Yunus et al., 2017). The managing of SNCI transactions and reporting became the central issues of past studies. In this regard, the Stewardship theory is believed to be relevant in the end-to-end process of managing and reporting the SNCI to fulfill the objectives of the bank while satisfying the needs of managers (Chiang et al., 2015). It was observed that the pillars in the theory are jointly related to Shari'ah governance, namely accountability, transparency and disclosure, competence, confidentiality, and independence (Obid & Naysary, 2014; Abas, 2017). The theory and its pillars are believed to best explaining the issue of Shari'ah governance particularly in managing and reporting the SNCI of Malaysian IBs. Thus, this study is embarked to fulfill the gaps in the end-to-end process of managing and reporting the SNCI, including its disposal in Malaysian Islamic banks.

3. RESEARCH METHODOLOGY

This paper incorporates the element of the qualitative approach that focuses on the practice of managing and reporting SNCI. This was obtained from the in-depth interviews with the bank's key functions of ten IBs in Malaysia. A multiple-case study design was applied as opposed to a single-case study design due to the multiple-case studies were argued to be more convincing and lead to robust studies (Creswell, 2018; Yin 2014; 2018). By having more than one category of IBs, the researcher can compare the practices of managing and reporting of SNCI by the bank's key functions from different types of IB from a total of ten IBs. It is impossible to achieve if a single case study is applied in which it is evident that multiple-case studies were argued to be more compelling thus, created robust studies (Stake 1995; Yin 2014). In this study, the data was derived from the three categories of IBs; full-fledged Islamic banks (FFIB), Islamic banks subsidiary (IBS), and Development Financial Institutions (DFIs). The research samples for this multiple case study were selected based on the purposive sampling strategy (Md Noor, 2009) whereby only the control functions and Shari'ah Research and Advisory (SRA) were chosen. These control functions comprised of the Shari'ah Review (SR) and Shari'ah Risk Management (SRM) in IB who are directly involved with the managing and reporting of SNCI assisted by the SRA. All the data collected from the in-depth interviews were recorded verbatim and subsequently transcribed and analyzed using a Computer Assisted Qualitative Data Analysis Software (CAQDAS) software, Atlas.ti. 8.6. The data were coded and themed using The Six Phases of Reflexive Thematic Analysis by Braun et al. (2018), a comprehensive method of capturing patterns ("themes") across qualitative datasets, eased by Atlas.ti software. Cohen Kappa test and triangulation of methods were conducted to attain reliability and validity on the themes developed.

4. RESULTS AND DISCUSSION

4.1 Occurrence of SNCI incidents in Malaysian Islamic banks

The bank's key functions claimed that SNCI could emerge from certain products or services provided by the bank, but mostly from contracts due to invalid *aqad*. It is found that the main causal factor of SNCI is contract-related matters due to human intervention. The findings are in line with the study by Hassan et al. (2017) and, Internationalbankers (2017) that found the main causal factors to the occurrence of non-compliance events are people, process, and system. Out of four root causes or causal factors determined by IFSB, the people factor or human intervention is the core causal factor to SNCI, followed by the process and the system. However, in a certain case, it could also emerge beyond product and contract, for instance, due to wrongness in the marketing material for instance brochure, leaflet and so forth. Hence, it could impact the bank financially and non-financially which could damage the bank's reputation. The feedback from the bank's key functions on the causal factors of SNCI shows in Table 1 below:

Table 1
The Main Causal Factors of SNCI in Malaysian Islamic Banks

Name of IB	Types of IB	Causal Factor(s)
IB01	FFIB	People, System
IB02	IBS	People, Process
IB03	IBS	People
IB04	IBS	People, System
IB05	DFI	People, Process, System
IB06	IBS	People
IB07	FFIB	People, Process
IB08	IBS	People
IB09	IBS	People, Process
IB10	FFIB	People

4.2 Current practices in managing and reporting of SNCI by relevant key functions in Malaysian Islamic banks

Generally, SNCI can be detected either from the ongoing process of review exercises by the Shari'ah Review (SR) or after the auditing process by the audit team. This ordinary process is executed by the control functions to ensure that IBs are complying with the Shari'ah principle in their overall operations. The SR and Shari'ah Audit (SA) have to work together to 'smell' or detect such breaches of SNC incidents. One thing to take note, the review and audit plan carried out by the SR and SA does not mean solely to detect SNC incidents, but it is rather a normal process in IB as an assurance and compliance to the Shari'ah principles. Besides the detection by the SR and SA from their ordinary review and audit plan, all business units are also accountable to do a self-check and detection of such SNC issues before they deliberated to the SRM for further investigation. Then, deliveries to the Shari'ah Committee (SC) are executed through an internal reporting mechanism for deliberation and approval. In most IBs, SRM is the custody of SNC incidents but in some other IBs (IB02 and IB04), it is under the custody of SRA. One of the bank's key functions responded that:

"Managing the SNCE and SNCI is under the custody of SRM." (R1IB01)

In which, the end-to-end process of managing the SNCI originates from the identification or detection of SNC incidents up to the disposal of SNCI, either it is distributable for charitable purposes or refunds

to the rightful customers. Each process has to comply with the SOP or a bank's self-regulated policy and regulatory requirement. As mentioned by one of the respondents:

"One of the crucial function of SRM roles and responsibility is to manage the SNCI from identification up to its disposal to charity." (RIIB05)

The SRM and SC are responsible for deliberate SNC incidents through the Operational Risk Integrated Online Network (ORION) platform. This is to notify the BNM of such incidents together with the rectification plan. As revealed by one of the bank's key functions:

"Shari'ah risk (SRM) owns SNC event reporting to fulfill ORION...every process has its own SOP. So we follow the SOP." (RIIB10)

The bank's key functions are accountable to ensure the SNC incidents are prudently managed and reported for SC deliberations and blessed by the board. This end-to-end process of managing and reporting SNCI can be illustrated in Figure 1 in the next section.

4.3 The current process in rectification, purification, and disposal of SNCI by Malaysian Islamic banks.

Section 28 (3) IFSA 2013 stipulates that when IFIs becomes aware that SNC event in any of its business or activity or any disregard towards the advice and ruling of Shari'ah committee (SC) or Shari'ah Advisory Council (SAC), they have to: (i) immediately notify its SC about the event, (ii) immediately notify BNM of the event; (iii) immediately stop the non-compliant act and cease from carrying on or, taking on any other similar business, affair or activity and, (iv) immediately come up with a rectification plan within 30 days after becoming aware of such non-compliance. Then, the bank must submit to the BNM their rectification plan on corrective and preventive action. One of the bank's key functions clarified that:

"Rectification plan is how to rectify that thing (SNCs), we need to get approval from the board within 30 days and we have to update in ORION as well." (RIIB05)

After such a rectification plan, the bank's key functions will dispose of any actual SNCI for charity purposes. As revealed by another bank's key function:

"Rectification plan approved by Shari'ah Committee. From the rectification plan, there may be non-Shari'ah Income that will be channeled for charity." (RIIB10).

Therefore, collective involvement of the bank's key functions starts from the stage where SNC issues detection up to the rectification, purification, and disposal of SNCI for charitable purposes. The overall processes summarized in Figure 1 overleaf:

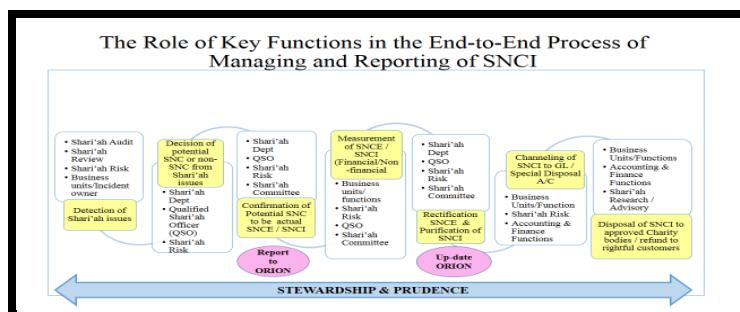


Figure 1 Role of Bank's Key Functions in Rectification, Purification, and Disposal of SNCI

Generally, purification is a process undertaken after rectification. It involves a process of 'cleansing' the SNCI and must be excluded from the bank's income. SNCI represents the financial SNC incidents in which the income requires not only corrective and preventive action but also purification of SNCI

for disposal. This SNCI should be disposed of for charitable purposes and approved by the SC. One of the bank's key functions alleged that:

"After SC decided the potential SNC as an actual SNC, the product owner (business unit) will come out with a purification plan and amount to be purified. The finance function will handle on channeling of the purified amount." (R1IB03)

Another respondent added that:

"The purification we split into two, (1) the principal goes back to the customer or we exchange (refund) to the customer, if the customer is expecting a profit, (2) we channel it to charity. It depends on the case." (R2IB04)

From the feedback of the respondents, purification is an important process to de-recognize SNCI from the income of the bank. Therefore, purification needs to be defined clearly to benefit the bank and multiple users. So that the users are aware IBs have prudently managed their SNCI until it is de-recognized from the income of the bank. It is also one of the ways of promoting accountability, transparency, and prudence exercised by the bank and their key functions to manage and report SNCI. The researcher believes that the purification strategy between IBs would be different as it is unregulated in the policy documents of the regulator. Therefore, the parameter and measures implementation for purification could vary between banks. These findings are consistent with Hanefah et al. (2020) who indicated that IFIs have established the purification account to manage SNCI. However, the real practice varies between IFIs.

5. CONCLUSION AND RECOMMENDATION

The main causal factor of SNCI incidents to all IBs was the people factor. Negligence is the main causal factor of SNCI incidents followed by the process, the systems, or the external factors. It is learned from this study that most of the banks initiated an automation or technology intervention in their *aqad*. In this case, digitalization would be the best solution to the issue of human negligence. It is particularly relevant during a hard time of MCO due to the COVID-19 pandemic, where a less human touch is preferred. Abas (2017) indicated that the central element of Shari'ah governance is primarily and essentially the man, whether he is the director, the manager, the shareholder, the auditor, the stakeholder, or even the regulator. In this regard, qualified human resources or the personnel involved in IFIs' operations and activities requires specialized knowledge to perform their duties efficiently (Hanefah et al., 2020; Shafii et al., 2017; Omar & Hassan, 2019; Abdul Ghani, 2019). The detection of Shari'ah issues, developing parameters, internal regulation, making decisions related to SNC incidents on rectification, purification, and disposal of SNCI or any other matters concerning SNCR are crucial to control and mitigate such non-compliances in the bank. Most of the bank's key functions indicated that the toughest and challenging process of managing SNCI is the detection and decision-making process. It is due to every process has its timeline to fulfill, especially within the timeline stipulated in the ORION by BNM.

On the other hand, there is a slight variation in the implementation of SNCI purification between IBs. The study believed that purification parameters and measures should be regulated by the regulator to promote better accountability, transparency, and prudence in reporting the SNCI. Although the bank has set up its internal policies and standard operating procedures (SOPs) in the implementation of rectification and purification measures, SNCE and SNCI still occur. This information needs to be disclosed in the financial reporting of IB as required by the regulator. In which, financial reporting is evidence for the bank to be seen they are accountable, transparent, and prudent in complying with the Shari'ah principles and regulatory requirements. The bank is seen as more credible in the eyes of the multiple stakeholders, market players, and the public at large when accountability, transparency, and prudence are the guiding principles embraced by the bank in managing and reporting SNCI in Malaysian IBs. The importance of prudence and stewardship is also highlighted by the Quran in At-Taubah (Chapter 9) Verse 105 and Al-Qaf (Chapter 50) Verse 17-18:

'And say "Do deeds! Allah will see your deeds, and (so will) His Messenger and the believers. And you will be brought back to the All-Knower of the unseen and the seen. Then He will inform you of what you used to do (Quran 9:105).

'(Remember) that the two receivers (recording angels) receive (each human being), one sitting on the right and one on the left.). Not a word does he (or she) utter but there is a watcher by him ready (to record it)' (Quran 50:17-18).

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Computational Thinking approach to Learning Data Science for Business School Students

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ABSTRACT

Data science has been the top competency required for the 21st century. Huge attempts are in the making to provide the proficiencies as it is a highly sought-after career. Many approaches are being introduced to the learning of Data Science, not specific to technically driven computer science but also business school students. However, the existing approaches were commonly established from the adoption of data science designed for computer science learners. This may induce challenges and amplify the struggles for the non-technical students. This article is an effort to introduce a Computational Thinking approach to learning data science for business school students. The pillars for Computational Thinking are Decomposition, Pattern Recognition, Abstraction and Algorithms. Here, we explain the importance of Data Science for current and future jobs and demonstrate the approaches of Computational Thinking to Data Science Problems using its four pillars. Finally, we propose that computational thinking has a more natural-like thought process and is simpler for learners from a non-technical discipline due to the association of real-life practices linking with the four pillars of computational thinking. The future of the study will include experiments that investigate the data science learning style and the effectiveness of Computational thinking intervention among business school students.

Keywords: Data skills; Method; Non-computing students; literacy; 21st-century skillset; Learning.

1.1 INTRODUCTION

The 4th Industrial Revolution era (WEF, 2020) stated that the demand for several skills related to Data Science (DS) is increasing. The DS job is perceived as meant for those who graduated in the field of computer science, information systems, information sciences or software engineering. The said disciplines may provide an advantage to the skills and competencies needed for DS, but it must be understood that DS is contributed also by many fields. Therefore, it is not a surprise for the Association to Advance Collegiate Schools of Business (AACSB) to add Data Analytics from 1st July 2019 in Uniform Certified Public Accountant (CPA) Examination Blueprint (2019) for Auditing and Attestation (AUD) and Business Environment and Concepts (BEC).

Pournaras (2017) argued that the highest challenge to learning DS is the ability to perform data processing and visualization. This involves the manual manipulation of data until automatically or at least semi-automatic, which certainly requires computational skills (Shute, Sun, Asbel-Clarke, 2017). Out of all the knowledge domain in DS, the challenge for business school and non-computing disciplines would be the technical or coding abilities (Pournaras, 2017). The ability to code has been argued to associate with the cognition or way a learner thinks, strategize and act. Therefore, Computational Thinking (CT) fits the position nicely. However, CT never limits only to coding or programming, but rather universal in nature (Nuar and Zaidi, 2019, Wing, 2006). CT is broader than computer science, which can be integrated with the daily activities and problems faced (NRC, 2010; Wing, 2006). Thus, several terms from CT concepts or pillars such as decomposition, abstraction, pattern recognition, algorithm are introduced (Lu and Fletcher, 2009).

In this article, we attempt to introduce the Computational Thinking approach for the learning of data science. CT establishes a more natural-like thought process and is simpler for learners from a non-technical discipline due to the association of real-life practices with CT.

2. Importance of Learning Data Science and its highly demanded Competencies

The term, “Data is the new Oil”, brought significant impact to the learning and research of DS (Bichler et al., 2017) and even the preparation of computer science graduates to catch up (Jean, et al., 2021). But the fundamental stays the same, where expectations when dealing with data by business and management students involve data input/entry, analysis, interpretation, discussion and finally recommendations. This is quite similar to the processes practised in DS. Except in DS, more computational assistance is necessary, particularly with the huge volume, high velocity, variety and veracity of the datasets. Van der Aalst (2016) defined DS as stated here.

“Data science is an interdisciplinary field aiming to turn data into real value. Data may be structured or unstructured, big or small, static or streaming. The value may be provided in the form of predictions, automated decisions, models learned from data, or any type of data visualization delivering insights. Data science includes data extraction, data preparation, data exploration, data transformation, storage and retrieval, computing infrastructures, various types of mining and learning, presentation of explanations and predictions, and the exploitation of results taking into account ethical, social, legal, and business aspects” (Van der Aalst 2016).

Another related point highlighted is by the Director of the Department of Statistic Malaysia (DOSM) during a Facebook Live session entitled *Penyelidikan PhD Berkualiti berpandukan data DOSM* (DOSM, 2021). He informed that many consultants are leveraging the data provided by DOSM and able to profit from it through high-value projects won by them. He advised that PhD students and PhD holders coming from universities and research institutions, should grasp the opportunity and compete with the consultants, therefore becoming competitive. This displays that DS skillsets are critical.

Mine and Victoria (2021), argued that introducing a data science course early will help improve students interactivity with data and computational tools, this could increase the benefit for those within a statistical domain. This is good news for business students, as they have vast coverage of statistics content in their curriculum. Several DS essential skills are illustrated in Table 1. All the soft skills are currently available within the business students curriculum, plus the mathematics & statistics and real-world projects or case studies. However, the majority of the technological skills are yet to be embedded for business students to learn. Current Data Science (DS) approaches are designed and aimed at learners from the computing field. The design is developed for computing students or students who are exposed to programming courses and practice. This includes the use of open-source data, portals with highly relevant and timely data such as Kaggle, GitHub, and even DOSM.

Table 1. Data Science 10 Minimum Essential Skills (Benjamin, 2019).

Technological Skills	Soft Skills
• Mathematics & Statistics	• Communication
• Coding	• Lifelong Learning
• Data Wrangling & Preprocessing	• Team Player
• Data Visualization	• Ethical
• Machine Learning	
• Real-World Project	

3. INTEGRATING COMPUTATIONAL THINKING FOR DATA SCIENCE LEARNING

Much has been seen on the different kinds of thinking methods or approaches for learning and problem-solving. Here, we are only focusing on one thinking method called Computational Thinking (CT), which has gained much attention since its reintroduction by Jeanette Wing from Seymour Papert 1980 work (Wing, 2006, Lodi, 2021). The core idea in CT is the thought processes involved in formulating problems and expressing its solution which an agent (either machine or human) can effectively carry out (Cuny, Snyder, Wing, 2010) and it has been dubbed as a fundamental skill for the 21st Century and learnable by all regardless of disciplines (Nuar, Rozan, Bahari, 2021). The idea is by no means to

develop everyone as software engineers or computer scientists but rather is an essential skill demanded every day due to the closeness of humans with computers. This will be seen as the ability to harness their command of computing power (Shute, Sun, Asbel-Clarke, 2017). This skill can benefit everyone in any discipline, not only benefiting those majoring in the field of computer science (Wing, 2010, Nuar, Rozan, Bahari, 2021). As the Computational Thinking (CT) approach have been seen to be effective for all learners regardless of age and discipline, the integrated CT DS approaches outlined in this article may provide some advantage to learning Data Science. This serves as the basis for the integration.

Figure 1 is the similarities and differences between Computational Thinking and Mathematical Thinking. We can see here that the challenge faced by non-computing students in learning Data Science are in the concepts such as Simulation, Data Mining, and Programming that requires high activities of coding.

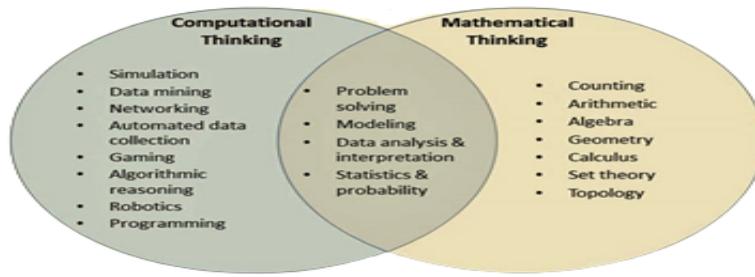


Figure 1: Similarities and differences between CT and mathematical thinking (Sneider et al. 2014).

3.1 Computational Thinking Pillars

The four main pillars or facets of a CT are Abstraction, Algorithm (Pipelining), Decomposition and Pattern Recognition (Hashing) (Wing, 2010). (David, John, Leslie, 2011) added that data organization and analysis, automation, efficiency, and generalization are also the pillars of CT. As a base for the discussion, only four pillars are selected, which is Decomposition, Algorithm, Pattern Recognition, Abstraction (Shute, Sun, Asbel-Clarke, 2017, Wing, 2010). The application of CT when approaching Data Science problems are logical, however, the impact is more on the way the thought processes are being handled by a learner. In this subsection, we will provide some demonstration on several facets in CT that could provide a better explanation of the processes. Any coding function illustrated as examples came from Python programming language Version 3.9.

3.2 Decomposition

The first and regularly used thought process is decomposition, which means breaking a complex problem into a manageable bite-sized problem. Once the bite-sized problems are solved, they may be put together and provide a solution to the original problem. In a DS problem, the complexity lies in the size of the dataset and the datatype included. The size may be too large, which would not allow any spreadsheet on a learner's machine to launch, such as MS Excel, and perform exploration on the dataset. By breaking it into several chunks, for example, activities such as how to access the data, how to view the first 50 records and how to know the datatype could be planned. This would help in identifying the kind of tool to use to access the data, such as in Python 3.9 using `df.head(100)` function that returns the first 100 rows of the record and using `type()` to check the data type for the variable.

3.3 Pattern Recognition

Recognizing patterns or pattern spotting is a highly important skill set for a data scientist. When decomposing the bigger problem, there are often observed similarities or shared characteristics among the problems. The learner often recognizes the patterns, which indicate outliers, similar or repeated problems, etc. The repeated problems may have shared similarities or shared differences. This is often taken as an opportunity to introduce repeated treatments or called looping or iterations, which solves identical problems occurring in several areas iteratively. This also applies to detecting outliers to address wrong expectations before providing suggestions to a solution, which are critically done in advance. The solution might be a data science model for example a machine learning model.

3.5 Abstraction

Abstraction is a process that performs information hiding of certain non-required characteristics or features so that we could focus on others. How a person sees a situation and expresses it, is normally related to the abstraction they could construct. A higher abstraction is due to more information hiding versus the lower abstraction that is more detailed and messy. The degree or the level of abstraction could be contributing to a different expectation of an observer. For example, if a learner explains every detail of a situation of a dataset, it is considered as lower-level abstraction, and if a learner explains with less detail but more general, is considered as a higher abstraction. If abstraction is not considered, the thought process will be clouded with too much information, which will overwhelm the learner and increases their vulnerability and struggle in handling the dataset. NumPy is a library for Python programming, and the use of NumPy as an abstraction tool is common in Python. It contributes to the data representation from models such as spreadsheets, images, audio, etc. Abstraction tools provide the convenience of not performing lower-level codings such as sorting, calculation in loops, and many more. So, the learner could focus on the problems at a higher level. The abstraction can also help the thought process to communicate either detailed ideas, which includes the nitty-gritty points or just simply convey the concept of the idea.

3.4 Algorithm

An algorithm is a step-by-step instruction of how to solve a problem. It identifies what should be done and the order of the execution. As for that, the algorithm that should be fulfilled by the learner should be organized step-by-step. Breaking down the task will create many tasks, which introduces a new problem. Which task among many needs to be prioritized and complete? The learner should be able to put in his mind the step on how data is treated; this involves exploring the data, knowing the number of records, the columns, the type of data- character, numerical, etc. Also, the learner should know how to identify missing data or empty cells. Before doing any analysis, these are the compulsory steps to perform. Even at this time, the relevant libraries or functions of the programming suite or the Integrated Development Environment (IDE) should be identified. Function such as `datasetname_df.shape`, `datasetname_df.info()` and `datasetname_df.describe()`, will assist in exploring, wrangling and providing an overview of the dataset. The learner will also operate together with the pillar of abstraction for a better understanding of the required steps and the relevant libraries and functions available. This will prevent overwhelming the learner with the vast list of libraries available for Python 3.9 IDE.

4. CONCLUSION AND FUTURE STUDY

With its highly demanded characteristics, data science requires very different learning approaches from the currently available learning targeted exclusively for computer scientists or programmers. This paper concludes that Computational Thinking can be beneficial to a learner that is approaching a Data Science challenge. The advantage of having a proper thought process will contribute to the skillset and generate better actions for the learner. Here, the natural-like thought processes can be simpler for learners from a non-technical discipline, as they could connect to their real-life activities using decomposition, algorithm, pattern recognition and abstraction. As CT and DS are both highly required skillsets for the 21st century, going deeper into its integration, applications and assessing its effectiveness is promising. On the other hand, the measurement of the effectiveness of CT intervention has yet to be established. The next phase of the research will investigate the learning style of business school students when approaching data science problems and measuring the effectiveness of practically applying CT as an intervention to their data science learning challenge.

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Thinking & Computer Science (CTCS) National Trainer appointed by Malaysia Digital Economy Corporation (MDEC) since 2016.

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Reputation Management Analysis through Company's Disclosure : A Case Study of Clinical Laboratory Company in Indonesia

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ABSTRACT

In Indonesia, there has been only one clinical laboratory company that has gone public, but this company's stock price has fallen and never returned to its IPO price. This study aims to know how the company manage their reputation pre and post IPO through their company's disclosure. To determine the focus of the company's disclosure and to find out if the company's disclosure, this study using case study approach by conducting content analysis and thematic analysis on the company prospectus and company annual reports from 2016 to 2020. The result shows that the company's disclosure in their prospectus are more focused on their services quality to promote the services they provide and their strategy in the future. While analyzing the realization of their strategy, the company mostly cannot realize their strategy, so to maintain their reputation, in the annual report the company disclosure are more focused on their management quality and their financial performance. In the future this study is expected to be used as a way to see how companies manage their reputation after their conduct IPO.

Keywords: content analysis; corporate reputation; disclosure measurement; pre and post IPO; thematic analysis.

1. INTRODUCTION

IPO can be used to increase capital for the expansion of the company's operations, increase liquidity for shareholders, improve the company's reputation and create a valuable currency, namely shares, which can be used to make acquisitions and compensate employees (Draho, 2004; Röell, 1996). In 2019, out of 668 companies listed on the Indonesia Stock Exchange there was only one clinical laboratory company that has conducted an IPO. Explained by the company's prospectus, the company that was founded in 1988 is an industry pioneer and leader of the leading private independent clinical laboratory chain in Indonesia, and the number of clinical laboratories owned by this company is also the largest in Indonesia. To increase its company's expansion, this company finally officially conducted an IPO on December 7, 2016, but until 2020 the company's share price had never returned to its initial offering price. This phenomenon is inversely proportional to the clinical laboratory company in India which conducted an IPO in 2015, where its share price has increased. In addition, when compared with the company's own performance, after conducting an IPO, the profit margin of this company has increased quite well and every year the company is able to maintain its performance.

Based on the explanation above, it can be seen that there is a gap between market expectations and company expectations. Company's reputation is a valid signal for stakeholders, because if a company does not act as it should, which is in accordance with its company's reputation, then the company can lose the capital that has been raised by the company (Pérez-Cornejo et al., 2019). Health organizations are mainly customer oriented, thus, the service quality, communication and trust are the key concepts of corporate reputation (Şatır, 2006). According to (Gray & Balmer, 1998) corporate communication is an important link between corporate identity and reputation, which includes all communications made by the company to convey information to various corporate stakeholders which in turn can affect the company's image and reputation.

Therefore, this study using case study method to analyze how the company manages its reputation after conducting the IPO through information that has been carried out by the company through its annual report. This study also wants to see how the pattern of information carried out by the company when compared to the company's financial performance. Content analysis conducted to analyze company's prospectus and annual report from 2016 until 2020. This study is expected to be used as a way to analyze the companies whose stock price has never returned to its IPO price.

2. METHODOLOGY

This study is a case study where according to Sekaran & Bougie (2010) case study focuses on gathering information about objects, events, or specific activities, such as business units or organization. Case studies generally describe one of the following three scenarios, (1) the need to make important decisions and potentially persuade other parties to accept these decisions, (2) the need to carry out an in-depth evaluation that outlines the pros and cons or strengths and the weakness of the case subject and (3) the need to carry out a comprehensive problem diagnosis that identifies the root cause of the problem described in the case (Ellet, 2018). Therefore, the case study conducted in this research is a case study which aims to diagnose the problems that occur in the company. The data used in this research are qualitative and quantitative data which will then be used for analysis and interpretation.

To analyze the causes of this problem, the data used in this study were secondary data which was carried out such as company's prospectus, company's annual reports 2016 -2020 and other information related to research through the internet media. The analytical method used in this research is the content analysis method. Content analysis can be defined as a part of a procedure for studying the content of written or transcribed text that allows researchers to enter large amounts of textual information and systematically by identifying its properties such as the frequency of the most frequently used keywords (Klenke, 2016). Castilla-Polo & Ruiz-Rodríguez (2017) also states that content analysis can be considered as a technique for analyzing communication, describing its content, and making reports regarding its effects.

The first stage in this session is to see what words are most often used by companies in the prospectus and annual report 2016-2020 by using the NVIVO-12. According to Bebbington et al. (2008) there are several aspects that according to managers can be used by the public when assessing company's reputation : financial performance, management quality, corporate social responsibility performance, employee quality, and quality of goods or services provided. Therefore, in this study, this aspect is used as a benchmark in this study to see what information disclosures made by companies focus on what. The words chosen to represent aspects of the disclosure assessment are as follows.

Table 2.1 Selected Words for Disclosure Assessment

Aspects of Disclosure Assessment	Word Representative
Financial Performance	asset, debt, financial, growth, investment, market share, profit, return, value
Management Quality	accountable, compliance, control, fairness, governance, independent, performance, reputation, responsible, risk management, strategy, transparency
Corporate Social Responsibility Performance	community, CSR, donation, education, environment, health, responsibility, scholarship, social, sustainability
Employee Quality	training, career, coaching, competency, employee, talent
Service Quality	check-up, customer satisfaction, examination, laboratory , quality, service, test

The next stage is comparing whether the business strategy presented in the prospectus has been carried out properly or not.

3. RESULT

Table 3.1 Percentage of Aspect Assessment Disclosure in Prospectus and Annual Report

Aspects of Disclosure Assessment	Prospectus		2016		2017		2018		2019		2020	
	Word count	%										
Financial Performance	3.212	37	1.413	35	1.237	24	1.570	32	1.740	25	1.875	28
Management Quality	1.337	15	1.209	30	1.830	35	1.424	29	2.306	33	2.171	32
CSR Performance	471	5	513	13	798	15	580	12	1.347	19	927	14
Employee Quality	436	5	231	6	364	7	322	7	343	5	355	5
Service Quality	3.229	37	704	17	969	19	971	20	1.197	17	1.430	21
Total	8.685	100	4.070	100	5.198	100	4.867	100	6.933	100	6.758	100

Using the framework from Bebbington et al. (2008), disclosures made by companies when they are about to conduct an IPO, through their prospectuses, companies emphasize the quality of the services they offer by emphasizing laboratory services and customer satisfaction, while for financial performance companies tend to repeat the use of the word stock. In 2016 the company still emphasized their financial performance and started to promote the quality of company management. In 2017, the company was more dominant in using elements of quality management where the company favored the company's ability to manage the company and its risks. In 2018 the company tends to emphasize the word finance and its value so that the financial performance aspect is superior to other aspects. In 2019 and 2020, the quality of management becomes the aspect that dominates corporate disclosure where the company again emphasizes the words management and risk and corporate governance.

From the analysis above, it can be seen clearly, since the company conducted an IPO, the company tends to emphasize the company's management compared to other components. When associated with the concept of agency theory put forward by Colombo (2020), the company seems to want to convince investors and potential investors that the company is managed by quality management.

Table 3.2 Result of Analysis of Company Strategy Realization According to Prospectus

	Corporate Strategy disclosed in prospectus	Realization of Corporate Strategy			
		2017	2018	2019	2020
1	Continue expand and grow the company's network of outlets in both existing and new markets in Indonesia.				
a	Adding three regional reference laboratories, will be located in Medan, Makassar and Semarang	-	-	-	Makassar Medan
b	Adding 33 additional clinical laboratories over the next five years	7	7	-1	0
c	Adding 13 specialty clinics over the next five years	3	1	2	1
d	Open up to 20 new POC collection centers per year	12	-2	-6	-19
e	Open up to five new hospital laboratories per year	2	3	0	-2
2	Upgrade existing clinical laboratories to provide wider range of tests and services and increase volume.				
a	Introduce new clinical laboratory tests	18	10	16	14
b	Upgrade some of our clinical laboratories to PHC Clinics outlets	v	n/a	n/a	n/a
c	Expanding up to 20 of company's existing clinical laboratories, including by relocating certain clinical laboratories to larger premises	13	n/a	n/a	n/a

3	Continue to enhance internal operating efficiency					
a	Open three more regional reference laboratories in the next few years	-	-	-	-	3
b	Implementing a vendor-managed inventory system and Improving productivity by upgrading our laboratory information systems	n/a	n/a	n/a	n/a	
c	Upgrade the technology and equipment we employ in our laboratories	v	v	v	v	
4	Providing quality diagnostic and related healthcare tests and services and attracting quality laboratory personnel					
a	Upgrade company's clinical laboratory testing equipment to improve efficiency and accuracy	v	v	v	v	
b	Developing an online registration and payments portal for our customers	v	v	v	v	
c	Continue close collaborations with 23 medical faculties and 54 other educational institutions to recruit the talent to support company's growth	30	30	35	38	
5	Focus on the development of next-generation diagnostic technologies for precision medicine	v	v	v	v	

When compared to the company's strategy for the next 5 years stated in the prospectus, until 2020, which is the fourth year since the company conducted an IPO, it was found that to expand the company's network, the company had not yet achieved the strategy that was presented and information about several company strategies and their realization was not disclosed in its Annual Report.

4. CONCLUSION

After conducting several stages of analysis this study found that to manage its reputation, the company focused on their management quality to ensure the shareholder since the stockprice was declining. When the company were preparing to conduct an IPO, they tend to promote the quality of the their services in their prospectus, and when presenting the IPO fund management plan, it can be said that the company looks optimistic. The company's optimism about its future prospects affects the company's IPO share price. Since the company conducted IPO until 2020, the company was not able to optimally realize the IPO fund management plan, and the increase in company performance did not show a significant increase so in its annual report the company tended to emphasize the performance of the company's management compared to the quality of its services or its financial performance.

The implication of this study on company management is that the findings of this study are expected to provide management insights and reviews about the impact of information disclosure on the company's reputation which in this study is measured by the company's stock price. When companies reveal more about what services they offer and how they plan to develop their services in the future, the company's stock price at the time of the IPO can be sold at a high price. However, when the company is not able to achieve the target that has been set, the company's information disclosure tends to focus more on the company's management, and this may be the reason why the company's stock price that previously fell could not increase significantly. In other words, indirectly from the investor's point of view, they have a positive view of the services offered by the company and the company's prospects in the future as well as the company's financial performance.

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The Role of Board of Commissioners and Board of Directors Effectiveness to Reduce the Probability of Financial Distress in Financing Industry

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ABSTRACT

This paper aims to see the effectiveness of two aspects from corporate governance structure, the board of commissioner (BOC) and the board of director (BOD) for predicting financial distress in the financial industry. Using a sample of 177 financing companies in Indonesia during the years of 2016-2020. In assessing the effectiveness two aspect from corporate governance, several questions were used to measure the implementation of governance on each sample. The measurement includes the board composition, competency and work activities. We found favor for the argument that the effectiveness corporate governance is beneficial for financing companies, as described in a reduced likelihood of financial distress. The result confirms that when the board of commissioners and board of directors implement good governance guidelines effectively, the possibility of the company experiencing financial difficulties will be lower, and vice versa. These results enrich previous research about corporate governance and the probability of financial distress, especially when data about corporate governance of financial companies in Indonesia is limited in public sources.

Keywords: board of commissioners effectiveness, board of directors effectiveness, financing industry

INTRODUCTION

A financing company is a business entity that distributes financing for goods or services in the form of investment financing, working capital financing, and multipurpose financing. The financing industry has total asset Rp456trillion as of December 2020 and a contribution of 22,86% for the people who are not bankable. In line with the development of the finance company industry, Financing Companies must carry out business activities based on Good Corporate Governance (GCG) principles since 2014 as required by the Indonesia Financial Services Authority regulation number 30 (OJK, 2014). This obligation expects to improve compliance with laws and regulations and Financing Companies' performance to minimize risk exposure due to the business environment's dynamic. However, during the last five years the Financial Services Authority has enforced compliance by imposing sanctions and revoking business licenses due to several financing companies' cases, such as the Company's failure to pay its obligations to creditors and investors. The default condition indicates that some companies were not good at managing cash flow, and less attention to the implementation of GCG principles. (Publikasi OJK, 2020).

Several previous studies had shown that implementing good corporate governance can keep the Company away from financial distress and make business continuity longer and more robust (Fich, 2008). Furthermore, most of China's financial failures occurred due to the poor implementation of good corporate governance (Li, et al 2020). Based on the obligation to implement good corporate governance, the phenomenon of failure of financing companies, and the impact of financial distress on the stability of the financial services industry in Indonesia, this paper aims to examine the effectiveness of two aspects of corporate governance: supervision of the board of commissioner (BOC) and the board of director (BOD) to predict financial distress. This research expects to be a reference for management to monitor their company and regulator to monitor compliance and performance of finance companies

before financial distress occurs. Financial distress is a condition when there is a decline in financial performance in a company before finally heading for bankruptcy, the company experiences liquidity difficulties and has operating profit, net income, and a negative book value of equity (Ross, et al 2016). Factors that can cause financial distress include poor management, unsuccessful business expansion, intense competition, too much debt exposure, court lawsuits, and unfavorable contracts (Emery et al., 2011). Previous studies regarding financial distress using GCG parameters were not specific to the financing industry in Indonesia. The result in this study expects to be an additional tool for regulators in the process of monitoring the compliance and performance of financing companies before financial distress.

METHODOLOGY

This study conducted to obtain empirical evidence for the hypothesis that the effectiveness of implementing good governance reduces the possibility of financial distress. The method used is the logistic regression, since the dependent variable was a binary variable that only has two categories, experiencing financial distress or not. The sample used in this research was the financing companies that registered in Indonesia Financial Services Authority before 2016 and still active as of December 2020. In addition, companies whose licenses had been revoked during 2018 to 2020 were also the samples of this research, because it has experiencing financial distress. The total sample was 177 companies, consisting of 91 companies experiencing financial distress and 86 companies in normal condition (see Exhibit 2). The independent variable in this research was the assessment of governance effectiveness through two parameters, namely the effectiveness of the board of commissioners (BOC) and the board of directors (BOD). The measurement of effectiveness BOC and BOD was obtained from the total score in GCG's checklist and the data from the report submitted by the company to the regulator on a limited basis and not published to the public.

From Exhibit 1, we can see each independent variable has a parameter checklist, with scores 1 to 3 for each question to measure the effectiveness of corporate governance. The measurement of the effectiveness of BOC used five parameters, namely the composition, the involvement of women in the composition, competence, independence in carrying out the duties and activities. The measurement of the effectiveness of BOD used four parameters, namely the composition, the involvement of women in the composition, competency and work activities. The existence of independent commissioners in the composition was expected to be able to carry out their duties independently and also to provide effective advice and improve performance based on their knowledge or competence (Li et al., 2020). We also used the quality of external auditor, age, and size of company for control variables as other factors that could predict financial distress. The role of external auditors is quite significant because they work independently and using professional judgment to ensure the quality of presentation and correctness of data from financial statements prepared by company management (Muñoz-Izquierdo et al., 2020). The quality of auditor external were categorized into two, big four or not. The big four have better competence in providing audit services and a greater number of professionals, networks and experience. The age of the company affected the company's business continuity, the longer the company exists indicates that the company can survive during dynamic conditions (Ross, et al 2016).

Therefore, the form of the model was specified as follows:

$$\ln\left(\frac{p}{1-p}\right) = \alpha + \beta_1 EFFBOC_{i,t-2} + \beta_2 EFFBOD_{i,t-2} + \beta_3 AUDEXT_{i,t-2} + \beta_4 AGE_{i,t-2} + \beta_5 SIZE_{i,t-2}$$

Where EBBOC is the effectiveness of board of commissioner, EBBOD is the effectiveness of board of director, AUDEXT is the quality of external auditor, AGE is how long company exist, and SIZE is total asset of financing company.

RESULT

The total sample was 177 companies, 91 of them (51.4%) experienced financial distress, and the remaining 86 (48.6%) were in normal condition. Companies experiencing financial distress consist of 17 companies whose business licenses had been revoked from 2018 to 2020, and 74 companies are under special attention because they had negative financial performance conditions or violated regulations, so they need intensive supervision. Based on the Hosmer and Lemeshow Goodness-of-fit test statistics, probability chi-square was 0.0000 or below 5%. Thus the model formed can predict the observed value. Using the logistic regression model, from Exhibit 3. we can see that effectiveness of BOC and BOD, and also size of company had a negative and significant correlation with the probability of financial distress in finance companies. This result was in line with previous research, that the board of commissioners is expected to be able to carry out their duties independently to be able to provide advice effectively and improve performance based on their knowledge or competence about financing (Z. Li et al., 2020). We also used women involvement in BOC and BOD composition as one of measurement, where the previous studies conclude women are considering to have emotional stability when facing crisis conditions and beneficial for evaluating objectively (Adams & Ferreira, 2009). The different result showed in the age of the company, where the longer company exist does not determine to avoid financial distress. The reason follows this may be because the company's management does not consistently apply or aware of the expansion of GCG principles in running the business. The need to complete GCG principles is increasing because the complexity of competition and community needs are growing. Companies that are weak in implementing good governance will increase the probability of management's opportunistic behavior. Then the ethical conflicts between shareholders and management who prioritize personal goals over company goals will increase (La Porta et al., 2000).

DISCUSSION/CONCLUSION

Corporate governance has attracted wide academic attention in many disciplines, most of which have found that certain aspects of the corporate governance of a company are linked to its corporate performance or its financial condition (Brédart, 2013). We find that the monitoring of independent board in BOC composition affects corporate performance. If they are present on site and serve their duties well, the risk of poor managerial decisions can be reduced (Li et al., 2020). The BOC must carry out its duties according to its objectives to protect the interests of shareholders who cannot be involved directly with the company's operations. BOD also obligated to ensure that the governance aspect has been running effectively and efficiently, thus opportunistic behavior that increases potential losses for the company can be avoided or minimized. In line with this concept and previous research, the existence of an effective BOD is expected to avoid the company from the potential for bigger losses.

Another factor considered in predicting financial distress was the size of the business. An increase in the total asset of the company will maintain the company's ability to pay off its obligations, so it can avoid financial problems. External auditor has negative but not significant association with probability of financial distress in financing companies. Finding on the age of company to predict financial distress is the only control variable that showed positive but not significant correlation. The company's long experience is not enough to avoid the occurrence of financial distress. Instead, it requires management to have sensitivity and awareness when the business environment change and more complex. In identifying measures of corporate governance which are significantly linked to financial distress, these empirical results directly address issues of effective BOC and BOD thus have important implications for financial stability in practice. The result confirms that when the board of commissioners and board of directors implement good governance guidelines effectively, the possibility of the company experiencing financial difficulties will be lower, and vice versa. Such information is helpful, first of all, for management in preventing potential losses, and also for the regulator in identifying problems and implementing changes accordingly. Finally, we have focused on financing companies that are legally registered in Indonesia for this study, and the data for assessing the effectiveness of BOC and BOD were limited in public sources. These results enrich previous research about corporate governance and the probability of financial distress.

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Exhibit 1. Parameter in independent variable

Main Independent Variable	Parameter		Number of questions
The effectiveness of the board of commissioners,	1	Composition	13
	2	the involvement of women in the composition	
	3	Competency	
	4	Independency	
	5	Activities	
The effectiveness of the board of directors,	1	Composition	7
	2	the involvement of women in the composition	
	3	Competency	
	4	Activities	

Exhibit 2. Sample data

Description	Number of Company
1 Licence revoked during period 2018 to 2020	17
2 Registered and operationally active during period 2016 to 2020	176
3 The population number	193
4 Sharia Financing Companies	(5)
5 Licence approved during period 2016 to 2020	(5)
6 Changes in ownership structure during period 2016 to 2020	(6)
7 Total sample	177

Exhibit 3. Logistic Regression Result

Variable	Exp sign	β	Std. Error	p-value	Odds Ratio (e^{β})
Constanta		13.75842	2.512386	0,000 ***	0,0000
EFFBOC	—	-11.27641	2.816384	0,000 ***	0,0000
EFFBOD	—	-4.664412	1.808213	0,005 ***	0,0094
AUDEXT	—	-1.069795	0.944291	0,129	0,3431
AGE	—	0.000607	0.025239	0,490	1,0006
SIZE	—	-0.429098	0.208117	0,020 **	0,6511

*** significance level $\alpha = 1\%$ (one-tailed)

** significance level $\alpha = 5\%$ (one-tailed)

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Strategic Partnership Model in Creating Value: Case Study of Online Education Provider

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ABSTRACT

The rise of technology and start-ups has made major changes in the education industry where people are able to receive education from informal institutions such as education start-ups combined with online capabilities to create online classes. The purpose of this study is to analyze business development inside online education. To analyze it, the researcher takes two main points that contribute directly to the business development of an online education provider, strategic partnership and value creation, from an online education start-up and the method used for data collection is in-depth interview. Research shows that the current strategic partnership is still lacking in terms of start-up's control and power on the partnership due to ineffective communication process and also revealed that customers play a big role in determining the value that online education startups offer which determines their future development in providing the services based on customers' preferences.

Keywords: business development; communication; education; start up; value creation

1. INTRODUCTION

The current pandemic outbreak that started since 2019 has created many changes in how the society live which also include changes in how we receive our education. Although learning through internet or using various platforms to obtain a certain knowledge is not something uncommon before the pandemic due to massive development in technology, the current infectious epidemic COVID-19 that spreads all over the world forced institutions such as schools and universities to closed down in order to stop the spread of the virus and conduct their learning activities using various online platforms such as Zoom or Google Meet (Chakraborty et al. 2020). This change further encourage the development of informal study through internet that is provided by companies as an education provider. Moloney and Oakley (2010) stated that the expected number of growths for online enrolments could exceed 20% annually. With the current situation of pandemic, the number of online enrolments growth might even higher than 20% as more people start tuning in to online classes which stress the massive opportunity for online education provider business. With the accessibility despite having restriction in terms of time or location (Moloney and Oakley 2010), the new system able to make learning available anywhere anytime.

The problem arise as now more online education provider business emerging one after another (Capper 2001) which makes the market for this industry become even more saturated. Although online platform could eliminate restrictions such as time and location, new restriction which is limitation in giving the best education experience make it hard for the company to differentiate themselves and stand out. Company needs to adapt towards the current technology changes and clients' requirements as a way to differentiate themselves (Capper 2001). Thus, business development strategy are crucial to ensure the company able to distinguish themselves with other player within the industry and decrease the chance of failure due to not focusing on business development that often happen to start-up (Cantamessa et al. 2018).

Although there is no solid definition of business development, research shows that business development requires 3 main categories which is identify new opportunities, clients, and partners to achieve growth and profitability by engaging and developing a long term value creation commitment (Kind and zu Knyphausen-Aufseß 2007). Two main business development that often found in online education providers are strategic partnership and value creation which serves different purpose.

Strategic partnership aim to create collaboration (Lasker, Weiss, and Miller 2001), which for online education provider company it's important to collaborate with the speakers as the material provider for online course. Meanwhile value creation aim to ensure that the customers able to perceive value when using the company's products or services and includes the customer in the company's value creation process (Ramaswamy and Ozcan 2018). These two strategies are the main point to create the best education experience for the customers because what differentiate one company and another is the content and how the content is delivered to the customers (Capper 2001).

This paper aims to answer two questions: First, what is the implemented strategies of strategic partnership and value creation inside an online education provider? Second, how is the current process of strategic partnership and value creation?

2.METHODOLOGY

The method used to answer the research questions in this paper is qualitative method in a form of a case study (Yin 2013). Case study are relevant to understand phenomenon that requires "in-depth" description and to explain "what" and "how" that phenomenon could happen (Yin 2013). The unit of analysis for the case study would be choosing one of online education provider in Indonesia and to obtain an in-depth description over the phenomenon, the researcher conduct an interview to participants which takes part in the online education provider's strategic partnership and value creation process.

This paper choose Venidici, an online education provider from Indonesia, as the unit of analysis. Venidici is a start-up that provides education materials for college students focusing on business, technology, and art fields. This start-up has been running for almost 2 years providing education in various forms such as online course, workshop kit, and also bootcamp. Venidici has around 40 employees and has collaborated with more than 15 speakers either as an individual or representing an organization. Venidici was selected because their main business process used to be offline but then change completely into online which they have no experience in how to handle online classes before. Thus, the researcher could study on how this company plan and implement their business development strategy from offline to online business process.

The participants for interview are 3 people from the Venidici's management team which is the product managers for each product Venidici currently provided, 5 loyal customers which has repurchase history, and 3 speakers with various background collaboration history which in total 11 participants.

3.RESULT

3.1 Strategic Partnership

The result able to show interesting findings in terms of strategic partnership that Venidici currently implemented. The process of strategic partnership are conducted in form of a flow from theme planning until payment to the speaker which is marked as the end of Venidici's collaboration with the speaker. The strategic partnership flow process can be seen as follows:



Figure 1. Strategic partnership process flow in Venidici

Source: Venidici management interview

Based on the management statement, the current strategic partnership process only work for a short period of time. After the speaker finished teaching the course, the contract between Venidici and the speaker also completed after Venidici give the speaker's payment. Venidici then will look for new speakers to collaborate with or start a new contract with the previous speaker. The agreement only applied for one online course. Based on 9 basic form of strategic partnership (Isoraiate 2009), Venidici's partnership are very similar to joint venture which focuses on collaboration between two or more parties to work on a certain project.

The management also stated that due to the one time agreement, they need to constantly looking for new theme and new speakers to collaborate. This system is not time effective because the process from the beginning until the speaker sign an agreement to collaborate takes a lot of time. Ineffective communication also contribute to the long process of agreement approval by the speakers. According to statement given by the management and also validated by one of the speaker, the speaker often times giving late responses to Venidici even when Venidici urgently need fast response. Not just impacting the process of agreement approval but also impacting the process of event preparation by Venidici. Management claimed that late responses also make them unable to prepare the best material for the online course and decrease their ability to ensure the quality of the material for online course.

3.2 Value Creation

As for value creation, the current system that Venidici implemented to engage with customers and understand deeper about customers are through feedback form that Venidici share at the end of online course and conduct independent customer research by interviewing their customers. Through those methods, Venidici able to establish their value and ensure that the customers able to receive the same value that Venidici intend the customers to perceived. Venidici also claimed that the constant direct communication with the customer are aimed to keep improving the quality and capabilities of their products and services to be able to serve directly what the customers' wants and needs.

Using the current value creation method, customers claimed that they feel like Venidici care about customers and also become part of Venidici as their recommendations and ideas from the feedback form or interview are used by Venidici as their next project or reference in the future. This is proven by one of Venidici's online course were inspired by one of the customers that stated she wants a certain type of topic and not long after her recommendation through feedback form, Venidici created an online course with the same topic as what the customer recommends. Customers also stated some values that they felt when using Venidici's services which is in line with value that Venidici aim for in the beginning.

Direct communication between Venidici and customers frequently use platforms such as Instagram and WhatsApp. From the interview, there is no known special platform or environment for Venidici and customers to communicate which indicates that there is no community formed under and managed by Venidici. Both management and customers stated that the current communication process and platforms

are enough for them and there is no obstacle known to the point it is urgent to create a new environment solely for communicating between Venidici and customers.

Despite the communication process and result between Venidici and customers relatively going well without obstacle, there is one concern coming from the management team of Venidici. stated in the interview that the feedbacks received from customers are not deep enough for the management to understand the actual wants and needs from the customers and what kind of value that the customers really looking for. This could indicates that there is a lack in process or ineffective method which the company need to improve in order to finally identify and understand deeply about their customers.

4.DISCUSSION

4.1 Result of Strategic Partnership

Based on 4 aspects of partnership implementation and 4 partnership outcomes categorization (Todeva and Knoke, 2005), Venidici able to implement a successful partnership with favorable outcome.

However, a certain point in implementation such as communication between Venidici and the speakers still needs improvement. There is also a need to improve the effectiveness of the partnership to shorten the time and increasing Venidici's online course quality through more preparation time given to Venidici.

Based on interview, indications of possibility to improve their partnership's effectiveness through creating long term partnership that has stricter rules and MOU. The product manager explained that their latest Bootcamp project were created not just to increase the value that can be given to customers but also to strengthen the partnership with speakers for a long run and build the foundation of trust as Venidici collaborated with the speakers.

Venidici's strategic partnership process flow can be considered as the basis of how the partnership established from the beginning until the end of the agreement. This flow is also important because improvements in the future can be made by analyzing and identifying the flow to determine which part that can be eliminated or added and also the chance that perhaps the flow needs to be longer or shorter.

4.2Result of Value Creation

Based on Value Creation Sphere theory (Grönroos and Voima 2013), Venidici as producer able to fulfill their duty in provider sphere by creating potential value to be used by the customers and even engage customer into the joint sphere where Venidici and customer are connected through direct communication. Venidici also able to deliver their potential value to the customers because the real value that customers felt are the same as the potential value that Venidici offers. Thus, the current value creation methods are effective enough even to the point the customers felt as if they are part of Venidici. It is important in order to ensure that the company able to deliver what they promises to the customers and fulfill customers' expectations. By creating the environment of co-creation with customers, company could directly understand the customers about their wants and needs. Co-creation process could influence how the customers see the product and increase the probability of repurchasing (Grönroos and Voima 2013).

4.3Limitations

This paper mainly look at the perspective of the company and try to analyze what the company have done so far in order to maintain their business through the scope of strategic partnership and value creation. The researcher aware that there is more factors to contribute in company's chance of survival in the industry such as marketing capabilities which means that further research are needed in this field. The lack of description in value creation through customer's perspective are also the limitations of this paper because this paper focus on the company's actions and the questions given to customers are act as an information to validate the company's answers. Thus, further research regarding value creation through customers' perspective are also needed in order to understand deeper regarding what value customer actually perceived when using the company's product.

5.CONCLUSION

This study is to identify how one online education provider, which in this case study is Venidici, create and implement their strategies in strategic partnership and value creation scope. It is also for the purpose of evaluating and identifying key problems that might occur during planning and implementing the strategies. From the result of the research, the strategic partnership model in creating value inside Venidici requires two important stakeholders which is the speakers and the customers.

With the role of speakers creating value through their materials and the role of Venidici creating platform for the speaker to share their value with customers. As for the customers, they are bound under Venidici's value creation process where interaction and communication happens to create value together. All of the stakeholders are merge into one, fulfilling their own roles and communicating with one another under Venidici's interactional co-creation environment.

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Student Online Shopping Patterns in Indonesia During the Covid-19 Pandemic

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ABSTRACT

Online shopping is a transaction between individuals that involves exchanging value through digital technology. Initially it can be done with a web browser, now it can be with applications installed in our mobile phone. Covid-19 Pandemic had an impact on shopping activities. Online shopping is the alternative way to decrease the people mobility in order to prevent from the spreading of the covid-19 virus. Students are the major population that used online media as they grew with the technology. This research examined factors that influence online shopping patterns and to study students acceptance of the online shopping during the Covid-19 pandemic. Using the theory of acceptance and use of technology based on UTAUT2 with changing the price value variable into price saving orientation. The questionnaire for data collection distributed to eight universities students in Yogyakarta, Indonesia. From 205 respondents obtained, only 196 that met the criteria. The data then analyzed using multiple regression analysis. The results showed that social influence, facilitating conditions, habits and price saving orientation had a positive influence, however performance expectancy, effort expectancy and hedonic motivation did not have an impact on student online shopping patterns during the Covid-19 Pandemic.

Keywords: online shopping, pandemic covid-19, shopping patterns, students, UTAUT 2

1. INTRODUCTION

Currently, the world is facing an outbreak of a global infectious disease called Severe Acute Respiratory Syndrome Coronavirus (SARS-CoV-2) which causes coronavirus disease 2019 (Covid-19). The virus was first discovered in Wuhan, China. Due to the virus that has widely spread throughout the world, The World Health Organization (WHO) declared that the Covid-19 virus as a pandemic.

Prevention from coronavirus spread with social restrictions triggered a change in people shopping patterns, from shopping at offline stores to shopping at online stores (Republika.co.id, 2020). The high mobility of people to fulfill their needs made online shopping the main choice of shopping today. Simply by relying on a device and an internet network, one can reach the market anytime and anywhere. In addition, the limitation space because of the pandemic Covid-19 has an impact on people's daily life activity. People forced to be online to avoid contracting with the deadly virus. Hasanat et al. (2020) said that changes in shopping that occur in the society are influenced by the lack of products and services availability in offline stores so that people have to rely on e-commerce to fulfill their needs. One of the reasons for the lack of products and services availability at offline stores was delayed supplies as a result of new regulation of importing goods from infected countries. The online service was chosen because it allows customer to buy product without having to look for it directly. Moreover, customers behavior in shopping has changed as the way to avoid contacting with the Covid-19 virus. Survey from the Indonesian Internet Service Providers Association (APJII) showed the number of internet users in Indonesia increased from 171.17 million to 196.71 million users in the second quarter of 2020 compared to 2019. 56.8% of the total internet users shopped at online stores and most users were young people (APJII, 2020).

The research examined the factors that affect students online shopping patterns and to study their acceptance of the online shopping during the Covid-19 pandemic using UTAUT2 model developed by Venkatesh et al. (2012). This research conducted in Yogyakarta as the city of education in Indonesia. Many students from all over Indonesia came to Yogyakarta to get their higher degree.

2. LITERATURE REVIEW AND HYPOTHESES FORMULATION

2.1 Online Shopping

Online shopping offer products and services using internet technology so that consumers can look products or services in photos or videos (Kurnianto, 2020). Initially shopping was done by face-to-face and currently shift to the online system. Online shopping provides a lot of convenience for its users. Simply by using their device customers can reach the market anywhere and anytime. Laudon & Traver (2017) defined online shopping or e-commerce as a transaction between individuals that involves the exchange of value using digital technology.

Decision making includes various stages from recognizing problems, finding solutions and evaluating alternatives (Mowen & Minor, 2002). Decision to choose a product is the result of decision making process from searching to selecting. During selection, evaluation of a product is made. This process is faced by costumers when they decide to purchase online.

2.2 Unified Theory of Acceptance and Use of Technology (UTAUT) 2

Venkatesh et al. (2003) first introduced UTAUT model to explain the various phenomena that affect the acceptance and behavior of using technology. UTAUT is based on eight pre-existing models by combining and interacting the best phenomena from the various models. UTAUT model consist of four factors, which are Performance Expectancy, Effort Expectancy, Social Influence, and Facilitating Conditions. Over time, the UTAUT model is updated to improve its effectiveness, called the UTAUT2 Model. The most basic difference is that this model studies technology acceptance in the context of consumers, in contrast to the previous model which emphasizes more on the employee (Escobar-Rodríguez & Carvajal-Trujillo, 2014). Moreover, UTAUT2 added three new variables which are hedonic motivation, price value and habit.

3.3 Hypotheses Formulation

Performance Expectancy

Performance expectancy is the believes of a person when using technology will provide benefit for them when performing certain activities (Venkatesh et al., 2012). Performance expectancy is described as the conditions in which people felt that his work is beneficial when using a system, took advantage and continued to use it. Similar results stated by Sheikh et al. (2017) and Macedo (2017) who stated that performance expectancy will affects interest and usage behavior. On the contrary Piarna et al. (2020) explained that performance expectancy has no impact on internet use of technology. Thus, the hypothesis that can be developed is:

H₁: Performance Expectancy has a positive effect on online shopping patterns during the Covid-19 pandemic

Effort Expectancy

Effort expectancy is interpreted as the level of convenience associated with the use of technology (Venkatesh et al., 2012). The more efficient the system, the more people will continue to use the system. Moreover, Macedo (2017) illustrated that effort expectancy affect usage interest, However Sheikh et al. (2017) and Piarna et al. (2020) stated that effort expectancy has no effect on interest and behavior in using technology. Therefore the hypotheses is formulated as follows:

H₂: Effort Expectancy has positive effect on online shopping patterns during the Covid-19 pandemic

Social Influence

Social influence is described as how an individual perceives other when they use new system (Venkatesh et al., 2012). Social influence explained as the efforts made to influence others through beliefs, perceptions, and behavior. Social influence came from external pressures such as family, friends, co-workers, and others. Social influences form surrounding environment would bring people

to try new system with their self-awareness. This opinion is supported by Macedo (2017) and Piarna et al. (2020) who stated that social influences affect usage behavior. However, Sheikh et al. (2017) stated that social influence has no impact on interest and behavior in using technology. Thus, the formulated hypothesis is the following:

H₃: Social Influence has positive effect on online shopping patterns during the Covid-19 pandemic

Facilitating Conditions

Facilitating conditions described as a person believe of their organizational infrastructure supported their use of technology (Venkatesh et al., 2012). Facilitating conditions described a condition in which an organization develops various facilities that make their users comfortable using software. Each of the system must be adjusted to user needs and developed periodically to meet the needs of potential users. This opinion is supported by Sheikh et al. (2017) who stated that facilitating conditions affect interest and usage behavior. On the contrary, Macedo (2017) and Piarna et al. (2020) stated facilitating conditions has no effect on interest in using technology. Therefore the hypothesis that can be drawn as follows:

H₄: Facilitating Conditions has positive effect on online shopping patterns during the Covid-19 pandemic

Hedonic Motivation

Hedonic motivation defined as the pleasure of using technology and it has an important role in determining the acceptance and use of technology (Venkatesh et al., 2012). Motivation described as the condition which hedonic person tend to like to use technology due to their thought and psychology aspect of trying new things and would use it again if they feel satisfied. This opinion is supported by Sheikh et al. (2017) and Macedo (2017) who stated that hedonic motivation affects interest and usage behavior, on contrary Piarna et al. (2020) illustrated that hedonic motivation has no impact on interest in using technology. Thus, the hypothesis that can be developed is:

H₅: Hedonic Motivation has positive effect on online shopping patterns during the Covid-19 pandemic

Habit

Habit is defined as how far people tend to perform their natural behavior and learned from their day to day activities (Limayem et al., 2007). Habit described as a condition in which a person performs certain behaviors continuously as they are used to do it. The more familiar a person use of a system, the more difficult they have to live without it. This opinion is supported by Sheikh et al. (2017), Macedo (2017), and Piarna et al. (2020) who stated that habits affect interest and usage behavior. Thus, the researcher wants to re-test these variables by formulating the following hypothesis:

H₆: Habit has positive effect on online shopping patterns during the Covid-19 pandemic

Price Saving Orientation

Price value is a perception of the money spent in using technology to obtain some benefits (Venkatesh et al., 2012). The price value is perceived as its relation to time, distance, and costs along with the benefits obtained. In this study, online shopping did not costly for consumers as its provides the advantage of being able to save money by comparing product prices from various online shopping sites and choosing the best product at the lowest price. Sheikh et al. (2017) considered price savings has strong impact for users to accept technology. Consumers who find low prices and more benefits in shopping online would increase their intention to repurchase online. Sheikh et al. (2017) stated that price savings orientation has positive and significant impact on the interest used of technology but has no direct impact on the usage behavior. Moreover, Kurnianto (2020) stated that the higher the suitability of the offered price in a system, the consumers interest for online shopping will increase. On the contrary, Piarna et al. (2020) stated that price value of a product has no effect on interest use on it. Therefore, the hypothesis formulated as follows:

H₇: Price Saving Orientation has positive effect on online shopping patterns during the Covid-19 pandemic

3. RESEARCH METHOD

3.1 Population, Sample and Data Analyses.

The population of this study is undergraduate students in Yogyakarta, Indonesia. Students from A accredited University were taken for samples. Yogyakarta was chosen because it is one of the city with the highest number of the best universities in Indonesia. This research used primary data sources by distributing questionnaires to students. The questionnaire used 6 Likert scale ranging from "strongly agree" to "strongly disagree". The questionnaire used for all variables are adopted from Sheikh et al. (2017). This research used multiple regression method for data analyses.

4. RESULTS AND ANALYSES

4.1 Data Collection Results

The questionnaires distributed to 205 respondents. However, only 196 met research criteria from 8 universities (2 public and 6 private universities). The students were from year 2015 until 2020. Most of the students (40%) bought online product 2 to 4 times on a monthly basis.

4.2 Multiple Regression Results

Table 1 . Multiple Regression Analysis Results

Construct	Unstandardized Coefficient		Standardized Coefficient β	T	Sig.
	β	Std. Error			
(Constant)	0.774	2.551		0.303	0.762
Performance	0.216	0.120	0.108	1.795	0.074
Expectancy					
Effort Expectancy	0.272	0.165	0.109	1.648	0.101
Social Influence	0.619	0.120	0.291	5.146	0.000
Facilitating Conditions	0.620	0.253	0.172	2.454	0.015
Hedonic Motivation	-0.102	0.145	-0.044	-0.700	0.485
Habit	0.393	0.081	0.277	4.850	0.000
Price Saving Orientation	0.549	0.137	0.208	3.998	0.000

Source: primary data, processed 2021

The regression model based on table 1 data analyses results are formulated as follows:

$$Y=0.774+0.216 X1+0.272 X2+0.619 X3+0.620 X4-0.102 X5+0.393 X6+0.549X7+\varepsilon$$

4.3 Hypotheses Analyses

H₁: Performance Expectancy has a positive effect on online shopping patterns during the Covid-19 pandemic

The results of significance testing which is $(0.074 > 0.05)$ indicated that performance expectancy has no impact on online shopping during the Covid- 19 pandemic, therefore H₁ is not supported by the data. This results is consistent with Piarna et al. (2020) who found that performance expectancy has no impact on interest in using technology.

H₂: Effort Expectancy has positive effect on online shopping patterns during the Covid-19 pandemic

The results significance testing obtained $0.101 > 0.05$ indicated that effort expectancy has no significant effect on online shopping during the Covid-19 pandemic, Thus H₂ is not supported by the data. The results are consistent with Sheikh et al. (2017) and Piarna et al. (2020) who found that effort expectancy has no effect on interest and behavior in using technology. T the university students is familiar using the latest technology, so that online shopping activities do not take a long time to learn and they find it easy to use.

H₃: Social Influence has positive effect on online shopping patterns during the Covid-19 pandemic

The significance value obtained $0.000 < 0.05$ indicated that social influence has significant effect on in online shopping consideration during the Covid-19 pandemic. Therefore H₃ is supported by data. The result is consistent with Macedo (2017) and Piarna et al. (2020) who stated that social influence affects interest and usage behavior. These results were able to prove that the higher the pressure intensity from the important people in life , the higher the demands to purchase online.

H₄: Facilitating Conditions has positive effect on online shopping patterns during the Covid-19 pandemic

The significance value obtained is $0.015 < 0.05$ which indicated that the facilitating conditions has a significant effect in online shopping during the Covid-19 pandemic. Therefore, H₄ is supported by the data. This result is consistent with Sheikh et al. (2017) who stated that facilitating conditions affect usage behavior. These results proved that the more facilities that support online shopping the more interest in doing it.

H₅: Hedonic Motivation has positive effect on online shopping patterns during the Covid-19 pandemic

The significance value obtained is $0.485 > 0.05$. This indicated that hedonic motivation has no significant effect on considerations in online shopping during the Covid-19 pandemic. Thus, H₅ is not supported by the data. The results were consistent with the research of Piarna et al. (2020) who stated that hedonic motivation has no effect on interest in using technology. From this study, it can be assumed that university students in Yogyakarta tend to spend their money to buy only what they need because as a student, they did not have their own income so that the pocket money they had is better spent on useful items.

H₆: Habit has positive effect on online shopping patterns during the Covid-19 pandemic

The significance value obtained is $0.000 < 0.05$. This showed that habit has significant influence in online shopping during the Covid-19 pandemic. Therefore, H₆ is supported by the data. The result is consistent with Sheikh et al. (2017), Macedo (2017) and Piarna et al. (2020) who stated that habits affect interest and usage behavior. These results proved that if students got used to purchase online, they will repeatedly doing it and felt something was missing if they did not do it.

H₇: Price Saving Orientation has positive effect on online shopping patterns during the Covid-19 pandemic

The significance value results obtained is $0.000 < 0.05$ which indicated that the orientation of price savings has a significant effect on considerations in online shopping during the Covid-19 pandemic. Thus, H₇ is supported by the data. The result is consistent with Sheikh et al. (2017) dan Kurnianto (2020) who stated that price saving has a positive and significant effect on interest in using technology. These results were able to prove that students who found more benefits such as discounts or cash back will increase their intention to buy online.

5. CONCLUSION

Based on the discussion of the results, it can be concluded that social influences, facilitating conditions, habits, and price saving orientation have a positive and significant impact on online shopping. However, performance expectancy, effort expectancy, and hedonic motivation did not have an impact on student online shopping patterns in Yogyakarta, Indonesia during the Covid-19 pandemic. Moreover, this study found that students are used to purchase online. During Covid-19 pandemic students choose to buy online rather than came directly to the store for anticipating the spread of Covid-19 virus. Moreover, university student in Yogyakarta tend to choose products with cheapest prices, despite the benefits such as free shipping and cashback.

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The Effect of Capital Regulation Motives in Earnings Management on Loan Loss Provisions with Type of Ownership as a Moderating Variable (Evidence from Indonesian Banking)

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ABSTRACT

The research objectives are to investigate the influence of earnings management motives namely capital regulation motives and type of ownership as moderate variable on the Loan Loss Provisions (LLPs) in the national banks in Indonesia. The data were collected from public bank's financial statements for the period of 2015 until 2017 based on the Indonesian banking website and financial report published by the bank in the newspaper. It is aimed to collect representative samples with settled criteria. There were 246 years-bank that fulfilled the sample criteria. This research is causal research which seeks to investigate the causality relationship or cause and effect between research variables. The research variables tested included the dependent variable (LLPs), the independent variable (capital regulation motives), and the moderation variable (a type of ownership). The result shows that the empirical research on the effect of earnings management (capital regulation motive) and type of ownership to the bank performance can be explained by agency theory. Analysis of the banking industry using the agency theory approach provides different conclusions from the theory predictions due to the inconsistency of the coefficients and the probability values of each variable. The research findings are: capital regulation motive brings about a significant and positive effect on LLPs; the different types of bank ownership moderates capital regulation motive effect on LLPs.

Keywords: Capital Regulation Motives, Earnings Management, Loan Loss Provisions

1. INTRODUCTION

Competition between financial institutions forces bank managers to become more risk-takers, namely by reducing or easing the requirements for allocating productive assets, especially in the form of credit. Government interference in credit policy often actually exacerbates the level of problem loans that occur. Apart from that, Amat et al. (2006) explain that there have been many unintentional (engine error) and intentional (error by commission) violations committed by bank managers. Financial problems in banking are inseparable from the characteristics of the banking industry itself which has a specific business nature (nature of the firm) that is different from other industries. Macey and O'Hara (2003) suggest differences in characteristics between banks and other industries, namely:

1. A bank is a "non-transparent" business model that allows agency problems. Agency Theory has been widely used to understand the problem of agent and principal relationship structures (Eisenhardt, 1989) including problems in banking, but the agency theory approach that has been used to understand problems in the industry needs to be reviewed given the basic assumptions of the agency theory used are different from the characteristics the banking industry itself.
2. Banks are business models that have a high level of rules/regulations compared to other business sectors. In certain conditions, regulations actually provide incentives (opportunities) for managers to act that harm other stakeholders. Agency problems due to debt as also occur in banks arise when the level of debt to equity ratio is very high, so that bank owners have the desire to transfer the

wealth of fund owners (bondholders) through increased business risk. The bank owner, through the manager, tries so that the desired financial strategy can be applied. When the decision goes as expected, the benefits are enjoyed by all company owners. If there is a failure, the owners of the funds (especially the depositors) must share in the loss (Husnan, 2001). Supriyatno (2006) has identified agency conflicts in banks including conflicts between: (1) Managers and owners; (2) Regulators with bank owners; (3) Regulators with the bank as a whole (represented by managers as management decision-makers); and (4) Banks and customers (depositors) and between banks and borrowers.

The agency problem in the banking world is related to the separation of ownership from control. Agency problems arise because the owner cannot oversee the company's activities from time to time so the owner delegates the company's control authority to the manager of the company (manager). Differences in risk level preferences, differences in diversification, and asymmetric information between managers and other stakeholders also trigger moral hazard actions. This condition encourages managers to achieve strategies that can benefit their interests at the expense borne by other parties (Went, 2002). Managers have ample opportunity to make decisions and actions according to their interests. This is due to the separation between ownership and control (Jensen and Meckling 1976).

1. The Changes Process for Loan Loss Provisions

In principle, the purpose of LLPs discretion is to adjust the amount of allowance for losses that are formed by the development of the condition (quality) of the portfolio of productive assets. Allowance for possible losses on productive assets should always reflect the estimated losses on the portfolio of productive assets (Francis et al., 1996). The discretion process occurs since the process of estimating losses, the formation of LLPs, write-off of productive assets losses and changes in the allowance for possible losses on earning assets.

The manager performs earnings management through the process of changing LLPs when the amounts previously formed are considered to be incompatible with the assumptions at the beginning of their formation. If the allowance for possible losses on earning assets is not adequately established, the actual loss of earning assets directly increases the book value of the loss of earning assets. Finally, these losses reduce the profit rate of the period concerned (Docking et al., 2000).

Changes in the allowance for earning assets losses are often considered to reflect more accurately the value of bank assets (current assets value) (Hatfield and Lancaster, 2000). Aggarwal et al., 2002 state that a decrease in the amount of allowance for earning assets losses will increase the amount of profit before tax, payment of tax obligations, and retained earnings. An increase in retained earnings will increase equity. An increase in the number of LLPs will have the opposite effect. Two reasons banks do earnings management by increasing the amount of LLPs reserves are: (1) non-performance credit portfolios and (2) inexpensive ways to form bank capital (Hatfield and Lancaster, 2000). The bank can choose the right time to increase the amount of the bank's portfolio loss losses when there is a future bank cash flow that needs to be covered up. Hatfield and Lancaster (2000) describe three considerations in assessing the adequacy of the allowance for earning assets losses before carrying out earnings management, namely: First, on the assumption that the bank's experience of problematic productive assets in the first interim is related to the growth of the second interim earning assets; Second, allowance for a write-off of cumulative earning assets is related to the size of the portfolio of earning assets, Third, allowance for a write-off of cumulative earning assets is related to non-earning productive assets. Normatively, the method that can be used to engineer the allowance for possible losses on earning assets is the use of valuation and classification methods for troubled productive assets. This method is based on the ratio of problematic earning assets to total earning assets for the last several periods.

2. RESEARCH METHODOLOGY

This research is causal research which seeks to investigate the causality relationship or cause and effect between research variables. The research variables tested included the dependent variable (LLPs), the independent variable (capital regulation motives), and the moderation variable (a type of ownership). This study uses panel data methods (pooling data) in accordance with the affirmation of Ghozali (2010) that panel data can improve the ability of data prediction. Samples were selected by purposive random sampling.

1. Research Variables

This study uses one dependent variable is the magnitude of LLPs (Ahmed et al., 1999; Lobo and Yang, 2001, and Kanagaretnam et al., 2003, 2004a). The independent variable consists of two variables, namely capital regulation motive (Ahmed et al., 1999; Lobo and Yang, 2001) and types of ownerships (Husnan, 2001; and Supriyatno, 2006).

Dummy variable A1 is a score of 1 mixed bank (shares owned jointly by foreign and domestic parties) and a score of 0 for other types of ownership. Dummy variable A2 is a score of 1 privately owned bank (not yet public) and a score of 0 for other types of ownership. Dummy variable A3 is a score of 1 bank that is privately owned (go public) and a score of 0 for other types of ownership. Dummy variable A4 is a score of 1 state-owned bank and a score of 0 for other types of ownership. Foreign banks are used as a benchmark for good bank governance models. This dummy variable is used to support the type of ownership which functions as a moderating variable (interaction).

2. Research Model

The research model using the regression model with variables based on the type of ownership group is as follows:

$$LLPs_{it} = \alpha_0 + \alpha_1 CAR_{it} + \beta_1 A1 + \beta_2 A2 + \beta_3 A3 + \beta_4 A4 + \delta_1 CAR_{it} * A1 + \delta_2 CAR_{it} * A2 + \delta_3 CAR_{it} * A3 + \delta_4 CAR_{it} * A4 + \varepsilon_{it}$$

where :

α_0 = constant

$LLPs_{it}$ = allowance for possible losses on earning assets divided by total productive assets of banks i period t

CAR_{it} = capital (core and supplement) divided by weighted assets according to the risk of bank i period t

A1-4 = type of ownerships, namely a mixed bank, privately owned closed private bank, public private bank and state owned bank

δ = parameter coefficient

ε_{it} = error term

3. Data Collection and Analysis

The following table explains the distribution of the banking population in Indonesia by type of ownerships according to Bank Indonesia (2018). Table 1 shows that the type of bank ownership is dominated by closed private ownership banks, as a whole 46.00 percent of the total population, while per year is 41.30 percent for 2015; in 2016 amounted to 49.04 percent; while in 2017, it was 47.12 percent. Furthermore, public-private banks accounted for 19.24 percent of the total population, while annually was 17.43 percent for 2015; by 19.23 percent for 2016; while in 2017 it was 21.15 percent. Mixed banks are in third place with 16.72 percent of the total population, per year at 17.43 percent for 2015; by 3.11 percent for 2016; while in 2017 it was 16.35 percent. Foreign banks rank fourth, at 10.41 percent of the total population, while per year it is 10.09 percent for 2015; by 10.58 percent for 2016; and in 2017 10.58 percent. Government banks are ranked last at 4.73 percent of the total population, while per year it is 4.59 percent for 2015; by 4.81 percent for 2016; and in 2017 4.73 percent.

Table 1. The Distribution of the Banking Population in Indonesia by Type of Ownership

Type of Ownerships	2015	%	2016	%	2017	%	Total	%
Foreign	11	10.09	11	10.58	11	10.58	33	10.41
Mixed	19	17.43	17	3.11	17	16.35	53	16.72
Non Public Private	38	41.30	51	49.04	49	47.12	138	46.00
Public Private	19	17.43	20	19.23	22	21.15	61	19.24
State Owned	5	4.59	5	4.81	5	4.81	15	4.73
 Total	 92	 100	 104	 100	 104	 100	 300	 100

Source: Bank Indonesia (2018)

The following table explains the distribution of the sample banks in this study. Table 2 shows that the sample is dominated by closed private ownership banks, amounting to 52.03 percent of the entire sample, while per year it was 53.01 percent for 2015; by 57.32 percent for 2016; and in 2017 45.68 percent. Furthermore, public-private banks amounted to 23.39 percent of the total sample, while per year amounted to 22.35 percent for 2015; in 2016 amounted to 20.73 percent; while in 2017 it was 27.16 percent. Mixed banks are in third place at 10.48 percent of the total sample, per year at 10.59 percent for 2015; by 3.11 percent for 2016; and while in 2017 it was 11.11 percent. Foreign banks ranked fourth, overall the sample was 10.08 percent, while per year it was 8.24 percent for 2015; 9.76 percent for 2016; and in 2017 9.76 percent. Government banks are ranked last at 3.63 percent of the total population, while per year it is 4.71 percent for 2015; by 2.44 percent for 2016; and in 2017 3.70 percent.

Table 2. Sample Distribution

Type	2015	%	2016	%	2017	%	Total	%
Foreign	7	8.24	8	9.76	10	12.35	25	10.08
Mixed	9	10.59	8	9.76	9	11.11	26	10.48
Non Public Private	44	53.01	47	57.32	37	45.68	128	52.03
Public Private	19	22.35	17	20.73	22	27.16	58	23.39
State Owned	4	4.71	2	2.44	3	3.70	9	3.63
Total	83	100	82	100	81	100	246	100

3. THE PRINCIPAL RESULTS

The results of testing the model for equation in Table 3 shows that the results of the Simultaneous Effect Test (F-test) of 10,287 and probability 0,000, which means the interaction between types of ownerships with capital adequacy ratio affect LLPs. This equation gives an adjusted R² of 0.428 which means that the variability in LLPs be explained by the capital adequacy ratio and type of ownerships by 42.8 percent while 57.2 percent is explained by other variables. The value of the Adjusted R² model 2 (0.428) is greater than the value of the Adjusted R² model 1 (0.075) which means that the type of ownership is indeed a moderating variable in capital adequacy ratio to LLPs (Ghozali, 2010).

Table 3. Regression Analysis Results by Type of Ownership

Variable	Coefficient	Prob	Sig
Constant	2.784	0.000	**
CAR	-0.375	0.002	**
A1	-0.555	0.001	**
A2	-0.473	0.071	
A3	-0.996	0.997	

A4	0.002	0.001	**
Variable	Coefficient	Prob	Sig
A1*CAR	0.424	0.003	**
A2*CAR	0.180	0.300	
A3*CAR	0.654	0.000	**
A4*CAR	-0.094	0.810	
Test of Suitability of the Regression Model			
Adj. R ²	0.428		
F-Test	10.287	0.000	**
N	246		

** indicate statistically significance respectively at 5% level

The results of the type of ownership regression moderating the effect of capital regulation motives on LLPs shows mixed results. Regression results on mixed banks produce positive coefficients (+0.424) and have a significant probability value (0.003). The results of the regression type of ownership in private banks produce a positive coefficient (+0.180) and have a non-significant probability value (0.300). The results of type regressions on public-private banks produce positive coefficients (+0.654) and have a significant probability value (0.000). The results of the regression of ownership types in state banks (A4) produce a negative coefficient (-0.094) and have a non-significant probability value (0.810). Thus, the type of ownerships moderates the effect of capital regulation motives on LLPs in joint venture banks and public-private banks. These results indicate that the type of ownerships moderating the effect of capital regulation motives on LLPs is accepted.

4. CONCLUSIONS

Based on the research findings described, the conclusions in this study are as follows: the results of testing the effect of capital adequacy ratio on LLPs indicate that capital regulation motive has a positive and significant effect on LLPs. Furthermore, the results of this study provide main evidence that the type of ownership moderates the effect of capital regulation motives on LLPs. The coefficient of variation of the capital adequacy ratio shows positive and significant results in mixed banks and public-private companies. The coefficient of variation test for capital adequacy ratio as a proxy for capital regulation motives shows that there is not equal to zero and significant coefficient value for all types of ownerships. These results support the use of capital adequacy ratio that can be used as a proxy for capital regulation motives. The results of empirical research on the effect of capital regulation motives and type of ownership on LLPs can be explained by agency theory.

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Motivation towards corruption in the time of COVID-19: A survey study of Indonesia

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ABSTRACT

This study presents the empirical results about the motivation for corruption or being involved in corruption in the public and private sectors. A total of 2,093 respondents was successfully gathered from two rounds of a nationwide survey, non-anonymous and anonymous, with 107 respondents admitted conduct or participate in the practice of corruption during the first year of the COVID-19 pandemic in Indonesia. The practice of corruption is predominantly in the public administration and finance sector amid the pandemic in Indonesia. Using ordinary least-square (OLS) regression, this study shows that corruption in the public administration, finance, and digital finance sector is most likely to be motivated to influence the decision making and receive access to the public services. In the finance sector, individuals are also motivated to receive the public fund and avoid legal consequences. The findings indicate that the practices may be related to structural and opportunistic behavior. By drawing on insights from behavioral economics, this study suggests that more robust public policy interventions, such as better institutional governance and accelerated digital innovations, are required to prevent and eradicate the practice of corruption. Finally, this study provides practical implications and new ideas for further studies with behavioral approach.

Keywords: corruption; motivation; behavioral economics; COVID-19; Indonesia

1. INTRODUCTION

The research of motivation for corruption lies in the cross-sections between social and natural science. It is not solely because of the science behind motivation but also the nature of corruption. The complexity of corruption is not always related to socio-economic consideration and other aspects such as cultures and individual perceptions. The abstract value of morality in a particular society, for example, is suggested to be a determinant of whether the practice of corruption can bring construction or destruction to the society (Torsello & Venard, 2015). Another case study from Indonesia shows that family domination in local politics drives the practice of corruption, benefiting from the unequal distribution of power (Hamid, 2014). Challenges to draw the underlying understanding behind the rationale of individual corruption or participating in corruption have attracted many scholars' interest.

Yet, there is a limited study about the motivation behind the practice of corruption in Indonesia. Prihanto and Gunawan (2020) observe that poor leadership plays an essential role in promoting corruption among public officials. They further suggest that improved governance, for example, setting the leaders with clear duties and obligations, can prevent and eradicate the practice of corruption. Corrupted leaders tend to abuse their power for their irresistible temptation for their wealth participation. Prabowo (2014) finds that the decision-making for corruption involves assessing benefits and costs from engaging the corruption. Even though so, the perspective of rational decision making in social science is not satisfactory to explain individual motivation in the light of growing discussion on behavioral economics. The decision making is not purely logical (Barberis, 2018).

This study aims to examine the motivation to engage in corruption in Indonesia. Two nationwide surveys with 2,093 respondents are used to conclude individual motivation. Because the surveys are conducted amid the pandemics of COVID-19, the conclusion will be carefully drawn. The economy deteriorates during pandemics. Indonesia sees a shrinkage of the economy in 2020 to -2.1% (Muhyiddin & Nugroho, 2021). This paper will provide a literature review outlining the theoretical discussion on behavioral economics in Section 2. Section 3 will present the study methodology, along with the model and its estimation technique. Section 4 will provide the estimation results, and Section 5 will bring the findings and conclusion along with some possible research avenues for future works.

2. LITERATURE REVIEW

In behavioral economics, motivations beyond financial and monetary aspects influence how individuals make everyday choices and decisions. Non-monetary motivations such as pride, satisfaction, trust, and moral sentiment, influence individuals to engage in the practice of corruption (Baddeley, 2019; Di Donato, 2018). Under this approach, the individuals are not autonomous decision-makers somewhat influenced by other people's thoughts and framing. The classical dichotomy of intrinsic and extrinsic motivations is still relevant when discussing motivation under this approach. Therefore, a multidisciplinary discussion between economics and other disciplines, such as psychology and sociology, is intense as the individuals are considered not pure self-interest creatures, rather *homo socialis* (Baddeley, 2019). The classical economic argument that corruption is more likely to perform if the perceived benefit crowds out the expected consequences are no longer valid. Chugh (2019) concludes that modification in the psychological process is required to prevent and eradicate the practice of corruption. Learning from India, he finds that corruption is not merely a politically driven behaviour but a psychosocial phenomenon. Many use behaviour economics in the study of corruption by scrutinizing the incentive from intrinsic and extrinsic motivations (Johann, 2015; Kown, 2012).

Table 1. Motivation and behavior to corrupt

Behavior	Intrinsic motivation	Extrinsic motivation
Structural	+	++
Opportunistic	++	+

Note: + less likely, ++ more likely

Taking into account the social context, individual connection with the surroundings shapes the motivation. Social norms can create a punishment that may discourage individuals to violate the norms. However, corruption is not always perceived as destructive behaviour. Torsello and Venard (2015) mention that corruption can bond the people in some societies (i.e., Italy, Latvia, Mexico, or Colombia). The cultural approach emphasizes the roles of cultural orientation (collectivism, uncertainty avoidance and power distance) and social norms (injunctive norms and descriptive norms) in explaining corruption. Many studies have found connections between cultures (national, organizational, local)-distributed in social norms (injunctive, descriptive) and level of corruption (Akbar & Vujic, 2014; Barr & Serra, 2010; Campbell & Goritz, 2014; Sahu, 2017; Taylor & Torsello, 2015; Zhang, 2015). It is because of rationalization of the good-bad feeling based on the culture. Pillay and Dorasamy (2010) suggest that a society with collective culture will enhance the pervasiveness of corruption regardless of whether the corruption is perceived as constructive or destructive behaviour. An example how the role of culture in Indonesia stimulates the corruption is tribute culture ("Budaya Upeti") (Abraham, Suleeman & Takwin, 2018). A study about corruption among Nigerian shows that extrinsic motivation tends to promote the practice of corruption (Agbo & Iwundu, 2020). They argue that a single standard does not exist in such societies. Thus, loyalty standard becomes important than other standards (i.e., social justice). This complicated situation enforces the policymakers to carefully design corruption prevention and eradication programs based on extrinsic motivations. Moreover, the interaction between intrinsic and extrinsic motivation can worsen the practice of corruption. Better performance pay eradicate corruption is damped by lower political patronage in the public sector (Campbell, 2020). Muramatsu and Bianchi (2021) suggest that these programs, if designed poorly, may diminish the intrinsic motivations of individuals not to corrupt (i.e., public integrity and honesty).

There are times when individuals corrupt or are involved in corruption because the social or political conditions allow them to do so. Systemic factors such as power distribution, leadership, law enforcement, the quality of the institution, and cultures may drive individuals to participate in structural behavior for corruption (Albanese & Artello, 2018; Graycar, 2015). The extrinsic motivation that is more driven by social norms intensifies structural behavior to corrupt. The study case in Bandung reveals that the working environment in the public sector allows public servants to engage in corruption (Engkus et al., 2020). They find a strong and massive structural behavior in such a case, both vertical and horizontal working relationship. In contrast, opportunistic behavior occurs when participation in corruption is collusive (Graycar, 2015). The individuals are willing and agree to corrupt for their benefit. Albanese and Artello (2018) mention this act as the result of the free-will decision. Nevertheless, there are times when opportunistic behavior invites individuals who are unwilling to corrupt. In this case, their involvement in corruption is most likely due to the exert of power from other individuals.

3. METHODOLOGY AND DATA

This study uses data from the distributed questionnaires targeting respondents living around Indonesia, both in urban and rural areas. Out of 2,093 responses, the survey collects 107 respondents who corrupt or participate in corruption amid the COVID-19 pandemic. The survey comprised two rounds: a non-anonymous survey (first round) and an anonymous survey (second round). The questionnaires for both surveys are the same. The method for the first survey is using surveyor while the method for the second survey is using a web-based survey. The first round consists of 1,560 responses, with 4% of the respondents ($N = 66$) indicating corruption. The second round, however, finds that 8% of the 533 respondents ($N = 41$) corrupting or participating in corruption.

Table 2. Result of t-test for non-anonymous and anonymous survey

Data Set	N	Mean	Std. Err.	Std. Dev
1 = non-anonymous	1,560	1.957692	0.005098	0.2013548
2 = anonymous	533	1.923077	0.0115529	0.2667197
Difference (diff)		0.0346154	0.0048154	
Ho: diff = 0				
Ha.: diff < 0		Pr (T<t) = 0.9991		
Ha.: diff != 0		Pr (T > t) = 0.0017		
Ha.: diff > 0		Pr (T>t) = 0.0009		

The data sets are then analysed using ordinary least squares (OLS) regressions. The dependent variable is the sector where the corruption occurs, while the independent variable is the motivation behind the corruption. However, a statistical evaluation using the unpaired student's t-test shows that the data is not identical. Table 2 shows that the null hypothesis that the data is identical can be rejected ($p = 0.0017$) and alternative hypothesis that the difference is not zero and more than zero can be accepted ($p = 0.9991$). The result suggests that there is a statistical difference between both respondent groups and population means. Thus, both data sets are not combined in this study.

The model specification in this study uses the relation between the response to corrupt or be involved in corruption and the motivations. The linear model is specified as follows:

$$\text{CORR}_{i,j} = 0 + 1\text{MOT1}_j + 2\text{MOT2}_j + 3\text{MOT3}_j + 4\text{MOT4}_j + 5\text{MOT5}_j + 6\text{MOT6}_j + \beta_7\text{MOT7}_j + 8\text{MOT8}_j \quad (1)$$

Where $\text{CORR}_{i,j}$ is the dependent variable measuring the count of individual i who commits or is involved in the practice of corruption for a particular sector, while MOT is shown in Table 2 above. The explanation of the dependent and independent variables used in this study is shown by Table 3. A test of validity and reliability on nineteen variables for non-anonymous shows a Cronbach's alpha of 0.8642 survey while for anonymous survey shows a Cronbach's alpha of 0.7477.

Table 3. Survey explanation

Sector (dependent variable)	Motivation (independent variable)
Public administration	MOT1: Taking a decision in government (i.e., election, procurement, etc.)
Agriculture, forestry, and fishery	MOT2: Influencing the decision-making in the government (i.e., election, procurement, etc.)
Energy	MOT3: Solving and expediting administration inquiries with the government (i.e., certificate of verification, permits, etc.)
Public services	MOT4: Receiving access to public services
Digital public services	MOT5: Gaining position or authority in the government structure
Public health	MOT6: Receiving public funds for own and/or community's benefit
Manufacturing	MOT7: Avoiding legal consequences from police, customs, army, or other legal institutions
Construction	MOT8: Other motivations (unlisted)
Finance	
Digital finance	
Other sectors (unlisted)	

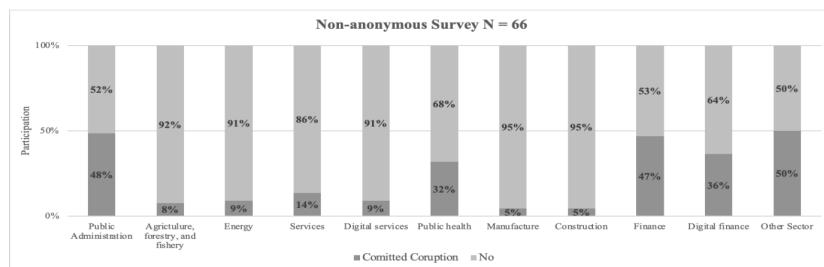


Fig. 1. Sector where respondents participate in committing corruption for non-anonymous (N=66)

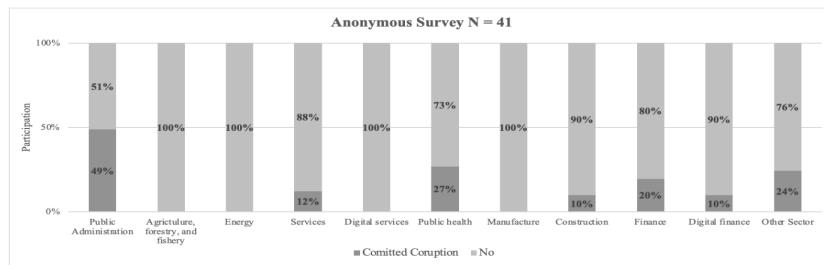


Fig. 2. Sector where respondents participate in committing corruption for anonymous (N=41)

In the analysis, this study analyses only the three sectors receiving the most responses. The respondents are allowed to answer more than one sector in accordance to their experiences. The responses for each sector are shown in Fig. 1 and 2. Other sectors are excluded from the analysis due to the limited information as the respondents are not asked to list down the sectors. The analysis for non-anonymous survey includes public administration (response = 48%), finance (response = 47%), and digital finance (response = 36%); while for anonymous survey includes public administration (response = 49%), public health (response = 27%), and finance (response 20%). This means that there are six regression models to analyse. Table 4 shows the result for three regression models (public administration, finance, and digital finance) of non-anonymous survey. Table 5 shows the result for three regression models (public administration, public health, and finance) for anonymous survey.

4. RESULTS

Table 4 summarizes the results of OLS regression for three sectors receiving the most responses for the non-anonymous survey (N = 66). They are public administration (response = 48%), finance (response = 47%), and digital finance (response = 36%) sectors. The r-squared value for those sectors is

accordingly 59.59%, 60.96%, and 46.46%. Independent variables in the model are the motivation for corruption, as shown by Table 3. The regressions show that the motivation to influence the decision-making process in the government is highly significant. The coefficient for this motivation is positive in all three observed sectors, accordingly public administration ($p = 0.000$), finance ($p = 0.001$), and digital finance ($p = 0.000$). This suggests that the exercise of power over the election or procurement process in the public sector in Indonesia is still dominant. Financial and political benefits from corruption are evident for the individuals who corrupt or are involved in the corruption. A study about the election in Indonesia shows that expenses for the political campaign during the regional election bring eminent burden for the running candidates. Money politics is among the ethics, administration, and criminal violations in the election in Indonesia (Sutarih & Agustina, 2019).

Table 4. Ordinary least-square (OLS) regressions of motivation for corruption for non-anonymous survey

Motivation for corruption	Public Administration	Finance	Digital Finance
	-0.3029776	-0.0784138	-1.711659
Taking decision	0.2332706	0.2289566	0.2584537
	0.199	0.733	0.510
	0.6331355	0.3692063	0.4679337
Influencing decision-making	0.1126411	0.110558	0.1248014
	0.000	0.001	0.000
	0.0880292	-0.0692062	0.1847053
Solving and expediting administration inquiries	0.1335202	0.1310509	0.1479345
	0.512	0.599	0.217
	0.2703644	0.4430077	0.318999
Receiving access to public services	0.134734	0.1322423	0.1492793
	0.050	0.001	0.037
	0.0523926	0.0071034	0.2687452
Gaining position or authority	0.3016593	0.2960805	0.3342253
	0.863	0.981	0.425
	0.0502336	0.4633783	0.425
Receiving public fund	0.1448225	0.1421442	0.160457
	0.730	0.002	0.554
	0.1445248	0.4969697	0.4006397
Avoiding legal consequences	0.1847123	0.1812963	0.2046531
	0.437	0.008	0.055
	-0.1364723	-0.099876	0.1204934
Other motivations	0.09586	0.0940872	0.1062086
	0.160	0.293	0.261
	0.1130798	-1.309192	-1.386926
Constant	0.8587996	0.8429173	0.9515124
	0.896	0.126	0.150
Observation	66	66	66
R-squared	0.5959	0.6096	0.4646
Adj. R-squared	0.5392	0.5548	0.3894

Note: Standard errors in second row, p-values in third row

Secondly, in the finance sector, individuals are most likely to be motivated to engage in corruption to receive public funds ($p = 0.002$) and avoid legal consequences ($p = 0.008$). All coefficients are positive. Economic motivation is primarily relevant when the individuals engage in corruption for receiving public funds. Amid the COVID-19 situation, economic relief package for easing the impact of the crisis on the society may attract the practice of corruption. Steingrüber et al. (2020) mention that individuals in power can be prevented from taking advantage of the crisis for their private benefits using an adequately designed monitoring procurement process and budget spending.

Table 5. Ordinary least-square (OLS) regressions of motivation for corruption for an anonymous survey

Motivation for corruption	Public Administration	Public Health	Finance
Taking decision	-0.1687848	0.4170977	-0.1230481
	0.2431438	0.2388147	0.2073229

	0.493	0.090	0.557
Influencing decision-making	0.1552387	-0.2728683	-0.2142752
	0.2663343	0.2615922	0.2270969
	0.564	0.305	0.352
	0.1588715	0.3111793	-.041993
Solving and expediting administration inquiries	0.1922505	0.1888275	0.1639274
	0.415	0.109	0.799
	0.4605438	-0.0908083	0.0101965
Receiving access to public services	0.1848663	0.1815747	0.1576311
	0.018	0.620	0.949
	0.0020442	0.5218708	1.079996
Gaining position or authority	0.6418333	0.6304055	0.5472759
	0.997	0.414	0.057
	0.0669302	0.2010123	0.2757746
Receiving public fund	0.2005716	0.1970005	0.1710226
	0.741	0.315	0.117
	-0.0108246	-0.1911113	-0.1404611
Avoiding legal consequences	0.2793442	0.2743705	0.2381901
	0.969	0.491	0.560
	-0.210981	0.0213721	-0.0288102
Other motivations	0.2352512	0.2310626	0.2005931
	0.377	0.927	0.887
	0.757943	0.0608837	0.2114305
Constant	1.079181	1.059966	0.9201918
	0.488	0.955	0.820
Observation	41	41	41
R-squared	0.3831	0.2425	0.2864
Adj. R-squared	0.2288	0.0532	0.1080

Note: Standard errors in second row, p-values in third row

Table 5 shows the ordinary least-square (OLS) regression results for three sectors receiving the most responses for an anonymous survey ($N = 41$). They are public administration (response = 49%), public health (response = 27%), and finance (response = 20%). The r-squared value for those sectors is accordingly 38.31%, 24.25%, and 28.64%. The expectation to have the anonymous survey is to reduce the respondent bias due to the feedback as the practice of corruption is deemed unethical and against social normal. Unfortunately, the argument that the results is less likely to be influenced by unbiased feedback cannot be verified in this study.

OLS regression results observe that the motivation to receiving access to public services is highly significant ($p = 0.018$) with a positive coefficient. Access to public services can be minimal amid the crisis, mainly when the interaction is limited because the administration is closed and public servants must work from home. Many shows that public services and administration encountering turbulent problems with the emergence of disruptive and uncertain events (Ansell, Sørensen, & Torfing, 2020; Di Mascio, Natalini, & Cacciatore, 2020; Klich, 2021; Zilincikova & Stofkova, 2021).

5. FINDINGS AND CONCLUSION

Corruption is a multi-faceted problem with a high degree of complexity. COVID-19 pandemic brings unpredictable and erratic events to the institutional organization in Indonesia. The response from a nationwide survey shows that 4% of the respondents engage in the practice of corruption during the pandemic in the non-anonymous survey. The response is slightly higher for the anonymous survey; 8% of the respondents engage in the practice of corruption. The lower rate of response is due to the so-called social desirability bias. Respondents encounter dilemmas when reporting unethical situations. In this case, it is the practice of corruption. The respondents do not dare to report due to the social and legal consequences that may arise in the future for them. Chung and Monroe (2003) study that the social desirability bias is higher for unethical actions, for example bad debts and bribes.

Despite the same questionnaires for both surveys, the findings are different between non-anonymous and anonymous surveys. The r-squared value is much better fitter for the non-anonymous survey. One possibility is that the number of observations for the non-anonymous survey ($N = 66$) is larger than the anonymous survey ($N = 41$). Even though so, the preservation of anonymity may open the opportunities for individuals to express themselves without having any anxiety being suppressed under normal circumstances (Kasakowskij et al., 2018). This study does not observe that anonymity does not lead to a much larger number of observations. The response rate for the anonymous survey is indeed larger than the non-anonymous survey, accordingly 8% and 4%. Unfortunately, the number of observations for modelling is the contrary. Another possibility is the instructions of the survey. This is the same finding that Mühlenfeld (2004) observes in his study. He concludes that different instructional methods may yield different results.

The main finding of this study is that the motivation to influence the decision making, receive access to the public services, receive the public fund and avoid legal consequences are predominant for the individuals to engage in corruption during the pandemics. The respondents say that they engage in corruption in public administration, finance, and the digital finance sector for the motivation of influencing the decision-making in the government. Indonesia has a structural problem with the deepening corruption involving corrupt officials, according to the study of Hellman (2017). Corruption practices were carried out in a secure manner because they relied on secrecy, collusion, and little trust so that illicit transactions did not leak out (Awaludin, 2016). Thus, it makes the practice of corruption tend to be structural behavior. According to Albanese and Artello (2018), the prevention method for corruption is more to change legal and structural changes to election processes to balance power distribution in the government and more vigorous enforcement of the rule of laws. We argue that the effect of corruption on structural behavior is most likely to be influenced by extrinsic motivation. However, it should be noted that in a country with a more robust collective culture like Indonesia, designing a public policy to overcome such extrinsic motivation can be more costly than intrinsic motivation. Individual factor plays a significant role in deciding corruptive behavior, and every individual has the motivation to display it. Two different studies by Kwon (2012) and Johann (2015) suggest that incentives for intrinsic motivation tend to be more effective than extrinsic motivation. Nevertheless, better institutional governance is imperative in light of preventing and eradicating corruption in Indonesia. However, one should realize that policy and process can still be corrupted.

Another important finding is that the motivation to receive public services is significantly observed in the public administration, finance, and digital finance sectors. In the middle of the COVID-19 pandemic, public services and administration face a high-turbulent environment that requires a fast and radical change so businesses and citizens can still receive the services without delay. Otherwise, individuals are triggered to corrupt to obtain access to public services. Such opportunistic behavior is more evident during the crisis. Studies in two different countries (Italy and Poland) show that digitalization can improve public services (Klich, 2021; Zilincikova & Stofkova, 2021). To solve bureaucracy's compartmentalized and siloed hierarchy, Indonesia needs to accelerate its administrative reform by digitalizing public services.

Studying corruption is an exciting field to explore due to its entangled relationship between social, political, economic, and cultural aspects. Due to the lower response rate, future studies in behavioural social science should aim to have 20-30% of response rate to represent the larger population. In term of the research topics, the studies can include more grounding and comprehensive experiments on how the implementation of public policy in Indonesia can motivate people not to engage in corruption. The question of whether digitalization can eradicate corruption remains a thought-provoking avenue. Addo and Senyo (2020) suggest that digitalization in Ghana is not adequate yet to eliminate corruption. Incorporating insights from behaviour economics and psychology can bring a better understanding of corruption in Indonesia. However, it is worth noting that isolating behavioural factors in the controlled environment is required to shed new light on this topic (Muramatsu & Bianchi, 2021). For example, a study finds that prosocial incentive to promote intrinsic motivation among the workers is less effective if conditional (Cassar & Meier, 2018).

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Evaluation of the Implementation of Good Public Governance in Local Church (Case Study on Church X)

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ABSTRACT

This research was conducted to evaluate the implementation of good governance in church organizations, at local level namely Church X. Based on its characteristics, the church is included in public sector, which seek profit is a supporting factor to realize quality services as its ultimate goal. The number of congregations tends to decrease is a fact, one of main factors is weakness of leadership. Good governance is needed in order to get continuous support from the congregation. The sustainability of the church organization will continue if it is well maintained, so that quality services can be achieved. The research of implementation of good governance in Church X uses the principles of good public governance as indicators. There are five principle components in good public governance consist of democratic, transparency, accountability, culture of law and fairness and equality. This research uses a qualitative approach with case study method. The result of this research is the church leaders generally been applied the principles of good public governance. Increasing the implementation of good governance in some aspects are needed to get continuing support from the congregation. It's necessary also the awareness of the congregation fulfilling its rights and responsibilities accordance with church guidelines.

Keywords: good governance; good public governance; local church; principle component; sustainability

1. INTRODUCTION

The implementation of good governance is believed to contribute positively to people's welfare, business climate, competitiveness, and effective against irregularities, corruption and bribery practices. This is supported by various studies, both at local and abroad, that the implementation of good governance can improve the performance and value of the organization, which has an impact on sustainable business continuity. Good governance has a broad meaning, but the concept is based on the process of achieving a decision and its implementation can be properly accounted. The implementation of good governance is not only aimed at the private sector but also the public sector.

In Indonesia, the issue of governance in the public sector has received attention since the mid-decade of 2008. The Indonesian National Committee on Governance Policy (KNKG) then issued the General Guidelines for Good Public Governance to further encourage the effectiveness of state administration aimed at the welfare of the people based on the principles of democracy, transparency, accountability, culture of law as well as fairness and equality.

Church is included in the public sector organization, whose main goal is not to seek profit, but to serve God through act of service to the congregation. Based on this, the church needs to implement good public governance (GPG), so that its credibility can be accounted and sustainable support can continue. The sustainability of the church organization will continue if it is well maintained, so that quality services can be achieved.

The decreased in the congregation, especially the youth, who no longer go to church has become a fact, according to David Kinnaman, Chairman of the Barna Group which is an ecclesiastical research institution in the United States. In his book, You Lost Me: Why Young Christians are Leaving Church and Rethinking Faith, published in 2011, states that nearly 60% of young people who used to be active in the church then stop attending church. In Indonesia, a similar survey was also conducted by the Bilangan Research Center, which is an organization that provides reference data on Christian spirituality in Indonesia. The survey results show that the percentage of young adult who do not worship regularly increases consistently with age groups, namely from the youngest age range to the adult age range. Then the results of a survey of teenagers who are regularly in going to church can be said, 1 in 3 teenagers has the potential to no longer go to church regularly. One of the biggest reasons they stop coming to church is feeling bad church leadership. The leadership meaning is that there is no big vision that challenges, is not involved in service responsibilities and does not understand the mindset of young people because it is old-fashioned and authoritarian. Church X which is the subject of this research is a local organization which influenced by Javanese cultural values. Church X facing the struggles and challenges in church life. One of the criticisms was from some of congregations themselves that the church was less likely to grow. Several indicators can be look at from the following points from a quantitative and qualitative perspective. The study shows, from the quantitative, in the period from 2017 to 2020 the number of congregations who are the members of Church X has decreased. The number of the congregation's attendance to Sunday services in the last 2 years has tended to decrease to an average of only 60% of the total members of Church X. Then from the qualitative perspective, the congregations are less enthusiastic to be involved in the church's activities. Both these situations have caused the regeneration process has not been working optimally where some church ministries and supporting departments have double titles and/or responsibilities. Church X, whose main income comes from offerings and tithes of its member and often encounters difficulties with its limited human resources, needs to build good governance for obtained sustainability supports especially from its congregations. Londong (2019) in his research on churches stated that the failure of an organization to achieve goals optimally is not because of the lack of available funds or the management of the organization, but because of the lack of understanding of the importance of governance in the organization. Based on the description above, the formulation of the problem that becomes the research question is "How is the implementation of the principles of good public governance (democracy, transparency, accountability, culture of law and fairness and equality) in Church X". The purpose of the study was to evaluate the implementation of good governance in Church X by referring to the principle of good public governance, consist of democracy, transparency, accountability, legal culture, fairness and equality. This research contributes to improve the quality of service therefore the congregations can obtained optimal services. As for the academic, it can provide knowledge and information in general to parties who need studies related to good governance practices in local church.

2. LITERATUR REVIEW

2.1 Agency Theory

The agency theory describes a possible conflict in the relationship between agents and principals (Jensen and Meckling, 1976). In the perspective of agency theory, it is difficult to believe that the agent will fully act in the interests of the principal. Both parties, namely the principal and agent, each have a bargaining position in placing their position and role. In this regard, monitoring activities need to be carried out to reduce the potential for conflict. One of them is through financial performance which is reflected in the financial statements. The principal requires the auditor to verify the information submitted by the agent. On the other hand, for agents, verification is the agent's legitimacy for their performance in managing the principal's resources.

2.2 Stewardship theory

Stewardship theory emerged as an alternative to agency theory. The basic assumption used by this theory is contrary to agency theory. The fulfilment of this theory is supported by the principal's conscious attitude to protect agents by paying attention to their welfare. Agents are automatically motivated to carry out their functions responsibly and so that supervisory actions from the principal can be minimized. Stewardship theory can be applied in the public sector, including the management of government and non-profit organizations. This is influenced by demands in the public sector that act as

stewards who aim to provide services to the principal (community). In some research results in both sectors, it is known that steward actions are more dominant than agents, because they are influenced by the services provided, management capacity, incentives and sanctions. So it is very relevant if research on stewardship theory is carried out in the public sector, including religious organizations.

2.3 Public Sector

The public sector has different characteristics from the private sector (business). In general, the public sector is understood as a sector that is oriented to the public interest, namely the fulfilment of public services and rights. While profit is a supporting factor to be able to meet the public interest as the ultimate goal.

Furthermore, the characteristics of public sector organizations according to Bastian (2010) are shown in Table 2.1. following:

Table 2.1. Characteristics of public sector organizations

Purpose	Welfare of the community gradually, both in basic needs and other needs (physical and spiritual)
Activity	Public services such as education, health, security, law, transportation and food supply
Sources	Public funds, in the form of taxes and levies, state company profits, government loans and other income that are legal and do not conflict with the laws and regulations
Accountability	Responsible to the community through representatives in state administration institutions (executive, judicial and legislative), while in foundations and NGOs, namely the supervisory board
Organizational Culture	Bureaucratic, formal and tiered
Budgeting	The planning is carried out with the community. Public budget reductions are published for public criticism and discussion. Then it is ratified, among others, through representative institutions of state administrators, councils, management boards of foundations or NGOs
Stakeholder	Can be detailed as Indonesian people, employees, investors, creditors, international institutions including international donor agencies

2.4 Good Public Governance

The initial form of the GPG principles was in line with the development of new public management which began to be applied in the implementation of public sector organizations in the early 1980s. This is because the idea of good governance is the same as new public management, which applying management values to the public sector so that the goal of establishing a public sector organization is achieved. Heyer (2011) stated that what is meant by new public management are actions aimed at improving the efficiency and effectiveness of public services and public service organizations, which prioritize accountability and improvement of public services.

2.5 Good Public Governance in the Churches

Based on the above criteria, the church belongs to the public sector. For the purpose of this research, the Researcher modified the principles of the General Guidelines for GPG issued by the KNKG with customizing to the church environment which was the object of this research. The researcher uses references from the principles for public sector organizations published by IFAC together with CIPFA in the International Framework: Good Governance in The Public Sector (IFAC, 2014), the OECD also publishes The Recommendation on Public Service Leadership and Capability (OECD, 2019). Researcher also using additional references from research on the application of good governance principles to churches. The following are the GPG principles used for this research, shown in Table 2.2.:

Table 2.2. Customizing of Principles of Good Public Governance

Principle of GPG	Description
Democracy	The principle of democracy contains three main elements, namely participation, freedom to express views and the realization of the public interest of the congregation. The participatory element is carried out by involving the congregation and acknowledging differences of opinion and being open to criticism and suggestions regarding church management. Then the element of embodiment of the public interest is carried out by prioritizing programs that are the needs of the congregation.
Transparency	The principle of transparency contains elements of disclosure and provision of adequate and easily accessible information for the congregation. It is intended that the supervision of church management is carried out objectively. So that easy access to information and related documents is needed.
Accountability	The principle of accountability contains elements of clarity of function and being able to account for it. Implementation of accountability requires church administrators to have a clear structure of main tasks and functions. Regulations and policies serve as guidelines in carrying out assignments to avoid abuse of authority.
Culture of Law	Culture of law contains elements of obedience to the rules and guidelines in the church. The stipulation of regulations and guidelines is carried out on the basis of the public interest and is carried out consistently. Church administrators need to build a sustainable legal culture at every stage, starting from the design, establishment, implementation and accountability. The church does not enforce the implementation of church law by making it state law, such as cracking down on people who violate church law.
Fairness and Equity	The principle of fairness and equality implies that in the ministry by church leaders applying elements of justice and honesty must be considered. Equal treatment of the entire congregation will be able to realize a fair and responsible quality of service. It also makes church leaders and congregations aware of obeying the agreed rules and guidelines to avoid conflicts of interest.

3. RESEARCH METHOD

3.1 Research Approach

This research was conducted to obtain a complete and in-depth picture of the implementation of good governance in Church X, hence the approach that was used is a case study. The case study approach is used as an intensive and systematic study, to answer the manageable research questions, in much deeper from a phenomenon at the level of individuals, institutions, as well as complex organizations. The analytical technique used in this research is descriptive qualitative analysis through interpreting, describing and then concluding data related to the object of research. In this research, data were collected through interviews, observation and documentation study.

The list of interviewees is shown in Table 3.1. following:

Table 3.1. Detail of Interview

No	Respondent	Church Title	Steps
1	Respondent 1	Head of Division	1. Convey the intent and agree on the interview schedule 2. Submit a list of interviews 3. Conduct interviews
2	Respondent 2	Secretary	
3	Respondent 3	Treasury	
4	Respondent 4	Congregation	
5	Respondent 5	Congregation	

Observations were made by attending several activities held by Church X, observing the workings of the member of church leaders and its employees, and visiting the offices of Church X. Documentation studies of various relevant documents were obtained from the member of church leaders at Church X, internal bulletin, and the website of Church X. In this study, the findings of the data obtained from the results of interviews, observations and documentation studies in the field, then tested with a predetermined theoretical framework. The following shown in Table 3.2. is analytical tools, analytical methods and results.

Table 3.2. Analytical Tools, Analytical Methods and Results

No	Step	Analytical Tools	Analytical Methods	Results
1	Generally analysis	General review	<ul style="list-style-type: none"> • Study the vision and mission statements of Church • Identify through observation to the X Church environment • Attend the activities held by Church X 	Profile of Church X
2	GPG analysis	<ul style="list-style-type: none"> • Compare with guidelines • Benchmarking 	Analysis of the implementation of the principles of democracy, transparency, accountability, culture of law, fairness and equality.	Adherence to principles

4. ANALYSIS AND DISCUSSION

4.1 Democracy

The church leaders has provided space for the congregation to express their concerns. It is not limited to formal forums, but during service activities, the church leaders tries to capture the concerns of the congregation. The characteristics of the congregation which are influenced by Javanese culture and culture affect the application of democratic principles. Congregations tend not to express their opinions directly in open forums, such as in Congregational Meetings. The church leaders tries to take a certain approach, such as how the congregation can convey its concerns without knowing its identity so that the democratic process can run in a balanced way between the church leaders and the congregation.

4.2 Transparency

The church leaders already has the media in reporting information regarding service activities at Church X. Apart from the printed version of the media, the church leaders also distributes it online via WhatsApp, website, and social media. With the pandemic conditions at the time of the research, the distribution was mostly through online media. The church leaders did not present detailed financial statements in the publication of financial information. but only in the form of an overview of income and expenditures as well as a brief explanation of the financial statements. For the display in internal bulletin to be even more minimal, it only shows income and expenditures from several activities and a recap of the receipt of the congregation's offerings.

4.3 Accountability

The Congregational Meeting is a form of accountability of the church leaders to the congregation regarding organizational management, but the accountability process is not running optimally because the attendance and participation rate of the congregation is low. The church leaders already has a guidance on its duties and functions, but the collegial nature causes the members of the church leaders not only to be responsible according to their positions. The church leaders internal meeting is a process of collegially controlling the performance of the church leaders.

The church leaders has a standard operating procedures (SOP) regarding the receipt and expenditure of funds. The other SOPs were in the process of being drafted at the time of the research. The church leaders also has an team of verification and evaluating to audit the financial statements prepared by the Treasurer, but the audit results have never been published.

4.4 Culture of Law

The implementation of the legal system will be more optimal if it is accompanied by awareness in its implementation not only for the church leaders, but also for the congregation. Church X already has guidelines and rules in managing the organization.

With a collective form of leadership, the decisions taken can be more rational. The obstacle that arises in decision making is the process that can run slowly because of the many opinions and considerations that are sometimes irrelevant.

4.5 Fairness and Equality

An organization is said to apply the principles of fairness and equality if it pays attention to the interests of all stakeholders in its environment. This principle also provides equal opportunities and rights in carrying out their activities. The church leaders in its service seeks to involve the congregation as well as the community and the environment. The church leaders in providing services or opportunities to serve does not look at gender, background and certain groups who can receive services. Regeneration is one of the things that the church leaders struggles with, in terms of the involvement of the congregation to become the church leaders and members of supporting departments. There is a different treatment for the dissemination of information regarding the search for replacement needs of the church leaders and members of supporting departments who are about to end their term of service.

5. CONCLUSION AND RECOMMENDATIONS

The GPG principles in church management have generally been applied by the church leader of Church X. The spirit to serve the congregation is shown by continuously trying to improve the quality of its services and actively involving the congregation in every church activity.

The following are suggestions of Researchers to improve the application of GPG principles in Church X:

- a. The church leaders needs to increase the understanding of the congregation about the importance of congregation participation and consider the influence of Javanese culture, so that the democratic process runs in balance between the church leaders and the congregation through a personal approach to the congregation.
- b. The church leaders also needs to publish the financial statements audited to provide confidence in the management of funds from the congregation.
- c. The church leaders can initiate by strengthening internal control in the management of the organization. The use of an independent auditor may be considered to validate the performance of the church leaders in managing the organization. So that offerings and fulfilling obligations from the congregation can be returned in the form of higher quality services.
- d. The implementation of the principle of culture of law will be more optimal if it is accompanied by awareness in its implementation not only for the church leaders, but also for the congregation. The existence of a match between what Church X offers and the needs of the congregation, can raise awareness of the congregation in church services as a form of fulfilling the rights and responsibilities of the congregation itself.
- e. Providing equal opportunities to be involved in being the administrators of Church X by distributing information evenly or being informed openly, regarding the need for replacement of administrators who will finish their term of office.

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Corporate Governance And Pandemic Disclosure: Evidence From Malaysia

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ABSTRACT

The coronavirus Covid-19 pandemic has been a clear and present danger spreading into earth rapidly since early 2020, raising a sad significant number of death cases. Multiple measures have been taken to contain the virus which have substantially drowning economic activities. Henceforth, corporate disclosure responsibilities are now being demanded even more than ever. During this high uncertainty period, it is vital for the companies to proactively communicate their responds on the crisis to their wider stakeholders. The objective of this study is to look into the extant of communicating disclosure to the stakeholder on action taken by the companies in combating the pandemic. An examination done to the top 100 companies listed in Bursa Malaysia according to their market capitalisation for year ended 2020, using secondary data published on the web and online reporting on action and initiatives taken to respond on the pandemic. The findings show that, there are positive relationship between Corporate Governance (Board Female Directors and Education level) and reporting extant in communicating disclosures to the stakeholders.

Keywords: Corporate Governance, Pandemic Disclosure, Covid-19

1. INTRODUCTION

The coronavirus disease which started in 2019 (Covid-19) pandemic has been indisputably set off many instabilities in every aspect of our modern life. Business and societies have had to crumble with the pervasive changes of global health pandemic enforcements on its surroundings. Many corporations have shift to safe mode and restructure to ensure the interests of stakeholders have been put to in the best review. Within the wildfire, corporate disclosure and reporting has become a more priority alongside with profit maximisation (Kyriakogkonas et al., 2021). As a retort, the World Bank Corporation's IFC Guidelines of disclosure and transparency framework has been established to assist corporations in communicating their strategic pandemic responses. This framework promotes the issuance of standardised corporate reports and data which in essence provides stakeholders with the information they need to assess the company's resiliency, preparedness, and continued management of material environmental, social, and governance issues. The guidelines spread both during and after the crisis (IFC,2021). This study is motivated to the limited research of literatures conducted on the relationship between corporate governance characteristic and the extant of reporting as a rejoinder to the companies initiatives and actions in combating the pandemic issues. Herein, this research acts to examine the corporations' annual report, sustainability reports and websites of such reporting. The framework of this research is guided by the IFC's guidelines of disclosure and transparency issued in February 2021. There were three main elements commissioned during the investigations in relations to the disclosures, which includes; strategy, governance and performance. In this grave period of high uncertainty, it is important for corporations to proactively communicate how they are responding to the crisis to their investors and myriads of stakeholders including their employees, customers, and the communities in which they are operating. In extension, disclosing the mitigative action, initiative, changes in strategy,

governance and restructured performance need to be properly communicated. The remainder of the paper is organised as follows. The next Section 2 read previous literature on corporate governance and reporting. Section 3 describes the research methodology, and, evidences data and sample collected. Section 4 presents the empirical analysis and discussion on the findings, and Section 5 final provides the summary and conclusion of the study

2. LITERATURE REVIEW

The raging inferno of Covid-19 is one of the most impingement hailstone in our modern economic ecosystem. Even in its early stage, the effect to the market environment, governance and society is remarkably chaotic due to the uncertainty caused by the Covid-19 virus which forced governmental caution measures. The economic catastrophic meltdown from this pandemic is now being evaluated and can been seen clearly (Saleh F.A Khatib & Nour, 2021). Although it is early to estimate the accurate effect of the pandemic, the fundamental need to documented research on this area ought to be done. The impact of the pandemic has already been documented in many areas, such as in; supply chain (Sharma et al., 2020), corporate solvency (Mirza et al., 2020), demand-supply mismatch (Eroğlu, 2020), abnormal stock returns (Liu et al., 2020), cash holdings (Qin et al., 2020), leverage (Slater, 2020), technology readiness (Sharma et al., 2020), firm performance (Mirza et al., 2020; Qin et al., 2020; Shen et al., 2020) and corporate governance (Saleh F.A Khatib & Nour, 2021). However, the study on the corporate governance and pandemic disclosure has received limited attention.

2.1 Corporate Governance Mechanism

Previously, research on corporate governance and disclosure has been widely documented in the literatures. Many studies have examined the effect of corporate governance mechanisms, such as; board size, composition, independence and ownership structure, and also toward the level or quality of disclosures (e.g. environmental, climate change and sustainability). With the current pandemic state, issues concerning transparency and accountability have now becoming increasingly more important in the corporate world. Stakeholders, especially investors and capital fund providers, require assurance on financial security and stability to protect their interests. Therefore, corporate governance is in the limelight as one of the tools which to ensure the corporations' manner are well administered by the management team. Good corporate governance practices are as one of the best solutions or rather, the first line of defense that provisions to reduce or mitigate any given uncertainty and risks. There are a number of corporate governance mechanisms that are available to employ in ensuring that the stakeholders' interests are protected. Amongst the common mechanism are; the separation of the roles of CEO and Chairman of the board, imposing time limit to the CEO's contracts, composition of the boardroom through the appointment of minimum number of independent directors, as well as formation of board level committees such as audit, nomination and remuneration committees (Crowther & Seifi, 2011). Nevertheless, this research had identified three corporate governance mechanisms to focus. They were examined in the motive to understand their effects toward corporations' disclosure decisions on pandemic issues, namely; board size, CEO's educational background, and board gender diversity and ownership. The first named mechanism is the board size, being boards of directors who are the elected representatives of the stakeholders. They are responsible with monitoring the performance and activities of the top management in ensuring that they acted in the best interests of all stakeholders. An effective board has the ability to detect the problem of manager's ill opportunism, and proactively stop such unfavourable behaviours in order to preserve corporate performances. As the board is considered as driver for the firm to achieve sustainable competitive advantage, the board size is one of the major factors that can affect the corporation's corporate governance effectiveness (Amran et al., 2014a). However, empirical evidences from the previous literatures show mixed result on the effect of board size against corporations' disclosure and financial performance. The second mechanism is being the director's education background, the characteristics of a CEO such as the education background and tenure of service; have been found to positively impact on the willingness of a corporation to voluntarily disclose environmental information (Lewis et al., 2014). In a study by Lewis et al. (2014) where they examined corporations' responses to the CDP, it was found that corporations led by newly appointed CEOs and CEOs with Master of Business Administration ("MBA") degrees are more likely to respond to the environmental issues. It was also found that the quality of employee has direct positive relationship with the quality of disclosure that the corporation made, regardless of the mandatory or

voluntary nature of the disclosure (Call, Campbell, Dhaliwal and Moon Jr., 2017). The third focused mechanism, being board gender diversity. Fernandez-Feijoo (2012) found that boardroom with more female directors tends to disclose more Corporate Social Responsibility (CSR) information. The study also suggested that boards with three or more women are associated with a higher quality of CSR reporting, i.e. more information is disclosed including an assurance report that adds credibility to the disclosure. This is due, according to Fernandez-Feijoo (2012), with presence of at least 3 female members in the board, it mediates the effect of power distance in the boardroom (i.e. level of democratic or autocratic in the boardroom). In addition, the presence of female directors in the boardroom also mediates the production of stand-alone reports as well as moderates the masculinity and individualism on the CSR strategy disclosure. Hyun, Yang, Jung and Hong (2016) stated that one of the reasons why corporations with more female participation in the boardroom tend to do better in CSR is because they are more often empathetic and caring as compared to their opposite gender.

2.2 Pandemic Disclosure

Investors and stakeholders rely on corporate disclosure to make informed decision about the value of corporations they invested. By looking into the current scenario, the pandemic is now changing the operating environment of corporations everywhere. New risks and opportunities need to be assessed and addressed on how this will have an impact on the stakeholders. Corporations are obliged to disclose information about the new operating environment and any changes in their business model, strategic objectives and management of sustainability issues. Being the study's focussed matter which cover the three elements i.e. strategy, governance and performance. The Covid-19 pandemic provides a unique opportunity to examine disclosure practices of corporations relative to peers in real time about a somewhat unprecedented shock that impacted (David F. Larcker, 2020), particularly to publicly listed corporations in Malaysia. A research by (Tasios S., et al., 2021) looking into 40 corporate non-financial corporations listed in ASE, Greece in 2020 shows that the level of pandemic disclosure was significantly positively associated with corporation size, profitability and board size. This indicates that during the pandemic, larger companies, more profitable and with more board members, disclosed more information on their websites on the impact of the pandemic to their corporations. Another research done by Loughran, T. & MacDonald, B. (2020) shows that less than 21% of the 10-K listed corporations in United States disclose related reference to pandemic in their annual report and website. This findings are contradict with another research by Sawalqa F. (2020), which stated that, 100% of the corporations listed in Amman Stock Exchange (ASE) disclosed the impact of pandemic in their disclosure. Results also show that those corporations that were suspended completely and impacted badly during the Covid-19 pandemic provided risk disclosures in more details. Looking into the importance of both variables, i.e. corporate governance characteristics and the extent of pandemic disclosure in the current situation and the adoption with the previous literature, this research propose to look into:

- H1: There is an association between CEO Education level and Pandemic Disclosure*
- H2: There is an association between Board Gender Duality and Pandemic Disclosure*
- H3 : There is an association between Board Size and Pandemic Disclosure*

3. METHODOLOGY

In the pursuit to collect sample data concerning corporate governances, relevant information were extracted and obtained from the publicly available published annual report which are available in Bursa Malaysia website for the year ended 2020. All the information needed for the research is publicly available in the annual report. Within the same source of sample, i.e. the annual report is required to make avail the Board of Directors profile. In this section it provides details of the directors' experience and profile. As for the pandemic disclosure, data are collected using two approaches. The first approach uses indexes to measure the extent of the disclosure (Bekiaris et al., 2014; Waweru et al., 2019; etc.). The second approach utilises a coding system that takes the value 1 if a company uses Internet reporting, annual report, sustainability report and 0 otherwise (Basuoni & Mohamed, 2014; Dolinšek & Lutar-Skerbinjek, 2018; etc.). The data are collected from top 100 corporations listed in Bursa Malaysia by market capitalisation in 2020. There are two parts of analysis, by using the SPSS, which are the *descriptive* and the *demographic*. After, completion of the descriptive and demographic analysis, SEM approach using the PLS technique was applied to further test the whole model. PLS was used for each

of the hypothesis testing and examine the relationship between the entire variable to capture the relationship between pandemic disclosure.

4. FINDINGS

Figure 4.1 shows three (3) paths of tested hypotheses. Out of the three (3) tested paths, two (2) paths have significant relationships, with a t-value of more than 1.65 with a significance level of 5%.

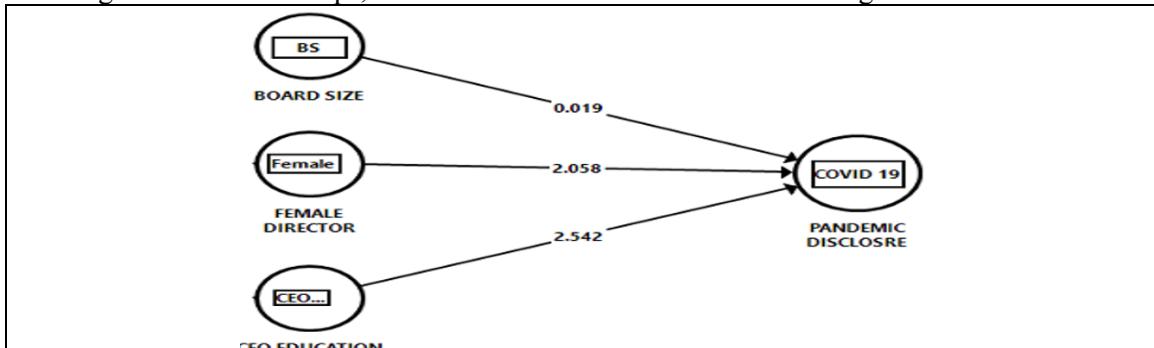


Figure 4.1 Path Coefficient – Corporate Governance and Pandemic Disclosure

The result shows that the education level of CEOs has a significant relationship with the pandemic disclosure, i.e. the higher the education level of the CEO (with Master's degree as the benchmark), the higher the extant of pandemic disclosure made by the public listed company, i.e. ($t= 2.542$). The second items that shows significant relationship is the between the percentage of female directors in the board composition of the public listed companies and pandemic disclosure. The result shows that the higher the ratio of the female director to board size have significant effect to the company's pandemic disclosure, which is reflected by the value of $t=2.058$. The third items which tested is the board size, shows a $t=0.019$, which shows insignificant relationship between the pandemic disclosure.

5. CONCLUSION AND DISCUSSION

This research used secondary data of top 100 public listed companies by market capitalisation published in 2020 as a sample to examine the relationship between corporate governance and pandemic disclosure. Out of three (3) components of corporate governance examined were board size, CEO's educational background, CEO's and board gender diversity, two (2) have shown positive relationship with the pandemic disclosure. In conclusion, it is found that adopting good corporate governance practices will positively lead to the corporation's be more vigilant on issues concerning such crisis which impacted the strategy, governance and performance of the company. The instant Covid-19 pandemic, which had prompted corporations to embark voluntarily in disclosing information related to their respond on the related issues that may affect the corporation's going concern, hence more comprehensive pandemic disclosure had being produced. The corporation's ability to be innovative and creative in developing such adaptive and mitigative action towards pandemic issues, will adds sterling credibility. In turn, leads to the better firm performance, which thus be beneficial to all the stakeholders. The adverse chaotic economic state created by the crisis of the Covid-19 pandemic have naturally emphasised the importance of corporate disclosures and the usefulness of the Online assortment advantage for the timely dissemination and availability of information (Tasios, S. et all. 2021) to the stakeholders. The investigation covers a period of one year, thus being the limitation for robust analyse. Future research to include multiple years may provide us further understanding of the subject matter.

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Analysis of Financial Transaction Examination Standards in Disclosure of Money Laundering: A Case Study at Indonesian Financial Intelligence Unit

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ABSTRACT

Money laundering is a financial crime that is increasingly occurring and is a serious problem faced by Indonesia. In preventing and eradicating money laundering, the Financial Intelligence Unit plays a central role by conducting investigative examinations of suspicious transaction reports. This study aims to evaluate the standard implementation of financial transaction examinations conducted by the Indonesian Financial Intelligence Unit. This research uses a qualitative methodology with a case study design that involves several methods of data collection and analysis including document analysis and interviews. The authors examining relevant documents regarding examinations and conducting semi structured interviews on five examiners. The results of this study indicate that there are several weaknesses in the examination standards and procedures. Through this study, it is expected that the Indonesian Financial Intelligence Unit will improve the standard operating procedure for the financial transaction examination and evaluate the supervision carried out on the implementation of the standard.

Keywords: Examination standards, financial intelligence unit, investigative audit, money laundering

1. INTRODUCTION

Money laundering has become a serious global problem that threatens the financial system and the global economy (Hendriyetti & Grewal, 2017; Jayasekara, 2020). UNODC, (2019) estimates that the amount of money laundered globally in one year is around 2-5 percent of global GDP or US\$ 800 billion to US\$ 2 trillion. The phenomenon of money laundering is increasingly prevalent in Indonesia. Based on the PPATK statistical bulletin, from 2015 to October 2020 the total number of court decisions related to money laundering was 367 decisions (PPATK, 2020). The number of these court decisions is increasing every year.

Money laundering is the act of changing the proceeds of crime as if it came from a legitimate source (Fauzi, Szulczyk, & Basyith, 2018; IMF/WorldBank, 2004). According to the United Nations (UN) 2000 Convention (UNODC, 2004), money laundering is the process of altering or transferring assets, knowing that the assets originate from the proceeds of crime, with the aim of concealing the source of the crime or assisting the perpetrators involved in committing the crime. Money laundering operations are getting more sophisticated and growing. Criminals and organized crime networks seek to hide the proceeds of their crimes by rapidly transferring assets between bank accounts, currencies, and different jurisdictions (Pavlidis, 2020).

The Financial Intelligence Unit (FIU) is a national institution that functions as a centre for receiving and conducting examination of suspicious financial transaction reports and other information relevant to money laundering and related predicate crimes, as well as for disseminating the results of the examinations to law enforcement or regulators (FATF, 2020). Based on the statistics data on the examination report, it is known that the utilization of the examination report of suspicious financial transactions conducted by the Indonesian FIU is still not optimal (PPATK, 2020). In the feedback from

law enforcement regarding the submitted examination report, the main reason the report was not followed up was the lack of supporting evidence and the connection of transactions with the criminal acts.

Considering the increasing prevalence of money laundering crimes that cause huge losses, as well as the difficulty of disclosing money laundering crimes by law enforcers, the Indonesian FIU as a central institution in the prevention and eradication of money laundering crimes must have high quality audits of financial transactions so that it can produce an examination report that has value added for law enforcement in detecting and uncovering money laundering crimes. Therefore, it is necessary to have an evaluation of the examination standards of financial transactions applied to carry out the duties and functions of the Indonesian FIU. This study is aimed to evaluate the financial transactions examination standards and provide a recommendation for improvement of identified weaknesses by conducting comparative analysis with best practices in investigative audits.

2. LITERATURE REVIEW

Financial transactions examination is a process of problem identification, analysis, and evaluation of suspicious financial transactions carried out independently, objectively, and professionally to assess suspected criminal acts (Republik Indonesia, 2010). The examination of suspicious financial transactions conducted by the FIU is a financial investigation aimed at finding indications of money laundering or related predicate crimes. The examination mainly uses investigative audit methods and techniques. Investigative audit is the process of searching, finding, collecting, analysing, and evaluating evidence systematically by competent and independent parties to reveal facts or actual events regarding indications of criminal acts of corruption and or other specific purposes in accordance with applicable regulations (BPKP, 2017). An investigative audit is a more specialized and in-depth audit, which leads to the disclosure of fraud (Tuanakotta, 2015).

The examinations process uses fraud audit methods to investigate suspected fraud, therefore this study uses Fraud Examiners Manual from ACFE as benchmark to evaluate the examination standards. Fraud Examiners Manual is a guideline used by fraud examiners in conducting fraud audit or investigations. When conducting a fraud examination, the fraud examiners should assume litigation will follow, act on predication, approach cases from two perspectives, move from general to specific, and use the fraud theory approach (ACFE, 2021).

According to the guideline, fraud examinations should begin when there is proper predication which is a sufficient basis and legitimate reason to take each step in an examination. Once it is determined that an allegation will be investigated, then begin the formal investigation. The steps in the formal investigations include planning the examination, collecting evidence, and writing the examination report. Planning the examinations include activities such as completing engagement letters, assembling investigation team, learning about the organizations at issue, and developing an investigation plan. Evidence collection includes obtaining testimonial evidence, digital evidence, and documentary evidence. The last step is writing the reports to communicate the results of the examinations to the responsible party.

3. METHODOLOGY

This study uses qualitative research methods and utilises a case study approach. The case study approach used to describe the state of the research object in one unit of analysis based on existing facts and describe as carefully as possible the existing data into discourse and conclusions in logical thinking (Yin, 2014). The case study was conducted at the Indonesian FIU. The Indonesian FIU is an independent institution that has the task of preventing and eradicating money laundering. In carrying out its duties and functions, the Indonesian FIU receives financial transaction reports from the Reporting Party and receives data/information from another FIU and other government agencies. The FIU then perform analysis and examination of the financial transaction reports and submit the results of the analysis and examination to law enforcement agencies.

This study used several methods of data collection, such as document analysis and interviews. Document analysis is carried out by identifying and collecting relevant documents from the unit analysis such as examination regulation, standard operating procedures, technical guidelines, and other related documents to gain an understanding of the processes and the rights and authorities of examiners in carrying out financial transaction examination.

Interviews were conducted using a semi-structured approach, the researcher prepared several questions before the interview while also remaining open to the possibility of developing further questions relevant to the responses of the interviewees (Bryman, 2012). Semi-structured interviews were conducted with 5 (five) respondents. The interviewees were examiners from different hierarchical levels in the examination team: supervisor, team leader, and team member. Details of the interviewees are shown in Table 1. The interviews questions are about the implementation of the examination, the examiner's perception of the applicable procedures, and the obstacles experienced in conducting the examination, as well as the conformity of standards with best practices in the implementation of the examination.

Table 1. List of Interviewees.

Interviewees	Position	Working Experience
Interviewees 1	Supervisor	8 years
Interviewees 2	Team Leader	13 years
Interviewees 3	Team Leader	10 years
Interviewees 4	Team Leader	8 years
Interviewees 5	Team Member	5 years

Variations in data collection methods and evidence serve to strengthen the validity of the results of the analysis and obtain an adequate understanding of the interpretations obtained during data evaluation. To ensure that the interpretation of the results of the document analysis is accurate, it is necessary to perceive from another point of view the information obtained. Triangulation is done by using interviews with parties related to the implementation of the examination in order to verify meaning and relevancy of data analysis that has been carried out.

4. RESULTS AND DISCUSSION

Based on the data collection through document analysis and interviews with respondents, it is known that the examination of financial transactions at the Indonesian FIU is carried out by referring to the regulatory documents on examination procedures and standard operating procedures. The examination process carried out by the Indonesian FIU can be divided into 4 (four) stages, namely pre-examination, planning, implementation, and preparation and dissemination of examination reports.

4.1 Pre-Examination Phase

Before the inspection is carried out, an initial review of the report or request for an examination is carried out first. Not all reports or requests for examination will be followed up with an examination. The report or request must first be evaluated or reviewed whether there is sufficient information to be followed up with an examination. The adequacy of a report or request for an examination for follow-up is measured based on several criteria such as information regarding the alleged parties involved, what crime or fraud occurred, the period or time of the crime, the location of the crime, the motivation or reason for the crime, how the crime was committed, and the estimated value of losses incurred. The examination of financial transactions can only be started if there is a strong predication or basis for carrying out the examination. If there is a predication, the Examiner can develop a hypothesis of fraud or crime that occurred and develop an examination plan. This stage corresponds to the initial stages in the Fraud Examiners Manual ACFE, (2021), the initial stage of an investigation or examination of fraud is to conduct an initial assessment to collect information related to indications of reported fraud and assess whether the information is adequate to conduct an investigation.

4.2 Planning Phase

The planning of the examination is carried out by determining the scope and objectives of the examination, proposing an examination plan detailing the period, place, method, object, audit team, budget and cost plan, examination program, as well as notification of the examination plan to the reporting party/financial service provider. In the preparation of the examination plan, there is a gap where there is no examination program that details the roles and duties of each member of the examination team. The examination program that is prepared only contains general audit procedures that will be carried out without any division of roles and tasks from team members. The determination of the roles and duties of the team members will be given when the examination is carried out based on the initial data/information obtained during the implementation stage.

Determination of the roles and tasks of each team member at the time of planning is carried out so that each member of the examination team understands and knows what to do when examination activities begin (ACFE, 2021). For efficiency and effectiveness of coordination, all team members must understand their roles and responsibilities and how they work to meet the examination objectives. Examination planning should also involve every member of the audit team. The absence of determining the roles and duties of each team member causes the examination to be ineffective and not completed on time. This is because the initial planning was only prepared by the team leader and the team formation was carried out in a short time so that there was not enough time to detail the examination program which contained the division of tasks from each member.

4.3 Implementation Phase

In this phase, the examination is conducted by collecting relevant and sufficient evidence. The evidence that has been collected must be properly organized from the start of the examination and it must be continually rearranged as the case progresses. The purpose of organizing evidence is to make it easier for examiners to analyse and evaluate relevant evidence in proving a case. Examiners can more easily relate facts based on relevant supporting evidence. In the applicable examination standards, documentation of the evidence collected must be kept safe and confidential. However, there are no arrangements regarding the organization of evidence such as the creation of a database or register of data/information that has been collected during the examination. Based on the interview, the collected evidence is stored in a separate file according to the case, but there is no register or master file containing a list of evidence that has been collected. This raises several problems such as repeated requests for data to the reporting party and difficulties in finding the evidence when needed. Repeated requests make the examination ineffective, causing the completion of the examination not being timely.

The implementation of the examination also includes the preparation of working papers that contain every procedure carried out in the examination. Audit working papers are the primary frame of reference used by supervisory personnel to review the audits. The preparation of working papers has been regulated in the applicable examination standards in which every activity during an examination must be documented in the working paper. However, the working paper documents are not reviewed by the director or the supervisor. The format of the working papers does not contain information about who did the work, when it was done, who reviewed it and the date of the review. The examination manager and supervisor only conduct a review of the interim audit report or at the time of exposure and preparation of the audit report. A tiered review of examination working papers is very important to ensure quality and that the examination has been carried out in accordance with applicable procedures.

4.4 Preparation and Dissemination of Examination Reports

The preparation of the examination report is carried out after the process of collecting data and information on financial transactions has been completed and there were sufficient and relevant evidence obtained. The examination report must contain four characteristics: accuracy, clarity, impartiality and relevance, and timeliness. The examination report then communicated to the designated parties or law enforcers. Communicating the results of the examination is necessary to ensure the adequacy of all elements of the indication of a criminal act and so that designated parties can immediately follow up and determine the appropriate action to deal with the fraud that occurred.

After the report is submitted to the relevant parties, examiners must monitor the follow up action that the law enforcers take. Unfortunately, there is no detailed procedure regarding follow-up monitoring activities in the Indonesian FIU's examination standard. The monitoring carried out is passive, where the examiner only monitors the cases through media and waits a request for coordination from law enforcement agencies. Follow-up monitoring should be carried out periodically by requesting confirmation of the status and progress of the handling of the examination report that has been submitted. The follow-up monitoring procedure must also ask for an adequate explanation to law enforcement on the reasons the report has not been followed up.

5. CONCLUSION

This study aims to evaluate the standard implementation of financial transaction examinations carried out by the Indonesian FIU. Based on the results of the analysis and discussion in the previous section, it can be concluded that the process of financial transactions examination has accommodated the stages in the investigative audit in accordance with the best practice, but there are still some gaps that have not been accommodated in procedures owned by the Indonesian FIU. Some of the identified gaps are: 1) the planning of the examination is not accompanied by the determination of the roles and duties of each team member; 2) documentation of evidence collected is not sufficient; 3) supervision of audit working paper documents is not sufficient; and 4) there is no systematic follow-up monitoring mechanism. For the identified gaps, to overcome weaknesses in the examination standards and procedures, it is expected that the FIU will improve the standard operating procedure for the financial transaction examination and evaluate the supervision carried out on the implementation of the standard.

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Lively Accounting: Combining Flashcards and Augmented Reality in Accounting Education

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ABSTRACT

The substantial changes and developments in technologies call for accounting educators to continuously create new teaching and learning methods. Students on the other hand facing the challenge to not just understanding the technical know-how, but also the concepts and theories of the accounting processes. The aim of this study is to record and provide preliminary evidence of the usefulness and acceptance of Lively Accounting, an interactive learning tool that combines flashcards with augmented reality. As past exams results show that students have difficulties in memorizing and understanding accounting terms, concepts and theories, Lively Accounting creates a unique experience where users can learn offline and online. A survey and an explanatory video about Lively accounting were distributed to students. The results show that the key features of lively accounting do meet the needs and preferences of students. More importantly, most students will want to use the tool once it is made available to the public. However, this study also found that the implementation of new tool will face many challenges and barriers. This study concludes that there is a need for a modern accounting learning tool and Lively Accounting is one of them.

Keywords: Accounting education; lively accounting; teaching and learning; flash cards; augmented reality

1. INTRODUCTION

Teaching accounting subjects has always been a challenging task for educators. Other than making sure that the students get the numbers correct, educators need to make sure that the concepts, theories and justifications are well understood by the students. Rebele and St. Pierre's (2019) suggested that emphasis on technical skills is very important and Apostolou, Dorminey and Hassel (2020) further added that the development of soft skills is also equally important. These arguments were supported by Fogarty (2019) and therefore suggested that educators are facing a tricky task of balancing the growth of students' technical and soft skills.

Innovations and advancement in teaching and learning methods and materials in accounting have become very important to ensure students get the highest quality learning experience. Wang, Tsilgiris, and Hartley (2019) adopts the A3 planner, a project management technique used by Toyota, to be used by students in managing their projects. They have found that the majority of the students have agreed that the method had improved the management of assignments and projects. More interestingly, Silva, Rodrigues, and Leal (2019) found that games can significantly improve the learning process. However, Calabor, Mora, and Moya (2019) claims that many issues need to be considered as implementing something new in education has many barriers such as time constraints and incentives. Other creative and innovative learning methods include choice-based learning (Opdecam & Everaert, 2019), collaborative learning (Tan, 2019), experiential education (Butler, Church, & Spencer, 2019) and

storytelling (Freeman & Burkette, 2019). These efforts in developing a better learning environment shows that the opportunity to create, innovate and improve the approaches in teaching and learning process is always present.

This study focuses on a new creative learning tool that combines short notes on flashcards with augmented reality called Lively Accounting. The aim of this tool is to provide versatile and portable short notes for accounting students. The flash cards can be scanned using the Zappar App to make the cards come to life and play videos that are linked with YouTube to explain the related concepts. The main feature of Lively Accounting is that it can be used online and offline as well as reduce the time students need to prepare short notes. There are many grounds on why this tool was created. One of the main reasons is the analysis of past exam results shows that students were able to score calculation questions but a worrying 72% failed to get at least 50 marks for theoretical questions.

The objective of this study is to examine the features of Lively Accounting (Table 1) by understanding students' favoured learning materials. This study also serves as preliminary evidence regarding the development and the usability of Lively Accounting from the users' point of view. Furthermore, this study aims to document comments and reactions by potential users of the tool.

Table 1: Features of Lively Accounting

Features	Description	
i.Versatility	Can be used offline and online; mobile	
. Understandability	Understandability	Use short notes; designed to look like presentation slides; use simple terms; use short explanation videos to explain the concepts and theories; focus more on helping users to understand rather than memorize.
. Use technology	AR	Users can scan the flashcards using Zappar App to watch and listen to the explanation of the related terms.

2. Literature Review

With the rise in the usage of mobile devices and the internet in the past decade, the use of augmented reality (AR) is poised to be one of the important tools in education. The use of AR in education is widely documented especially in medical schools (see Kavoor & Gupta, 2021; Moro, Smith & Finch, 2021). Gandedkar, Wong and Darendeliler (2021) found that the use of AR in orthodontic teaching and research had enhanced the ability of students and educators in assimilating and imparting knowledge. Other researchers have also documented positive results relating to the use of AR in education. Radu (2012) claimed that AR will increase context understanding, favours long-term knowledge retention and increases learning motivation. Wu, Lee, Chang, and Liang (2013) added to the benefits of AR by saying that it empowers, ubiquitous, collaborative and situated learning, visualizing the invisible and bridging formal and informal learning. A more recent study by Akçayır and Akçayır (2017) also mentions the learning gains by using AR approaches. However, they also mentioned about the difficulties of the AR technology to be used by students. This supports Calabor et al. (2019) assertions that many issues must be considered in implementing AR in teaching such as time constraints and incentives.

Technological advancements drove the need for educators to shift from the traditional in class approach to a more sophisticated modern style of teaching. As documented by McCarthy, Kusaila, and Grasso (2019), online and hybrid delivery modes were significantly and positively associated with exam averages in teaching higher level accounting subjects. They further reported that students can perform at the same level even when exams are taken online. Kotb, Abdel-Kader, Allam, Halabi, and Franklin (2019) explored technology development in accounting curriculum in Britain and the Republic of Ireland and concluded that information technology elements should be implemented across the curriculum. The growing popularity of YouTube videos have allowed educators to post teaching videos

for online students viewing have shown positive effect (D'Aquila, Wang, & Mattia ,2019). Coetzee, Schmulian, and Coetze (2018) analysis of accounting undergraduates from South Africa found that students agree that academic performance will improve if they regularly attend online tutorials.

3. RESEARCH METHODOLOGY

Questionnaires were distributed to the accounting students in Universiti Teknologi MARA Perak Branch, Tapah Campus. The survey was designed to capture students' responses as per the research objectives identified earlier. A YouTube video showing the features and attributes of the Lively Accounting prototype was posted online to capture reactions and comments.

4. RESULTS AND DISCUSSION

A total of 362 respondents have participated in the survey. The respondents consist of students from the first year (50%) and second year students (49%) and others (1%). Almost all students (99.4%) have readily internet access. It is also important to note that 51.4% of the students are from B40 families, 26% are from M40 families and 12% are from T20 families. 9.9% of the respondents came from families with a household income of less than RM1,000.

Concerning the versatility of Lively Accounting, it was found that students do prefer offline materials over online materials. As presented in Table 4.1, 77.3% students favour offline materials and 66% of their learning materials to be in hardcopy. It was also documented that the students use both online materials and offline materials to study. This shows that although they prefer hardcopies of learning materials, online resources are equally important to complement the printed materials.

Table 4.1: Response on versatility

Features	Yes	Percentage	No	Percentage
Prefers hardcopy over softcopy	239	66%	123	34%
Prefers offline materials	280	77.3%	82	22.7%
Uses offline materials more often	197	54.4%	165	45.6%

N = 362

Table 4.2 records students' preference on the design and understandability of Lively Accounting. The results show that the features of Lively Accounting meet the students' needs. By proving short notes designed to resemble teaching presentation slides, it meets 89.5% of students' preferred learning material. The results also show that 50% of the students prepare their own short notes. Lively Accounting will reduce the time needed in preparing those notes. As per the results documented, the majority of the students (98.1%) uses explanation videos and prefer it to be in short duration (91.2%). Lively Accounting also links the flashcards with online videos which most students (74%) use in their learning activities. The results are consistent with Taylor, Marrone, Tayar, and Mueller (2018) that digital materials will enhance students' engagement and conceptual understanding. The inclusion of videos will positively affect students learning effectiveness as suggested by D'Aquila et al. (2019)

Table 4.2: Response on understandability and use of Lively Accounting

Features	Agree	Percentage	Neutral or disagree	Percentage
Uses presentation slides to study	324	89.5%	38	10.5%
Make own short notes	182	50.3%	180	49.7%
Use video materials to study	355	98.1%	7	1.9%
Prefers short explanation videos	330	91.2%	32	8.8%
Stream online to watch videos	268	74%	94	26%
Use Lively Accounting	289	79.8%	73	20.2%

N = 362

The most important finding is that 79.8% of the students will use Lively Accounting. Some of the probable reasons for not achieving 100% ready use rate is that students realise that this tool comes with a price and the result of the study shows that on average students are only willing to pay up to RM15

for the tool. This finding further supports Akçayir and Akçayir (2017) and Calabor et al. (2019) findings that implementing a new tool in education will face some challenges and barriers.

The promotional video of Lively Accounting concept and prototype in YouTube received 1,809 views and was liked by 804 viewers. 39 positive comments were received highlighting the creative and innovative features of Lively Accounting as an accounting learning tool. Some viewers highlighted that they agree that students tend to focus more on calculations resulting in weak understanding of theoretical concepts. One viewer mentioned that the tool will engage students to learn more about accounting. Most of the viewers agree that the concept of using AR in teaching accounting is innovative and will benefit the users.

5. CONCLUSIONS

The challenges and the need of modern teaching tools is well documented by previous researchers. Educators may use technological advancements in innovating teaching methods and creating new learning materials. The results of this study documents that Lively Accounting will be a useful tool as it meets students' preference of learning materials and provides features of a modern accounting education tool. However, the result may only serve as a preliminary understanding of how Lively Accounting would fit in accounting education as the survey was done based on the prototype and not the full version. More research must be done to better understand the product and make better conclusions on its usefulness. The use of Technology Acceptance Model in future research would give better insight and interpretation regarding the application of Lively Accounting.

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Factors Influencing Students' Satisfaction and Academic Performance in Open and Distance Learning (ODL)

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ABSTRACT

The worldwide education systems are crippled, inevitably leading to the near-total closure of school establishments, early childhood educations, colleges as well as universities due to the COVID-19 pandemic. As of May 2021, approximately 1.2 billion students from all over the world were affected. As a result, education essentials dramatically adjust with the distinctive rise of e-learning tools, wherein teaching is now undertaken remotely on digital platforms. Realizing the grave current situation and the importance of education, this study aims to identify the main factors affecting student's satisfaction and their academic performance in an open and distance learning (ODL) environment. The data were collected from 279 respondents vide online surveys, which comprises of accounting students in UiTM Perak branch, Tapah campus. The analysis of the findings shows that the quality of instructors is the main factor that influenced student satisfaction in ODL and in terms of academic performance, students performed well during ODL.

Keywords: Student satisfaction, quality of instructors, performance, COVID-19, education

1. INTRODUCTION

COVID-19 pandemic has dramatically changed the education world. Starting from the initial outbreak of COVID-19 malady in December 2019 in Wuhan, China; in early 2020 it had rapidly appeared in other parts of the world (Sahu, 2020). Due to the nature of the transmission capability of the disease, the World Health Organization (WHO) declared the COVID-19 plague a public health emergency of international concern (Spina, Marrazzo, Migliari, Stucchi, Sforza & Fumagalli, 2020). In the same vein, 107 countries had implemented national school closures in response to the COVID-19 pandemic (Viner, Russell, Croker, Packer, Ward, Stansfield, Mytton, Bonnel & Booy, 2020). Worldwide, universities have either cancelled all campus events including conferences, workshops, sports, and other programs and have rapidly moved to change many courses and programs from physical to online delivery mode (Gewin, 2020). In the effort to break the malaise transmission and ease the now over-burden of the health system, the Malaysian Government has taken drastic action for school closures as part of the physical distancing policy. Most higher education institutions (HEIs) are unprepared, while other universities that are quick and proactive in response, have their contingency online learning tools at hand. Nevertheless, the online teaching mode is new and requires advance upskill, in some cases, reskill requirements by the academic sector. Prior to COVID-19, there was already high growth and adoption of online education technology. In response to the significant demand, many online learning platforms were forced to move rapidly without proper training, insufficient bandwidth conditions and little hardware-software preparations, hence resulting in poor user experience which is unconducive to sustained quality (Cathy, 2020). Both the students and educators now need to adapt to the new norm of the education environment. Therefore, this study conducts an examination to understand the factors affecting the students and how they perceived these changes, which are reflected through their satisfaction level and finally translate into their academic performance.

This paper is structured as follows: Section 2 provides previous literature on factors that influenced student satisfaction and academic performance during open and distance learning (ODL). Section 3 describes the research methodology and includes the data of participants, materials, and data analysis. Section 4 represents the descriptive analysis and discussion on findings, and lastly section 5 provides a summary and conclusion of the study.

2. LITERATURE REVIEW

2.1 Students' satisfaction factors in ODL

Student satisfaction is an essential element to enhance the learning process, especially in the ODL mode. During ODL, classes are conducted via a blend of asynchronous (without real-time interaction) and synchronous (real-time interaction) sessions. Literally, factors affecting students' satisfaction in ODL vary in the past studies. A study was done by Mason and Welle (2000) regarding students' satisfaction towards the web course revealed that the support of their tutors, their devotion to the course (time, patience and motivation) as well as the level to which the course design fit the students' expectations and learning style are the key factors for students' satisfaction. It is not surprising for a course without face-to-face tutorials, trying to teach IT skills and expecting students to work collaboratively, is going to rely heavily on the quality of its tutors for the satisfaction and success of its students (Mason & Welle, 2000).

According to Lee (2014), the student satisfaction level is closely associated with two factors; human factors (course instructor's knowledge of materials) and design factors (course structures and technical aspects). The study found that instructors' and content experts' availability was a key component of student effective learning in online Math methods courses. In terms of course structure, students highlighted clear assignment rubrics and guidelines as factors for online learning satisfaction. As not all students are experts in using technology, a user-friendly system is believed to be another important factor in their satisfaction level.

These above arguments have been supported in the literature by Rajabalee and Santally (2020) and Gopal, Singh and Aggarwal (2021). Rajabalee and Santally (2020) reported that technical difficulties and lack of tutors' support create a sense of frustration which eventually impact the overall satisfaction of students in online learning. Furthermore, Gopal et al.(2021) indicated that by delivering the course content properly, the instructors may affect the student's satisfaction during online classes. In fact, the initial stage of online education was highly dependent on instructors who played a major role in the educational process (Hamdan, Al-Bashaireh, Zahran, Al-Daghestani & Al-Habashneh, 2021). According to Hamdan et al.(2021), enhancing students' interaction, self-regulation, internet self-efficacy and decreasing the number of e-learning theoretical courses may increase students' satisfaction with online education.

In another interesting finding by Alzahrani and Seth (2021), the study showed that service quality did not influence students' satisfaction, while information quality and self-efficacy both had a significant influence. This study analysed the critical factors influencing students' satisfaction with their continuing use of online learning management systems in higher education during the COVID-19 pandemic.

2.2 Academic Performance during ODL

Theory of Performance (ToP) proposed that level of performance depends on personal factors, among others (Elger, 2013). Examples include the quality of a student's learning environment, and this is especially crucial in the online learning setting. Previous literature has seen various outcomes following the ODL implementation. A study performed by Shaw, MacIsaac, and Singleton-Jackson (2019) found that despite the limited engagement in cognitive learning, students still received high test marks using the online tool. In a different point of view, online pedagogy seemed to have a negative impact on the academic achievement of undergraduate engineering students compared to their counterparts enrolling in the traditional pedagogy (Bir, 2019). Surprisingly, there is another variant of ODL outcome, which is no different than the physical mode, provided that certain situations are abided by. This is evident in the study conducted by Francescucci and Rohani (2019) who found that virtual, interactive, real-time,

instructor-led online learning has the same level of student outcomes as the face-to-face format. Thus, it is observed that ODL greatly impacts academic outcomes at university, both positively and negatively.

Therefore, this study aims to determine the main factor that influences students' satisfaction and to observe the academic outcomes in online and distance learning.

3. RESEARCH METHODOLOGY

The data for this study were gathered from 279 respondents who are pursuing Diploma in Accountancy and Diploma in Accounting Information System in UiTM Perak branch, Tapah campus. The questionnaire was created using Google Form and was distributed to respondents via Whatsapp. The research instrument used for the data collection is an online survey that includes the four factors being measured: instructors' quality, course design, prompt feedback and student's expectations. The measurement of the variables was adopted from Gopal et al. (2021) with some selections made to only include items relevant to the study. In contrast to that of Gopal's, this study fills the gap in terms of providing additional literature in Malaysia setting, particularly in the accounting field. The statements in the survey were assessed on a four-point Likert scale ranging from "1 = strongly disagree" to "4 = strongly agree". Descriptive analysis is applied in searching for the focal point of the study.

4. FINDINGS AND DISCUSSION

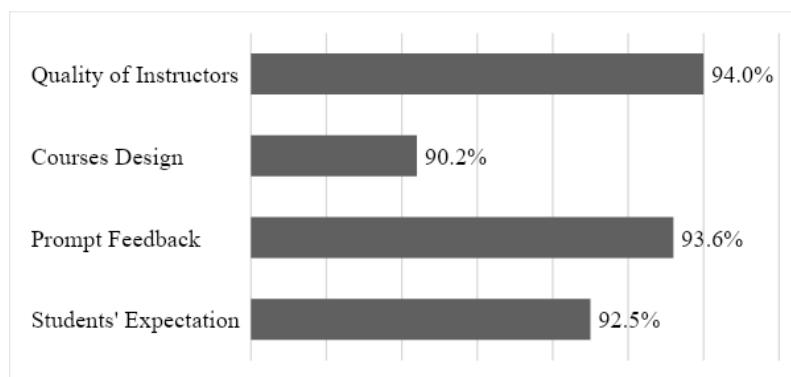


Figure1. Factors that influence students' satisfaction in ODL

Figure 1 shows the factors influencing students' satisfaction with ODL. In general, more than 90% of respondents agreed that all four factors had an impact on their satisfaction. Furthermore, the four factors listed above were chosen to determine which one will have the greatest impact on students' satisfaction. According to the finding, most respondents (94 %, n=262) agreed that the quality of instructors is the most important factor affecting students' satisfaction during ODL. The finding is consistent with those of Gopal et al. (2021), who discovered that teachers' enthusiasm and ability to deliver course content appropriately improve the quality of online learning and thus influence students' satisfaction. Furthermore, effective content delivery during online classes may result from efficiency in lecturing and understanding student psychology. It is also supported by Musa, Alia, Baharuddin, and Ibrahim (2020), who discovered that educators must be aware of students' conditions for them to participate in online learning and effectively engage with educators. This study concludes that the quality of instructors should comprehensively include teaching skills and passion, good communication and attention for any difficulties raised by students to satisfy them throughout online classes.

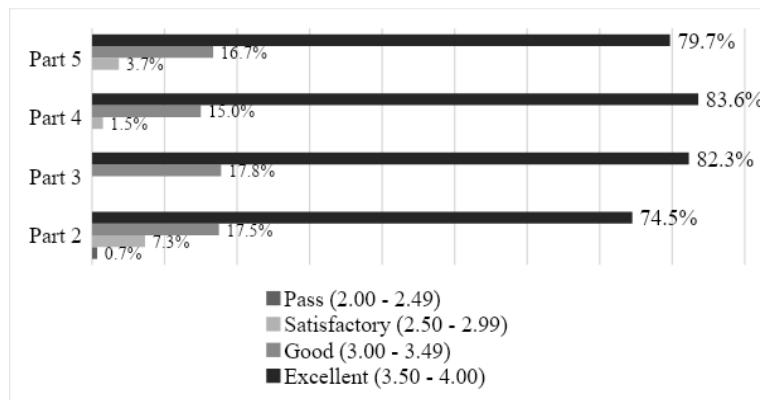


Figure 2. Academic performance during ODL

Figure 2 illustrates a summary of students' Grade Point Average (GPA) during ODL implementation. The GPAs from previous semesters within ODL sessions were analysed among Part 2 until Part 5 students. Part 1 students were excluded from the analysis since they have not sat for any final examination yet. Notably, the result shows that most students in each part 2 through part 5 performed well, with GPAs ranging from 3.50 to 4.00, which is considered as excellent performance. Part 4 students outperformed the others with 83.6% of the excellent result, followed by Part 3, Part 5, and Part 2. The findings were also supported by Elger (2013) through his Theory of Performance whereby one of the components to establish a level of performance is the personal factor. It includes the personal situation of an individual, for example, the student's performance is affected by the quality of their learning environment. Students will be able to focus on what they have learned since ODL provides a flexible teaching and learning environment through asynchronous sessions using video, leaflets, articles, and PowerPoint presentations utilising the Learning Management System (LMS) (Rindaningsih, Findawati, Hastuti, & Fahyuni, 2021). Furthermore, using video for learning purposes led to positive emotional engagement (Kort & Reilly, 2002) and a pleasant learning environment (Strobel & Van Barneveld, 2009), which was helpful to their motivation to study, learning process, and outcome (Meyer & Tuner, 2002). Thus, the study concludes that students performed well throughout ODL sessions.

5. CONCLUSION

This paper describes the factors affecting student's satisfaction and academic performance in ODL. Following Gopal et al. (2021), four factors were determined to influence students' satisfaction which are quality of instructors, course design, prompt feedback and students' expectations. This study found that the quality of instructors is the main factor that influences students' satisfaction. Teaching skills, passion, good communication and attention for any difficulties raised by students are among the qualities that must be possessed by instructors to satisfy students during online classes. Furthermore, instructors, according to Hamdan et al. (2021), may play an important role in online learning. The second factor is prompt feedback followed by students' expectations and course design. In addition, this study noticed that a lot of students performed well during semesters with ODL implementation. The Theory of Performance (Elger, 2013) components, which are personal elements such as learning environment, which relate to ODL session in this study, may be utilised to establish what characterizes a learning-to-learn students' performance. It is important to identify the factors that influence students' satisfaction during ODL since it helps educators and universities to improve the quality of online learning during ODL sessions. The current study, however, restricts descriptive analysis to factors influencing students' satisfaction and performance. Future research may examine a more in-depth examination of the relationship between these two variables, as well as a comparison with pre-ODL performance.

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The Impact of Macro-Environment Factors on Strategic Business Risks in ASEAN Countries During COVID-19 Pandemic

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ABSTRACT

The COVID-19 pandemic is impacting businesses globally by disrupting economic activities and growth, i.e. travel restriction, imbalance production and consumption, disoriented operations and unstable financial markets. Being one of the regions close to China, ASEAN countries was one of the first regions to get affected with COVID-19. Since then, the business activities were restricted because of lockdowns and other measures implemented by governments to minimize the spread of the virus. As a consequence, it is expected that the ASEAN economies will sink deep into minus growth. Hence, the rapid assessment of macro-environment impacts of the COVID-19 pandemic are important since this analysis is essential in determining the most appropriate and targeted measures at mitigating the pandemic's impacts and risks. Undeniably, risk is an integral part of every company's strategy to determine the objectives and direction of the company, thus, company have to emphasize the risk which is inherent in the strategy. To execute strategic decisions effectively during the crisis of uncertainty, companies need sufficient information about business performance and market as well other relevant aspects of internal and external environmental factors. Therefore, this paper is intended to study the impact of macro-environment factors namely, political, economic, social and technological on strategic business risk in ASEAN countries during the COVID-19 pandemic. The finding of this research will contribute to the development of businesses in determining the strategic risks during the crisis of uncertainty.

Keywords: economic; external; political; social; technological

1. INTRODUCTION

The COVID-19 pandemic is impacting businesses globally by disrupting economic activities and tapering growth prospects around ASEAN countries, which include travel restriction, imbalance production and consumption, disoriented operations and unstable financial markets. Governments, communities, organisations and individuals have been hit hard by sudden fall in demand for products and services, that leads to the closure of businesses and loss of work. Furthermore, death rates, hospitalization and infection rates differ widely between countries as their governmental response has differed in speed of response and isolation measures imposed. From economic development perspective, several issues including supply chain failures, closure of offices, technology impacts of working from home, together with increased risk of fraud, corruption, theft and cyber-attacks have limited the ability for some organisations to carry out business (CPA Australia, 2020). Being one of the regions close to China, ASEAN countries was one of the first regions to get affected with COVID-19. Since then, the business activities were restricted because of lockdowns and other measures implemented by governments to minimize the spread of the virus. As a consequence, it is expected that the ASEAN economies will sink deep into minus growth.

However, economic activity is expected to rebound gradually once infection rates are under control, but weakness could be protracted if business failures become more prevalent due to liquidity issues,

lack of credit, the loss of income, and ongoing weak business. Governments' decisions to ease social distancing measures and exit from lockdown will be a necessary balancing act between the risks to public health and the risks to the economy (United Nations Report, 2020). Nonetheless, as in many regions in ASEAN, the pandemic has inflicted real suffering, with a hard impact on the most vulnerable party, and it has featured prevailing inequalities, and also the unsustainability of the current development pathway. It has also exacerbated existing risks and exposed new challenges to a business. Therefore, the exit strategies of countries from lockdowns should also be coordinated to the extent possible in order to minimise the risk of recurrence in a business, and to speed up the economic recovery (IMF,2020).

The impact of COVID-19 has shown that many businesses were not prepared for a major crisis. From technology risk point of view, insecure virtual private networks, or applications previously only available inside offices now being accessed remotely, create a bigger attack surface for cybercriminals to attempt and exploit vulnerabilities. According to Risk Management Survey Report by Governance Institute of Australia (2020), during a crisis such as the current pandemic, cybersecurity and data privacy are key risks for all organisations since the employees and management may be distracted with the significant business disruption and fail to apply the same level of cyber awareness as they do during normal operations. Apart from that, it may also expose to human risk as working from home is different to working from an office as informal interactions that are often integral to innovation and psychological well-being do not readily occur. Equally, workplaces at home are not always designed for corporate work, with interruptions from household members and the psychological impact of being at home impacting productivity and job satisfaction. Thus, when forced to work from home, standard work practices can be affected and this situation may lead to operational risk. Due to this, fraud is a significant area of risk during these times. While most employees can be trusted and should be treated as both trustworthy and reliable, the disruption to work practices might be seen by some as an opportunity for taking shortcuts in standard processes. Some employees may not properly observe operational and financial controls. In addition, the simultaneous global, health, financial and operational impacts of pandemics significantly increase the risk of financial instability and insolvency. Mitigating operational, technology, human and other risks bring costs to the organization (CPA Australia, 2020). Due to this reason, boards need to weigh the costs and benefits to the organisation, to determine which risks should be eliminated and those risks to be mitigated. Thus, the current pandemic situation demands a strong financial modelling of risks which their impacts is a critical part of making these determinations (McKinsey & Company, 2020).

Therefore, this research seeks to analyze the impact of macro-environment factors namely, political, economic, social and technological on strategic business risk in ASEAN countries during the COVID-19 pandemic. This study based on the in-depth exploratory and descriptive studies about macro-environment factors and strategic business risk. This study was divided in twofold: firstly, it focusses on theory and understanding of strategic business risk and PEST analysis; and secondly, to provide an insight inference based on the secondary research. Thereby, this research intended to give awareness on how the PEST analysis impact the strategic business risk during crisis of uncertainty and provide a better understanding on PEST analysis factor in improving and assisting business operation during pandemic.

2. FINDINGS OF LITERATURE

The literature review includes relevant literature to gain insight about strategic business risk in ASEAN countries. It covers theoretical reviews and empirical studies that show light on the impact of macro-environment factors on strategic business risk during COVID-19.

2.1 PEST ANALYSIS

According to Khodaveysi, Mobarakabadi, and Slambolchi (2016), the critical success factors have been introduced by D. Ronald Daniel in 1960s which comprises of five main sources of critical success factors identified as industry, competitive strategy and industry position, environmental factors, temporal factors and managerial position (Forster & Rockart, 1989). Out of five main sources of critical success factors, this study focused on the environmental factor as the researchers want to look at the impact of macro-environment factors on strategic business risks in ASEAN countries. According to Bullen and Rockart (1981), the environmental factors under critical success factors involved competition, new technology and regulatory issues. Hence, PEST analysis is the best analysis to be used in this study in order to look at the impact of macro-environment factors on strategic business risks. Supported by Sammut-Bonnici and Galea (2015), PEST analysis widely accepted and an authoritative instrument being used to study on strategic risk. Even though macro-environment involves the factors beyond the control of a company, however it is important for the company to readjust their corporate strategy by analyzing the macro-environment factors.

PEST analysis is a measurement tool which is used to assess markets for a particular product or a business at a given time frame. PEST is an acronym for political, economic, social and technological. It is a way to assess these four factors and understanding how these external forces impact the industry in making strategic business decisions, planning marketing activities, product development and research (Aguilar, J, 1967). PEST analysis is a powerful tool for understanding strategic risk, since it identifies the changes and the effects of the external environment (Porter, 1985; Olaganathan, 2021). Generally, external environment are those influences, circumstances or situations that a business cannot control which affect the business decisions that the business owner and stakeholders make. (Rakesh, 2014). Precisely, changes in the external environment factors can have a direct impact on not only the business but also can impact other players in the industry itself. Different markets have different norms or environmental standards which can impact the profitability of an organization in those markets (Olaganathan, 2021). Even within a country often states can have different environmental laws and liability laws. Moreover, in coping with global pandemic situation, there are a lot of challenges like globalization, technology advancement, the emergence of new industry and market and also restructuring of economics that have reinforced the organization to be more pro-active in strengthening its firm's strategies (Al Ghamdi, 2005).

2.2 Political factors

Political factors play a significant role in determining the factors that can impact ASEAN business's long-term profitability in a certain country or market due to COVID-19 crisis that affected the countries. According to Ghani and Nayan, (2010), the pro-active involvement of government and its support have an impact on strategic planning. Factors of bureaucracy and approval of plans become the most important factors that affect the dimension of business performance during the crisis. They found that the changes of government policy during COVID-19 towards the financial institutions affect the sales of houses. It can be supported by Mohamad (2004), where reasonable rate offers by banks in housing loans can help the sale of houses and the development of real estate policies. Boiral et. al., (2021) stated that the COVID-19 outbreak has made the government take hard restrictions to avoid the spread of the virus. When COVID-19 arrived in South-East Asia, the government took more rapid containment actions by alerting the public about the virus soon after the first global confirmed case was reported. Further, to combat the COVID-19 pandemic, the government of Malaysia, Indonesia, Singapore had moved rapidly to develop new regulations and develop technologies to address COVID-19 (UNCTAD, 2020). Furthermore, Boiral (2021) stated that government and related organizations can focus on contingencies and plans to mitigate the risk by offering economic support to companies to remain profitable during the crisis.

2.3 Economic factors

The ASEAN countries economic growth were affected largely with the hit of COVID-19 pandemic (Chong, T. T. L, et al., 2021). The economic growth of ASEAN countries will show a slow-paced growth in 2020. In ASEAN countries, China is known as an important trading partner, foreign investor and top tourist source (Cheng, C., 2020). The economic growth during a pandemic state mostly affects

the country economy and welfare of the citizen as a whole. Cheng, C. (2020) viewed that Malaysia's economy is affected in twofold: first, indirect impact from other coronavirus countries, and second, the movement control order (MCO) in Malaysia. This view seems to apply to other ASEAN countries because they are also facing the same state. He also stated that the lockdown measures in China have caused wide-ranging demand and supply shocks across the globe (Cheng, C., 2020). The MCO measures were implemented with the objective to reduce the number of COVID-19 cases, but it has affected the country's economy to a certain extent. Undoubtedly, the measures have impacted several industries and personal delivery services which result in tremendous shocks in country supply and demand (UNCTAD, 2020). With the MCO measures, the business and individual livelihood were adversely affected and led to high risk to business cash flows constraints and reduction in individual incomes, as well caused bankruptcy among individual and business insolvent (Cheng, C., 2020). Most countries are dependent on the tourism industry, however, with the hit of pandemic, it adversely affects the ASEAN countries economy with the decline of national revenue (Hamilton, C., 2020 & UNCTAD, 2020). The unemployment rate in ASEAN countries seems to be increasing since the start of the pandemic in 2020, which caused more citizens to lose their job in this state of pandemic with the implementation of lockdown (Chong, T. T. L, et al., 2021).

2.4 Social factors

The COVID-19 outbreaks represent a numerous crisis that affects the main dimensions of corporate strategic planning sustainability, where it is defined as the balanced consideration of social, economic, and environmental issues through the strengthening of the social responsibility of companies. Boiral et al, (2021) stated that the COVID-19 pandemic has raised major social issues such as risk contamination, protection of employees, and health due to W.H.O had announced travel restrictions which are necessary to avoid the spread of the diseases. Limitations in the movement of people including tourism and the reduced flow of goods and services have caused a sharp decline in the company's production and had made many companies facing low demand started to lay off workers (Boiral et al. 2021). In Malaysia, AirAsia Berhad lay off more than 300 employees to slow down its operations following the difficult situation faced due to the pandemic. The movement control order was implemented to reduce the number of COVID-19 cases, but it has indirectly affected the country's social factors to a certain extent. Many employees suddenly found themselves without work or with less money in their pockets (Fowler, 2020). The impact of losing jobs will give employees emotions down and till the worst, they can commit suicide (Boiral et.al., 2021). Various social factors as unemployment and social distancing are to be seriously considered. According to Singer and Lamm (2009), the period of lockdown was also seen as an evolution in the concept of producing new perspectives for the company.

2.5 Technological factors

In the current pandemic state, technological factors are the key player in mitigating the disruption occurring during pandemic. With the Internet, we may communicate with people around the globe and may ease our job. Indirectly, the adoption of technology i.e. artificial intelligence (AI), robotics and data analysis technology has changed how we do our job and business through the digital economy (Kam, A., 2020). Technology becomes the mode of communication in conducting our daily lifestyles and also business. Kam, A. (2020) stated that technology actually has facilitated the ASEAN meetings and has become the digital platform to accommodate the disruption of physical meetings, as well as conducting business. Furthermore, the ASEAN countries have been the smart cities with the adoption of technology and digital solutions since 2018 (Clavier and Ghesquiere, (2021)). In 2020, Singapore becomes the first nation to launch a Bluetooth based application for contact tracing known as TraceTogether (Clavier and Ghesquiere, (2021)). Further, ASEAN countries also had to develop the digital infrastructures to support public health strategies to combat COVID-19 viruses in the region (Clavier and Ghesquiere, (2021)). In some of ASEAN countries, they had introduced "new online marketplaces" and "peer-to-peer donations platforms" with the objective to provide aid for local business and workers who had been impacted during pandemic (Clavier and Ghesquiere, (2021)). The micro-, small, and medium-sized enterprise (MSME) in ASEAN countries were guided by ASEAN Strategic Action Plan for SME Development 2016-2025, by providing directions, training, consultation and advice on how to acquire digital tools and solutions to improvise the MSME business in the nation (Ali, N. and Karimah, V., 2020). The pandemic state of the world has led ASEAN countries to adopt

and learn digital infrastructures and solutions to accommodate the country's economic growth in the pace of digital age and new normal. The technology transformation of digital platforms has facilitated the nation in conducting business, online education, online transactions, and other types of services during the pandemic.

2.6 Strategic business risk

Managing risk effectively has always been a benchmark of the most successful companies. But in today's risk-filled business environment and during COVID-19 pandemic, it can be hard for businesses to have confidence that their plans and strategies will play out as expected. A significant reason is that, strategic risks those that either affect by external environment or created by business strategy decisions can impact more quickly during crisis, hastened along by rapid-fire business trends, technological innovations, changes in demographic preferences, economic conditions and government policy. Polinkevy, Khovrak, Trynchuk, Klapkiv and Volynets (2021) found that, external risks, which are always present in the business process, are classified into competition, political and legal, socioenvironmental, information security and currency risks. Since some of the risk cannot be prevented, they should be mitigated using risk insurance by involving stakeholders to offset risks. They also emphasized that, the main stages of managing strategic business risks during pandemics and crises are modelling and identification of risks, risk analysis and assessment, selection of management tools, creation and implementation of risk minimization strategy, and also monitoring of strategic risk minimization processes.

Additionally, strategic risk can be seen as the probability and consequences of a failure of strategy. It is important to note that strategic risk is not just about the management of risk but also that of strategy (Johnson, Scholes and Whittington, 2005). Allen and Beer, (2006) pointed out that, strategic risk emerges from strategic decision-making because the future is uncertain and therefore all outcomes of strategic choice will be accompanied by varying degrees of uncertainty. On the other hand, Tura et al. (2019) also established a macro-environment framework of critical success and risk factor for circular economy businesses across various industrial sectors, proposing seven main categories known as environmental, economic, social, institutional, technological-informational, supply chain, and organisational. It has been supported by Vermunt et al. (2019), who performed the study on barriers in business model found the external barriers were related to the supply chain, markets and institutions, and government policies and standards. Hence, through a precautionary strategy, the effects of macro-environment factors towards company are able to be mitigated especially during pandemic. According to Polinkevych et al. (2021), strategic risks are affected during crisis and pandemic such as risk of ineffective business strategy and the risk of goals and objectives of the market situation. The company has the potential of to experience poor and less effective business strategy. Other than that, company also can be affected by the market changes, market acceptance, the opportunities and limitation of new markets and regulatory compliance during crisis and pandemic. Therefore, it is important to understand the impact of macro-environmental factors on strategic business risk during Covid-19 Pandemic.

3. IMPLICATIONS

Strategic business risk is determined by board decisions about the direction of the organisation. It will include board planning and decision-making process. To take strategic decisions effectively especially during pandemic, boards must have relevant or sufficient information about how the business is performing. The impact of political and social factors and other relevant aspects of the economic measures need to be considered by companies to make a good decision making. However, even all the procedures have been followed for the strategic decision making, it will still have a positive and negative impact on business environment. To understand the factors and impact on decision making, boards need to understand the major risks that strategies are involved. Hence, Hanggaraeni et al,(2020) stated that the main advantage is to decrease the possibility and the number of losses and to increase the shareholder value. Specifically, risk and initiative cannot be separated from business decision making. It can be supported by Tonello (2007), mentioned that the companies can reduce the costs and loss through better integration of risk assessment especially during the pandemic. Moreover, Callahan and Soileau (2017) found that the failure of companies to identify the impact of external factors and managing risk will bring significant effect on their business.

With the current economic situations across the world, it truly affects the growth of the economy in ASEAN countries as well it directly affects the employment of citizens for a longer period of time (Cheng, C., 2020 and Chong, T.L.L, et al., 2021). The unemployment rate in ASEAN countries is expected to increase due to slowdown in country recovery and supply of foreign laborers (Cheng, C., 2020 and Chong, T.L.L, et al., 2021). Besides, it also affect the supply chain of business operation, cross border trade and business survival during pandemic, so the businesses should reassess their business plan and strategy in curb the issues (United Nation, 2020). Therefore, the ASEAN countries has introduced the fiscal packages with the aim to support their frontliners, businesses, households and employees with the stimulus packages and monetary policy, so that the country economic activities can be sustained and maintained without any liquidity (United Nation, 2020). With that it provide support to the business continuity as well as assist the financial sector stability in the nation.

The present situation of pandemic has given positive growth opportunities for the technology sectors with the adoption of digital platforms in conducting business across the country, which allow the users to reach each other (Kam, A., 2020 and Clavier and Ghesquiere, 2021). The ASEAN countries has equipped with the application of technologies in addressing the pandemic with the invention of “contact tracing using smartphones, Bluetooth and mapping interfaces” to identify and detect infected individual immediately, and enable the researcher to gather big data information from the apps (United Nation, 2020). Indirectly, it shows that the ASEAN countries has arranged the strategic business risk with measuring it with the adoption of technology to assist the nations with strengthening the health system. The digital adoption also can be apply in cross-border trade and supply chain of businesses with the digital trade facilitation to accommodate the trade barriers during pandemic with the implementation of digital regulations and trust policies (United Nation, 2020). In addition, the government should introduced a comprehensive legal and regulatory of digital economy to the citizen and businesses to enable them to use the platform with confidence and conveniently, so that it will build a rapport relationship between government and their citizen (United Nation, 2020).

4. CONCLUSIONS

The COVID-19 pandemic is unprecedented, not only in ASEAN economies but worldwide. Inappropriate measure could lead to a prolonged, deep recession, exacerbated by closed borders and characterized by rising social tensions, vulnerabilities and a return to environmentally unsustainable development. To be specific, it is difficult to estimate the impacts of a shock that is uncertain in itself. This uncertainty highlights the need for caution in establishing risk assessments where it emphasizes the need for rigorous modelling and scenario analyses. The external environmental factors are largely beyond the control of an organization and its success will depend to a very large extent on its adaptability to the environment. This PEST analysis acts as a major tool for analysis and helps to understand the macro-environmental risk and opportunities that include political stability, economic growth, social factors and technology development. One thing which may change is greater acknowledgement of the value of strong risk management practices. Perhaps the global COVID-19 pandemic will change the views of boards and corporate executives around ASEAN countries.

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Identifying students' preferred learning materials for online learning during Covid-19 pandemic

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ABSTRACT

The Covid-19 pandemic has forced the education system to shift from face-to-face to virtual learning almost instantaneously. Although changes are taking place thick and fast, these situations could be dealt in a more effective manner by understanding the needs and requirements of both educators and students. This study aims to identify students' preferred learning materials during the pandemic. A survey was conducted requiring respondents to rank their most preferred to least preferred materials. The result shows that the students are considered to be more traditional and does not put total reliance on digital materials. Students also prefer educator-centred approaches and gave higher value to materials provided by their lecturers. This study can help educators to plan and create better learning materials that suits the students need in order to safeguard teaching and learning quality.

Keywords: Accounting education, Covid-19, learning materials

1. INTRODUCTION

The Covid-19 pandemic has affected the education system in many ways. In Malaysia, lockdowns and movement control orders have resulted in the migration from face-to-face classes to virtual classes. Both educators and students were not prepared to have online classes and undergo teaching and learning activities from home. Although Langford and Damsa (2000) claimed that it is easier for tertiary institution students to migrate, Oyedotun (2020) pointed-out that developing countries may face some challenges for a compulsory shift to rapidly implement, consolidate and embrace technology in a very short period of time.

This study was conducted to identify learning materials suitable for online or virtual learning based on students' preference. This study is believed to have a huge importance to reduce complexities in full online education and ensuring the quality of teaching and learning is maintained. The migration to full online basis may seem simple to the naked eye, however, Zhang, Wang, Yang and Wang (2020) asserted that the vulnerabilities in teaching infrastructure, the inexperience of educators, information gap and complex home environments contribute to the inability of the students to effectively learn new knowledge.

To identify students' preference, this study divides learning materials into three categories as presented in Table 1. Each of the categories will be discussed based on the common related materials that are usually available to the students. Students were required to rank the learning materials based on their preference and opinion on the best material suitable for online learning.

Table 1: Categories of learning materials

Categories	Definition	Examples
Visual	Printed or on-screen documents	Books, short-notes, lecture-slides, study guide, PDF documents, flashcards
Audio	Voice recordings	WhatsApp voice notes, voice recordings, Podcast, Radio
Audio-visual	Combining both visual and audio elements	Videos, online classes, explainer videos, animations
Interactive Apps	Application that requires students to respond and get feedback	Google form, Kahoot, Quizlet, Scratch, Apps designed specifically for a certain course.

2. LITERATURE REVIEW

Covid-19 pandemic has transformed the way we usually perform teaching and learning activities. Prior research has documented many evidence relating to the benefits, advantages, difficulties, barriers and challenges in the shift towards virtual learning. Zhang et al (2020) asserted that the government play a crucial role in ensuring that educators are equipped with relevant skills on online learning platforms. This could be done through professional development, with legal, financial, and administrative support. Kyriakides, Christoforou, and Charalambous (2013) argued that teachers guidance plays an important role in achieving learning outcomes. This suggests that an educator's role is significant in determining learning quality. Mukuka, Shumba and Mulenga (2021) pointed out that it is important to orientate teachers on lesson planning and delivery during the Covid-19 pandemic and beyond.

Adler, Whiting, & Wynn-Williams (2004) claimed that the theoretical structure of accounting and the education quality of accounting students are related not just with the learning style adopted by the students, but as well as the quality instructive methods and course material. Therefore, online learning can be as effective as offline learning providing that teaching and learning methods are adjusted accordingly and the students are equipped with the required learning materials. This is supported by Fortin, Viger, Deslandes, Callimaci, and Desforges (2019) which explained that accounting students undergoing lessons with equivalent content and design perform similarly and have the same level of course satisfaction across online and offline delivery formats.

Prior research has also documented the challenges faced in shifting to virtual learning. Lavy & Naama-Ghanayim (2020) highlighted that the students themselves must be able to cope as some online classes become long and sometimes stressful. They further added that if students are resistant or minimize their investment, attention or effort on their participation, they will not gain much in the learning process. Oyedotun (2020) claimed that most students found it challenging to maintain focus during online teaching. This is supported by Sutton (2020) as he explained that the online delivery mode forced many students to be working at home where they are under enormous distractions and other domestic issues. Oyedotun (2020) found that many students who were accustomed to the traditional face-to-face method of teaching found the online method burdensome, with some becoming rude and impolite to lecturers because of the stress experienced in adjusting to online education. She further added that students' mental health may be affected due to the sudden change. Regarding students' preference, Taplin, Kerr, and Brown (2017) found that students prefer face-to-face classes over online delivery and educator-centred rather than student-centred activities. From their findings, it implies the need for educators to understand the difference between online and face-to-face learning other than the need to balance learning approaches and students' preference.

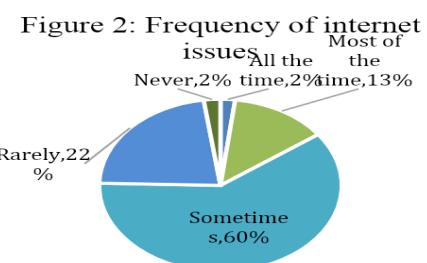
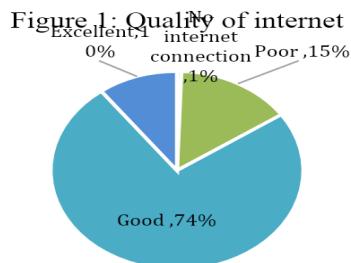
3. RESEARCH METHODOLOGY

A survey was conducted involving Diploma in accountancy and Diploma in Accounting Information System students of Universiti Teknologi MARA Perak Branch, Tapah Campus. The survey requires students to give marks based on their preferred leaning materials. A higher mark given indicates that the student favours the materials better. The survey was divided into six parts. The first part was to collect the respondents' demographic data. The second part of the survey requires respondents to rank their preferred leaning materials based on its category. The later part of the survey further collects data

of each category of leaning materials which are visual, audio visual, audio and interactive application. This survey was conducted in year 2021.

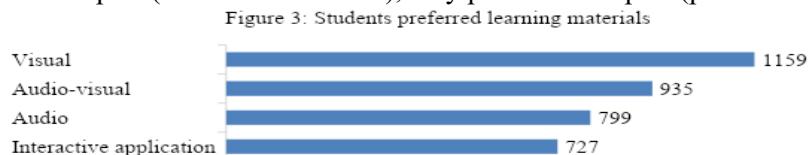
4. RESULTS AND DISCUSSION

A total of 362 students participated in the survey. Most of the respondents are from the second semester (47.5%) and the fourth semester (46.7%). At the time the survey was distributed, 337 (93.1%) respondents were at home. Since the survey was conducted during the Covid 19 pandemic where most of the teaching and learning activities are conducted online, it is important to understand students' internet accessibility. Figure 1 shows the internet quality and Figure 2 documents the frequency of internet connection issues faced by the students. The figures indicates that the most respondents have good (74.3%) internet quality and sometimes (60.5%) face internet connection problems.



4.1 Students preferred learning materials.

The survey documented that although students use both online and offline materials, most of them essentially prefers offline learning materials. Offline materials are learning materials that are available without internet connection. Furthermore, it was documented that although most of their learning materials are in softcopies (available on screen), they prefer hardcopies (printed materials).



As shown in Figure 3, the respondents prefer visual materials the most followed by audio-visual, audio and interactive application learning materials. The results show a different finding than Wynder (2018) who analyze the preferred materials by post-graduate students that ranked audio-visual materials as the most favoured material followed by audio only and visual static materials.

4.1 Students preferred learning materials

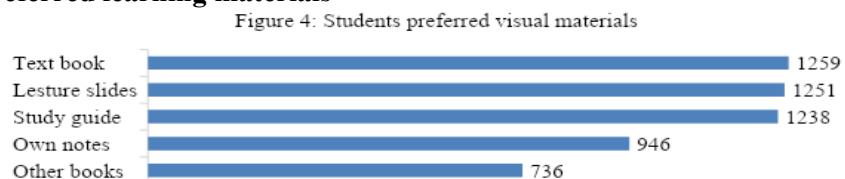


Figure 4 further detail out the type of visual material preferred by students. As per the marks given by respondents, Textbooks remain relevant and considered to be the main source of learning materials. Still, compressed or simplified learning materials such as lecture slides and study guides are also highly valued by students. Many of the respondents do prepare their own handwritten notes but the notes are mostly written on the printed slides or in the textbooks or study guides.

4.3 Students preferred audio-visual material.

Audio-visual materials are the second most used materials by the students. This category of learning materials are considered to supplement students understanding of what was obtained from visual materials. Additionally, students will be able to see step-by-step demonstration, detailed examples and many more benefits from watching audio-visual materials. From the score presented in Figure 5, students prefer recorded classes rather than live class. This may be due to the fact that 61% of the students sometimes experience internet connection issues. Therefore, a recorded online class is preferred as students may watch the videos when they see fit. Short explainer videos also received a good score as it is considered to provide simple and easy to understand information and examples. The effectiveness of audio-visual materials has been documented by Coetzee, Schmulian, and Coetzee (2018) who founded that online tutorials improve students' grades and understanding. In addition, Miley and Read (2019) also documented that online video (through YouTube) had a positive impact toward students' motivation to learn.

Figure 4: Students preferred audiovisual materials



4.4 Students' preferred audio material.

Figure 3: Students' preferred audio materials



Audio materials, although can easily be made available by educators, seems the most unlikely sources of leaning materials to be used. The survey records that 82.3% of the respondents do not use audio materials. Furthermore, 62.2% of the students would look for other materials with visual aids rather than using the audio materials to study. The probable reasons that audio materials are ranked third is mentioned by Taplin, Kerr, and Brown (2017) that most students prefer educator-centred rather than student-centred approaches. This implies that students will value any materials from the educators as significant and important.

4.5 Students preferred interactive application content.

The last part of the study identifies the contents of interactive application that the students would likely value the most. The results are presented in Figure 5. It was found that applications that allows the students to answer questions, get quick notes and provide video links are the characteristics of a good application. The use of games in the applications are still not widely available. Most students consider that the long notes are already available in the textbooks. Most students feels that interactive application involving questions and answers is appealing due to the quick feedback it provides. This is consistent with Helfaya (2019) who discovered that students preferred working with applications that provides timely feedback.

Figure 5: Students' preferred interactive application content



5. CONCLUSION

As the pressure to perform and meet students' expectations are increasing, educators must be able to strategize and appreciate the constraints and opportunities. Though the pandemic has resulted in many

challenges, an understanding of the student's current situation is vital in ensuring quality teaching and learning activities. The results show that students will highly value the material given by the educators. Among the important findings are (1) students still prefer the traditional method of leaning where hardcopy textbooks and notes are valued the most. However, Other short (2) materials such as lecture slide and key-terms are considered to be precious to compliment the textbooks. (3) Students are very less likely to use audio materials and will try to find something better to be used to study. Interactive application was ranked bottom as not many materials are viable online. A more detailed analysis must be made to understand the subject. The use of regression analysis is highly recommended as the results may be influenced by students' internet quality or even their learning style.

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COVID-19 and Movement Control Order (MCO) in Malaysia: Access to Financial and Social Capital for Microenterprise Sustainability

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ABSTRACT

Micro, small and medium enterprises (MSMEs) have always been recognized as a major contributors to the Malaysian economy. The global COVID-19 outbreak has severely affected the economic landscape of Malaysia and impacted the microentrepreneurs because they mainly do not have enough financial resources to support their business. However, as the COVID-19 cases keep increasing, the third MCO has been imposed and this situation continues to disrupt the business activities of microentrepreneurs. Despite the stimulus packages provided by the government to cushion the impact on businesses, different microentrepreneurs have different experiences and capabilities to mitigate the negative impact of COVID-19. The purpose of this study is to understand the challenges faced by microentrepreneurs during MCO 3.0 and to investigate to what extent their access to resources influences their business strategy. This study employed a qualitative approach and collected data using phone interviews with five selected microentrepreneurs in Perak. The main challenges surrounding these microentrepreneurs are a lack of financial resources and supply chain issues. This study also found the access to financial capital and social capital influence microentrepreneurs to undertake business strategies that can ensure their businesses sustain during the pandemic crisis.

Keywords: COVID-19; MCO; microentrepreneurs; sustainability; Malaysia

1. INTRODUCTION

COVID-19 outbreak has been causing hostile effects globally. It marks the utmost challenges faced by everyone around the world. Malaysia is now fighting its deadliest Covid-19 outbreak since the start of the pandemic amid growing concern about sporadic cases that have come to dominate infections in the country. Since 18 Mac 2020, the Government of Malaysia had imposed the Movement Control Orders (MCO), which was implemented as a preventive measure to curb the spread of the virus. The sudden increase of COVID-19 was reported in a few states of Malaysia. Following this situation, the MCO 2.0 was implemented on 13 January 2021 in 6 states; Penang, Selangor, Wilayah Persekutuan, Melaka, Johor and Sabah. Since then, the number of reported cases continues to provide a worrying sign. Malaysia government announced the third Movement Control Orders (MCO 3.0) came into effect on 1 June until 14 June 2021. Until this paper is written, the MCO 3.0 is still being implemented and Malaysia is still fighting with the highest number of COVID-19 cases and fatality rates.

The Malaysian Government has announced the National Recovery Plan in June 2021 to increase public healthcare facilities, support public welfare, and support business continuity. With regards to MSMEs, the government will be providing additional assistance under the Prihatin Special Grant (GKP) 4.0 program, and give MSMEs one-off payments of RM500 in September and another RM500 in November 2021. As such, this plan is expected to help MSMEs in their business' post-MCO recovery. The state government in Malaysia has also planned its Stimulus Package to further support the recovery of MSMEs in each state. Under Perak Stimulus Package 2021 which has been launched on 2nd June 2021, the Perak State government has allocated RM19.5 million to assist affected peoples and businesses in Perak.

Previous studies revealed microenterprises in Malaysia are facing a tremendous impact during MCO because they mainly do not have enough financial resources and capital to support their business, lack financial management skills, and have outdated marketing strategies. Despite the financial aids provided in the stimulus package by the government since the first MCO, no studies have been found to look into aspects of financial and social capital into business strategy for business sustainability. Therefore, this study aims to explore the challenges faced by microentrepreneurs during MCO 3.0 and to investigate to what extent their access to financial and social capital influences the microentrepreneurs' business strategy for survival and sustainability of their business.

2. LITERATURE REVIEW

2.1 Microenterprise in Malaysia

The term microenterprise, also known as a microbusiness, refers to a small business that employs less than ten people. Khaw (2019) defined microenterprises as those with ten or fewer employees. As they are small, microenterprises are much more flexible and responsive to market as well as demand from customers. This type of business started with a small amount of capital advanced from a bank or other organization. A small or micro-enterprise is generally a one-man show, where all the activities are mainly carried out by one of the partners or directors and the others are simply as sleeping partners who mainly provide funds. Wayne Lim, group chief editor of Malaysia SME reported that there are five million informal and formal micro-businesses in Malaysia. Microenterprise comprises 78.7% of all businesses in Malaysia (Sabli, Latiff, & Wahi, 2018). Furthermore, Khaw (2019) stated that 694,000 microenterprises in Malaysia make up 75% of total firms. His study found that 94% of microenterprises are mainly in the service sector. Microbusiness is a type of small business that employs fewer than ten people. The main differences between a microbusiness and a small business are in terms of size and scale as a sole proprietorship. In Malaysia, SME Corp categorizes microenterprise as a business in the manufacturing sector, service and other sectors with a sales turnover of less than RM300,000 and have a maximum number of employees of five (SME Corp, 2019).

2.2 Financial and social capital

Microenterprises are facing a tremendous impact during MCO because they mainly do not have enough financial resources and capital to support their business (Tajudin, Rahim, Idris, & Arshad, 2021, Hamdan, Kassim, & Lai, 2021), reduce in cash flows due to losses in daily income (Fabeil, Pazim, & Langgat, 2020), operation disruption (Che Omar, Ishak & Jusoh, 2020) and laying off workers and supply chain disturbance (Fabeil et al., 2020, Hamdan et al., 2021 and Megat Tajudin et al., 2021). Furthermore, microenterprises are found to have difficulty accessing stimulus package and causes them to the potential risk of bankruptcy (Che Omar et al., 2020). The business possesses certain unique resources and capabilities to achieve a competitive advantage. The theory of Resource-Based View developed by Barney (1991) posits those resources and capabilities are valuable, rare, inimitable, and non-substitutable and they can constitute a source of competitive advantage.

From a resources perspective, access to scarce resources is critical to entrepreneurial success (Liao, Welsh & Moutray, 2008). These resources include human capital in the form of related experience and education, social capital in the form of useful social networks, and financial capital (Chandler & Hanks, 1998). These resources are critical because they influence entrepreneurs' confidence and assurance in their ability to perform tasks and roles associated with entrepreneurship (Marshall, Meek, Swab & Markin et al., 2020). This study focuses on two types of resources; financial and capital resources. Social capital relates to the relationship among members in the teams and external stakeholders such as investors, suppliers, and customers (Adler & Kwon, 2002). Social capital includes information, social support, financing from these relational networks and supports the growth and performance of the business (Hitt, Ireland, Camp & Sexton, 2002). Meanwhile, financial capital obtained externally through investors or internally by business owners represents money available for running the operations of the business (Klyver & Schenkel, 2013). The greater the access of the microentrepreneurs to financial and social capital may enhance the microenterprise capability and performance. Thus, during pandemic and MCO, the government provides financial capital to the affected microenterprises

and the government agencies responsible to ensure the access of microenterprises to the social capital in the form of online training and network.

2.3 COVID-19 and stimulus package

The global COVID-19 pandemic does not only affect global health condition but also impending the structure of global economic order. The MCO, lockdown, and social distancing are amongst the government effort to control the spread of the COVID-19 virus. The closure of economic sectors has a great impact on Malaysia's economy especially the MSMEs. The government has prepared several stimulus packages to assist businesses in the country. On 27 March 2020, the Prime Minister announced the Economic Stimulus Package Prihatin Rakyat (PRIHATIN) worth RM250 billion. A special PRIHATIN Grant amounting to RM2.1 billion is established for eligible microenterprises. Each eligible company will receive a grant of RM3,000 (Ayman, 2020). In early January 2021, Malaysia announced the Malaysian Economic and Rakyat's Protection Assistance Package (PERMAI) to support businesses. As to assist the micro-enterprises, the implementation of micro-credit schemes under PRIHATIN and PENJANA valued at RM1 billion is also expedited.

The government has also allocated RM300 million for providing training on digitalization for micro-entrepreneurs to switch to the e-commerce platform. For further enhancement of micro-credit for microenterprise, Bank Simpanan Nasional (BSN), the Small and Medium Enterprises Corporation, Government agencies MARA, National Entrepreneur Group Economic Fund (TEKUN) have allocated a further RM1.5 billion at 3% interest (Ayman, 2021). Pakej Perlindungan Rakyat dan Pemulihan Ekonomi (PEMULIH) is announced by the Prime Minister on 28 June 2021 as a respond for the extension of the MCO 3.0. Among the incentives announced is the continuation of a wage subsidy program, special grant for MSMEs, additional payment for Prihatin Special Grant receivers, government guarantee scheme, enhancement of micro-loans, loan moratorium for MSMEs, electricity discounts, and small entrepreneur digitalization empowerment program (Ayman, 2021b).

3.0 METHODOLOGY

This study used a qualitative approach using semi-structured interviews via telephone. This method was selected to gain insights from the microentrepreneurs on the challenges they faced and their business strategy to survive during the crisis of COVID-19. Lo Iacono, Symonds & Brown (2016) proposed the use of internet based-method of communication using voice and video across the internet via a real-time connection. The phone interview is selected for this study since some of the micro entrepreneurs prefer to have a phone interview and it is a suitable method during the pandemic. Although it cannot completely replace face-to-face interaction, it works well as an alternative collection tool for qualitative study (Lo Iacono, Symonds & Brown, 2016). Five micro-entrepreneurs were selected with the following criteria; (i) registered their businesses with Ipoh City Council and Batu Gajah District Council in Perak, (ii) has been running the business for more than four years and (iii) annual sales less than RM300,000 with fewer than five employees. The sample was selected through the non-probability sampling technique (purposive sampling) as the criteria of the respondents are already set. The interviews were conducted in the fourth week of June 2021 and recorded with the respondents' permission. The interview recordings were transcribed and analyzed using the thematic analysis approach. Using NVIVO-12 software, the data were coded and analyzed to search for patterns and emerging themes. Table 1 list the background of the respondents.

Respondent	Gender	Types of business	Category	Location	Business experience	No of staffs
RESP 1	Male	Grocery	Essential	Batu Gajah	10 years	3
RESP 2	Female	Saloon	Non-essential	Ipoh	8 years	2
RESP 3	Female	Dobby	Non-essential	Batu Gajah	7 years	1

RESP 4	Male	Food	Essential	Batu Gajah	11 years	2
RESP 5	Female	Traditional food	Essential	Ipoh	12 years	1

4.0 RESULTS AND DISCUSSION

Findings from the data highlighted two sets of themes according to the two research objectives. The themes that emerged for challenges faced by microentrepreneurs are (i) lack of financial resources and (ii) supply chain issues. For business strategy used to survive during the pandemic and MCO, the major themes are related to (i) access to financial capital and (ii) access to social capital and networking.

4.1 Lack of financial resources

The implementation of MCO 3.0 has further caused financial implications to microentrepreneurs especially those under non-essentials business. Respondent 2 who is the owner of the hair saloon stated her business was impacted due to the closure of the business operation. She still needs to pay for the rental of the premises and wages for her staff. Similar to respondent 3, the owner of the dobbay shop, expressed her worry because of her sudden decline in her business income. She needs to borrow from her mother as her saving is already used to sustain during MCO 1.0. However, those selling essential items do not facing bad financial problems since they still can continue operations during MCO. For respondent 4, his business capital is still sufficient to run the business. But he needs to spend more to buy a larger quantity of stocks because of supplier did not travel frequently from Ipoh.

4.2 Supply chain issues

Furthermore, the major challenge faced by microentrepreneurs is on the supply chain issues. For respondent 1 who is selling local products in the markets such as *ikan kering*, *kerisik* and coconut milk revealed even though there are demands of the products, it is difficult to get ensure the stocks are sufficient because the suppliers take a longer time to deliver stocks due to restriction of cross-district travel. For respondent 5 who is selling traditional *kuih*, instead of selling six types of *kuih* daily, now she is only able to make four types of *kuih* because of a shortage of materials like grated coconut. However, she is still grateful because there are still customers coming to her stall although the number of customers is slightly decrease compared to before MCO.

4.3 Access to financial capital

Meanwhile, the respondents have mixed opinions on the financial aids provided by the government. Other than the stimulus package by Federal Government, the Perak State government also provides financial support for these microentrepreneurs affected under Perak Stimulus Package 2021 announced on 2nd June 2021. For respondents 4 and 5, the one-off RM300 financial assistance for registered micro-businesses and one-month stall rental exemption for micro-businesses registered with the local authority of Perak are really helpful to sustain their businesses. However, they admitted that the one-off payment is insufficient to cover the impact if MCO is prolonged. For respondent 2, she has to change the salary scheme of her workers from fixed salary into daily based salary. Although she applied for the loan moratorium, she is still worried because her business currently has no income. She is intent to apply for the newly announced government incentive despite she never applies for any government incentive package during MCO 1.0.

4.4 Access to social capital and networking

Respondent 3 informed that government agency such as Sekretariat Usahawan Negeri Perak (STEP) assists her because only by using Facebook, she able to get access to free online courses, especially on digitalized marketing. Currently, she ventured into selling online baby clothes which can support the impact of the closure of her dobbay shop. Similar to respondent 2, upon suggestion from her friend in Kelab Usahanita Perak, she is now selling cosmetic products through dropship while waiting for her saloon to operate. For respondent 1, with the help of her daughter, he now ventured into selling his products online using Facebook. There are also customers ordered through phone and upon request, he

provides delivery for nearby customers. On the other hand, respondent 5 views that as long as she has sufficient cash to run the business, she does not need to venture into online marketing. She hopes her business will be back to normal after MCO.

5.0 CONCLUSION

This study provides evidence on the challenges faced by the microentrepreneurs and how the financial and social capital influence their strategy to sustain during MCO 3.0. The findings revealed two main obstacles for microentrepreneurs in Perak; lack of financial resources and supply chain issues. These findings are consistent with the previous studies of Megat Tajudin et al., (2021), Hamdan et al., (2021), and Fabeil et al., (2020). Moreover, the microentrepreneurs took certain strategies to ensure the survival and sustainability of their businesses. Access to financial capital such as financial aids through stimulus package and social capital like networks and social media are important for microentrepreneurs to decide on business strategy. This study found the financial aids provided by the federal government and state government bring hope to the microentrepreneurs in facing the challenge during MCO. Moreover, entrepreneurial government agencies play a crucial role because they provide an online platform and network for microentrepreneurs to enhance their skills and knowledge and venture into new business opportunities. Social support from family members is also crucial for microentrepreneurs' self-belief, thus decrease the possibility of future business failure. Future studies should focus on self-efficacy and entrepreneurial persistence among microentrepreneurs as these factors are important for the sustainability strategy of the business.

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Disclosure of Takaful Information in Malaysia: Users Perspective

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ABSTRACT

Takaful is still in its early stages as compared to conventional insurance with regard to regulatory maturity and market penetration. In Malaysia, Bank Negara Malaysia has issued guidelines to ensure the operational efficiency of takaful operators, safeguard the interests of participants and promote uniform practices between operators. From a reporting perspective, in the Financial Stability and Payment Systems Report 2013, Bank Negara Malaysia (2014) mentioned the importance of having meaningful disclosure to protect participants. However, it did not provide details of the elements of meaningful disclosure. This study focuses on disclosure of takaful information from user's perspective. A checklist was developed to represent desirable level of disclosure based on various requirements and standards. To measure the voluntary disclosure level, the checklist was distributed to takaful agents to examine their perception of the disclosure on takaful information. It was found that majority of the users (86.14%) agreed that all disclosure items on takaful policy requirements are meaningful. It is hoped that the findings will assist authorities in formulating guideline or policy pertaining to meaningful disclosure for the users in the future.

Keywords: Takaful, voluntary disclosure, takaful operational framework, takaful policy requirements

1. INTRODUCTION

Conventional insurance differs from takaful primarily because of its inconsistency with Islamic law (Shariah) in terms of uncertainty in the transactions (*gharar*), interest income, interest expense (*riba*) and gambling elements (*maisir*) applied in the conventional insurance. Unlike insurance which transfer risk, takaful is based on the principle of *tabarru'* (donation) and the concept of risk sharing. In term of reporting, takaful has to adhere to various standards and regulations to ensure the takaful operations according to Shari'ah principle.

1.1 Background of the study

Takaful is a fast growing industry and Malaysia hold a second largest takaful gross contribution of USD1.962b (EY, 2013). Malaysian takaful market is the fastest takaful growth in South East Asia and is more focussing on family takaful unlike other major players (Saudi Arabia and UAE) which are more focussing on general takaful products. Malaysia has the world's largest family takaful market with a proven model and a better regulatory (EY, 2014).

Malaysian takaful operator is free to choose any takaful model (mudharabah, wakalah, hybrid or waqf model) unlike Saudi Arabia, which only allow cooperative insurance based on mudharabah model.

In term of flexibility and efficiency, takaful insurance is more effective compared to cooperative insurance (Benyoussef & Hemrit, 2019). However, the need of information to be disclosed is higher as variety of model, products and information must be adhered to Shariah principles disseminated to the potential participants to assist them in making decision.

1.2 Problem statement

Bank Negara Malaysia (2014) highlighted meaningful disclosure perception to help consumers or participants to understand the costs, benefits and associated risk of financial products. Indirectly, it assists the potential customers or participants to decide on which takaful product that suit their needs. This is to ensure a better protection to the participants.

Although there are rules and guidelines produced by Bank Negara Malaysia (National Bank), Islamic Financial Services Board (IFSB), Islamic Financial Services Act (IFSA), Malaysian Accounting Standard Board (MASB) and Malaysian Deposit Insurance Corporation/ Perbadanan Insurans Deposit Malaysia (PIDM), there is no specific standard of disclosure items to fulfill the needs of potential consumers or participants.

This study focusses on the needs of potential consumers or participants on disclosure level of voluntary information pertaining to takaful policy requirements.

1.3 Objective and significance of the study

The objective of the study is to examine the desired disclosure level of potential consumers or participants that fulfill their needs to make decision on the most preferred takaful products or investments. The study employs a set of disclosure index of takaful policy requirements developed based on takaful operational framework and Islamic Financial Services Board (IFSB). The findings of the study will lead to further research study and indirectly will assist the regulator to set a disclosure standard in the future.

2. LITERATURE REVIEW

As Takaful industry grows, the number of studies focusing on takaful has increased significantly. However, most of these studies cover almost the same areas with some focus deviation. Takaful is relatively new compared to conventional insurance and many researchers study the concepts and applications in takaful.

Previous studies can be classified into three main theme; research on knowledge and perception of takaful products, the basic concepts of takaful and consumer behaviour and preferences of takaful products. Several studies examining the level of awareness , knowledge and perception on takaful products and services (Maysami & Williams, 2006; Abdul Wahab, Lewis, & Hassan, 2007; Hamid, Osman, Ariffin, & Nordin, 2009; Bashir & Mail, 2011; Ayinde & Echchabi, 2012; Salleh, Abdullah, & Razali, 2013). Other studies explore and clarify the basic concepts and products of takaful (Maysami & Kwon, 1999; Bekkin, 2007; Altuntas, Berry-stölzle, & Erlbeck, 2011; Muhamat@Kawangit et al., 2012). Consumer behaviour and preferences in takaful are among the focus area of studies of researchers (Ab Rahman, Ali, Che Seman, & Wan Ahmad, 2008; Redzuan, Abdul Rahman, & Aidid, 2009; Matsawali et al., 2012; Sherif & Shaairi, 2013).

There are only 2 studies on takaful reporting by Abu Kasim (2012) and Mohd. Puad & Abdullah (2014). Abu Kasim (2012) studied the disclosure of Shariah compliance via annual reports by takaful operators while Mohd Puad & Abdullah (2014) examined Takaful accounting reporting and regulations and the current practice of accounting standards among all the Takaful operators in Malaysia.

Under decision usefulness theory, the core principle of accounting information is to meet the information requirements of users located in the considerable environment of any focal organisation (Bebbington, Gray, & Laughlin, 2001) Under behavioural accounting research (BAR) approach, it is assumes that the user is in the best position to determine the information that will affect their decision or behaviour. As for this study, the main focussed is on the needs of disclosure by potential consumers or participants to make decision on takaful products and investments.

3. METHODOLOGY

A set of disclosure index on shari'ah compliance and governance and takaful policy requirements were developed based on takaful operational framework and Islamic Financial Services Board (IFSB). The disclosure index consists of 20 items on takaful policy requirements.

Most of the disclosure items are quite difficult to understand as it is related to technical term in takaful operations. Therefore, samples are taken from respondents who possess takaful policy and have gone through takaful training. We decided to choose takaful agents who meets the two criteria to represents users. Takaful agents were chosen because they have formal takaful training and they are a better group of respondents who understand the technical information to represent the whole population of takaful participants.

The disclosure index was distributed through emails and social media applications (WhatsApp, Telegram and Line). Google Form were used as a medium to disseminate and gathered responses from the users. The index distributed to 250 takaful agents to gain their responses. The disclosure index was distributed from 1st January 2021 until 14th February 2021. Only 79 respondents reply and give their response. The data were gathered and analysed using SPSS.

4. FINDINGS

1. Demographic Information

There are seventy-nine respondents answering the survey, consists of 44 (55.7%) male and 35 (44.3%) are female. In term of age, 6 respondents (7.6%) are under 25 years, 23 (29.1%) are between 26 to 35 years, 23 (29.1%) are between 36 to 45 years, 20 (25.3%) are between 46 to 55 years, 6 (7.6%) are between 56 and 65 years old and 1 (1.3%) is over 65 years old.

The academic qualification of the respondents, are SPM 3 (3.8%); SPM 4 (5.1%); Diploma 30 (38.0%); Degree 33 (41.8%); Master 6 (7.6%); PhD 3 (3.8%) and others qualification is 1 (1.9%). In terms of academic background, 38 (70.4%) respondents are from Business/Management; Law 7 (13%); Engineering 3 (5.6%) and Science 6 (11.1%).

2. Information on Takaful Policy Requirements

The respondents are required to evaluate 20 voluntary information relating to takaful policy requirements for takaful operator in Malaysia. The respondents are required to rank the information according to its importance; 1 – Least important to 5 – Most important. Table 1 below shows the descriptive statistics for the information pertaining to takaful policy requirements. For transparency and brevity, the percentages of more important and most important (4 and 5 on Likert scale) were added together and report it as “percentage that perceive statement to be important” in the last column of the table 1. Those who are uncertain (3 on the Likert scale) were classified as perceiving the statement not to be important as the middle point of the Likert scale (3) suggest neutrality in the perception of the importance of the statement. The statement was ranked according to the percentage of users that perceive statement to be important which was adopted from the previous studies (Charl De Villiers & Van Staden, 2010:233-234; Kamala, 2014:295).

Table 1
Descriptive statistics for information pertaining to takaful policy requirements

Takaful Policy Requirements	Means	Standard Deviation	Std. Error of Mean	Rank	Percentage that perceive statement to be important
Obligations of participants	4.7722	0.47903	0.0539	1	97.47%
Statement of assurance	4.7468	0.49273	0.05544	2	97.47%
Obligations of takaful operators	4.6835	0.51997	0.0585	3	97.47%

Complaints handling policy	4.6203	0.56168	0.06319	4	96.20%
Procedures of claim processing	4.6203	0.60561	0.06814	4	93.67%
Remunerations policy	4.6076	0.66829	0.07519	6	92.41%
Tabarru' concept	4.5949	0.63081	0.07097	7	92.41%
Operational model	4.5823	0.56857	0.06397	8	96.20%
Exit options	4.481	0.63772	0.07175	9	92.41%
Underwriting policy	4.443	0.69332	0.078	10	88.61%
Investments mgt strategy	4.2911	0.87928	0.09893	11	77.22%
Policies on loss rectification	4.2785	0.83107	0.0935	12	81.01%
Policy on PRF surplus	4.2658	0.85798	0.09653	13	81.01%
Specific investment objectives	4.2532	0.79208	0.08912	14	81.01%
Retakaful mgt strategy	4.2405	0.83536	0.09399	15	81.01%
Surrender value basis	4.2278	0.84655	0.09524	16	78.48%
Publish on websites	4.1646	0.82323	0.09262	17	75.95%
Policies to manage operating costs	4.1266	0.95229	0.10714	18	74.68%
Allowable expenses	4.0633	0.82185	0.09246	19	74.68%
Commissions and agency fees	4.0633	1.06629	0.11997	19	73.42%
Average	4.4063				86.14%

From table 1 it was found that majority of the respondents perceive all 20 voluntary disclosure items in takaful policy requirements to be important. 97.47% (with mean of 4.7722) of respondents feels that obligations of Takaful participants (to make full disclosure of material facts relevant to the proposed transaction before signing any documents, to avoid any conflicts in the future) is either more important or most important. The lowest percentage is information on commission and agency fees, where 73.42% (with mean of 4.0633) of the respondents perceived that the information is either more important. More than 80% of the respondents perceives that the 15 out of 20 of the information related to takaful policy requirements are either more important or most important. On average, 86.14% (overall mean of 4.4063) of the respondents perceive that information on takaful policy requirements to be important.

5. CONCLUSIONS, RECOMMENDATIONS AND FUTURE RESEARCH

The findings of the study provide valuable insights to the standard setter as they are made aware of potential customers' or participants' needs based on how they ranked the information related to takaful policy requirements.

The average percentage of users perceive that the information on takaful policy requirements to be important is 86.14% which is high. According to the decision usefulness theory, (based on users' knowledge and needs), users may agree or disagree with the meaningful disclosure index developed. As for this study, majority of the users agree with the standard and guidelines of the authorities.

This is the first study in Malaysia to evaluate the disclosure of takaful policy requirements information which is consistent with the available standards and regulations in the takaful industry. The findings of the study provide significant insights to Bank Negara Malaysia as regulator to undertake the task of formulating new legislation and standards. With input from the users, Bank Negara can improve the existing regulation by revising the existing guidelines especially on the consideration to classify the information as mandatory requirements.

Further research is needed to extent the scope and to include other voluntary information listed in the takaful operational framework, IFSB and other related rules and standard. The current practice of

disclosure needs to be observed and analysed to match against the desired level of disclosure needed by the potential customers or participants.

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Impact Of Behavioural Factors On Investors' Financial Decision Making In Malaysian Stock Market

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ABSTRACT

Malaysia economy has grown rapidly for the past 10 years. Bursa Malaysia has acted as one of the platform to raise fund for Malaysia listed company in order to expand their business. In the past, stock market movement has been explained by efficient market hypothesis (EMH). However, in recent year, some literatures have actively investigated investors' behavioural factor that affect investors' decision making. There is lack of research in behavioral finance in Malaysia. This paper attempts to fulfill the gap by analyzing behavioral factors in Malaysian stock market. The objective of this paper is to propose a robust framework based on the analysed literatures. The methodology that will be used in this research is survey questionnaire. The survey plans to collect responses from respondents who are retail investors in Malaysia. This paper will use SmartPLS to analyze the effect of investor sentiment, overconfidence, overreaction and under-reaction and herd behavior on investment decisions. The findings of this paper would help to understand the behavioral pattern of individual investors in Malaysia. This will help the government to educate the new generation of the importance of investment especially in Malaysia stock market. This also helps to identify the common mistake made by the investors in Malaysia so that the younger generation will be able to learn from more experience investors. As a result, this will lead to the growth of Malaysian stock market.

Keywords: investor sentiment, overconfidence, overreaction and under-reaction and herd behavior

1. INTRODUCTION

Malaysian economy has grown for the past 10 years due to the successfulness of Malaysian Development Plan such as Tenth Malaysian Development Plan and Eleven Malaysia Development Plan. Malaysia is also one of the most open economies in the world with a trade to GDP ratio averaging over 130% since 2010. Malaysia's economy has been growing at an average growth rate of 5.4% since 2010, it is expected that Malaysia will transit from middle-income economy to a high-income economy by 2024 (The World Bank, 2021). As a result of the effort of government and private sector, there were high influx of foreign direct investment flowing into Malaysia and there are a lot of different types of investment available for local investors and foreign investors.

Malaysia stock market, known as Bursa Malaysia, was one of the most active stock market in term of trading volume in 2020. The volume data reported in April 2021 was 150,227.092 million shares and 210,954.105 million shares traded respectively in March 2021 (Global Database's Malaysia, 2021). In Aug 2020, trading volume on Bursa Malaysia went on as high as 26.65 billion shares and worth RM9.05bil changed hands per day compared to as low as 1,993.334 million shares traded in Mar 2001. It has recorded the highest daily volume in the region compared to Singapore which has recorded 1.52 billion shares traded on the same day while the Philippines had volume of 5.27 billion. Meanwhile, Thailand and Indonesia had recorded shares volume traded at 16.62 billion and 12.3 billion, respectively (TheEdge, 2021).

There had been numerous literature in the past that used mathematical model for example efficient market hypothesis (EMH) to explain the movement of stock price in stock market, this helps the

investors to make profit in stock market with minimum risk (Fama, 1965; Lintner, 1965). However, there are another behavioural research which investigate on human emotional and psychological factors that may affect individual investment decision. Those factors include fear, greed and overconfidence (Statman et al., 2006; Lo et al., 2005; Shefrin, 2002; Daniel et al., 1998).

Since mathematical model cannot explain all of the movement of stock price, there must be other behavioural factors that may affect individual investment decision. The motivation that make me research on this topic is because I notice that there is a gap to be filled for topic on behavioral finance in South East Asia as there were not many literatures on this part of the world (Yang et. al, 2012). Most of the past literature were on developed countries in North America and European countries (Guo et al., 2017, Pikulina et al., 2017).

Hence, this study will concentrate on human psychological factors that affect individual investment decision. The objective of this paper is to propose a robust framework based on the analysed literatures. This study will provide benefits to practitioners as well as academicians. This is because this study will provide a deeper understanding of how psychological and behavioral factors affect investors' decision making, knowing this will allow practitioners to avoid these biases. Academically, this study also contributes to the body of knowledge on the stock market investors' investment decision behaviour.

2. LITERATURE REVIEW

2.1 Investment decision

It is important to identify the decision behavior of the investors. This is because these investors constantly interact in the stock market (Stout, 2002). The dependent variable is investment decision. This investment decision includes decision to purchase, to hold and to sell. This decision can be measured by investors' reaction to buy or sell the securities based on the released financial performance of the company thru media, on technical analysis by reading the chart and volume analysis, or from fundamental analysis or the company Glaser and Weber (2007). Studies on investors' investing decision has proven to help both retail investors as well as the fund managers (Jaiyeoba and Haron, 2016). Researcher such as Massironi and Guicciardi (2011), suggested that the future research to research on this topic based on a more constructivist perspective because they believed this will be able to understand investors decision making process on a more formal basis. The reflective investment decision attitude and developed constructs and cognitive processes will create greater constructive awareness and efficacy (Mohamad and Perry, 2015).

2.2 Investor sentiment

Investor sentiment is defined as investors' beliefs about the future cash flows of the company or cash generating ability of the company as opposed to current fundamentals of the company (Baker and Wurgler, 2006). Investor's optimism or pessimism will affect investors' trading on mainstream models (Black, 1986) which may result in investor react differently according to his perspective although the fundamental of the stocks was bad. This is further supported by Lee et al. (2002). According to them, when the investors are pessimistic, the stock return will reduce and vice versa especially in small firm where the discount of the share are larger. Evidence was found in the research of Leonard and Shull (1996) that investor sentiment is priced in the share price. This is further supported by Mian and Sankaraguruswamy (2012) that share price response to news and noise in the market. This moves investors' sentiment and in turn moves the share price. This is even more obvious in a volatile market. In a highly volatile market, stock price moves positively in a good earning season because market sentiment is high compared to the low sentiment market where volatility is low. As a result of investor sentiment and noise in the market, investors' decision making are being affected (Ben-Rephael et al.,2012). However, Lemmon and Portniaguina (2006) found no evidence of basing on market sentiment to predict or forecast the share price and momentum premiums. Guo et al. (2017) who did the research in China also concluded that predicting the share price based on market sentiment will only be valid if investor put attention on share price. Otherwise, there is no correlation between investor sentiment and stock price.

2.3 Overconfidence

Individuals tend to overestimate the chances of success but underestimate the chances of failure or risk (Hirshleifer et al., 2012). This result in investors' overconfidence and overestimation of their skills of trading. Investors who are overconfidence over their own investment knowledge will tend to trade excessively, whereas, investor who are lack of confidence will underinvest, while investor with moderate confidence will trade with cautious and obtain good result (Pikulina et al., 2017).

Dittrich et al. (2005) showed that investors tend to be overconfidence when dealing with complex decisions, however, it will get lesser with the increase in investors' age. Wang (2001) concluded that overconfident investor survived in a highly risky market. Whereas, pessimistic investor get flushed out from the market. This is supported by Besharov (2004), that overconfident will help in the absent of accurate information.

According to the research by Gervais and Odean (2001), traders tend to be overconfident in their early stage of trading history career, this started to diminish when they have accumulated their trading experience. In a research done in Taiwan stock market by Lin and Shiu (2003), they found that overconfident investors tend to trade more frequently and their return is lower compared to mature investors. They are also over-optimistic over the value of IPO company and overvalue the share price of the companies. Investors who have past record of making accurate forecasting may eventually underperform in their subsequent prediction because of overconfidence. Young and male investors with lower education level tend to be overconfidence in trading behavior because they are less rational and informed (Hilary and Menzly, 2006). This is further supported by Al-Hilu et al. (2017) who found that the individual investors in the UAE who are overconfident have bias toward selling 'winner' stock but keeping 'loser' stock. This is because they tend to believe in themselves and lack of reasoning and analytical skill. Eventually, they made decision based on rumors or their own channel or information and familiarity when making investment decision.

2.4 Overreaction and underreaction

Market inefficiency occurred when investors overreact to unexpected news (De Bondt and Thaler, 1985). This is because investors put attention on stock performance in the past and ignore the possibility of change of trend of the stock. It is proven that company which have good performance now once had bad past performance (Lakonishok et al., 1994). His research concluded that investors overreact to bad performance and ignore the possibility of reversion of stocks which produce good return in the future.

Mean reverting and trend are the two stages of earnings that are observed by the investors. Investors underreact to earning reversion as they believed that it might only be temporary. However, investors will also overreact to false trend believing that the trend will repeat itself (Daniel et al., 1998). Investors who are overconfidence will overestimate on the signal they perceived to be true of a stock and underestimate the public signal. As a result, they have gain in the short-term but eventually make a loss in the long-run. This is because public information eventually outweighs personal behavioral anomalies (Hong and Stein, 1999). Testing of overreaction and underreaction was carried out by Kausar and Taffler (2005), under-reaction effect was found when investors received bad news and they overact to good news. This was further supported by Daniel et al.'s (1998) model. Under-reaction evidence was also found in Ikenberry et al. (1996)'s research when they analyzed post stock splits performance. Similarly, Desai and Jain (1997) also found evidence of underreaction in post stock split. Overreaction was found in emerging markets as well. According to Boubaker et al. (2015) "losers" tend to outperform the "winners" over short term, hence it means that in the short-term investors underreact to earning but in the long term they overreact to unexpected earning. Del Giudice and Paltrinieri (2017) also found evidence of overreaction by retail investors in Africa stock market.

However in Brazil stock market, Piccoli et al. (2017) found that stocks overreact to both positive and negative news. They also found that share reaction is more obvious when market is less volatile. This result is different from prior research result where share price showed higher volatility in highly volatile market.

2.5 Herd behavior

In economics and finance, herding is the phenomenon when investors follow the crowd in making investment decision but not based on their own decision. With the help of technology, internet blog serves as communication channel which lead to herd behavior among the investors. As a result, this leads to a collective behaviour of buying or selling a particular stocks or assets in large numbers. This is evident from the irregular share trading of GameStop Corp (GME) at Dow Jones in January 2021 (Moreau, F, 2012). Herd behaviour is more obvious during market asymmetry because during this period market are more volatility, this makes the markets more fragile and vulnerable. As supported in the past research, investors resorted to significant herding in trading during uncertainty due to lack of information (Bikhchandani and Sharma, 2000). Hirshleifer (2012) concluded that herding was due to conformity bias, because people feel more comfortable by following others during investment. This is evident at mutual fund manager where they purchase stocks based on past performance but sell the stocks at the same time, this showed evident of herd behavior (Grinblatt et al.,1995).

Herd behavior causes deviation of asset price (Chiang and Zheng, 2010). Balcilar and Demirer (2015) also found strong evidence of herding behaviour in Middle East stock markets, however, herding behavior is the least at Abu Dhabi stock market. Asian markets has more obvious herding behavior compared to American markets during market volatility (Chiang & Zheng, 2010). This is due to bigger component (80%) of institutional holding in American market compared to only 50% in Asian Market (Bloomberg, 2017). It is believed that institutional investors will be able to make more objective assessment compared to individual investors. As individual investors received different information from different sources, this will result in different sentiment and herding effect (Philippas et al.,2020). Lao and Singh (2011) found a significant presence of herding in the Chinese stock market but not in Indian stock market. This is further supported by Kumar et al. (2016) and Dutta et al. (2016) who did not find significant presence of herding in Indian stock market.

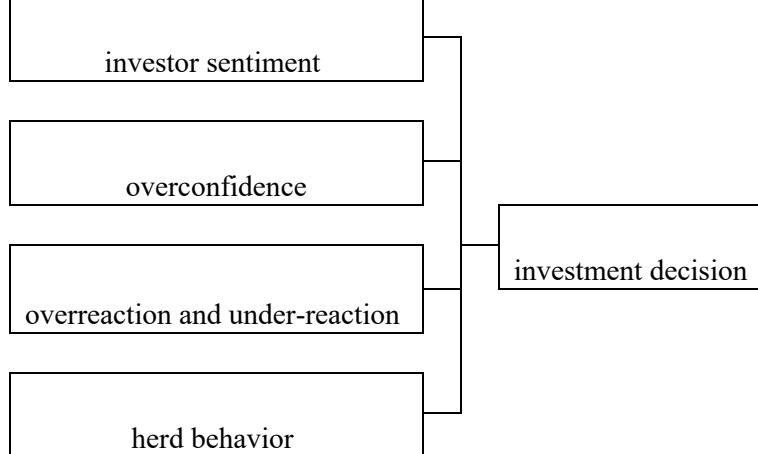
3. RESEARCH METHODOLOGY

The objective of this paper to investigate the relationship between investor behavioural factors and investment decision in Malaysian stock market. The hypothesis of this paper are:

- H1. There is a significant positive effect between investor sentiment and investment decision.
- H2. There is a significant positive effect between overconfidence and investment decision.
- H3. There is a significant positive effect between overreaction and under-reaction and investment decision.

H4. There is a significant positive effect between herd behavior and investment decision.

Below is the conceptual framework.



4. CONCLUSION

The objective of this paper is to propose a robust framework based on the analysed literatures. Data collected will be analysed using SmartPLS. The explanation will be used to analyses different

behavioural effect that will affect individual investor investment decision. The findings of this paper would help to understand the behavioral pattern of individual investors in Malaysia. This will help the government to educate the new generation of the importance of investment especially in Malaysia stock market. This also helps to identify the common mistake made by the investors in Malaysia so that the younger generation will be able to learn from more experience investors. As a result, this will lead to the growth of Malaysian stock market.

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The effects of budgetary participation, job satisfaction, and justice on organizational citizenship behavior among lecturers: role of the organizational values of Muhammadiyah

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ABSTRACT

This paper investigates the role of the organizational values of Muhammadiyah on the relationship between budgetary participation, job satisfaction, and justice on organizational citizenship behavior based on Self Determination Theory. An online survey was conducted to 350 lecturers and grouped based on their experience in receiving education in Muhammadiyah's school or college. The data were then analyzed using a partial least square-based structural equation model (PLS-SEM). The PLS-SEM path result does not support the hypotheses of association between budgetary participation, job satisfaction, and organizational citizenship behavior, as the self-determination theory explained. We found support for the hypothesis of an association between distributive justice and OCB. However, we have supports that indicate the experience of education in Muhammadiyah's school or college affects the association of justice-OCB. The findings of this research provide practical implications for the management of higher educational institutions. The management should orient the lecturers and other staff to implement the organization's values to improve the goals congruence between elements in the institution and the institution's goal. Every member of the institution should be encouraged to improve their OCB for a better institution's performance.

Keywords: Altruism; compliance; multi groups analysis; PLS-SEM; self-determination theory

1. INTRODUCTION

This paper applies two theories to examine the antecedents of Organization Citizenship Behavior (OCB). The first theory, self-determination theory (SDT) (Deci & Ryan, 2000, 2008), applied to investigate job satisfaction (JS) as the antecedent of OCB. We also empirically test the mediating effect of job satisfaction on the relationship of budgetary participation (BP) and OCB. Self-determination theory suggests that the higher JS leads to a higher OCB, while BP positively affects JS. Thus, a person with a higher BP tends a higher OCB. The second theory, justice theory (JT) (Rawls, 1971, 1999), applied to test the dimensions of justice as OCB's antecedent. The three dimensions are distributive justice, interactional justice, and interpersonal justice. The higher the perception of justice, the higher the OCB. The current research is motivated by three reasons. First, the association between budgetary participation and job satisfaction has revealed by Chenhall (1986) and Chenhall & Brownell (1988), while the association between JS and OCB is examined by Ang et al. (2003). However, the research that examines the relationship between budgetary participation, job satisfaction, and OCB using the SDT framework is still limited. Second, researches on OCB topics are excessively conducted on business or work organizations, while research on this topic in an educational setting is still minimal, especially on the lecturer. Third, Muhammadiyah is one of the most prominent religion-based organizations snowballing with "charity movement" (Nashir, 2015). One of Muhammadiyah's focuses is education and teaches the "charity movement" to all students. This research is the pioneer in investigating the internalization of "charity movement" on Muhammadiyah's educational institutions' alumnae and its effect on OCB. Previous research on OCB, especially on the higher education institution were conducted, among others, by Abror et al. (2020) and Munawir et al. (2019). Using

lecturers in a state-owned university in West Sumatera as samples, Abror et al. (2020) found that satisfaction significantly impacts OCB. Munawir et al. (2019) conducted research using heads of programs in religious-based private universities in Makassar and Aceh City. They found empirical evidence that OCB has an impact on performance. They also found that good university governance was mediated the relationship between OCB and performance. This study contributes to the OCB literature in the following ways. The recent studies on OCB, especially in a higher education setting, are ubiquitous to focus on students (Azila-Gbettor et al., 2020; Khaola, 2014). However, this research focuses on the role of budgetary participation and justice in promoting lecturers' OCB. Second, this research expands the earlier studies on OCB by examining the role of value adopted in the lecturers' educational organizations on their OCB. Finally, this research provides insight for Muhammadiyah to evaluate their educational institution's success in educating and internalizing their organizational values.

2. LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

2.1 Job satisfaction and justice as antecedents of OCB

The attachment of organizational members and their commitment to organizational goals has a considerable influence on the organization's continuity. An organization can operate effectively when all members of the organization have ties to the organizational structure and social environment in the organization (Katz, 1964). This concept was later put forward as citizenship (Bateman & Organ, 1983; Organ, 1988; Smith et al., 1983). Many motives drive people to do OCB (Matsushita, 2015; Rioux & Penner, 2001). However, the later research focused on job satisfaction and justice as the antecedent factors. People in an organization with a high level of job satisfaction and a high perceived justice level would do OCB as a reciprocity action (Organ, 1977, 1988). This emergence process of OCB is consistence with the self-determination theory. Deci & Ryan (2008) explained how people shifted their motivation—extrinsic to intrinsic—as a reaction to the needs, wealth, and basic personality. This theory is well-suited in explaining why people would do voluntary acts (Güntert & Wehner, 2015). Organizational citizenship behavior might be considered as a voluntary act because OCB has no relation with reward system. Satisfaction's role, as a general concept, in affecting OCB revealed by Koys (2001), Podsakoff et al. (1990), Farh, Zhong, & Organ (2004), and Zenker & Rütter (2014). Other researchers responded to Organ's (1977) statement that the work environment was also associated with OCB. They were then revealed that job satisfaction has a direct effect on OCB as claimed by Organ (1977; 1988) (Ang et al., 2003; Moorman et al., 1993; Somech & Drach-Zahavy, 2000; Van Dick et al., 2008; Williams & Anderson, 1991; Xie et al., 2017). As Rawls (1971) stated, justice is a social contract that assigns rights and duties between members of society and determines the division of social benefits. Thus, according to the utilitarianism concept, men would act differently based on their perception of justice as fairness. There are empirical shreds of evidence that justice as fairness affected the performance (Ghosh et al., 2017; Lam et al., 2002), satisfaction (Alwin, 1987; Chan & Lai, 2017), and also motivation (Folger, 1993; Olafsen et al., 2015). Lavelle et al. (2009) elaborated on the association between fairness perception on a particular source of justice and OCB. Their finding is consistent with Rupp & Cropanzano (2002), who stated the positive association of procedural fairness and OCB. However, research on association between dimensions of justice and OCB result various findings (Lambert & Hogan 2013; Chou et al. 2013; Lavelle et al. 2009). Organ and Moorman (1993) pointed out the importance of justice in explaining OCB. They argued that there was a possibility of the occurrence of misperceptions of justice and job satisfaction. Thus, it is important to draw a clear association between job satisfaction, justice, and OCB. Testing the role of job satisfaction and justice as predictor of OCB is important.

2.2 Budgeting and job satisfaction

Budgeting is an essential process in an organization. This process focused on resource allocation for business activity in an organization. The budgeting process might be initiated from the top level of the organization, known as “top-down” budgeting, or initiated from the lower level management, known as the “bottom-up” budgeting process. However, the “top-down” has a more significant effect compared to its counterpart (Covaleski, 2003). The attainability of budget in the “top-down” budgeting has an interesting association with the employee's motivation. The employees will be motivated and will have higher motivation when the budget attainability located somewhere between easy to attain and impossible to attain (tight but attainable). This association show an “inverted U-shaped curve”

(Argyris, 1953; Kenis, 1979; Ronen & Livingstone, 1975; Stedry, 1960). A different kind of association occurred when an organization implemented “bottom-up” budgeting that involving participation across level of employees. This budgeting process tends to create a more attainable budget. However, there has been various evidence of a positive relationship between participation in the budgeting process and motivation (Kenis, 1979; Merchant, 1981). However, Brownell & McInnes (1986) found an insignificant correlation between participation and motivation. The final budget acceptance was expected to be shifted up by involving employees in preparing the budget (Aranya, 1990), and finally would shift up the performance (Kenis, 1979). Those finding were contrary to Milani (1975), who stated that the association between participation and performance was weak. Those two conflicting evidence was due to the role of the budget instrumentality (Cherrington & Cherrington, 1973). Aranya (1990) found the interaction effect between budget participation, satisfaction, and budget instrumentality. He explained that high satisfaction was associated with high participation and low budget instrumentality, otherwise, low participation and high instrumentality. Other two research show that budget participation and satisfaction have an association with budget emphasis and organization commitment as moderating variables (Lau & Chong, 2002), and role ambiguity as mediating variable (Chenhall & Brownell, 1988).

2.3 OCB in Muhammadiyah

Muhammadiyah is one of the most prominent spiritual organization in Indonesia. Its name means the follower of Muhammad, the last prophet in Islam. The organization has a mission to purify Islam in Indonesia and focused on improving the community level of health and education as a strategy. This strategy leads Muhammadiyah to found educational organizations and health and social organizations across the country. The latest data shows that this organization has 9000 schools, 171 higher lever educational organizations, 2119 hospitals and clinics, 454 nursing houses and other residential-care facilities, and thousands of mosques across the country (Pimpinan Pusat Muhammadiyah, 2018a). In building so many facilities, Muhammadiyah depends on internal funding and “hibah” or “wakaf” (grant) from sympathizers, including grants from the international social organization. It is interesting because Muhammadiyah is an independent organization, including independence on the fund (Nakamura, 2012). It is interesting to understand how Muhammadiyah raises the internal potencies and manages it to build many social facilities. The founder of Muhammadiyah, Kyai Haji Ahmad Dahlan, told his followers to look after the organization and not join this organization just for a living (Fakhrudin, 2012). This quote becomes a principle that must be held by all members. This principle told that every member of Muhammadiyah should prioritize the organization above personal interest. This principle then becomes the guidance of the Islamic way of living for all its members (Pimpinan Pusat Muhammadiyah, 2018b). The principle that prioritizes organization than personal interest is consistent with an attribute of organizational citizenship behavior, the organizational concern (RiouxB & Penner, 2001). Thus, it is clear that Muhammadiyah urges its members to improve their level of OCB. The principle that prioritizes organization than personal interest is consistent with an attribute of organizational citizenship behavior, the organizational concern. Although not a primary performance indicator, OCB is still very important to an organization. OCB may improve the social mechanism and affect the environment that leads to better individual performance, and in the end, a better organization’s performance (Katz, 1964; Smith et al., 1983).

2.4 Hypotheses

As discussed above, job satisfaction is a strong predictor for OCB (Organ, 1977, 1988; Smith et al., 1983). However, there is a possibility that misperceptions and job satisfaction occur in research, especially when the research only involving one of these constructs (Organ & Moorman, 1993). Thus, we testing the following hypotheses:

- H1: Job satisfaction positively affects the OCB.
- H2a: Distributive justice positively affects the OCB.
- H2b: Procedural justice positively affects the OCB.
- H2c: Interactional justice positively affects the OCB.

Tested partially, we found evidence on the relationship between budgetary participation, job satisfaction, and OCB (Aranya, 1990; Chenhall & Brownell, 1988; Cherrington & Cherrington, 1973; Kenis, 1979; Lau & Chong, 2002; Milani, 1975). We test whether budgetary participation might be applicable to improve OCB on the higher educational institutions. Thus, we test the hypothesis as follows:

H3: Budgetary participation positively affect the job satisfaction

H4: Job satisfaction mediates the relationship between budgetary participation and OCB

H5: The relationship² between budgetary participation, job satisfaction, and OCB are different between lecturers who have experience in Muhammadiyah educational institutions and those who do not.

3. METHODOLOGY

This research was using a positivistic-quantitative approach. Data was collected using an online survey with lecturers in Indonesia as respondents. The online survey link was sent to 25 public universities/colleges and 100 private universities (including Muhammadiyah's institutions). Using a snowballing sampling, we received 350 responses. Data were then analyzed using a PLS-SEM in STATA 16.1. The procedure for performing PLS-SEM in Stata was developed by Venturini & Mehmetoglu (2017). Survey instruments were developed based on the existing instruments developed by Lambert & Hogan (2013), Milani (1975), Ramkissoon (2016), and Spector (1985). A back-translation was performed to verify semantic equivalency as recommended by Maneesriwongul & Dixon (2004).

4. RESULT

This research was carried out on high educational institutions in Indonesia. The participants were lecturers in various universities. An online survey was carried out by sending the questionnaire to lecturer groups in universities across the county. Three hundred and fifty (350) data were collected consist of 149 (43%) were lecturers in public schools/universities and 201 (57%) were lecturers in private schools/universities. We find support for the H_{2a} and H₃ (see table 1 below). There are positive associations between distributive justice on OCB (H_{2a}: $\beta=0.2210$, $p<0.05$) and budgetary participation and job satisfaction (H₃: $\beta=0.4420$, $p<0.000$). The variance explained are 0.158 and 0.193 for OCB and job satisfaction respectively. According to the effect size defined for R^2 by Cohen (1988), these effects can be classified as medium (small: 0.02; medium: 0.13; large: 0.26). As mentioned above, we use GoF proposed by Tenenhaus et al. (2005) because we intended to compare the model with two set data. The GoF is useful to assess how well the model explains different sets of data but not suitable for model validation (Henseler & Sarstedt, 2013). We performed a multi group analysis PLS with 200 replications. We find support for H₅ with absolute difference=0.5990 (group 1-group 2) and p value=0.0200 (see table 2 below). We only find a difference in the path between distributive justice and OCB. The β for the global data is 0.2210. The coefficient (β) for group 1 (lecturers with no experience in the education in Muhammadiyah institution) is higher than the β for the global data. In contrast, the β for group 2 (lecturers with experience in Muhammadiyah educational institution) is much lower (-0.3200). Results presented in table 2 and table 3 below indicated that only distributive justice impacts OCB. However, there is a difference in the relationship between distributive justice and OCB. Lecturers with the internalization value of Muhammadiyah show different responses on their perception of distributive justice.

Structural Effect	Group 1	Group 2	Statistic	<i>p</i> value
Distributive Justice -> OCB	0.2790	-0.3200	2.3310	0.0200
Interactional Justice -> OCB	0.1320	0.3000	0.7620	0.4460
Procedural Justice -> OCB	0.0560	0.3970	1.1360	0.2570
Job Satisfaction -> OCB	-0.0030	0.0530	0.1260	0.9000
Budgetary Participation -> Job Satisfaction	0.4170	0.5100	1.3930	0.1640

number of replications: 200

group labels:

Group 1: No Experience

roup 2: Have Experiences in Muhammadiyah's education

group sizes:

Group 1: 265

Group 2: 85

Variable	OCB	Job Satisfaction
Distributive Justice	0.2210 (0.011)	
Interactional Justice	0.1550 (0.134)	
Procedural Justice	0.0450 (0.697)	
Job Satisfaction	0.0290 (0.747)	
Budgetary Participation		0.4420 (0.000)
r ² a	0.1580	0.1930

*p-values in parentheses

Number of obs	=	350
Average R-squared	=	0.1818
Average communality	=	0.7044
GoF	=	0.3578
Average redundancy	=	0.1068

4.1 Sensitivity analysis

In this additional analysis, we regroup the data based on institutional affiliation. We make three groups, which are (1) public institution, (2) private non-Muhammadiyah, and (3) Muhammadiyah. We make this group because, in Muhammadiyah's institution, there is no condition that a lecturer should be a Muhammadiyah institution alumnae. Conversely, a Muhammadiyah alumna also can apply to a public institution or other private institution for a lecturer position. We performed this test to assure whether the value of Muhammadiyah is embedded in the organizational level and thus may affect the organization's members. The result is presented in table 3 below and shows that there are no differences between groups. We then conclude that the value of Muhammadiyah does not exist at the organization level.

Structural effect	Group 1	Group 2	Group 3	P 2vs1	P 3vs1
Distributive Justice -> OCB	0.2900	0.2250	0.1010	0.8380	0.2640
Interactional Justice -> OCB	-0.0130	0.2690	0.2140	0.2070	0.3600
Procedural Justice -> OCB	0.1920	-0.0610	-0.0030	0.2930	0.4710
Satisfaction Justice -> OCB	0.0040	0.0380	0.0840	0.8930	0.5290
Budgetary Participation -> Job Satisfaction	0.4890	0.3810	0.4130	0.2210	0.6350

number of replications: 200

legend:

Group 1: Public

roup 2: Private Non Muhammadiyah

Group 3: Muhammadiyah

group sizes:

Group 1: 149

Group 2: 118

Group 3: 83

5. DISCUSSION AND CONCLUSIONS

This study aims to ascertain the relationship between distributive justice, interactional justice, procedural justice, budgetary participation, job satisfaction, and OCB in higher educational justice with lecturers as participants. The second objective is to discover whether the value of Muhammadiyah

affects those relationships. A PLS-SEM procedure using Stata 16.1 was performed to test the proposed hypotheses. The result of the model indicates the following:

1. For the relationship between distributive justice and OCB, a significant relationship exists with an estimated coefficient is 0.2210 ($p<0.05$).
2. The relationship between budgetary participation and job satisfaction exists with a coefficient of 0.4420 ($p<0.01$).
3. The relationship between distributive justice and OCB on lecturers who are alumnae Muhammadiyah institutions is different from those relationships on lecturers who are non-alumnae on Muhammadiyah institution.

The result is inconsistent with Farh et al. (2004), Organ (1988), Podsakoff et al. (1990), and Smith et al. (1983). There is no evidence for the existence of the relationship between job satisfaction and OCB. Any other motives for OCB might be taken into account. The management impression motives on OCB might exist (Bolino, 1999; Bolino et al., 2009, 2010, 2012; Bolino & Turnley, 2005). Furthermore, the management impression motives will be reflected in a negative correlation between job satisfaction and OCB. If the two motives emerge coincide in a research, the effect will cancel each other and result in non-significant findings. Moreover, a non-linear model might be applied in future research to reveal the relationship between job satisfaction and OCB more clear. This research analyzed the role of job satisfaction and justice on OCB in a higher educational institution with lecturers as respondents. The result shows that only distributive justice has a relationship with OCB and indicates that OCB might be affected by the changes in distributive justice perceptions. Further, higher educational institutions' management may boost the lecturers' OCB by promoting distributive justice in lecturers. Further analysis reveals the difference in the relationship between distributive justice and OCB on lecturers who are alumnae of Muhammadiyah educational institutional on lecturers who are not ($p<0.05$). Additional analysis found that there is no difference in job satisfaction-OCB relationship between institutions' affiliation. This result indicates that the value of Muhammadiyah appears on individuals as a result of previous educations and affects their behavior, especially on OCB. The difference in the relationship between distributive justice and OCB in Muhammadiyah's institutions and the person with experiences in Muhammadiyah's educational institutions might result from the recruitment systems in Muhammadiyah's institution. Having experiences in Muhammadiyah's educational institutions is not a must. This research, however, is a subject of common limitations of survey research. Moreover, the samples in this research are limited to lecturers only, while the management in a particular institution might be involved, non-lecturers staff.

Thus, the generalizations of the results should be made with caution.

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Bureaucratic corruption in community sport program management: a networking perspective

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ABSTRACT

This study explores the network that raises the features of bureaucratic corruption in implementing fiscal decentralization. The analytical approach applies Actor Network Theory (ANT) to investigate a series of episodes of local bureaucratic corruption related to spending on public goods and services, the largest type of expenditure allocation in most local governments in Indonesia, which is packaged in the community sport program business in Bantul Regency. The analysis shows that corruption networks are increasingly spreading to the joints of the regency bureaucracy at the lowest level, obscuring the involvement of many actors through pressure on power and administrative sophistication within the framework of fiscal decentralization. This study develops a useful analysis to promote an anti-corruption strategy by analysing the execution of public expenditures by Indonesian local governments within the framework of fiscal decentralization to address the expansion of corrupt behaviours of the actors involved. As such, this study provides relevant insights for policymakers and local and national institutions.

Keywords: ANT; Corruption; Decentralization; Local Government; Public Expenditures

1. INTRODUCTION

Local government corruption in Indonesia in the last two decades has shown an increase (ICW, 2019), which is in line with implementing fiscal decentralization (Law 32/2004). In fact, the local government apparatus within the framework of fiscal decentralization has broader authority to execute the budget to provide services according to the needs and preferences of the local community (Kim, 2008). In contrast, fiscal decentralization also provides an open space for bureaucrats to engage in corruption that hinders public welfare in developing countries (Alfada, 2019; Kim, 2008; Kolstad et al., 2014; Martines-Vasques et al., 2017).

This study argues that government bureaucrats use their authority to execute budgets that benefit themselves (Rose-Ackerman, 1978: 88), so that fiscal decentralization further fosters bureaucratic corruption in local governments (Prud'homme, 1995). Here, the administrative skills of local government officials play a role in disguising the interests of actors involved in implementing the public budget, in that context we concentrate on the corruption network of the community sports program (CSP) in Bantul Regency involving business people, mediators, and legislators. The protagonists of the corruption episode in the CSP are legislators, among them Mr. NS, Mr. SS, and Mr. ES, which have the political power to intervene in the authority of local government officials.

This study reveals the emergence of corruption through the process of translation (Callon, 1986), which explains the role of power and authority of the makers through the ANT approach (Latour, 2005). The analysis uncovers and provides insight into the relationship between corruption and fiscal decentralization, the web of corruption disguised through administration, and the flow of money to few people. Thus, this study develops a useful analysis to promote an anti-corruption strategy by analyzing the execution of public expenditure budgets by Indonesian local governments within the framework of

fiscal decentralization to deal with the expansion of corrupt behavior involved. As such, this study provides relevant insights for local and national policymakers and institutions.

2. BUREAUCRATIC CORRUPTION AND FISCAL DECENTRALISATION

Fiscal decentralization triggers growth in the level of corruption in local governments because of the great potential to exploit the budget for the benefit of the apparatus (Alfada, 2019). The broad and monopolistic authority of the local government apparatus to offer bureaucratic services in government agencies is an open space for corruption (Klitgaard, 1998; Rose-Ackerman, 1978). Thus, bureaucratic corruption brings about spending in the regions is getting worse with exist broad powers through fiscal decentralization.

Until now, improving public services through the implementation of fiscal decentralization is still unclear to improve the welfare of local people due to the corrupt behavior of the apparatus (Alfada, 2019; Kim 2008; Kolstad et al., 2014; Martines-Vasques et al., 2017). This condition is increasing difficult because fiscal decentralization narrows the central government's control and supervision space for regional financial management carried out by local governments (Prud'homme, 1995). This supports corruption in the region is increasing pervasive and hidden.

3. AN ACTOR-NETWORK PERSPECTIVE

ANT is a methodological tool based on a particular worldview that aims to trace the practices through which society congregates (Johannesson and Baerenholdt, 2020), through which people are constantly reconfigured (Callon, 2001). They do the configuration through translation, which means displacement, shift, discovery, mediation, creation of links that did not exist before (Latour, 1999: 179). These make it possible to trace the corrupt practices of bureaucrats that arise from the confusion between carrying out their obligations in the public interest or the interests of themselves and their cronies (Latour, 2005).

Callon (1986) identified and explained that there are four elements in ANT which are referred to as translations that allow each other to precede, namely problematization, interessement, enrolment, and mobilization. Here problematization is the determination of the identity and interests of other actors that are in line with their interests, which must go through mandatory channels. Next, the interessement stage is to make sure other actors agree and accept the definition of the main actor. Next, the enrolment stage, where an actor accepts the interests defined by key actors and seeks to achieve them through actor alliances aligned with the Actor-Network. Finally, the mobilization stage, where the main actor is confirmed to represent the interests of other actors. Here is the possibility of treason, a situation in which actors do not comply with the agreements arising from the enrolment of their representatives (Callon, 1986).

4. METHODS

Exploration of bureaucratic corruption is more suitable for the agency network approach (Groenendijk, 1997), through a case study strategy (Scapens, 2004). We developed data collection and analysis for case studies in three ways, according to those carried out by Pianezzi and Grossi (2020). First, an investigation to understand the macro-context of local government bureaucratic corruption in Indonesia; second, focusing on implementing fiscal decentralization policies in which the regional apparatus implements the public expenditure budget for CSP in Bantul Regency in 2019; and third, the collection of all publicly available data to develop a thorough understanding of cases of bureaucratic corruption.

The three-step analysis focused on four different data sources. First, online mainstream newspaper articles are the principal source of information for chronological and contextual analysis of cases of bureaucratic corruption that occur. Second, prioritizing regulatory and policy documents to analyze the implementation of fiscal decentralization. Third, we use the Bantul Regency internal budget realization report document for the 2019 period and the results of its examination from the State Audit Office (SAO) to focus on the case of implementing public spending in the CSP. last, Interview to find out how the network functions, model it, and do a detailed reconstruction of how the case unfolded. The

informants comprised 15 people who had information or were involved directly in the CSP program, which are presented in Table 1. The interviews lasted from 40 minutes to 90 minutes. To protect the identity of the interviewees, their real names do not show in this paper.

Table 1. Key information regarding interviewees

No.	Position	Organization
1	Treasurer	
2	Financial official	
3	Planning official	
4	Accounting official	Bantul Regency
5	Internal auditor	
6	Internal auditor	
7	Secretariat official	
8	External auditor	State Audit Office
9	Accounting consultant	Development Supervisory Board
10	Prosecutor	Attorney-General's Office
11	Policeman	Attorney-General's Office
12	Political party official	Partai Demokrasi Indonesia Perjuangan
13	Legislative staff	Bantul Legislative Body
14	Legislative staff	Bantul Legislative Body
15	Head of village	Village in Bantul Regency

5. BUSINESS OF COMMUNITY SPORT PROGRAM: BANTUL REGENCY BUREAUCRAT CORRUPTION CASE

CSP is a routine activity of local governments in Indonesia to promote sports, such as fitness, cycling, and leisurely walks. CSP in Bantul Regency is managed by the Youth and Sports Division (YSD) of Bantul Regency and the Youth and Education Commission of the regency's legislative body. This expenditure is a public expenditure budget as expenditure on goods and services (SAO AR Bantul, 2020:13).

CSP activities come from the results of the absorption of community aspirations by the local legislative during recess. They convey these aspirations to the executive to be programmed, which is budgeted in the sports and recreation development program. Legislators use their campaign teams as community groups to submit proposals for CSP activities to the council secretariat. The proposal was submitted to YSD to fulfil administrative requirements (SAO AR Bantul, 2020: 19). The proposal from the community group did not go through adequate verification by the officials at YSD (SAO AR Bantul, 2020:15). The Goods and Services Procurement Officer at YSD stated, "We can't do much because there is intervention and our position is at stake." Thus, the approved proposal is one that includes the name of the legislator as a facilitator for the implementation of CSP activities (SAO AR Bantul, 2020:12). The implementation of CSP activities should be left entirely to community groups and accounted for by them, where the YSD apparatus acts as a supervisor (presidential decree 16/2018).

Incumbent legislators get the double benefit of the event, namely increasing their popularity for re-election and financial gain. Other actors also enjoy financial advantages, the bulk of which comes from payments for food and drinks services.

6. DISCUSSION

The story of corruption in the CSP business begins with an episode of problematization (Callon, 1986). The Bantul Regency Government intends to carry out CSP programs and activities in a targeted way and its budget according to rules. This CSP involves many actors, including the YSD apparatus and the Bantul Council Secretariat, community groups, village officials, legislators, and the private sector. The actors involved have different roles and authorities and are related to each other in a network. Structurally, it is very vulnerable to use through poor control mechanisms, supported by low accountability (SAO AR Bantul, 2020: 14). This is the beginning of the disguise of corruption by actors in a network.

The problematization of implementing CSP activities is framed in a frame in which important actors work together to find solutions. Some important actors have more dominant authority than others. These parties are legislators who use their political position to give their “name” to community groups as a guarantee for implementing activities. The legislator becomes an “obligatory passage point” in the ANT (Callon 1986) in the CSP implementing procedure. The second stage is interessement (Callon, 1986) in which actors build networks to link their interests with other new actors. Referring to the offer to the community group that will carry out the CSP, proof of the bidding document that the community who submitted the bid was including the name of the legislator in their proposal (SAO AR Bantul, 2020:12).

The third stage is enrolment (Callon 1986), which is to identify the roles of the actors in the CSP. The key actors here are legislators who have several roles over the power as councils they have. First, the legislator determines the community group that is actually their success team for submitting the implementation of CSP activities. Second, they have intervention on the apparatus in YSD for determining community groups that will carry out activities. The intervention is showed by including the name of the legislator on the proposal for implementing CSP activities (SAO AR Bantul, 2020: 12). This is in line with head of village’s explanation that, “it is impossible for any community group to carry out CSP without the backup of council members.”

Finally, the legislator intervened in the disbursement of funds from these activities. SAO findings show that the document for submitting payments for CSP activities contains the name of the legislator as a facilitator of the activity (SAO AR Bantul, 2020: 12). As stated by the YSD goods and services procurement official (interview result) that, “the official (YSD apparatus) concerned cannot avoid intervention, his position and reputation are at stake.”

The last stage is mobilization in which the network of actors translates corrupt deals into practice. At this stage, there is a real social and physical transfer of resources (Callon, 1986). The move is through a complex administrative network. At this stage the role of bureaucratic actors disguises the corrupt activities of the actors involved, including himself, through neat administration to meet the demands of the rules. This is in line with the explanation of the treasurer at YSD that, “we ensure payments are made carefully, especially for sensitive activities so that certain signs are needed.” This of course fosters bureaucratic corruption disguised through administrative sophistication which overlaps legally and illegally at each stage (problematization, interessement, enrolment and mobilization) here (see Figure 1).

7. CONCLUSIONS

A strong desire to get out of the trap of corruption in Indonesia seems to have met a dead end called bureaucracy. The factory of corruption was initially at the center, but fiscal decentralization shifted it to the regions. Local bureaucrats disguise this corruption using their administrative skills to facilitate the corrupt interests of local legislators and officials, while profiting from complex bureaucracies (Neu et al., 2013). This reinforces the notion that decentralization creates regional political elites that are difficult to control by the center (Harun et al. 2019), which expands the scope for corruption in the regions.

The description of corruption as a translational process allows us to identify several factors and mechanisms that direct the creation of corruption networks (Pianezzi and Grossi 2020). The abuse of political power and administrative skills goes hand in hand through the complexities of rules that legislators, apparatus, and other interested parties exploit to secure their advantage (Neu et al., 2013). Under these conditions, conventional controlling corruption is not effective, so it is important to identify alternative instruments that allow to increase control of authority and accountability of the actors involved. Here, ANT helps to decipher the complex network of bureaucratic corruption through how the network of actors (human and non-human) is involved in shaping it so that it is possible to prevent it from happening again.

This study is limited to one case study. This allows for further studies using several cases for comparison.

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The Quality of Accounting Information in the Industrial Sector of ASEAN 5: Before and During the Pandemic Covid-19 Pandemic

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ABSTRACT

The purpose of this paper is to examine the effect of the Covid-19 pandemic on the quality of accounting information in terms of accrual quality and value relevance. This study uses a sample of companies listed on stock exchanges in five ASEAN countries, Indonesia, Malaysia, the Philippines, Singapore, and Thailand, for the period 2009-2020. OLS pooled regression model was estimated with panel data. The results showed that the COVID-19 pandemic impacted earnings quality, but not on value relevance of accounting information quality. Enforcement of accounting and auditing standards can reduce the impact of the COVID-19 pandemic in improving earnings quality. However, investor protection is not adequate to improve the quality of accounting information during the COVID-19 pandemic.

Keywords: Covid-19, ASEAN, accounting information quality, accruals quality, value relevance

1. INTRODUCTION

The Covid-19 pandemic has had a significant impact on all activities of life and business. This pandemic resulted in a reduction in international trade activities to reduce the spread of the virus. It causes a sudden and intense impact on economic activity and financial markets around the world. The US stock market index S&P 500 plunged nearly 34 percent from February 20 to March 23, 2020 (Bloomberg, n.d.). The same is reported by the Croatian index value CROBEX (Zagreb Stock Exchange, n. d.). This decline follows the previous 11% decline of the China CSI 300 stock market index from January 23 to February 3, 2020 (China Securities Index, n.d.). The COVID-19 pandemic has had a mixed impact on financial markets and companies' financial performance (Palma-Ruiz et al., 2020). It is not clear how long the crisis due to the Covid-19 virus will last, so it is not possible to estimate the impact of the loss. The pressure faced by management raises the potential for manipulating accounting information to meet market targets and expectations. Management may try to use accounting discretion to adjust financial statements with pessimistic expectations for the future. Previous research related to the impact of the crisis has not been conclusive. Several studies have shown an increase in earnings management during the financial and economic crisis (Silva et al., 2014; Flores et al., 2016), while others document a decline in earnings management during the crisis. It is suspected that poor company performance reduces earnings management intentions (Chintrakarn et al., 2018) or the need to attract investors (Cimini, 2015). The purpose of this paper is to examine the effect of the COVID-19 pandemic on the quality of accounting information. It is hypothesized that the COVID-19 pandemic has a degrading effect on the quality of accounting information. Previous research has suggested that the crisis reduces the quality of accruals (e.g., Persakis & Iatridis, 2015; Kousenidis et al., 2013; Chen et al., 2018) and the value relevance of accounting information (Graham et al., 2000; Choi et al., 2011; Adwan et al., 2020). Investors and other stakeholders must determine the company's future financial prospects, for example through the quality of accounting information. This study contributes to the literature in the following perspectives. First, this study is one of the first studies to investigate the quality of accounting information in ASEAN countries' practice in the context of the ongoing pandemic. ASEAN countries are countries, some of which are developing countries that Covid-19 has financially developed. Second, this research extends Palma-Ruiz (2020) by examining the quality of accounting information from both

an accounting and market perspective during the pandemic crisis. Finally, this study helps ASEAN country authorities and investors better understand how Covid-19 affects accounting practices and the quality of accounting information. The practical implication is on the quality of accounting information of public companies, which may decrease due to the motivation to display financial statements that look different from what they are. Theoretically, this research will add to the literature on the quality of accounting information, especially financial reports published during the COVID-19 pandemic.

2. LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

2.1 Quality of accounting information during the Covid-19 pandemic

Stakeholder theory emphasizes the interconnections between business and all those who stake in it: customers, employees, suppliers, investors, and the community. It suggests that a company must seek to maximize value for its stakeholders (Freeman, 1984). According to Freeman (1984), a company places all stakeholders at risk due to the company's activities, which legitimizes all stakeholders' claims to the company's decision-making process. The fraud triangle theory (Cressey, 1950; Schuchter & Levi, 2016), explains the motivation for companies to adjust their financial results with future expectations. During the financial crisis, investors and other market participants paid more attention to profits, which tended to be unstable and showed a downward pattern. The role of accounting information for firm valuation when a firm's financial health deteriorates is the subject of several studies in the accounting literature (e.g. Barth et al., 1998; Davis-Friday et al., 2006). Previous research stated that COVID-19 had a huge impact on business activities, for example, a decrease in financial performance (Rababah et al., 2020; Shen et al., 2020). DeFond & Park (1997) find that when estimates of future performance are below the previous year's standard of financial success, management tends to transfer earnings to future periods and vice versa. Since the COVID-19 crisis occurred, it is suspected that companies have the motivation to shift some of their profits from the previous year to future turbulent periods. Previous literature has investigated market valuations of accounting information when a company's financial condition is deteriorating (e.g., Davis-Friday et al., 2006; Burgstahler & Dichev, 1997; Barth et al., 1998). The quality of accounting information is related to the usefulness of accounting information for users of financial statements. The quality of accounting information is a level, which in this case, financial reporting can reflect the actual economic conditions of a company. Because changes in market values are unpredictable and financial statement items are updated every period, earnings become more volatile and less persistent. Less persistent earnings are less predictable and less useful for equity valuation (Bhattacharya et al., 2003; Dichev & Tang, 2009). Adwan et al., (2020) found evidence of a significant decrease in the value relevance of net income in times of financial crisis. Prior studies focused on the impact of the financial crisis on the value relevance of accounting information (the book value of equity and net income). For example, Graham et al., (2000) found that after the financial crisis in Thailand, the value relevance of the book value of firms' equity increased, while the value relevance of net income decreased. Meanwhile, Davis-Friday et al., (2006) revealed variations in the value relevance of the book value of equity and net income after the Asian financial crisis. According to Chintrakarn et al., (2018), managers can manipulate reported earnings more aggressively during the financial crisis. The current pandemic scenario also determines the implementation of earnings management. Increased earnings management will reduce the quality of accounting information. COVID-19 has significantly affected the economic activities of listed companies in ASEAN countries. Therefore, the first hypothesis is as follows:

H1: During the COVID-19 pandemic, companies listed in ASEAN countries experienced a decline in the quality of accounting information

2.2 The impact of strong country institutions on the quality of accounting information

The accounting and financial literature provide evidence that a country's strong institutional infrastructure is critical in determining opportunistic managerial behaviour and the quality of accounting information (e.g., Leuz et al., 2003; Fernandes & Ferreira, 2008; Kim & Shi, 2011). We suspect that investor protection and enforcement of accounting standards are essential to the credibility of accounting information reported during the crisis. This implies that state-level legal institutions play a complementary role in the value of accounting information (e.g., Ball et al., 2003; Choi & Wong, 2007). Consistent with this argument, Hung, (2000) reports that the value relevance of accruals is lower

in countries with weak legal institutions compared to strong institutions. Therefore, we propose an alternative hypothesis as follows:

H2. The decline in the quality of accounting information during the COVID-19 pandemic crisis was more severe in countries with weak institutions than in countries with strong institutions.

3. RESEARCH METHOD

3.1 Measures of the accounting information quality

Earnings quality

The quality of financial reporting is proxied by the quality of earnings with the argument that earnings are the basic measure used by investors (Francis et al., 2006). Earnings quality is measured by the absolute value of the estimated residuals of the modified Dechow-Dichev model (Dechow & Dichev, 2002). Choi & Pae (2011) state that accrual quality reflects managers' opportunistic behavior concerning reported earnings and their reactions to unfavorable economic news. This study follows McNichols (2002) and estimates the following cross-sectional model for each industry year (defined as Fama-French 48 industry classifications) as follows:

$$ACC_{it} = \beta_0 + \beta_1 CFO_{it-1} + \beta_2 CFO_{it} + \beta_3 CFO_{it+1} + \beta_4 \Delta REV_{it} + \beta_5 PPE_{it} + \epsilon_{it} \quad (1)$$

ACC is defined as earnings before extraordinary items and discontinuing operations minus operating cash flows (CFO), taken directly from the cash flow statement following Hribar & Collins (2002). REV is the change in sales from the previous year, and PPE (property, plant, equipment) is the gross value of property, plant, and equipment. Property, plant, and equipment (PPE) explain non-current accruals, which are mostly depreciation. Earnings quality is estimated as the residual from model (1) across all sample firms sorted by industry sector and year. This study adopts the cross-sectional approach of modified Dechow-Dichev models instead to the firm-specific time-series approach. Subramanyam (1996) shows that the cross-sectional model provides a more accurate parameter estimates than the time-series one due to the larger number of freedom degrees. The lower residual number indicates a higher quality of earnings.

Value relevance

This study follows Persakis & Iatridis (2017) using the value relevance model estimated by Ohlson (1995). Ohlson (1995) used the explanatory power ($R^2_{i,t}$) of the following regression model:

$$P_{it} = \beta_0 + \beta_1 E_{it} + \beta_2 BV_{it} + \epsilon_{it} \quad (2)$$

where, P_{it} is stock price; E_{it} is price per share; BV_{it} is book value per share; and ϵ_{it} is the error term. The value of the β_2 coefficient obtained from the regression of Ohlson's (1995) model shows the value relevance. The higher the coefficient value, the higher the value relevance.

3.2 Measures of country institutions

Investor protection

This study uses the investor protection score reported by the World Economic Forum (the Global Competitiveness Report) 2019. Other studies use other measures to measure investor protection, for example, the investor protection index by La Porta et al., (1998).

Enforcement of accounting standards and audit

This study follows Wijayana & Gray (2018), which uses the measurement of accounting standards and audit enforcement recommended by Brown et al., (2014). Accounting standards enforcement and auditing indexes capture country differences in the environment in which accounting standards board's operate and in which auditors perform their role regarding compliance with accounting standards (Brown et al., 2014). The combined index of accounting and auditing standards enforcement has a maximum score of 56 (Brown et al., 2014). The accounting and audit enforcement measures developed by Brown et al., (2014) directly capture the strength of financial reporting enforcement and audit quality.

3.3 Hypothesis testing

This study tested H1 and H2 using the Ordinary Least Square, which was estimated using the following model:

$$IQ_{i,t} = \alpha_0 + \beta_1 COVID-19 + \beta_2 INVESTOR_{i,t} + \beta_3 ENFORCEMENT_{i,t} + \sum CONTROLS + \epsilon_{i,t} \quad (3)$$

where,

IQ: accounting information quality (measured by accrual quality and value relevance)

COVID-19: dummy variable specified 0 before the pandemic and 1 during the pandemic

INVESTOR: investor protection (measured by investor protection scores reported in the Global Competitiveness Report 2019 provided by the World Economic Forum)

ENFORCEMENT: accounting standard and audit enforcement (an index developed by Brown et al. 2014)

CONTROLS: the control variables used in this study include institutional level (legal system and capital market developments) and company level (firm size, leverage, and growth).

ϵ : error term

We conducted additional analyzes to test for differences in earnings quality and value relevance before and during the COVID-19 pandemic. The test was carried out by t-test for paired samples.

4. RESULTS

4.1 Samples and descriptive statistics

The research sample consists of companies registered in five ASEAN countries, Indonesia, Malaysia, Philippines, Singapore, and Thailand, whose data are available in 2009-2020. To measure accounting information's earnings quality and value relevance, we used financial data provided by OSIRIS in 2009-2020. We measure earnings quality using residuals of the modified McNichols' model (McNichols, 2002), estimated from 2009-2020 pooled data regression per industry per country. We use the standard deviation of the residuals of each company to determine earnings quality. The value relevance of the accounting information is measured by the coefficient β_2 (book value per share) from Ohlson's regression model (Ohlson, 1995). We also perform additional analysis to measure the quality of accounting information, using earnings management estimated using Dechow & Dichev (2002) regression model for 2009-2020 data. Table 1 shows the sample selection procedure. Table 2 presents the descriptive statistics of the sample.

Table 1. Sample selection.

Country	Publicly listed companies	Financial sector	Final sample
Indonesia	723	(239)	484
Malaysia	948	(85)	863
Philippines	266	(41)	225
Singapore	628	(41)	587
Thailand	768	(113)	655

Table 2. Descriptive Statistics.

Variable	Obs	Mean	Std. Dev.	Min	Max
AQ	4,641	43895.78	235749.7	-3932009	9045943
EM	4,344	72393.93	275167.1	-3932009	9045943
VR	4,925	-.0056171	.3062866	-11.4655	4.480403
LNTA	4,029	11.87083	1.811285	2.935207	18.25464
REV	4,847	-24763.96	447170	-1.98e+07	7949669
PPE	4,724	537641.3	2807870	0	9.24e+07
GCI	5,628	72.47932	7.559493	61.9	84.8
ENF	5,628	13.43461	4.521515	6	19
MARKET	5,628	.7133876	.203476	.2868648	.8362726
DEVELOP	5,628	.5152807	.4998109	0	1

4.2 Hypothesis testing

We used the ordinary least square method to test the hypothesis. H1 states that the COVID-19 pandemic impacts the quality of accounting information as measured by earnings quality and value relevance. Appendix 1-2 shows the results of both regression analysis. It shows that H1 is supported for earnings quality proxy (p-value = 0.000), but not supported for value relevance proxy (p-value = 0.584). H2 testing (Appendix 3-4) shows that both strong institutional factors (investor protection and enforcement

of accounting standards) impact improving earnings quality (p-value = 0.000 and p-value = 0.001, respectively). However, different results prove that the strength of institutional factors (investor protection and enforcement of accounting standards) does not significantly impact the value relevance of accounting information (p-value = 0.767 and p-value = 0.762, respectively). We control for both firm (i.e., firm size, leverage, and growth) and country (i.e., capital market developments and developing/developed categories) factors.

We conducted a t-test to examine differences in the quality of accounting information before and during the COVID-19 pandemic. The results (Appendix 5-6) show differences in accounting quality before and during the COVID-19 pandemic (p-value=0.000). The value relevance test showed no difference before and during the COVID-19 pandemic (p-value=0.8822).

5. CONCLUSIONS

The results showed that the COVID-19 pandemic impacted earnings quality as a measure of the accounting information quality, but not on value relevance. Enforcement of accounting and auditing standards can reduce the impact of the COVID-19 pandemic in improving earnings quality. However, investor protection is not adequate to improve the quality of accounting information during the COVID-19 pandemic. The implication is to expand the enforcement of accounting standards to reduce the impact of the crisis on value relevance.

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Appendix 1: Results of Hypothesis Testing H1—Earnings Quality

Source	SS	df	MS	Number of obs	=	3,406
Model	5.4451e+13	8	6.8063e+12	F(8, 3397)	=	136.13
Residual	3.6984e+14	3.397	4.9998e+10	Prob > F	=	0.0000
Total	2.2429e+14	3.405	6.5872e+10	R-squared	=	0.2428
				Adj R-squared	=	0.2410
				Root MSE	=	2.2e+05

EQ	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
COVID	48577.15	8000.02	6.07	0.000	32891.81 64262.49
GCI	3.45e-04	3.61e-04	0.95	0.345	-3.33e-04 3.61e-04
ENF	16740.29	4833.425	3.46	0.001	7263.577 26217.01
LNTA	16299.46	2354.171	6.92	0.000	11683.72 20915.19
REV	.0364006	.0086744	4.20	0.000	0193933 -.0534082
PPE	-.0030735	.0034561	2.66	0.008	0.00667 -.0034082
MARKET	-314379.7	78783	3.99	0.000	-468846.6 -109942.8
DEVELOP	-210330.8	57023.52	-3.69	0.000	-322134.7 -98526.95
_cons	-1158154	241620	-4.79	0.000	-1631889 -684418.5

Appendix 2: Results of Hypothesis Testing H1—Value Relevance

Source	SS	df	MS	Number of obs	=	3,311
Model	2.84940685	8	.356175857	F(8, 3302)	=	3.45
Residual	341.28031	3,302	.103355636	Prob > F	=	0.0006
Total	344.129716	3,310	.103966682	R-squared	=	0.0083
				Adj R-squared	=	0.0059
				Root MSE	=	.32149

VR	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
COVID	-.0063766	.011648	-0.55	0.584	-.0292146 .0164613
GCI	.0015529	.0052412	0.30	0.767	-.0087234 .0118292
ENF	.0021374	.0070535	0.30	0.762	-.0116922 .0159671
LNTA	-.0030735	.0034561	-0.89	0.374	-.0098499 .0037028
REV	5.93e-08	1.25e-08	4.75	0.000	3.48e-08 8.37e-08
PPE	1.45e-09	2.05e-09	0.71	0.480	-2.57e-09 5.46e-09
MARKET	-.0466614	.1149869	-0.41	0.685	-.2721142 .1787913
DEVELOP	-.0295055	.0833028	-0.35	0.723	-.1928359 .1338249
_cons	-.0573298	.3523128	-0.16	0.871	-.7481034 .6334438

Appendix 3: Results of Hypothesis Testing H2—Earnings Quality

Source	SS	df	MS	Number of obs	=	3,406
Model	5.3920e+13	7	7.7028e+12	F(7, 3398)	=	153.63
Residual	1.7038e+14	3,398	5.0140e+10	Prob > F	=	0.0000
Total	2.2429e+14	3,405	6.5872e+10	R-squared	=	0.2404
				Adj R-squared	=	0.2388
				Root MSE	=	2.2e+05

AQ	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
COVIDGCI	1459.704	306.4288	4.76	0.000	858.9001 2060.507
COVIDENF	-4345.909	1675.404	-2.59	0.010	-7630.81 -1061.008
LNTA	17066.37	2347.83	7.27	0.000	12463.07 21669.67
REV	.0361818	.0086802	4.17	0.000	.0191629 .0532007
PPE	.0350632	.001422	24.66	0.000	.0322752 .0378512
MARKET	-20847.32	24512.4	-0.85	0.395	-68907.86 27213.23
DEVELOP	11481.61	8674.268	1.32	0.186	-5525.7 28488.92
_cons	-188211.9	34257.51	-5.49	0.000	-255379.3 -121044.4

Appendix 4: Results of Hypothesis Testing H2—Value Relevance

Source	SS	df	MS	Number of obs	=	3,311
Model	2.68462494	7	407803562	F(7, 3303)	=	3.95
Residual	341.275091	3,303	103322765	Prob > F	=	0.0003
Total	344.125716	3,310	103366682	R-squared	=	0.0003
				Adj R-squared	=	0.0002
				Root MSE	=	32144

VR	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
COVIDGCI	.0000167	.0004447	0.4	0.370	.0000252 .0008867
COVIDENF	-.0006654	.002444	-0.27	0.765	-.0054455 .0041106
LNTA	-.002935	.0034398	-0.85	0.393	-.0096833 .0038053
REV	.0000000	.0000000	0.00	0.000	.0000000 .0000000
PPE	1.438e-09	2.058e-09	0.70	0.404	2.588e-09 5.458e-09
MARKET	-.0101638	.0357192	-0.29	0.776	-.0602179 -.0598502
DEVELOP	-.0040334	.0161187	-0.25	0.727	-.0010128 .0200202
_cons	0.437133	.0203160	0.87	0.385	-.024942 .1423606

Appendix 5: Additional T-Test Analysis—Earnings Quality

Variable	Obs	Mean	Std. Err.	Std. Dev.	[95% Conf. Interval]
AQ2019	2,789	20422.34	1872.756	98902.08	16750.21 24094.47
AQ2020	1,852	79245.37	8133.153	350009.2	63294.25 95196.49
combined	4,641	43895.78	3460.552	235749.7	37111.46 50680.11
diff		-58823.03	7014.421		-72574.63 -45071.43
					t = -8.3860
Ho: diff = 0					degrees of freedom = 4639
Ha: diff < 0					Ha: diff != 0
Pr(T < t) = 0.0000					Pr(T > t) = 0.00000
					Ha: diff > 0
					Pr(T > t) = 1.0000

Appendix 6: Additional T-Test Analysis—Value Relevance

Variable	Obs	Mean	Std. Err.	Std. Dev.	[95% Conf. Interval]
VR2019	2,669	-.0008567	.001119	.057811	-.003051 .0013375
VR2020	2,256	-.011249	.0094351	.4481442	-.0297515 .0072534
combined	4,925	-.0056171	.0043644	.3062866	-.0141733 .002939
diff		.0103923	.0087593		-.0067798 .0275644
					t = 1.1864
Ho: diff = 0					degrees of freedom = 4923
Ha: diff < 0					Ha: diff != 0
Pr(T < t) = 0.8822					Pr(T > t) = 0.2355
					Ha: diff > 0
					Pr(T > t) = 0.1178

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Affect, Multitasking, and Auditor Judgment

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ABSTRACT

This study investigates the role of incidental affect (non-task-related affect) on auditor judgment. Working on multiples tasks/clients simultaneously (multitasking) is common practice among auditors. This research also investigates the interaction effect between multitasking and affect on judgment. We conduct a web-based experiment on accounting students as surrogates for senior auditors. Each subject was required to complete two unrelated audit tasks. Results of our experiment suggest that subjects in negative affect conditions have more conservative judgment than subjects in positive affect conditions. We find no significant difference in judgment between subjects who accomplish two tasks sequentially and subjects who work back and forth between two tasks (multitask condition). However, we find support for the interaction effect between affect and multitasking on auditor judgment. Subjects in negative affect conditions and multitasks (work back and forth between tasks) have the most conservative judgment compare to subject in other experimental conditions. These results suggest that individuals in a negative affect condition tend to have superior performance under complex tasks than an individual in a positive affect condition.

Keywords: Affective Reaction, Audit Judgment, Complexity, Conservatism, Multitasking

1. INTRODUCTION

Since the last several decades, the role of affective states (mood and emotion) on human behavior and decision has received increased attention in psychological and organizational literature (for a review, see George & Dane, 2016). However, there is only limited research on the role of affect in behavioral accounting literature. The first objective of this paper is to investigate the impact of incidental (non-tasks related) affect on auditor judgment.

Auditing operates in an interactive and competitive environment. Handling multiple tasks/clients simultaneously is prevalent among auditors. In line with existing psychological literature (see Puranik et al., 2020 for review), little recent accounting literature documents negative associations between multitasking and performance (Basoglu et al., 2009; Kim et al., 2017; Long & Basoglu, 2016; Mullis & Hatfield, 2018). Mullis & Hatfield (2018) find that auditors who multitasked identify fewer conceptual errors than auditors who finish tasks sequentially. Kim et al. (2017) document that multitasked auditors show lower memory performance and identify the fewer seeded error. In addition to performance, prior research also suggests that multitasking poses several psychological and emotional consequences (Mark et al., 2008; Zijlstra et al., 1999). This study investigated the role of affect when auditors multitasked between complex (cognitively demanding) tasks to extend prior literature on the influence of multitasking on auditor judgment.

By using a 2x2 between-subject experimental design, our results support the superiority of negative affect in information processing. As predicted, we find that subjects in the negative affect condition show more conservative judgment than subjects in positive affect conditions. In contrast, our study fails to find the impact of multitasking on judgment. Our results partially support our hypothesis on the

interaction effect between affect and multitasking. Our results find that subjects in a negative affect condition and multitasked show the most conservative judgment compare to subjects in other treatment conditions.

2. LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

Judgment consists of both cognitive and affective input. However, most studies on judgment and decision making (JDM) in accounting focus on the cognitive aspect. To date, there is limited study on the impact of affect in accounting literature (Bagley, 2010; Blay et al., 2012; Cianci & Bierstaker, 2009; Curtis, 2006; Kida et al., 2001; Moreno et al., 2002). Blay et al. (2012) investigate the impact of affect on information search in a risky situation. They find that auditors with negative affect use a more efficient information search under a high-risk condition than those with positive affect. On the other hand, auditors with positive affect show a more efficient information search under a low-risk situation than those with negative affect. Using the inventory valuation case, Chung et al. (2008) and Cianci & Bierstaker (2009) document that auditors with a negative mood condition have more conservative judgment than those with positive mood. The impact of affect is also found in ethical decision-making cases. Curtis (2006) finds that auditors with negative affect are less likely to report unethical conduct than those with positive affect. However, compared to individuals with positive affect, individuals with negative affect are less likely to engage in pro-social behavior.

The different impacts of positive/negative affect on performance and decision can be explained using the level of focus hypothesis (Clore et al., 2001). According to the “level of focus” principle, affective cues influence the global versus local focus of information processing (local versus global processing). Positive affect induces global and top-down information processing. Positive affect relies on easily accessible information such as knowledge, beliefs, expectations, *stereotypes*). Negative affect, on the other hand, induce a local focus of information processing. Individuals with negative affect use bottom-up, systematic, and data-driven information processing (Clore et al., 2001). Auditors frequently make judgments under highly complex and uncertain conditions. Complex tasks require bottom-up, systematic, and data-driven information processing (Andrews & Thomson, 2009). Applying the level of focus perspective, we propose the following hypothesis:

Hypothesis 1: Auditors in a negative affect condition show more conservative judgment than those in a positive affect condition.

Next, we examine the role of affect in a setting where auditors require to multitask. Most studies on the relationship between affect and judgment focus on single task-setting. However, findings on single-tasking cannot necessarily be generalized into multitasking settings (Morgan & D’Mello, 2016). Compared to single-tasking, multitasking is more difficult to perform. Although the quantity and tasks demand remains the same, multitasking incurs more cognitive cost than single-tasking (Monsell, 2003). Multitasking requires one to switch between incomplete tasks. Leroy (2009) suggests that switching between incomplete tasks incur additional cognitive burden as cognition of previous incomplete task carried over and remain active as one work for another task.

The major component of multitasking is interruption (Oswald et al., 2007). Within the context of judgment and decision making, the focal aspect of interruption is the decision suspension (Kupor et al., 2015). Decision-makers tend to change their information processing style of the interrupted task after interruption. The impact of the changes in information processing on the quality of suspended decisions is documented in few recent studies (Kupor et al., 2015; Liu, 2008; Long & Basoglu, 2016; Xia & Sudharshan, 2002). Recent marketing literature documents that interrupted customers make poor decisions due to the use of short cut and reduced information search after interruption (Kupor et al., 2015; Xia & Sudharshan, 2002). Further, Liu (2008) finds that interruption shifts customer preference from feasibility to desirability feature of a product. The shift in preference is due to information processing changes from effortful and bottom-up to a more top-down and goal-directed information processing. Evidence on the impact of interruption on professional judgment in accounting literature is

documented in Long & Basoglu (2016). Long & Basoglu (2016) find that interruption exacerbates tax consultants' bias toward supporting aggressive client preference.

In addition to cognitive mechanisms, the impact of multitasking on a decision can also be explained through affective mechanisms (Kupor et al., 2018; Puranik et al., 2020). Using math tasks (cognitively demanding tasks), Morgan & D'Mello (2016) document that multitasked and positive affect subjects outperformed subjects who multitasked under negative affect conditions. Kupor et al. (2018) document an association between interruption and risk-taking behavior. Kupor et al. (2018) argue that interruption increases the willingness to make risky financial decisions. This discussion leads to the following hypothesis:

Hypothesis 2: Multitasking moderates the relationship between affect and conservatism of auditors' judgment. Subject with negative affect and work sequentially show the most conservative judgment compared to subjects in other experimental conditions.

3. RESEARCH METHODOLOGY

In this present study, we conduct a web-based experiment. We use accounting students as surrogates for senior auditors. Prior studies suggest that accounting students are an appropriate surrogate for professional accountants (Ashton & Kramer, 1980; Houghton & Hronsky, 1993). Houghton & Hronsky (1993) argue that inexperienced but educated accounting students and professional accountants have similar cognitive structures concerning accounting concepts.

During the experiment, we ask subjects to complete two unrelated audit tasks. We adopt the experimental material from Chung et al (2008) and Knechel & Messier (1990). We test our hypotheses using a 2x2 between-subject factorial experimental design. Our dependent variable is auditor judgment (measured by auditor assessment on the percentage of past-due account receivable that can be recovered). We investigate two independent variables (affects and multitasking). We manipulate affect (positive/negative affect) by asking subjects to write down a short paragraph telling their most enjoyable/annoying experience during online learnings. We manipulate multitasking at two-level (multitasking/sequential). Subjects in sequential conditions are asked to complete the tasks sequentially, and subjects in multitasking conditions are asked to work back and forth between tasks. We randomly assign subjects to each experimental condition.

Fifty-three undergraduate accounting students completed our experiment. To determine if subjects understand the experimental material and its instruction, we do the following procedures. First, we asked subjects to identify the name of the account of the audit task. Second, we verify the short paragraph written by subjects. We remove 12 of our 49 subjects (24 percent) who incorrectly answer one or both manipulation checks. We process 37 subject's responses in our Analysis. The age of our subjects is from 20 to 25 years. All subjects are at least in the third year of their studies, and more than one-third of our subjects are female.

4. RESULTS AND DISCUSSION

Table 4.1 presents the descriptive statistics for the dependent variable (judgment). The table shows the mean, standard deviation, and minimum and maximum value of judgment across four experimental conditions. For sequential and multitasking groups, minimum and maximum judgments are 30 to 90 and 20-90, respectively. Subjects with the highest means of judgment are those in the multitasking-positive group (72.50). Subjects with the lowest means of judgment are those in the multitasking-negative group.

Table 4. 1. Descriptive Statistics

	N	Mean	Std. Deviation	Minimum	Maximum
Sequential, Positive	9	65.56	18.105	30	90
Sequential, Negative	9	61.11	16.915	40	80
Multitasking, Positive	8	72.50	21.213	30	100
Multitasking, Negative	11	46.36	20.136	20	90
Total	37	60.27	20.881	20	100

Our first hypothesis predicts that subjects in negative affect conditions have more conservative judgment than those in positive affect conditions. As predicted, table 4.1 shows that the means for judgment (the estimated portion of the past-due account that can be collected) are lower for subjects in negative affect groups (61 for negative-sequential and 46.36 for negative-multitasking groups) than those in positive affect groups (65.56 for positive-sequential and 72.50 for positive-multitasking groups). The Analysis of variance presented in table 4.2 shows that the difference is statistically significant (p -value = 0.02). Thus, H1 is supported. These results are in line with the level of focus hypothesis suggesting that effortful, systematic, and data-driven information processing promoted by the negative affect leads to more conservative judgment.

Table 4. 2. Tests of Between-Subjects Effects

Dependent Variable: Judgment

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	3581.641 ^a	3	1193.880	3.252	.034
Intercept	137596.031	1	137596.031	374.777	.000
Affect	2134.488	1	2134.488	5.814	.022
Multitasking	138.970	1	138.970	.379	.543
Affect * Multitasking	1073.969	1	1073.969	2.925	.097
Error	12115.657	33	367.141		
Total	150100.000	37			
Corrected Total	15697.297	36			

a. R Squared = .228 (Adjusted R Squared = .158)

Our second hypothesis 2 predicts that multitasking moderates the relationship between affect and conservatism of auditors' judgment. Subject with negative affect and work sequentially show the most conservative judgment compared to subjects in other conditions. The interaction effect of multitasking and affect presented in table 4.2 is marginally significant at 0.097 (p -value <10%). However, the descriptive statistic for groups judgment presented in table 4.1 shows that subjects in negative-multitasking groups have the lowest judgment. The result is contrary to our prediction stating that subjects with negative affect and work sequentially have the most conservative judgment compared to subjects in other experimental conditions. Thus, these results provide partial support for our hypothesis 2. This finding suggests that affect on judgment is stronger when individuals multitasked than when individuals single tasked.

5. CONCLUSION

Even though both cognitive and affective aspects of an individual may exert significant influence on professional judgment, the role of affect is poorly investigated in behavioral accounting literature. From the perspective of the level of focus hypothesis, this research warns of potential adverse effects of positive affect in complex tasks. Our results suggest that even a mild induction of positive affect induced by incidental events is enough to inadvertently shift one's information processing to a more top-down global focus and less systematic information processing. For complex tasks, such kind of information processing often leads to poor decisions. Further, as multitasking is prevalent among auditors, this research sheds light on the role of incidental affect on auditor judgment within the multitask audit environment.

We use accounting students as surrogates for professional auditors. The strength of an experimental approach is in its ability to test causal relationships (Shadish et al., 2001). Students, as opposed to professionals, are more homogenous groups, and therefore, social characteristics (i.e., age, experience, experience, age, organization) are less likely to influence the results. Therefore, for the theory development purpose, students are an appropriate surrogate for professionals. Professional auditors are desirable subjects for future research whose main objective is the applicability of findings in a real-world setting.

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CEO Narcissism and Its Impact on Financial Statements: A Literature Review

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ABSTRACT

This article provides a comprehensive summary of narcissistic personality issues and their impact on financial reporting by using Publish or Perish bibliometric software. Narcissism is a personality that reflects an excessive love for oneself, thus causing various consequences in being to yourself and the organization. This personality is experiencing an upward trend from generation to generation. With social media, the proliferation of narcissistic personalities becomes inevitable. In the context of accounting, narcissism and its impact on financial reports were first written in 2007 to date are still growing and interesting to review. Unfortunately, this personality is widely identified with negative consequences on the quality of financial reporting. This study discusses the findings of narcissism impact on financial statements along with the logic and methods used. We provide input on weaknesses that may be contained in existing research. In general, this personality is proven to have a negative impact on financial reporting. However, those findings are depends on the methods and measures of narcissism itself. Since narcissistic personality is also related to innovation and creativity that is good for companies, conclusion about this personality have to be written carefully.

Keywords: narcissism; fraud; financial statements; CEO personality; reporting quality

1. INTRODUCTION

Narcissism is a personality that reflects an excessive love for oneself, thus causing various consequences in behaving for yourself and others (Park & Colvin, 2015).. Because this trait encourages a strong desire to build a positive self-image, it is signaled to have an adverse impact on the organization (Young, Du, Dworkis, & Olsen, 2016). In narcissistic individuals, excessive self-confidence tends to be sedentary and stable (Aktas, Bodt, Bollaert, & Roll, 2016; Young et al., 2016). Excessive confidence causes individuals to overestimate abilities/performance over certain conditions. If company's leader is having high narcissistic score, the impact will be dangerous.

With easy access to technology and social media that allows humans to show self-existence, narcissism levels are increasing and important to learn (Young et al.; 2016). In general, Raskin & Terry (1988) conceptualized several narcissistic constructs, namely (1) exploitative, (2) felt entitlement, (3) felt able to do everything themselves (self-sufficiency), (4) felt authority, (5) showed off (exhibitionism), (6) felt superiority, and enjoyed praise and pride (vanity). The negative construct makes narcissism trigger exploitative attitudes both towards yourself and around (Buss & Chiodo, 1991). In organizations, this trait triggers overconfident decisions (Buyl, Boone, & Wade, 2017; Chatterjee & Hambrick, 2007, 2011). Cooper & Pullig (2013) found that this trait has good predictive power over unethical behavior. Thus, when a company is lead by a narcissistic leader, what are the risks and consequences towards its financial reporting?

Narcissistic research and financial reporting are much inspired by upper-echelons theory. It stated that leaders influence corporate strategy choices, including financial strategies. With this theory, narcissism is widely associated with the variables of financial statements (Buyl et al., 2017; Chatterjee & Hambrick, 2007; Ham & Wang, 2018; Rijsenbilt & Commandeur, 2013). This theory explains that

a leader's personal preferences and characteristics can be reflected in the implementation of the company's strategy and financial statements.

Until now, studies on narcissism and its impact on financial reporting are still not many in number and leave some room for question. The lack of research on this topic creates an urgency to summarize and map the development of narcissistic research and its impact on financial statements, making future research opportunities easier to identify. The purpose of this study is to report financial reporting research from the point of view of narcissistic unique personalities. It is expected to contribute adequate literature to future research ideas, as well as inspire the managerial practices of the organization. Companies that recruit narcissistic CEOs should know the positive and negative side of this personality in order to determine the right management control system.

2. METHODOLOGY

This study used bibliometric analysis with Publish of Perih software with scopus as the database. We implemented five steps which are defining keywords, obtaining initial search, refining the results, coupling the articles, and analyse the contents. A total of 44 articles were found and used as main references due to its specific theme of narcissism in accounting and management topics. Following and modifying the steps done by Indarti *et al.* (2020), we summarized findings based on the growing discussion on narcissistic leadership and its impacts on the company financial reporting. We also suggest several proposed future research ideas in this topic.

3. DISCUSSION

Real Case on Narcissistic CEO

A real example of a business entity bankruptcy case resulting from a CEO's narcissist occurred at Lehman Brothers, a major investment firm in the world. One of the strong causes of Lehman's bankruptcy was the error of Fuld's strategy that was too sure to save the company from crisis in its own way (Stein, 2013). The publication of Fuld's speech when the crisis hit Lehman clearly illustrates the high-narcissism, which is to feel able to change things with their abilities, thus ignoring the advice of others. Lehman ended up in bankruptcy. Although only individual personalities, the narcissism of a leader has a huge impact on teams and companies (Blair, Helland, Walton, & Group, 2017).

In addition to these cases, the world may not have forgotten the Qwest bankruptcy scandal in 2003 which was marked by a 98% drop in the share price in July 2002 (*US Security Exchange Comission*, 2008). That giant's bankruptcy in the US was done by leveraging the complexity of business transactions to create fictitious revenues. The company, which was audited by Arthur Andersen, not only recorded fictitious transactions, but also conducted insider trading techniques and exploited all the moments that could be used as loopholes to overstate assets (Markham, 2006). Joseph Nacchio, CEO of Qwest, is the lead actor in the cheating, which is popular with high performance targets, so numbers should be directed towards meeting targets (Stanwick & Stanwick, 2011).

Who is Nacchio? Nacchio is known as an ambitious, unrealistic, aggressive, and resistant CEO to criticism (Stanwick and Stanwick, 2011). While Qwest has clearly been entangled in litigation, Nacchio still argues that Qwest's future is still good, as it is just a trap from the Federal Government that does not accept Qwest's rejection of the National Security Agency program. Nacchio's behavior highlighted the attention of research so that some studies state that the extreme cause of Nacchio's attitude is excessive narcissistic personality (Craig & Amernic, 2011; Rijsenbilt & Commandeur, 2013; Stanwick & Stanwick, 2011). From these real examples, the impact of narcissistic CEO towards company's financial statements were interested to be studied.

Narcissism and Fraudulent Reporting

Fraudulent financial reporting is dangerous due to its potential losses to the company. Johnson et al., (2013) found that auditors had been able to accommodate client narcissism as a consideration for determining risk audits. The more narcissistic the client, the more vulnerable his financial reporting contains to cheating. Rijsenbilt dan Commandeur, (2013) proves that companies affected by financial reporting fraud cases have narcissistic CEOs. With the data archived the study proves that narcissism increases the risk of cheating occurring.

Narcissism influenced CEO through over-optimism and behavior channelling so that the organization is viewed as a tool to realize his/her narcissistic supply (Chatterjee & Hambrick, 2007).

Consequently, financial statement is a facilitator to legitimize CEO positive self-images (Amernic & Craig, 2010). Several performance indicators reflected in the financial statements must be in line with CEO narcissistic supply without paying attention whether the process is free from unethical issues. For example, the CEO of Qwest forced their subordinates to manipulate financial statements by creating a fake scenario that his request was because of saving the employees' and companies' welfare (Stanwick & Stanwick, 2011). He framed his fraud by deception and got the compensation in term of higher bonuses and extra-ordinary positive impression gained from the fraudulent reporting.

Based on a study that used financial reporting data among CEO of S&P 500 from 1992 until 2008, CEO narcissism has a positive relationship towards companies fraudulent reporting (Rijssenbilt & Commandeur, 2013). However, this archival research contained limitation merely on the indirect measures of narcissism which might be inaccurately proxied (Cragun, Olsen, & Wright, 2019). Ham *et al.* (2017; 2018) enriched CEO narcissism and financial reporting research by providing a new measurement of narcissism. They used signature sized and also did their research both by experiment and by archival data. Those indirect measures of CEO narcissism were being replicated by Van Scotter (2020) and surprisingly resulted in low-reliability score. We need future research that employs direct measures of narcissistic personality to fill this measurement gap.

Future Researches Opportunity

One of the missing gaps in CEO narcissism research is how to capture the process by which narcissistic traits influence corporation decisions. Previous research explains limited logical explanation that contains general prejudice to built arguments regarding narcissism and fraud. For example, because narcissistic CEO is overconfident and feeling superior in nature, he/or she tends to promote fraud in the reporting process. Another example, narcissistic CEO is having a high tendency to be exploitative. Therefore, they have a high propensity to induce fraudulent reporting. Those explanations did not answer comprehensively about the logic behind narcissistic personality to real negative actions. Conceptual research done by Chatterjee & Pollock (2017) proposed an interesting diagram that explains how narcissistic CEO construct their professional words and influence the organizations.

Other than measurement issues, future researchers are challenged to explain more details on how this trait will influence the organization. CEO is not the only member of top-level management. An unanswered question is how can a certain personality of a person influence crucial organizational decisions such as reporting. Future research could employ another explaining variable such as mediation, moderation, and intervening between narcissism trait to organization outcomes. For example, Chatterjee & Pollock (2017) proposed that firm-level outcomes can be influenced by the narcissistic individual in several different ways that depend on TMT characteristics, the likelihood of being a celebrity, and personal conflicting needs. The mechanisms on how narcissistic personality influences financial reporting are needed.

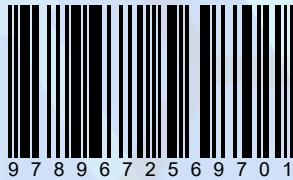
It is important also to understand how narcissism affects several components of expenses such as lobbying expenses, entertainment expenses, product failure, etc. Other topics that can be studied are how is the capital structure of a company lead by a narcissistic leader? Does it bring impacts on risk management control? How does narcissism influences financial strategies and potential error/fraud? Research on CEO narcissism is still open for future research. Focusing on it, researchers can also identify several conditions or strategies that effectively mitigate the negative impact of narcissism while still attaining better benefits for the company.

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