

# University of Otago

# 2021 (Jun) PhD Workshop

Department of Accountancy and Finance, Otago Business School

# Program for 2021 (Jun) PhD Workshop

# Department of Accountancy and Finance, Otago Business School 1:00-4:00pm, 04 June 2021 (Friday), Zoom

Organizer: Dr. Xinfeng Ruan

Note: Every presenter will be assigned 6 minutes (5 minutes speech plus 1 minute Q&A)

Zoom link: https://otago.zoom.us/j/95182059802?pwd=dDRtR2dCWIQxYjdIUFdmVGdZYW5GQT09

Zoom password: 263658

| PhD Presentations |  |  |
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| 2                 | Presenter: Mahnoor Sattar  Title: Impact of board gender diversity on capital structure of UK private firms                                |  |
| 3                 | Presenter: Wei Lin Title: Pricing SPX Option by Modelling VIX Directly   |  |
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| 6                 | Presenter: Thilini Arachchige Title: Social Networks, Information Technology, Intellectual Capital and Value Creation in the Public Sector |  |
| 7                 | Presenter: Iftekhar Ahmed Title: Microfinance's Climate Distress   |  |
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| 21 | Presenter: Junyu Zhang Title: Option-implied Measures and Tail Risks: International Evidence  |

Presenter: Xiaoxu Zhang

Title: Audit Committee Diversity and Disclosure of Internal Control Weakness

Presenter: Umaid Sheikh

Title: Impact of COVID-19 on investor's Reaction to Macro and Non-macroeconomic variations:

Cross country analysis for Evidences beyond symmetry

# **Abstracts**

**Tile:** The role of retail investors

# Sampath Kongahawatte, PhD in Finance

#### Abstract

Using Korean stock market price and volume data from January 2004 to June 2015, we find evidence of a robust negative relationship between turnover and future returns. The turnover is informative about the cross-section of returns throughout the trading day but not overnight. We also find that the turnover effect is a stronger predictor for stocks with a higher retail trading proportion. We interpret our results using the Banerjee and Kremer (2010) dynamic model on investor disagreement and trading volume.

**Tile:** Impact of board gender diversity on capital structure of UK private firms

# Mahnoor Sattar, PhD in Finance

#### Abstract

Using 25,564 UK firms for the period 2005-2017, this research investigates the effect of female directors on private firms' capital structure. Baseline models find that overall female directors reduce leverage and short-term debt but increase retained earnings. Further analysis indicates that female directors have a significant effect when they have a critical mass of 40% or more. Subsample analysis shows that female directors are beneficial for less risky, non-small and dispersedly owned firms. During the GFC supply shock, female directors' impact on leverage and short-term debt was insignificant. However, their positive impact on retained earnings is persistently present throughout all subsamples. These findings are robust to endogeneity corrections using the Heckman selection model and propensity score matching.

**Tile:** Pricing SPX Option by Modelling VIX Directly

# Wei Lin, PhD in Finance

#### Abstract

In this paper, we develop an approximated relationship between VIX and the instanstaneous variance in SPX. Using the log-normal Ornstein-Uhlenbeck diffusion model in Detemple (2000),

we show how to pricing SPX option by modelling SPX directly. To further verify the non-flat implied volatility of SPX, the SPX option pricing formula under the log-normal Ornstein-hlenbeck with stochastic volatility model is also derived. Finally, we analyze their pricing performance, and predictability on the level of the implied volatility.

Tile: The impact of climate change actions on the cost of debt financing

# Khurshid Ali, PhD in Accounting

#### **Abstract**

The purpose of this study is to empirically investigate the impact of climate change actions on the cost of debt financing. The sample of the study includes constituent companies of S&P 500 index over the period of 2005 to 2020. The findings reveal a negative and statistically significant relationship between climate change actions and cost of debt financing. Our findings provide support for the argument that firms taking measures to combat climate change have a lower cost of debt.

**Tile:** Bakshi, Kapadia, and Madan (2003) Risk-Neutral Moment Estimators: An Affine Jump-Diffusion Approach

# Pakorn Aschakulporn, PhD in Finance

#### **Abstract**

This is the first study of the errors of the Bakshi, Kapadia, and Madan (2003) risk-neutral moment estimators under the Duffie, Pan, and Singleton (2000) affine jump-diffusion model benchmarked against their true values. This is accomplished by extending the exact solutions from Zhen and Zhang (2020). To mitigate errors in skewness, interpolating the implied volatility curve with cubic splines and applying constant extrapolation to have a step size of \$1 and strikes ranging from half to double the forward price should yield skewness values with errors less than 10–3; based on simulated data using parameters calibrated with the S&P 500 index during 2019 and 2020.

**Tile:** Social Networks, Information Technology, Intellectual Capital and Value Creation in the Public Sector

# Thilini Arachchige, PhD in Accounting

#### **Abstract**

The study examines how various actors interact in social networks while solving related problems during the introduction of information technology initiatives. Additionally, it explores how intellectual capital (IC) is mobilised by the actors to promote value creation, when they are solving problems. Archival and interview data is currently being collected from a large Sri Lankan and a large New Zealand public sector organisation's head offices and branches. The study uses actor-network theory, particularly the four moments of translation, to analyse the

results. Consistent with the four stages of translation in actor-network theory, the ongoing and emerging findings of the present research suggest that the introduction of a new actor produces a cascading set of changes in the existing actor-network, including the identification of original work approaches, the enabling of new business processes, the alignment of actors' interests, and the encouragement of intra-network knowledge sharing. These changes, when managed successfully, permit better IC utilisation and help promote a firm's value creation.

Tile: Microfinance's Climate Distress

# Iftekhar Ahmed, PhD in Finance

#### Abstract

This research sheds light on microfinance institution's (MFIs) climate distress risk. We systematically investigate the effects of climate-related events on microfinance soundness/distress. The study invokes panel data regressions using an unbalanced panel sample of 3,114 MFIs from 124 countries covering the period 1999-2019. Our preliminary results suggest that MFIs are distressed by climate-induced risk. Specifically, the findings show that climate-related catastrophes have negative consequences on microfinance's capital adequacy, asset quality, earnings, and social mission. However, we find limited evidence that climatic events affect MFI managerial qualities and liquidity.

**Tile:** The covariance risk premium and the equity premium

#### Xiaolan Jia, PhD in Finance

# Abstract

We study the predictive power of covariance risk premium (CRP), defined as the difference between the historical and the risk-neutral covariance rates of the implied volatility changes and the underlying security returns. CRP positively and significantly predicts the equity premium over horizons up to 24 months both in-sample and out-of-sample. Its predictive power outperforms many well-known predictors. Furthermore, CRP also reveals substantial economic value for investors. We value the CRP and equity premium under a pricing kernel based on a 2-factor stochastic volatility model, and first theoretically prove the positive relationship between the CRP and equity premium.

Tile: Extending management accountants' roles into business partnering

# Siamak Ansari, PhD in Accounting

#### Abstract

The literature has long discussed the business orientation of management accountants' roles. What prior studies have in common in this respect is management accountants' collaboration in decision-making processes with a forward-looking vision by providing strategic information and executing proactive tasks. This is how they are called 'business partners'. Looking at the

literature, there has been an overemphasis on constructing the business-partnering role and not necessarily reconfiguring the already existing role(s) in terms of partnership. It is also evidenced that little is known of the practices by which practitioners would make sense of the skills and tasks that have so far attached to this type of role. Drawing on a practice-driven approach of institutional theory and using insights from a case study that comes from the new public management reforms, this paper aims to understand how practices performed by management accountants have so far captured the symbolic assumptions of business partnership called 'logics', and what institutional factors have enabled and/or constrained management accountants to extend their roles into business partnering. Overall, this paper contributes to the literature in the following way. Theory and empirical investigation in the field of management accountants' business partnering are still underdeveloped. Therefore, to the best of our knowledge, this is the first time that micro-mechanisms of practitioners' works, partnership logics, and institutional enablers and constraints are articulated with each other by employing a new branch of institutional theory at the individual level. Partnership logics we propose in this study are based on competencies that have been acknowledged by IMA (2019) as requirements for every management accountant as a business partner in the digital age. So, the findings of this study may enrich practitioners' understanding of how building up skills needed for performing their tasks could lead to a business-partnering profile in practice. This study would also be able to show practitioners how they might have acted at partners' sight level irrespective of what they are called, which areas of their profiles are needed to be improved, and which intra- and extra-organizational factors could impact this process.

**Tile:** A talanoa why public values of accountability and transparency are unrealised: Civil servant perspectives of Tonga

# Iki Mafi Uele, PhD in Accounting

#### **Abstract**

This study aimed to determine the role of accounting in measuring the Public Values of transparency and accountability and determine why there is a disparity between the espoused (stated) and realised (observed) Public Values of Tonga's government ministries, departments, and related organisations. My first research paper find that three (judgement, timeliness & accessibility, and consequences & redress) out of five public values proposed by Gupta and van Asselt (2019) have either realised or partially realised in the Tongan public sector. In this research, I examine why and how these public values are unrealised.

By exploring the perspectives of current workers within the organisations and the perspectives of Tonga's major donors and development partners, the research question for this paper will help identify why accountability and transparency are not fully realised in Tonga. Talanoa, a robust Pacific research technique, will be used in this study. Talanoa is a decolonising research pedagogy whose effectiveness is demonstrated by its ability to extract and build public confidence, especially in the Pacific as highly conservative countries. Allowing talanoa participants to propose explanations is one of the advantages of talanoa. They can mention things that do not fit into these categories but are still beneficial to Tonga and the developing world. This study will help Tonga and other developing countries reconstruct or reform policies, processes, and practices.

Tile: Non-GAAP and Audit Partner Rotation

# Chang Liu, PhD in Accounting

#### **Abstract**

Although external auditors are not responsible for non-GAAP disclosure, they still need to read non-GAAP disclosure. Therefore, people may think auditors may provide assurance to the non-GAAP figures if external auditors do not publicly disagree with that. Hence, examining the association between auditors and non-GAAP disclosure may contribute to literature. My research examines the effect of audit partner rotation on the quality of firms' non-GAAP earnings, where non-GAAP earnings are achieved by making adjustments to GAAP earnings. Results suggest audit partner rotation may lead to low-quality non-GAAP disclosures, which may be explained by a lack of familiarity with the incoming audit partners with the client firms.

Tile: Volatility Risk Premium and the Implied Volatility Curve of VIX Options

# Jungah Yoon, PhD in Finance

#### Abstract

In this paper, we quantify the implied volatility curve of VIX options and test the forecasting power of the options-implied volatility market factors on subsequent volatility risk premium. We find that the implied volatility slope predicts significantly and positively on subsequent volatility risk premium at various data frequencies. It is also robust to alternative volatility risk premium and slope specifications. The key risk source of the implied volatility slope is the correlation between returns of the VIX and VVIX indexes and is significantly related to investors' trading activity in the VIX futures market.

**Tile:** The Shape of Implied Volatility Smirk, Investor Sentiment, and the Cross-Section of Stock Returns

#### Jianhui Li, PhD in Finance

#### **Abstract**

In this article, we use the level (LEVEL), slope (SLOPE), and curvature (CURV) of a quadratic function describing the implied volatility smirk to reveal investor sentiment, and investigate the predictive power of these option-based sentiment measures for subsequent stock returns in the cross-section. We find that stocks exhibiting higher-up, steeper and narrower smirk in their traded options underperform stocks with the lower IV smirk factors in their options by 1.54%, 0.40%, and 0.43% per month on a risk-adjusted basis. In particular, we find that the CURV-return relation is pronounced in times of high market sentiment periods, the predictability of LEVEL and CURV is associated with overpricing caused by investors' bearish opinions, and that of SLOPE is driven by the information asymmetry.

**Tile:** Who Drives Intraday-overnight Cross-sectional Momentum the in New Zealand Equity Market

Sandun Fernando, PhD in Finance

#### **Abstract**

Using intraday half-hour returns and overnight returns on all New Zealand common stocks from January 2005 to September 2019 we document persistent cross-sectional momentum. The momentum profits accrue in a specific period during the day: (1) in the first half hour and (2) then gradually during the afternoon trading session. Momentum returns are strikingly high in the last half hour of trading. Momentum profitability, however, reverses in the overnight period earning negative overnight alpha. The existing literature suggests that clientele active during specific times of the day creates this pattern. This study seeks to determine if the observed intraday-overnight momentum pattern can be attributed to investor heterogeneity.

**Tile:** Application of management control system (MCS) in waste management practices: Structured literature review

Disney Kariyawasam, PhD in Accounting

#### **Abstract**

This paper reviews the literature on applications of management control systems (MCS) in waste management (WM) practices. A structured literature review (SLR) approach was used to analyse 261 published articles in management and accounting, between 2000-2020 based on number of criteria such as, year, journal title, research locations, research industry, research method, and theory and research theme. The literature is dominated by management, mainly focuses on manufacturing industry and provides evidence mostly from the European and Australasia continents. The key themes mainly focus about the sustainable consumption and production, consumers behaviour, supply chain actors and circular economy. The paper provides insights on how WM research in MCS has developed and identify the future research opportunities.

Tile: CSR Decoupling: A Systematic Literature Review

Shabana Talpur, PhD in Accounting

#### Abstract

This research project provides a systematic literature review of Corporate Social Responsibility (CSR) decoupling. We focus on conceptual and empirical studies that assess CSR decoupling and its related terms. The analysis measures the frequency and changes in the CSR decoupling literature and associated trends. CSR Decoupling is defined as "the gap between how firms communicate CSR and what firms do regarding actual CSR practice. Decoupling occurs when firm practices and actions are not aligned. More than two decades of related literature underpins CSR decoupling research. The subject domain uses various terminologies, keywords, and phrases. Many high-profile companies have been placed under the CSR decoupling spotlight by scholars. Examples include firms such as Nestle, H & M, Starbucks, Volkswagen, and British Petroleum. Each of these businesses was condemned for initiating CSR practices with the sole purpose of green advertising. Following the surge in CSR decoupling scandals and their influence over the green market, academics also pursue this topic from various perspectives. Despite all the hype in decoupling research, there are limited literature reviews. This study identifies the current trends in decoupling research, discusses the popular themes presented in

the literature, and provides potential research gaps for future investigation.

**Tile:** The impact of financial development and FDI on CO2 emissions: A country level analysis **XiaojieYu, PhD in Finance** 

#### **Abstract**

This study investigates the impact of financial development (FD) and FDI on CO2 intensity of a country with a comparison between developed and developing economies. We use a sample of 57 economies for the period 2000 – 2017 in a robust panel data analysis. Among FD indicators covering both financial markets and institutions, financial market efficiency and stability tend to increase CO2 intensity while financial institution efficiency, stability, access, and depth lead to reduce CO2 intensity specifically in developing economies. In developed economies, depth and access of both financial institutions and markets tend to reduce CO2 intensity. Moreover, inward FDI quality positively affects CO2 intensity in all economies while outward FDI quality affects CO2 intensity positively only in developing economies. Besides, the net FDI position in monitory terms significantly reduces CO2 intensity in all economies. Thus, we highlight the fact that both FD and FDI have to be taken together towards sustainable development goals.

**Tile:** Idiosyncratic Volatility Puzzle: A Climate Risk Explanation

Kasun Perera, PhD in Finance

#### **Abstract**

Motivated by the recent empirical studies on climate finance, this study investigates the long-debated idiosyncratic volatility puzzle from a climate risk perspective. Using a unique data set from the USA market, we uncover that the carbon emissions risk, being a non-diversifiable risk, can account for the idiosyncratic volatility puzzle in cross-sectional returns. Moreover, we find inefficiently priced carbon emissions risk with no robust idiosyncratic volatility puzzle in stock returns exists in low-carbon-intense industries. Our findings have vital implications for a broad spectrum of stakeholders, including company management, investors, regulators, and policymakers.

**Tile:** The Evolution of Social Environment Responsibility in Ancient Ceylon **Hiruni Rathwatta, PhD in Accounting** 

#### **Abstract**

Social Environment Responsibility (SER) is currently the subject of intense corporate and academic scrutiny. The interest in SER research from a corporate perspective has expanded rapidly since the initial work of Bowen (1953). However, the origin of SER can be traced back to 3000 BCE in ancient Mesopotamia, Egypt and Persia, and in pre-colonial Ceylon to at least 300BCE. To date, the majority of historical SER research has focused on Western contexts (the United Kingdom and Europe) neglecting the rich history of Asia. My thesis contributes to the extant SER literature by exploring the evolution of SER practices in pre-colonial and colonial Ceylon and examine how those manifested in practice today.

**Tile:** Relation between Corporate Governance and Corporate Political Activity **Junxiu Lyu, PhD in Accounting** 

#### Abstract

My topic is to explore the relation between corporate governance and corporate political activity.

The reason to choose this topic is corporate governance plays a vital role in organizations in contemporary society, and corporate political activities may deter firm value through the channel of corporate governance. There are three search themes regarding their connection in my SLR essay, including corporate governance and financial corporate political activity, corporate governance and informational corporate political activity as well as corporate governance and constituency-building corporate political activity. After searching in both Scopus and Web of Science databases, the final number of articles with elimination of duplicates is 2347.

Tile: Option-implied Measures and Tail Risks: International Evidence

Junyu Zhang, PhD in Finance

#### **Abstract**

Options can provide efficient protection against the market uncertainty and thus tail risk will also be priced in the options market. As international evidence, this study uses several iShares MSCI Country ETFs and SPY as proxies to investigate option-implied measures of indices in different regions. The relationship between measures and returns as well as the connection of these indicators across different regions will be studied. The event-driven (Political, Environmental, etc.) fluctuation of these implied measures will also be estimated

Tile: Audit Committee Diversity and Disclosure of Internal Control Weakness

Xiaoxu Zhang, PhD in Accounting

#### Abstract

Using a sample of listed companies from China for the period 2010-2020, this paper explores the relationship between audit committee diversity and disclosure of internal control weakness (ICWs). In particular, we analyse the effects of committee member (i) gender and age (relation dimension) and (ii) tenure and expertise (task dimension). Our results show that audit committee diversity is significantly associated with disclosure of ICWs. This study contributes to the internal control disclosure and audit committee literature using evidence from a unique setting. The study also provides insights for regulators on governance and disclosure.

**Tile:** Impact of COVID-19 on investor's Reaction to Macro and Non-macroeconomic variations: Cross country analysis for Evidences beyond symmetry

**Umaid Sheikh, PhD in Finance** 

#### Abstract

The main objective of first essay is to estimate the impact of both positive and negative shocks across multiple quantiles of macroeconomic and non-macroeconomic fluctuations on the investor's reactions during the health crisis. This research will incorporate symmetrical like ARDL and asymmetrical econometric approaches like QNARDL, QARDL, and NARDL for analyzing the macro-non-macroeconomic and stock price nexus by utilizing high frequency data. This research will present practical implication for short term and long term shareholders, brokers and governmental agencies regulating the performance of respective stock exchanges.