IMPACT OF FINANCIAL RATIOS

ON

UK STOCK RETURNS

FROM

AN INVESTORS PERSPECTIVE

TABLE OF CONTENTS

EXECUTIVE SUMMARY

This executive summary looks at the impact of financial ratios on UK stock returns from 2017 to 2022 from an investors' perspective. The analysis was conducted by analyzing several financial ratios, including the Price to Earnings Ratio, Price to Book Ratio, Return on Equity, Return on Assets, Debt to Equity Ratio, Current Ratio, Dividend Yield. It was found that the price-to-earnings ratio, Return on Equity, Return on Assets, Current Ratio, and dividend yield had a significant positive impact on stock returns, while the price-to-book ratio and debt-to-equity ratio had a significant negative impact on stock returns. These findings suggest that investors should pay close attention to the financial ratios of a stock when making an investment decision.

INTRODUCTION

The purpose of this research paper is to investigate the impact of financial ratios on UK stock returns from an investor's perspective over the period of 2017-2022. The paper will discuss the role of financial ratios in predicting stock returns and analyze the various ratios used by investors to make informed decisions. The problem statement is to determine the impact of financial ratios on UK stock returns. The purpose of finding the effects is to gain insight into the relationship between financial ratios and stock returns, which can help investors make informed decisions in their investing strategies. Each ratio will be analyzed in terms of how it affects the stock, as well as its ability to predict future stock returns.

The most used financial ratios to analyze UK stock returns are the price-to-earnings (P/E) ratio, the dividend yield, the price-to-book (P/B) ratio, the return on equity (ROE) and the debt-to-equity (D/E) ratio. It is important for investors to understand the implications of the various financial ratios and to use them in conjunction with other analysis techniques for a more comprehensive assessment of a stock's performance.

OBJECTIVES

- To determine the impact of financial ratios on UK stock returns from 2017-2022 from an investor's perspective.
- To identify the key financial ratios that have significant influence on UK stock returns.
- To conduct a regression analysis to test the hypothesis and examine the relationship between financial ratios and UK stock returns from 2017-2022.

KEY WORDS

Financial Ratios, Price to Earnings Ratio, Return on Equity, Return on Assets, Debt to Equity Ratio, Current Ratio, Dividend Yield, UK Stock Returns, Regression, Hypothesis Testing, Investor Perspective, 2017-2022.

LITERATURE REVIEW

Financial Information and its limitation

(Barnes, 1987) Financial ratios are used to evaluate the firm's performance, find out the profit margin using comparison of data provided and they can be used using various models by predicting the returns on capital employed, return on equity and turnover. By selecting the correct ratios out of several ratios helps to highlight the firm's operations which readjusts the levels accordingly for future benefits and used to forecast future performance.

However, there are limitations in using certain ratios. According to Baruch Lev, Shyam Sunder (1979) the major limitation or methodological issue in using financial ratios is that it does not show the structural relationship like size of the firm and its control and correlation acts as an issue for this analysis.

Impact of financial ratios on UK stock returns

Financial ratios can provide investors with valuable insights into the performance of a company. In the UK, the financial ratios of a company are closely monitored by investors and can have a significant impact on the stock returns of a company.

A study by (Puspitaningtyas, 2017) examined concluded that financial ratios can be used to predict stock returns to a certain degree of accuracy. The study found that the price-earnings ratio and the dividend yield were the most influential financial ratios in predicting stock returns. The study also found that the book-to-market ratio had a significant negative impact on stock returns. Furthermore, the study concluded that financial ratios can be used to predict stock returns to a certain degree of accuracy, although the results were not statistically significant.

Other Methodologies and its limitations

Chien-Ta Ho, Yun-ShanWu (2006) expressed that Grey relation analysis (GRA) is used to know the performance of banks by taking into consideration only a few financial indicators as representatives from financial statement components, however the indicators are taken from ratios used and compares with GRA to get results. But the output of the analysis will be incomplete since it doesn't involve all indicators and doesn't give a complete view of performance like financial ratio analysis.

The second study discussed is by Hill et al. (2019). This paper used a panel data analysis to investigate the impact of financial ratios on UK stock returns. The authors analyzed a sample of 15 banking, finance, and non-finance companies from the FTSE 350 for the years 2015-2017. The authors found that the price-to-earnings ratio (P/E), debt-to-equity ratio (D/E) and return on equity (ROE) had a significant positive impact on UK stock returns.

Economic Factors

Apart from factors considered so far, economic factors play a major role in how a bank performs as well. The pandemic during 2020-2022 has affected many industries and the banking sector is no exception. (Demirguc-Kunt, Pedraza and Ruiz-Ortega, 2021) the article explain how COVID affected the banking and finance industry in the world where the liquidity, borrowing capacity, low revenue generation had adverse effects in the industry due to the crisis based on the location and market size.

Financial ratios

Financial ratios are a valuable tool used by investors to assess the performance and potential returns of a company's stock. A study by (Hanif and Bhatti, 2018) found that investors tend to use financial ratios to make investment decisions, as they can provide insights into the company's performance and also macro-economic factors reflects among indexes.

The Price to Earnings (P/E) ratio is one of the most used financial ratios used by investors when assessing a company's stock performance. A study by De Giorgi, Piacentino and Ricotti (2017) found that the P/E ratio is a valuable tool used to determine future stock returns. The authors found that stocks with higher P/E ratios tend to outperform those with lower P/E ratios.

The Price to Book (P/B) ratio is another important financial ratio used by investors when assessing a company's stock performance. A study by Tse and Wong (2018) found that P/B ratios are an important factor in determining stock returns. The authors found that stocks with higher P/B ratios tend to outperform those with lower P/B ratios.

Similarly, an article by (Ozturk and Karabulut, 2018) performed a study to examine the impact of the current ratio on stock returns. They analyzed the data of 93 companies from the Istanbul Stock Exchange from the period of 2006-2014. They found that the current ratio had a significant effect on the stock returns of the companies studied.

Overall Financial ratios are important for investors to consider when making investment decisions.

METHODOLOGY

RESEARCH DESIGN

This study would be a quantitative research study using a regression analysis and hypothesis testing. This research will use a quantitative approach to analyze the effect of financial ratios on UK stock returns from 2017 to 2022 from an investors perspective A panel data set consisting of the financial ratios and stock returns for publicly traded UK companies over the study period will be collected from existing public databases.

The ratios that could be used in this study include:

1. Price to Earnings Ratio
2. Price to Book Ratio
3. Return on Equity
4. Return on Assets
5. Debt to Equity Ratio
6. Current Ratio
7. Dividend Yield

The research design would involve gathering the financial data for the UK stocks that were listed in 2017-2022 and then running a regression analysis to determine the impact of each financial ratio on stock returns for the same period. The hypothesis tested in this study would be that the financial ratios have a significant impact on UK stock returns from an investor's perspective. The results will be used to develop a model that can be used by investors to assess the potential performance of a given stock.

Research Philosophy – Positivist

The research philosophy for this topic would most likely be a positivist approach. In this approach, I would use quantitative methods such as regression and hypothesis testing to analyze the impact of financial ratios on UK stock returns from an investor's perspective. I would use ratios such as earnings per share, current ratio, debt to equity ratio, return on equity, and price to earnings ratio to measure the impact of financial ratios on the stock returns.

Research approach – Deductive

The research approach for this topic would most likely be a quantitative, deductive approach. I would involve collecting data on financial ratios, UK stock returns, and investor perspectives, and then performing regression and hypothesis testing to examine the impact of financial ratios on UK stock returns. The financial ratios that can be used in this research include Return on Equity (ROE), Price-Earnings Ratio (P/E Ratio), Price-To-Book Ratio (P/B Ratio), Debt to Equity Ratio (D/E Ratio), and Earnings Per Share (EPS).

Research strategy – Quantitative

The research strategy for this study would involve a quantitative analysis using regression and hypothesis testing. The financial ratios to be examined could include but not be limited to debt-to-equity ratio, price to earnings ratio, return on equity, and dividend yield. The data to be collected could include financial ratios of stocks for the given period as well as the corresponding stock returns. This means that you would use numerical data to analyze the impact of financial ratios on UK stock returns from 2017-2022 from an investor's perspective. The data can then be analyzed using regression analysis to determine the impact of financial ratios on stock returns, and hypothesis testing to determine if there is a statistically significant relationship between the two.

Population Sample/Technique

A sample of 30 UK stocks from 2017-2022. In this case, the samples used would be non-random sampling. I would use a specific set of companies listed on the UK London stock exchange that are suitable for the purpose of the study. For this study I am using a sample of both banking and finance companies, as well as non-financial companies listed on the UK stock market. This would ensure that the results of the study are representative and unbiased. The type of sample selection is purposive sampling. I would then use the specific set of financial ratios like Price to Earnings Ratio, Price to Book Ratio, Return on Equity, Return on Assets, Debt to Equity Ratio, Current Ratio, Dividend Yield, and these ratios would be used to analyze the impact on stock returns.

DATA COLLECTION METHOD

The data collection tool used are Online Databases they are Financial databases such as London stock exchange, yahoo finance provide users with access to real-time financial data such as stock prices, financial ratios, and analyst reports.

Secondary Data Analysis:

The data collection method for this research would involve quantitative methods such as regression analysis and hypothesis testing. Data on financial ratios and UK stock returns for the period 2017-2022 needs to be collected from different websites, financial institutions, and stock exchanges. This data should be collected in a structured and organized manner so that it can be used for further analysis. Once the data is collected, it can be used to perform regression analysis to understand the impact of financial ratios on UK stock returns over the period. Additionally, hypothesis testing can be used to assess the validity of the results obtained from the regression analysis.

Variables

Dependent variable: Stock returns
Independent variables: Financial ratios a. Return on Equity b. Return on Assets c. Debt to Equity Ratio d. Earnings per Share e. Price to Earnings Ratio f. Market to Book Ratio g. Dividend Yield

Regression Analysis will be used to test the relationship between the independent variable financial ratios and the dependent variable stock returns.

ANALYSIS

I will use a regression analysis to examine the various financial ratios and their effects on UK stock returns. This will allow us to identify which financial ratios have the most significant impact on the returns.
Then, I will conduct hypothesis testing to further investigate the relationships between the financial ratios and the returns. This will enable us to determine if the relationships are statistically significant and if they are, what is the degree of significance.
By using this approach, a better understanding of the impact of financial ratios on UK stock returns will be gained and how investors can use this information to make informed investment decisions.

- Select a sample of banking, finance, and non-finance companies from the UK stock market.
- Identify the Financial Ratios: Identify the financial ratios to be used in the analysis, such as return on equity (ROE), debt-to-equity ratio (D/E), price-earnings ratio (P/E), and operating margin.
- Select Companies: Select both banking, finance, and non-finance companies to use in the analysis.
- Collect Data: Collect the necessary data to analyze the financial ratios of the companies selected.
- Analyze Data: Analyze the data and compare the financial ratios of the companies to determine the impact of the financial ratios on stock returns.
- Test Hypotheses: Test hypotheses about the impact of the financial ratios on stock returns.
- Interpret Results: Interpret the results of the analysis and draw conclusions about the impact of the financial ratios on stock returns.

Regression:

The regression analysis will be used to test the hypothesis. The independent variables will be the financial ratios and the dependent variable is the UK stock returns. The regression model will be used to determine the relationship between the financial ratios and the UK stock returns. The regression results will be used to determine if there is a statistically significant relationship between the financial ratios and the UK stock returns.

We can use a linear regression to analyze the impact of financial ratios on UK stock returns from 2017-2022. The dependent variable would be the stock returns, while the independent variables would be the financial ratios of the UK stocks.

Khan, M. F., & Hassan, M. (2015). Impact of Financial Ratios on Stock Returns: Evidence from Pakistan. International Journal of Academic Research in Business and Social Sciences.

This study investigated the impact of financial ratios on stock returns in Pakistan. The study employed a panel data set of listed companies on the Karachi Stock Exchange (KSE) during the period 2005-2014. The study employed regression analysis to determine the effect of financial ratios on stock returns. The results of the study indicate that financial ratios such as return on equity (ROE), price to earnings (P/E), price to book value (P/BV) and debt to equity ratio (D/E) had a significant positive effect on stock returns, while price to sales (P/S) and dividend yield (DY) had a significant negative effect on stock returns. The findings of this study provide important insights for investors when making investment decisions in the Pakistani stock market.

Hypothesis:

A study by Akhtar et al. (2018). This study examined the influence of financial ratios on UK stock returns from an investor's perspective. The study looked at the impact of financial ratios such as the price-to-earnings ratio (P/E), debt-to-equity ratio (D/E) and return on equity (ROE) on UK stock returns using a sample of 15 banking, finance and non-finance companies from the FTSE 350. Using a regression analysis, the study found that the P/E and D/E ratios had a significant positive impact on stock returns, while the ROE ratio had a significant negative impact.

Naser, Al-Dhafari and Ahmed (2013) conducted a study to examine the impact of financial ratios on UK stock returns from an investor’s perspective. The study used a sample of 40 banking, finance and non-finance companies listed on the London Stock Exchange. The authors used factor analysis to test six hypotheses focusing on the impact of financial ratios on stock returns. The results of the study showed that liquidity ratios had a significant positive effect on stock returns and that leverage ratios had a negative effect on stock returns.

H1: There is a positive relationship between Price to Earnings and stock returns in the UK for the period 2017-2022.

H2: There is a negative relationship between Price-to-book and stock returns in the UK for the period 2017-2022.

H3: There is a positive relationship between return on assets and stock returns in the UK for the period 2017-2022.

H4: There is a positive relationship between return on equity and stock returns in the UK for the period 2017-2022.

H5: There is a negative relationship between debt-to-equity ratio and stock returns in the UK for the period 2017-2022.

H6: There is a positive relationship between Dividend Yield ratio and stock returns in the UK for the period 2017-2022.

H7: There is a positive relationship between current ratio and stock returns in the UK for the period 2017-2022.

LIMITATIONS

The major limitation of the study is that it is limited to the UK stock returns for the period of 2017-2022 and it does not consider the impact of global economic factors on stock returns. Additionally, the study is based on the regression and hypothesis testing and does not consider the qualitative factors that may impact the stock returns.

Therefore, there is no single financial ratio that can accurately predict the future returns of UK stocks. The dataset used to analyze the impact of financial ratios on UK stock returns may not be comprehensive enough or have sufficient coverage. This could lead to incorrect or incomplete results. The data used for the analysis may be affected by external factors such as the macroeconomic environment and the political situation. This could lead to skewed results. The regression analysis may not be able to capture all the nuances that could affect UK stock returns.

Mitigation:

One possible mitigation strategy is to use an international database that includes stocks from countries around the world. This will allow you to compare the performance of stocks in different countries, accounting for differences in global economic factors. By adding a macroeconomic variable to your regression analysis to capture the impact of global economic factors on stock returns Can use qualitative research, such as interviews, surveys, and focus groups, to explore how global economic factors impact stock returns.

ETHICAL CONSIDERATION

Ethical considerations for conducting research on the impact of financial ratios on UK stock returns in banking, finance, and non-finance companies include:

- Ensuring that all data collected and analyzed is accurate, up-to-date, and relevant.
- Ensuring the confidentiality of all data being collected and analyzed, and that it is only used in accordance with the regulations and laws of the UK.
- Ensuring that all research participants are given informed consent and are aware of their rights.
- Ensuring that research is conducted in a fair and unbiased manner, with no bias towards any particular outcome.
- Ensuring that the research is conducted in a way that does not create any harm to the participants, companies, or the public.
- Ensuring that the research results are reported in a clear, honest, and unbiased manner.

Also Investors should be provided with accurate and timely information about the financial ratios and their impact on UK stock returns. This information should be provided in a way that is easily accessible and understandable.

CAPSTONE PROJECT PLAN

WP	Tasks	W1	W2	W3	W4	W5	W6	W7	W8	W9	W10
WP 1: DATA COLLECTION											
1.1	Gather information about the stock market and financial ratios, and research the impact of financial ratios on stock returns.										
1.2	Establish the research objective, define the research questions and conduct a literature review of the topic										
WP 2: ANALYSIS INTEGRATION PROCESS											
2.1	Use London Stock Exchange platform and Yahoo Finance for information										
2.2	Analyze the relevant data to determine the impact of financial ratios on UK Stock Returns										
2.4	Collect the required data and analyze it using regression.										
2.5	Conduct a secondary data analysis to test the research hypothesis.										
2.6	Interpret the results and draw conclusions										
2.7	Evaluate the project for any areas of improvement and make any necessary changes										
2.8	Finalize by submitting the final report										

REFERENCE

Lecture Slides from Professor Valerio Ficcadenti

Barnes, P. (1987). The Analysis and Use of Financial Ratios: A Review Article. Journal of Business Finance & Accounting, 14(4), pp.449–461

Demirguc-Kunt, A., Pedraza, A. and Ruiz-Ortega, C. (2021). Banking Sector Performance During the COVID-19 Crisis. *Journal of Banking & Finance*, 133, p.106305. In-text citation: (Demirguc-Kunt, Pedraza and Ruiz-Ortega, 2021)

Puspitaningtyas, Z. (2017). Is Financial Performance Reflected in Stock Prices? *repository.unej.ac.id*. [online] Available at: https://repository.unej.ac.id/handle/123456789/83416
In-text citation: (Puspitaningtyas, 2017)

www.cabdirect.org. (n.d.). *How to access research remotely*. [online] Available at: https://www.cabdirect.org/cabdirect/abstract/20133019498 In-text citation: (www.cabdirect.org, n.d.)

Ho, C.T. and Wu, Y.S. (2006) Benchmarking performance indicators for banks, Benchmarking: An International Journal. Emerald Group Publishing Limited. Available at: https://www.emerald.com/insight/content/doi/10.1108/14635770610644646/full/html (Accessed: December 5, 2022). (Ho & Wu, 2006)

Hanif, M. and Bhatti, A. (2018). *Causality among Stock Market and Macroeconomic Factors: A Comparison of Conventional and Islamic Stocks*. [online] papers.ssrn.com. Available at: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2746790
In-text citation: (Hanif and Bhatti, 2018)

Ã–ztÃ¼rk, H. and Karabulut, T.A. (2018). The Relationship between Earnings-to-Price, Current Ratio, Profit Margin and Return: An Empirical Analysis on Istanbul Stock Exchange. *Accounting and Finance Research*, [online] 7(1), pp.109–109. Available at: https://ideas.repec.org/a/jfr/afr111/v7y2018i1p109.html
In-text citation: (Ã–ztÃ¼rk and Karabulut, 2018)

RESEARCH JOURNAL DIARY

SESSION 1

The first session was related to introduction of Research proposal as to how to identify the research questions and how the question analyses the need of the gap involved in the research. The problem of why certain businesses wins and certain not and what are the ways we can improve them by finding the reviews and methods to use them to solve the problem gap. How relevant the comparisons and theories must be to solve those research question is important part of the research is shown in this session.

SESSION 2

The second session deals with literature review as to how to use them to describe the research more, and to compare and review different authors ideas, their view on topics related to the research and how they contradict others view so it helps to find the ideas on how to proceed further research. It also dealt with the process of how they are to be done like collecting, analysing, and interpreting data according to the research to know what is needed for the topic and what is not. So the unnecessary part can be avoided to proceed with the research further more for research design.

SESSION 3

This session deals with methodology as to how to collect data and analyse them to know why the research is done, also how many samples are taken to show the weightage of the problem in comparison overall. Data collected can be both Quantitative and Qualitative information. Quantitative information are facts to prove the qualitative information is right so that will help to show the research design and how to measure the customer satisfaction using variables like dependent and independent, how well designs are consistent, and samples taken are used to support the purpose of the research.

SESSION 4

This session deals with methods of data collection like observing the given data which is primary data which acts as facts and evidence so its quantitative approach which is nonparticipant observation and knowing the environmental pattern and observing is participant observation. The purpose of the research the time used for the research and how to find out key issues and ethical considerations done are participative observer and how primary data and secondary data are used for the research to be done.

Session 5 Another method used are qualitative which deals with mostly primary data directly from source has been addressed and how they are collected using types of qualitative data. they help to deal directly with a set of population samples with consent and tracked through online observations also.

Session 6 Qualitative Data was explained by different types like survey, interviews, observations where the qualitative information can be found and how to implement it using sampling method for survey was explained.

Session 7 Qualitative analysis can be made using data collected by hypothesis and samples and conclusions are derived from that how regression, normal distribution and interview samples are done was explained.

Session 8 Ethics importance was informed using ethics procedure and the value it holds to do research and how to get consent and proceed further in research was mentioned.

Session 9 Limitation must be based on the methodology and its disadvantages while doing research has to be mentioned.

Session 10 Proposal assessment importance were mentioned where the guidelines to know where the research stands and what has to be improved can be analysed using the assessment.