

ASIAN JOURNAL OF MANAGEMENT STUDIES

Journal homepage: https://www.sab.ac.lk/ajms/ DOI: https://doi.org/10.4038/ajms.v4i1.75 Faculty of Management Studies Sabaragamuwa University of Sri Lanka



Differential Value Relevance of Accounting Information on Investors' Decisions: Evidence from Sri Lankan Commercial Banks

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This research investigates the impact of differential value relevance of accounting information on investors' decisions in Sri Lankan commercial banks during noncrisis (2013-2018) and crisis (2018-2022) periods. Key metrics such as Earnings per Share (EPS), Return on Equity (ROE), Earning Yield (EY), Net Asset Value Per Share (NAVPS), and Return on Assets (ROA) were analyzed, with Market Value per Share (MVPS) as the proxy for investors' decisions. Data from ten licensed commercial banks listed on the Colombo Stock Exchange from 2013 to 2022 was analyzed using descriptive statistics, correlation analysis, and panel regression. The study found a strong positive correlation between NAVPS and MVPS during non-crisis periods, while EY was negatively associated with MVPS. In the crisis period, EY had a negative link to MVPS, and EPS showed a positive relationship. These findings provide valuable insights for stakeholders in Sri Lanka's commercial banking sector.

Keywords: Differential Value Relevance, Investor Decision-Making, Commercial Banks

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ARTICLE INFO

Article history: Received: 2 June 2024 Accepted: 9 July 2024 Published: 31 August 2024

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INTRODUCTION

Background of the Study

A company's financial statements contain different kinds of information: accounting data, financial data, and non-financial information. Accounting data is the data that describes a utility account. The business conducts financial activities to disclose information externally to a range of stakeholders, including government organizations, creditors, investors, and shareholders. Non-accounting information is information that cannot be evaluated monetarily to assist investors in making judgments about their investments (Perera & Thrikawala, 2010). The impact of accounting information on stock returns and prices is significant. Therefore, accounting data is essential for choosing investments, and investors need to be aware of this information to make informed decisions (Bhatia, 2020).

The use of information technology in accounting processes and in the distribution of accounting data to end users has had a substantial impact on the accounting environment as well. Most businesses these days utilize software packages to enhance accounting operations. As a result, the quality of accounting information has recently significantly improved. CSE introduced a website that offered market-based statistics as well as quick, more precise, and timely public information on each organization. All investors can access the financial statements of every company via the website. Consequently, it is necessary to reevaluate the value and applicability of accounting information in Sri Lanka (Chandrapala, 2010).

Global financial markets have faced several difficulties recently, including financial crises and economic downturns. These instances demonstrate the importance of understanding how investors respond to and utilize accounting data in times of crisis. Although several research studies have looked into how accounting information affects investor decisions in times of economic stability, the dynamics shift when shocks and uncertainty cover the financial landscape (Jayaraman, 2012). Because of this, research on the relative value relevance of accounting information in times of economic crisis vs times when it is not, particularly about Sri Lanka's commercial banking sector, is lacking.

The purpose of this study is to investigate how investors in Sri Lanka's listed domestic commercial banks use accounting information to inform their stock market decisions. Since banks provide liquidity to the whole economy, they are crucial to the financial system. Payment services are implemented by banks as well, making it easier for all companies to make financial transactions. 24 Licensed Commercial Banks (LCB) and 6 Licensed Specialized Banks (LSB) made up the banking industry (Association of Professional Bankers Sri Lanka, 2023). In the banking industry, LCBs are the most significant of these two types. As a result, the researcher chooses to carry out the investigation using commercial banks.

Accounting data relevance is evaluated using Market Price per Share (MPS) and selected accounting statistics like Earnings per Share (EPS), Return on Equity (ROE), Earnings Yield (EY), Net Asset Value per Share (NAVPS), and Return on Asset (ROA). Based on accounting data from commercial banks listed on the Colombo Stock Exchange (CSE) in their released financial statements, the data analysis was conducted. It spans ten years, between 2013 and 2022, throughout Sri Lanka's economic and non-economic challenges.

Research Problem

Effective investment strategies in the financial markets rely heavily on the interaction between investor decisions and accounting information. Numerous studies have looked into how accounting information affects investment decisions in times of economic stability (Martin, 2010). However, there is still a substantial knowledge vacuum about how this relationship changes during economic downturns, especially when it comes to Sri Lanka's commercial banks. By examining the differential value relevance of accounting information on investors' decisions during and after economic crises, from 2013 to 2022, this study aims to close this gap.

Economic catastrophes have been prevalent on the global financial scene, from the 2008 financial crisis to the more recent difficulties brought on by the COVID-19 pandemic (Johnson et al., 2021). These crises have highlighted the need to have an in-depth understanding of how accounting information affects investor decisions during times of increased uncertainty. Although previous research has shown general patterns in investor behavior during financial crises, it frequently lacks the detail required to identify the particular changes in the value relevance of accounting information.

Understanding the intricate interaction of diverse elements and data that impact investors' valuation of a firm's shares is essential to comprehending how market share prices represent investor decisions. A company's future potential, hazards, and overall value are all represented by the collective beliefs of investors in this valuation process. Because supply and demand balances determine prices in the stock market, it functions as an ongoing system, and the present share price is a reflection of these shared opinions. Investor decisions are heavily influenced by key financial parameters such as ROA, EY, NAVPS, EPS, and ROE. Periodically issued, these indicators offer vital insights into the performance and financial well-being of an organization.

It is crucial to remember that the market doesn't always respond right away. A wait may occur while investors consider the data in light of broader market and economic trends. This delay demonstrates how accounting data can have a long-lasting effect on market prices. Gaining an appreciation of the significance of accounting data in influencing the decisions of investors in various economic contexts requires having this understanding.

This research attempts to close the gap between broad trends and particular dynamics by examining how investor decisions are impacted differently by accounting information under various economic conditions. In addition, by doing comparison analyses for both economic and non-economic crises, the researcher can ascertain how investors react to decisions and what adjustments they make before making a choice. The results of this study may advance our understanding of investor behavior, inform financial reporting guidelines, and facilitate the creation of flexible investment plans, especially during times of economic instability.

Examining the components of accounting information and the investor decisions of commercial banks licensed by the Central Bank of Sri Lanka will allow researchers to determine the value relevance of accounting information on domestic commercial bank investor choices in Sri Lanka. To ascertain if there is a positive, negative, or no link between accounting information and Market Price Per Share, as well as whether there is a difference between the economic crisis and non-economic crisis of licensed commercial banks in Sri Lanka, these objectives are the focus of this study.

- 1. To find out the significant relationship between the value relevance of accounting information (EPS, ROE, EY, NAVPS, ROA) and investors' decisions (MPS) of commercial banks in Sri Lanka.
- 2. To investigate the differential value relevance of accounting information on investors' decisions within the commercial banking sector of Sri Lanka during economic crisis and non-economic crisis periods.

This study has a wide variety of stakeholders and is relevant in many different ways. To begin with, the study broadens the corpus of existing knowledge in academia by investigating a subject that hasn't been explored previously: the relative value relevance of accounting information during economic downturns vs booms. By addressing this information vacuum, the study increases our understanding of the dynamics of financial reporting, investor behavior, and the connection between accounting indicators and decision-making, particularly in the context of commercial banking in Sri Lanka.

Second, the study's findings may be applied by investors and financial experts. Understanding how accounting information affects investment decisions is becoming increasingly important as long as there are times of volatility and uncertainty in the financial markets. By understanding how accounting indicators react to shifting economic conditions, investors may make better investment decisions. Financial professionals may improve their decision-making and risk-management processes by adapting their techniques to certain outcomes.

The study's findings have consequences for policymakers and oversight organizations as well. The stability of the financial system depends on accurate and open financial reporting practices. Understanding how the value and usefulness of accounting information fluctuate depending on the state of the economy, regulators may modify their rules to promote efficient disclosure procedures and preserve investor confidence. The study's insights can be used to guide legislation that decreases the negative consequences of economic crises and fosters a stable financial environment.

LITERATURE REVIEW

Theoretical Review

Efficient Market Hypothesis (EMH)

The efficient market hypothesis (EMH), initially defined by Eugene Fama in 1970, posits that security prices in financial markets quickly and accurately reflect all available information. This implies that asset managers must prove their ability to enhance investment value if the EMH holds. Essentially, the EMH suggests that markets efficiently incorporate all relevant information into security prices, leaving few opportunities for investors to profit from mispriced assets. As a result, outperforming the market by identifying undervalued or overvalued stocks and creating consistently higher-yielding investment strategies becomes exceptionally challenging (Brown, 2020).

Value Relevance Theory

When describing the extent to which investors use accounting statistics from financial statements when making judgments about equity investments, the phrase "value relevance" is frequently used. Essentially, it determines the degree to which changes in accounting data may explain variations in stock prices (Brown et al., 1999).

The degree of association between financial statement items and stock prices is known as value relevance. It shows how market-based performance measures, which are frequently reflected in changes in stock prices, parallel both cash and accrual-based performance metrics, which are normally included in financial statements. Put differently, value relevance measures how well accounting data matches market assessments and perceptions, filling in the gap between a company's reported financial performance and its stock market value (Imhanzenobe, 2022).

Empirical Review

Recent literature has promoted the widely held belief that financial statements have lost significance as a result of the transition from a conventional capital-intensive economy to a modern, technology-driven, service-oriented economy. It is specifically asserted that financial figures are

no longer relevant for assessing the real worth of high-technology and knowledge-intensive service-oriented enterprises.

Badu (2018) found a positive relationship between earnings, book value of equity, and stock prices on the Ghana Stock Exchange, with earnings having a more significant impact. Despite Ghana adopting International Financial Reporting Standards, the value relevance of both earnings and book value has declined. Honggowati & Aryani (2015) showed a positive correlation between ROA and market success for 121 manufacturing companies on the Indonesia Stock Exchange (ISE). Andriantomo (2013) also identified book values and earnings as key factors for stock prices in ISE.

Oyerinde (2009) examined the top 30 companies on the Nigerian Stock Market (NSM), revealing that EPS, ROE, EY, and MPS are crucial accounting data influencing share prices. Germon (2000) found a strong correlation between share price and EPS, but a low correlation with ROE. Abayadeera (2010) studied 91 Australian companies, highlighting a decrease in earnings relevance but an increase in book value importance in high-tech industries. Robu et al. (2016) examined Indian companies from 2006-2014, finding ROA and financial leverage information valuable to investors.

Abiodun (2012) used logarithmic regression on 40 Nigerian companies, emphasizing that income statements are more influential than balance sheets in shaping company values. Mohammadi (2012) studied Tehran stock exchange (TSE) companies, suggesting market inefficiencies and limited accounting information use hinder the connection between financial data and stock valuation. Emamgholipour et al. (2013) found P/E ratio and market-to-book value negatively affected TSE stock returns, while EPS had a positive impact.

Shehzard and Ismail (2014) studied Pakistan's banking sector, finding EPS more significant than book values in stock pricing, aiding economic decision-making. Miah (2012) revealed a weak correlation between market share price and EPS/NAVP, attributing only 6.5% of share price variation to these variables. Nasar (2002) found that financial statement releases impacted investor behavior on the Saudi Arabian Stock Exchange.

Kheradyar et al. (2011) identified that the book-to-market ratio predicts stock return better than EY and DY on the Malaysia Stock Exchange. Khan (2012) observed a positive correlation between stock performance and accounting factors on the Pakistan Karachi Stock Exchange, with BVPS having more explanatory power than EY. Menaje Jr (2012) found ROA negatively and EPS positively correlated with share price on the Philippines Stock Market. Ikhatua (2013) studied the Nigerian capital market, finding that book values, EPS, and DPS disclosures affect stock volatility. Wang et al. (2013) investigated the Chinese Stock Exchange, noting a generally favorable link between stock prices and accounting data, with strong correlations for ROE and EPS.

Sri Lankan Context

Investors depend on accounting information when determining the prices of shares, and companies that offer high-quality information enjoy a competitive advantage by having a lower cost of capital. In developed countries, investors place great emphasis on the financial data of companies they intend to invest in.

Vijitha and Nimalathasan, (2014) empirically demonstrate the value relevance of key accounting indicators, including EPS, NAVPS, ROE, and Price Earnings (PE) Ratio, about the Share Prices of manufacturing companies listed on the CSE. The results indicate a substantial influence of accounting information on share prices. Furthermore, there is a significant correlation between the value relevance of accounting information and share prices.

Musthafa and Jahfer, (2013) looked at the usefulness and applicability of accounting data in Sri Lanka. They applied both the operational cash flow per share alternative model and Ohlson, James' (1995) price model, by using 310 firm-year observations from the top five industry sectors. As stated by the analysis, there's a direct and statistically significant association between book value per share (BVPS), EPS, operational cash flow per share (OCFPS), and market value per share.

To be able to assess the value relevance of the information in financial records, Karunarathne and Rajapakse, (2018) performed empirical research and applied both the Return model and the Price model. It was revealed that the Price model has greater interpretive ability, than the Return model instead, when it comes to the value relevance of accounting information.

Perera and Thrikawala, (2010) analyze the data from six commercial banks and present a diverse scenario. It implies that share price and ROE are highly correlated in an examination of accounting data's influence on investors' choices among CSE-registered commercial banks. The study revealed that EPS, EY, and ROE maintained their significant impact. It emphasized that investors make decisions based on the amalgamation of disclosed accounting data in financial statements, highlighting the explanatory power of accounting information in understanding share prices.

Gap Identification

The body of current research lays the groundwork for future investigations into the usefulness of accounting data and how it affects investor choices. Nevertheless, there doesn't seem to be a lot of research that explicitly looks at how this value relevance could change in times of financial crisis compared to times when there isn't a crisis within the specified time range. By examining these variations, researchers have made a substantial contribution by shedding light on how the significance and influence of accounting information on investor decisions change during financial crises. This method adds depth by taking into account the distinct characteristics of the crisis (2018–2022) and non-crisis (2013–2017) eras in addition to addressing a specific time range. By conducting this research, the Researcher hopes to close a significant knowledge gap regarding the role of accounting data as a tool for investors' decision-making in the particular setting of Sri Lanka's commercial banks in both stable and unstable times.

METHODOLOGY

Conceptual Framework

The conceptual framework clarifies the connections between the variables being examined. The rationale behind this relationship is grounded in the efficient market hypothesis, which posits that stock prices fully reflect all available information. Consequently, higher value relevance of accounting information is anticipated to lead to more informed and rational investment decisions, thereby affecting the market price of the shares. This study aims to empirically validate this linkage, offering insights into how specific financial indicators drive investor behavior and stock market dynamics in the Sri Lankan banking sector.

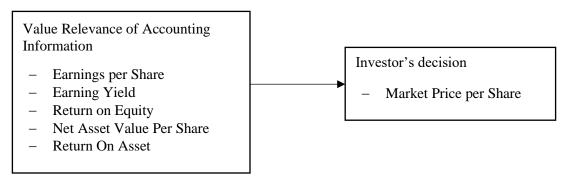


Figure 1: Conceptual Framework

Operationalization

The variables and measurement indicators related to foundational ideas are explained in detail in this section. Below is an explanation of how the major ideas and variables from the conceptual framework were operationalized.

Table 1: Key Concepts and Variable

Concept	Variable	Indicators		
Accounting information	EPS	Net Profit after Tax - Dividend on Preference shares /		
_		Number of Equity Shares		
	ROE	Annual Net Income /		
		Average Stakeholder's Equity		
	EY	Earnings Per Share /		
		Market Value Per Share		
	NAVSP	Net Asset Value /		
		Number of Outstanding Shares		
	ROA	Net Income /		
		Total Assets		
Investors decisions	MPS	Net Income - Preferred Dividends /		
		Number of Common Shares Outstanding		

Development of Hypotheses

All the hypotheses will be tested separately for the non-crisis period (2013-2017) and the crisis period (2018-2022).

H₁: There is a significant impact of Earnings per Share on Market Price per Share of commercial banks in Sri Lanka.

Ansotegui and Esteban (2002), demonstrated a strong, long-lasting correlation between the Spanish stock market performance and its EPS, highlighting the critical function that connection plays in assisting projections and forecasts.

On the other hand, Khan, et al., (2014), recognize that the predicted and theoretically valid correlation between the EPS and stock price trajectories did not always hold during the observational period. A deeper examination of the data revealed an unexpected turn of events since the conclusions were paradoxical. Essentially, during periods of increased EPS growth for a certain company, the associated share prices did not rise in line with it. As a result, there was a bewildering dissonance and a departure from the original theory. Investigating the underlying causes of this stark discrepancy is essential to understanding why, despite all conventional assumptions, share prices showed an unexpected reluctance to move in line with the higher EPS trends.

H₂: There is a significant impact of Return on Equity on the Market Price per Share of commercial banks in Sri Lanka.

Sukmawati and Garsela, (2016), suggest that ROE and ROA wield substantial influence when forecasting financial distress among these publicly traded entities. As ROA experiences an upswing, stock prices demonstrate a corresponding upward trajectory. Furthermore, it is essential to underscore that the interplay of ROA and ROE collectively functions as a cogent explanatory framework for the dynamics of share prices. In essence, these two financial metrics, when evaluated in conjunction, offer an insightful perspective on the variances observed in stock prices.

Investors are usually interested in a firm that has a great track record of financial performance and consistently provides positive financial outcomes. This is because a track record like this assures prospective investors that their investment in the firm will probably be profitable (Saputra, 2022). A significant discovery on the correlation between stock prices and Return on Equity (ROE) in food and beverage firms listed on the Indonesia Stock Exchange has been made by Lusiana, (2020). The findings of this study demonstrate that ROE has a statistically significant and beneficial impact on stock prices within this particular industry. Stated differently, these firms' stock prices tend to grow when their ROE improves a link that has been verified by empirical data (Asraf & Desda, 2020).

H₃: There is a significant impact of Earnings Yield on Market Price Per Share of commercial banks in Sri Lanka.

It is clear that earning yield is the main and most important component influencing market share price performance. Kumar, (2017), found that PE ratios and EPS oscillations and trends are highly significant. These results provide present and potential investors with useful recommendations to help them make well-informed decisions about their investments in the everchanging car industry.

H₄: There is a significant impact of Net Asset Value Per Share on the Market Price per Share of commercial banks in Sri Lanka.

MPS and NAVPS interact to determine how sensitive the market is to different circumstances. Furthermore, a well-established relationship is noted, as MPS and NAVPS show strong associations with market vulnerability (Vijitha & Nimalathasan, 2014). Additionally, Hayajnch, (2013) examined the correlation between capital structure and corporate performance in the context of publicly traded Jordanian shareholding companies. Their study's results provide important new information, indicating a negative and statistically significant relationship between capital structure and the way MPS and NAVPS interact. This suggests that these company's capital structures and the dynamics between NAVPS and MPS are inversely related, a link that may have an impact on how well the companies perform on the stock market.

H₅: There is a significant impact of Return on Assets on the Market Price per Share of commercial banks in Sri Lanka.

Pratheepan (2014) reveals an interesting discovery in the manufacturing industry in Sri Lanka. In this particular context, it is noted that a firm's ROA shows a positive correlation with its MPS. This suggests that when MPS rises, Sri Lankan manufacturing sector businesses' ROA tends to grow as well.

Accounting data is a vital resource that businesses use when making investment decisions, such as whether to engage in the stock market or devote resources to real initiatives. Making wise investment decisions that result in effective and value-enhancing projects usually with a positive net present value. Accounting data is crucial in this situation since it offers crucial information and insights. It is a vital tool that businesses use to assess the viability and financial feasibility of possible initiatives. Businesses may better comprehend the projected cash flows, expenses, and returns associated with different investment alternatives by analyzing accounting data (Zhai, 2016).

Sampling

The researcher selects a sample of 10 commercial banks (Commercial Bank, Hatton National Bank, Nation Trust Bank, Sampath Bank, Seylan Bank, Pan Asia Bank, National Development Bank, DFCC Bank, Amana Bank, Bank of Ceylon) in Sri Lanka to study. These banks are chosen based on their prominence, size, and representation of the banking industry during a stable economic period (2013-2017) and economic crisis period (2018-2022).

Method of Data Collection

This study investigates how investors in domestic commercial banks listed on Sri Lanka's Colombo Stock Exchange are influenced by accounting information while making investment decisions. The study only uses secondary data, which is mostly taken from each commercial bank's annual report. Every year on December 31st, the data is gathered with an emphasis on the financial statistics from the comprehensive income statement and statement of financial condition. To successfully address its goals and hypotheses, the study uses a quantitative analytical approach. Its goal is to shed light on how investor decisions and accounting information relate to one another in the context of Sri Lanka's commercial banking industry.

DATA ANALYSIS AND FINDINGS

Two separate analytical models that are customized to the particulars of each temporal segment are used in the process. Model A, which attempts to capture the nuances of investor decisions in a stable market environment, is used in the analysis of the non-crisis era. On the other hand, Model B is utilized in times of economic instability and is meticulously designed to account for the subtleties of investor conduct. This comprehensive study of how accounting data influences investors' judgments in Sri Lanka's commercial banking sector highlights the need for a multimodal statistical analytic approach. To get complex insights, the methodology combines several sophisticated statistical techniques, such as panel data regression analysis, correlation analysis, and descriptive analysis.

To understand the dynamics of accounting information relevance inside the Sri Lankan commercial banking industry throughout the non-crisis era from 2013 to 2017, an extensive and comprehensive methodology is used to construct the analytical approach. We have a unique chance to examine how accounting information affects investment decisions during this period of relative stability.

The analysis of the dynamics of accounting information relevance within the Sri Lankan commercial banking industry takes a distinctive and critical stance in light of the crisis phase of 2018–2022. It is possible to examine the complex linkages between accounting information and investors' actions by using this period of economic uncertainty and suffering as a lens. Investors have particular opportunities and challenges during crises because of the increased volatility and changing financial landscapes.

Multicollinearity (VIF Test)

Table 2: Results of the Multicollinearity Test

Non-crisis period (2013-2017) Crisis period (2018-2				
Variable	VIF	1/VIF	Variable	VIF 1/VIF
EPS	1.10	0.9104	EPS	7.94 0.1259
ROE	1.09	0.9180	ROE	6.53 0.1530
EY	2.85	0.3507	EY	4.21 0.2376
NAVPS	1.84	0.5442	NAVPS	3.46 0.2887
ROA	1.68	0.2934	ROA	1.21 0.8273
Mean VIF	1.71		Mean VIF	4.67

These results indicate minimal multicollinearity, suggesting that the independent variables are largely independent of each other. This strengthens the reliability of coefficient estimates, enhancing the overall robustness and interpretability of the model.

Descriptive Statistics

The behavioral patterns of the data were analyzed using descriptive statistics, with an emphasis on important metrics like mean and standard deviation. These metrics were essential for revealing the properties of the data and spotting significant trends when gathering the data. Insights into fundamental characteristics and succinct descriptions of the sample and its measurements are provided by descriptive statistics, which are essential for data cleansing. They support the understanding of the core elements of the data and are necessary for precise interpretation and further analysis.

Table	3:	Descrip	tive	Statistics
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	Variable	Mean	Std. Dev	Min	Max	Skewness	Kurtosis
	MPS	125.484	78.614	3.700	315.700	0.5884	0.4355
13-	EPS	15.311	14.048	0.030	61.950	0.0003	0.0259
Non-crisis period (201 2017)	ROE	0.162	0.078	0.007	0.447	0.0582	0.0088
	EY	0.111	0.062	0.008	0.293	0.2000	0.3689
Non-cr period 2017)	NAVPS	94.906	74.510	4.020	293.020	0.1141	0.5313
Z & Z	ROA	0.015	0.008	0.001	0.042	0.0002	0.0022
	MPS	64.666	56.543	2.300	235.000	0.0046	0.1627
od 2)	EPS	12.934	10.714	0.180	45.130	0.0181	0.5582
Crisis period (2018-2022)	ROE	0.114	0.048	0.038	0.268	0.1195	0.2799
	EY	0.199	0.135	0.008	0.646	0.0048	0.0844
	NAVPS	118.430	84.853	4.650	300.420	0.1674	0.6073
00	ROA	0.103	0.004	0.004	0.022	0.0276	0.2674

For Non-Crisis Period

The accompanying table provides a comprehensive examination of important financial measures during five years, from 2013 to 2017. The wide range of MPS values is indicative of the various market capitalizations of the organizations under investigation. The obvious differences in market valuation, which range from Rs. 3.7 to Rs. 315.7 for the lowest and greatest values, reflect differing investor confidence and anticipated financial health. Owing to this variance, investors could hold varying views of the banks' market position and attractiveness as potential investments.

The skewness values show how asymmetrical the distribution is. Positive skewness for MPS, ROE, EY, and NAVPS indicates a rightward skew with a positive tail. Since the skewness of EPS and ROA are close to zero, the distribution is almost symmetrical. Kurtosis evaluates the peak and tail of the distribution. The distribution of MPS, EPS, EY, and NAVPS is within the usual range; they all show kurtosis around or below zero. The kurtosis of ROE and ROA are very close to zero, indicating a distribution that is almost normal with modest tails.

For Crisis Period

Researchers may gain a deeper understanding of the dynamics of the Sri Lankan banking industry by expanding the research to encompass the years 2018 through 2022. The average intrinsic value of shares is shown by the NAVPS, which has a mean of 118.43. The banks' ability to make money off of their holdings is shown by their ROA, which is now 0.103. These figures lay the foundation for a detailed examination of how the value relevance of accounting information influences investor choices in Sri Lanka's developing banking industry.

The skewness and kurtosis values provide insights into the distribution characteristics of the dataset. MPS, EPS, ROE, EY, NAVPS, and ROA, all exhibit skewness and kurtosis close to zero, indicating relatively symmetrical distributions with minor deviations. These findings contribute to a comprehensive understanding of the dataset's shape and variability.

Correlation Analysis

Correlation analysis computes the linear correlation between two variables, yielding a value within the range of +1 to -1. This assessment considers both the infection of the relationship between the variables. The analysis's correlation coefficients provide a numerical depiction of how closely two variables move together.

Table 4: Results of Correlation Analysis

Non-crisis period (20	13-2017)		Crisis period (2018-2022)
	MPS		MPS
EPS	*0.8039 (0.0000)	EPS	*0.8569 (0.0000)
ROE	*0.3370 (0.0192)	ROE	0.2108 (0.1418)
EY	0.2135 (0.1451)	EY	-0.0097 (0.9465)
NAVPS	*0.8298 (0.0000)	NAVPS	*0.8308 (0.0000)
ROA	*0.3868 (0.0066)	ROA	0.1829 (0.2037)

^{*} denotes significant correlation while the p-value is given in the brackets

For Non-Crisis Period

The correlation matrix offers a detailed viewpoint on the complex correlations between important financial indicators, providing insightful information about possible drivers of market dynamics. The MPS and EPS have a significant positive connection of 0.8039, which indicates that investors may view greater market values as a sign of increased profitability. When market pricing and earnings coincide, it may be a useful indicator for investors looking to make big money. The idea that investors may see growing net asset values together with higher market prices as a sign of the banks' sound financial standing is supported by the significant positive correlation (0.8298) between MPS and NAVPS. This connection may have a significant role in shaping investor attitudes and decision-making. On the other hand, there appears to be a lower overall correlation between ROA, ROE and market value. This emphasizes the necessity of conducting a more thorough examination than just ROA, and ROE to determine how appealing these banks' shares are.

In general, this interpretation enhances value by shedding light on the attitudes and decision-making elements of potential investors. In the context of Sri Lankan commercial banks, it highlights how crucial it is to comprehend the complex linkages between market prices, earnings, and asset values to make wise investment decisions.

For Crisis Period

Notable correlations between important financial metrics are displayed in the correlation matrix for Sri Lankan commercial banks from 2018 to 2022. Interestingly, there is a substantial positive correlation of 0.8569 between MPS and EPS, indicating a strong relationship between market value and profitability. This suggests that investors may expect bigger earnings per share when market prices per share grow, which might impact their choice of investments.

It's interesting to note that there is a -0.0097 negative association between EY and MPS. Despite the small magnitude of this negative link, it implies that market prices per share may somewhat decline when earnings yield rises. Investors looking for a balance between profits and market value may find this dynamic interesting. There are noteworthy positive relationships between MPS (0.8308) and NAVPS. This suggests that rising market prices correspond with rising net asset values per share, which may indicate to investors that the values of the underlying assets support market valuations.

Panel Data Regression Analysis

The following equation can be used to calculate the regression and the study will use two equations, for both non-crisis (2013-2017) and economic crisis periods (2018-2022). The regression model is as follows,

$$MPS_{it} = \beta_0 + \beta_1 (EPS_{it}) + \beta_2 (ROE_{it}) + \beta_3 (EY_{it}) + \beta_4 (NAVPS_{it}) + \beta_5 (BVPS_{it}) + \varepsilon$$

Where, MPS is the Market Value Per Share, EPS is the Earnings per Share, ROE denotes Return on Equity, EY for Earning Yield, NAVPS is the Net Asset Value Per Share, ROA implies the Return on Assets, β_0 is the Constant term and ϵ for error term.

To ascertain which factors, have the greatest enduring impact on the dependent variable, panel data analysis is employed. Finding the model that

effectively represents the complex dynamics of accounting information's influence on investors' judgments across each period is the main goal. The results of the statistical tests will be reviewed to determine the best model for a complicated comprehension of value relevance in various temporal contexts. This will guarantee a full analysis of investors' decision-making processes in both crisis and non-crisis circumstances.

Model Selection

The Random Effect Model, Fixed Effect Model, and Ordinary Least Squares (OLS) are the three key models for panel data analysis included in the methodological framework. The study makes use of statistical measures like the Hausman test, LM test and the F test to determine which model is more appropriate for forecasting outcomes. These tests are crucial in identifying the optimal model because they illuminate the complex relationship between accounting data and investor decisions in Sri Lankan commercial banks.

Fixed Term Test

We used both pooled OLS models and fixed-effect regression models for the first data analysis. To account for enduring unobservable personality qualities that may eventually correlate with the observed independent variables, fixed effects regression is employed as a panel data estimate technique. The test findings for the non-crisis period show that F (9,33) is 2.75 with a p-value of 0.016. And for the crisis period also it is statistically significant (F; 9,35) = 5.62, p = 0.0001). Which will confirm the use of the fixed effect model for further analysis.

LM Test

Next, the OLS and random effect may be compared to see which has a greater influence using the LM Test. An LM test for the non-crisis period with a probability of 0.0000 and for the crisis period with a probability value of 0.0087 suggests substantial evidence against the null hypothesis and supports rejecting it in favor of an alternative. This suggests that there is no predicted pattern in the observed data, which supports the adoption of a random model. As a result of the low probability, it may be concluded that the data is more compatible with randomness, supporting the suitability of a random model to represent the inherent unpredictability and uncertainty in the underlying process.

Hausman Test

The Hausman test can be used to choose between a fixed effects model and a random effects model. The test findings can be interpreted in the following ways using the Hausman test.

Probability > 0.05: Random Effect Model is Appropriate

Probability < 0.05: Fixed Effect Model is Appropriate

Table 5: Results of Hausman Tests

For Non-Crisis Period			
Test Summary	Chi-Sq. Statistics	Chi-Sq. df	Probability
Cross-selection random	27.53	5	0.0000
For Crisis Period			
Test Summary	Chi-Sq. Statistics	Chi-Sq. df	Probability
Cross-selection random	26.71	4	0.0000

The results of the Hausman test reveal chi-square statistics with probability values of 0.0000. The low probability indicates a persistent difference between the random effects and fixed effects models and suggests that the null hypothesis is being rejected. The fixed effects model may thus be seen as being more suited for the inquiry due to its consistency under the null hypothesis and efficiency under the alternative hypothesis.

Results of Regression Analysis

Using the fixed effects model for the regression analysis makes sense in light of the overall results and the consistency of the Hausman test and F test. Data appears to be more intricately represented by this model because time-invariant unobserved individual variables are included.

Table 6: Results of Fixed Effect Model

For Non-Crisis Pe	eriod			r Crisis Period	
Variable	Coefficient	Probability	Variable	Coefficient	Probability
Constant	53.487	0.031	Constant	53.4873	0.000
EPS	1.105	0.293	EPS	5.3629	0.000
ROE	115.704	0.222	ROE	-85.3581	0.579
EY	-433.573	0.000	EY	-235.6882	0.000
NAVPS	0 .767	0.007	NAVPS	-0.1064	0.285
ROA	947.293	0.293	ROA	1035.4080	0.411
F – statistic is 10.94 with a p-value of 0.000; R ² is 0.8639 with			F – statistic is 36.10	with a p-value of 0.000; R	² is 0.7767 with
a Durbin - Watson Stat of 1.654			a Durbin - Watson Stat of 1.186		

For Non-Crisis Period

The outcomes of a regression analysis provide important new information about how the dependent variable and other factors are related. The model's overall significance is supported by the F-statistic of 10.94 with p value of 0.000, which raises the model's explanatory power. EY has a probability of 0.000 and a high negative coefficient of -433.573, indicating that it has a large impact on the dependent variable's prediction. Another statistically significant predictor is NAVPS, with a coefficient of 0.767 and a probability of 0.007. Other factors that add to the model include ROA, EPS, and ROE, albeit their statistical relevance varies.

Its R-squared value of 0.8639 reveals that the independent variables explain around 86.39% of the variability in the dependent variable, demonstrating the model's explanatory power. This strong ability to explain shows how well the model captures and explains the underlying patterns seen in the data. It is important to take note of the Durbin-Watson statistic of 1.654, which suggests that the residuals may include some autocorrelation. Even if the model shows a reasonable match in most cases, efforts should be made to identify and correct for any potential autocorrelation to improve the accuracy of the findings. According to the above results, the Researcher has concluded regression model A for the noncrisis period (2013-2017).

Regression model A

MPS =
$$53.487 - 433.573$$
 (EY) + 0.767 (NAVPS) + ϵ

It can be concluded that the lower profit returns are preferred by investors, demonstrating a desire for reliable, low-risk assets. Further, in stable economic conditions, a positive coefficient of NAVPS indicates that investors place a high value on a good net asset position.

For Crisis Period

Regression analysis for 2018–2022 provides useful details about the factors influencing the dependent variable. EPS shows extraordinary importance and a considerable impact on the dependent variable, with p-values of 0.000. This suggests that a significant part of the explanation for the observed outcomes within the specified time range is provided by the EPS. EY, on the other hand, also shows statistical significance with a p-value of

0.000, indicating its possible impact albeit a negative one. The coefficients for ROE, NAVPS, and ROA have p-values of 0.579, 0.285, and 0.411, respectively, which are not statistically significant at conventional levels. This implies that throughout the 2018–2022 period, these factors might not have a meaningful impact on the dependent variable.

The entire model is highly significant with a p-value of 0.000, indicating that the collection of independent factors has a considerable ability to explain the dependent variable at this point. Furthermore, corroborating the model's general applicability is the robust F-statistic of 36.10. The R-squared value of 0.7767, which shows that a sizable portion of the variability in the dependent variable is explained by the model, suggests a good fit.

It's crucial to keep in mind that the 1.4541 Durbin-Watson statistic raises the probability of autocorrelation and implies that consecutive data may be related. These findings provide a more nuanced understanding of the dynamics influencing the value relevance of accounting information during a particular crisis time. According to the above results, Researcher has concluded regression model A for the crisis period (2018-2022).

Regression model B

MPS =
$$53.487 + 5.36$$
 (EPS) - 235.69 (EY) + ϵ

A negative impact on MPS might indicate a flight to safety amid financial upheaval by implying a preference for lower earnings yields. The inclusion of EPS suggests that, in times of crisis, there is a greater emphasis on firms that have demonstrated excellent profit success. Comprehending these intricacies is vital in managing financial choices under diverse economic circumstances.

Hypotheses Testing

H₁: There is a significant impact of Earnings per Share on Market Price per Share of commercial banks in Sri Lanka.

For non-crisis periods the insignificance EPS coefficient (p=0.293) implies that fluctuations in EPS might not wield a noteworthy influence on investors' choices. This outcome, in harmony with conventional theory due to its p-value surpassing 0.05, practically indicates that alterations in EPS may

lack substantial sway on decision-making. However, for the crisis period, the coefficient for EPS is highly significant with a p-value of 0.000, indicating a substantial impact on investors' decisions during the crisis. Changes in EPS are strongly associated with variations in decision-making, emphasizing its crucial role. Based on this finding there is a positive relationship between EPS and MPS of commercial banks in Sri Lanka.

H₂: There is a significant impact of Return on Equity on the Market Price per Share of commercial banks in Sri Lanka.

The coefficient for ROE is not statistically significant indicating that ROE may not have a significant influence on investors' decisions during the non-crisis period as well as during the crisis period. This suggests that ROE might not be a dominant factor in shaping decision-making dynamics.

H₃: There is a significant impact of Earnings Yield on Market Price Per Share of commercial banks in Sri Lanka.

The coefficient for EY is statistically significant with a p-value of 0.000 for both periods, signifying a substantial impact on investors' decisions. A negative coefficient suggests an inverse relationship, implying that as EY decreases, investors' decisions may be influenced positively. According to the findings, there is a negative relationship between EY and MPS of commercial banks in Sri Lanka.

H₄: There is a significant impact of Net Asset Value Per Share on the Market Price per Share of commercial banks in Sri Lanka.

Though the coefficient for NAVPS is statistically significant (p=0.007), indicating that NAVPS plays a significant role in influencing investors' decisions during the non-crisis period, it is insignificant for the crisis period (p=0.285). The positive coefficient suggests that as NAVPS increases, investors' decisions may be positively influenced. Therefore, it can be interpreted that there is a positive relationship between NAVPS and MPS of commercial banks.

H₅: There is a significant impact of Return on Assets on the Market Price per Share of commercial banks in Sri Lanka.

The statistical insignificance of the ROA coefficient suggests that variations in ROA may not wield a significant influence on investors' choices within the specified period. Based on this finding there is no relationship between ROA and MPS of commercial banks in Sri Lanka.

In conclusion, there is a significant relationship between the value relevance variables (EPS, EY, NAVPS) and investors' decision (MPS), which is in line with Perera and Thrikawala, (2010) who have interpreted that there is a significant relationship between Accounting Information and MPS. The study considered the difference between a non-crisis period and a crisis period. Mayadunne and Safeena, (2015) also analyzed the value relevance of accounting information on investor's decisions in a non-crisis period. It revealed that NAVPS has a positive significant relationship and EY has a negative relationship on market price. Karunarathne and Rajapakse, (2018) considered the crisis period and found a positive relationship between EPS on investor decisions and a negative relationship with EY which is very similar to the findings of this study.

CONCLUSION

The purpose of this study was to determine whether there is a significant impact of the value relevance of accounting information on investor decisions during the crisis period (2018–2022) compared to the non-crisis period (2013–2017). The study's conclusions indicate that there is a strong positive correlation between NAVPS and MPS. Additionally, throughout the non-crisis era, there is a negative association between EY and MPS. Researchers discovered that when taking the crisis-era into account, there is a negative association between EY and MPS and a positive relationship between EPS and MPS.

The significance of these results lies in their ability to identify clear trends in investor behavior over economic cycles. Investors may favor stable assets because of the positive correlation between NAVPS and MPS during non-crisis times. On the other hand, the positive correlation between MPS and EPS during a crisis denotes a move in favor of companies that have demonstrated strong earnings success. A predilection for lower-risk assets is also shown by the negative link between EY during and before crises. These insights are crucial for making strategic decisions in dynamic financial environments.

Recommendations

The findings of the study highlight how important it is to adjust financial strategy to specific economic environments. Dynamic reporting is required during non-crisis periods due to the positive connection between NAVPS and MPS and the negative correlation with EY. Furthermore, there is no connection at all between ROE, ROA, and EPS. In contrast, the crisis era highlights a positive relationship between EPS and MPS, with a negative correlation for EY. Furthermore, there is no connection at all between NAVPS, ROA, and ROE. To strengthen Sri Lanka's financial environment, these insights call for flexible reporting, investor education, sophisticated risk management, legislation changes, and ongoing research.

Making suggestions entails discussing important discoveries. Make recommendations for improving financial reporting procedures to better suit the needs of investors in times of stability and crisis. Encourage the teaching of investors how to make thoughtful decisions. Urge policymakers to modify their approaches to create resilient financial environments. Encourage ongoing study to improve comprehension. Make suggestions for flexible risk management strategies and policy modifications to account for changing economic conditions. To find complete solutions for Sri Lanka's commercial banking system, stakeholders should prioritize collaboration.

Implications for Practice

The study's useful ramifications highlight how Sri Lanka's banking industry has to adopt flexible financial procedures. In times when there is no crisis, practitioners should place a high priority on the open disclosure of NAVPS and develop plans to offset the detrimental impact of EY on MPS. Practitioners might think about focusing on EPS in financial reporting during times of crisis and resolving issues brought on by the unfavorable association with EY. To effectively handle economic uncertainty, these insights demand dynamic reporting techniques, ongoing research, and cooperative activities.

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