Value Relevance of Accounting Information and Implication on Stock Price Movement: Empirical Evidence from Listed Banks in Sri Lanka

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Introduction

The relationship between stock price and accounting earnings has been an internationally popular subject of research for more than thirty years. Value relevance is defined as the ability of accounting numbers contained in the financial statements to explain the stock market measures. (Beisland 2009). Accounting information is one of the most prominent inputs to decision determining pricing. So it becomes natural candidate to consider when examining the efficiency of the price setting process (Jiri 2008). Accounting plays a significant role within the concept of generating and communicating wealth of companies (Meryer 2007). Stock price is the most obvious and important criteria for determining the firm's value. So, stock price maximization is the most important goal for most corporations to maintain their economic growth and creditability in the mind of investors.

The purpose of this study is to investigate the importance of accounting information for stock market responsiveness. It means whether accounting data provide value- relevant reflected to investors and other users which are reflected in share price or not. More recently studies addressed on the contribution of cash flows, earnings and book value when assessing the value relevance of the firm. This paper studied about the association between stock movement and accounting related information such as earnings per share, return on equity and earning yield. Vijitha and Nimalathasan (2014) has examined the value relevance of accounting information by studying variables such as Earnings per share, net asset value per share and return on equity and price earnings ratio to share prices of manufacturing companies in Colombo stock exchange. They found that the value relevance of accounting information has the significant impact on share price and value relevance of accounting information significantly correlated with share price.

Literature Review

Different researchers from different countries defined the word value relevance in their previous studies including Beisland (2009), Ohlson (1999), Barth et al. (2000) and Amir et al. (1993). Prior study in 1993 by Amir et al used the term "value relevance" and defined as the relationship between accounting figures and market value of equity. The definition of value relevance given out by Amir et al. (1993) closely related with definition given out by other researchers including Barth et al. (2009) and Barth et al. (1998). Studies by Kothari (2001), Haley and Palepu (2001) have extensively reviewed studies examining the relation between accounting information and security prices. These studies concluded that financial reports provide new and relevant information to investors although the relevance has considerably come down.

Svenson and Larsson (2009) studied a research to examine the value relevance of earning in Sweden. Earnings and market values from 30 companies and over 10 years from 1999 to 2008 were collected for this study. According to their research it is found that earnings are value relevance and earnings can explain 9.3 percent of the market return in Sweden.

Vijitha and Nimalathasan (2014) titled "Value relevance of accounting information and share price: A study of listed manufacturing companies in Sri Lanka" has examined the value relevance of accounting information by studying variables such as Earning per Share (EPS), Net Assets Value Per Share (NAVPS), and Return On Equity (ROE) and Price Earnings Ratio (P/R) to Share Prices (SP) of manufacturing companies in Colombo Stock Exchange (CSE). The number of 20 companies was selected in the period of 2008-2012. They found that the value relevance of accounting information has the significant impact on share price and value relevance of accounting information is significantly correlated with share price.

A large number of empirical studies have been conducted about the value relevance of accounting information on stock price movement. Several researchers examined the relationship between stock prices and selected factors. The result shows a variety of findings depending on the scope of the study. Some of those factors could be common for all stock markets. Thus, research in this area has given mixed outcomes that suggest a significant gap in the understanding of the nature and direction of the relationship between value relevance of accounting information and implication on stock price movement.

Methodology

In order to assess the value relevance of accounting information and stock price movement of banks, this study employed quantitative techniques. The focus of interest in this study is the listed banks on the CSE as at 2014. In order to select the sample, random sampling method used, which implies population has equal chance of being included in the sample (Saunders et al. 2009). Consistent with this selection, the sample size is 10 listed banks on the CSE. Mainly this study examines the empirical relationship between accounting information or variables like Earning per Share (EPS), Return on Equity (ROE) Earning Yield (EY) in the market for the period of 2009-2014 in CSE database.

Hypotheses Development

H₁:- The value relevance of accounting information is significantly correlated with stock price movement

H_{1a}:- Earning per share significantly correlated with market price per share

H_{1b}:- Return on equity significantly correlated with market price per share

H_{1c}:- Earning yield significantly correlated with market price per share

H₂:- There is an impact of value relevance of accounting information on stock price movement

H_{2a}:- Earning per share impact on the market price per share

H_{2b}:- Return on equity impact on the market price per share

H_{2c}:- Earning yield impact on the market price per share

Findings and Discussion

Table 1: Descriptive Statistics

	Minimum	Maximum	Mean	Std. Deviation
MPS	10.75	399.90	108.9062	84.09497
EPS	.10	55.31	11.4617	10.01816
ROE	.70	42.35	14.6525	7.78982
EY	43	39.06	9 5341	5 38670

Table 01 illustrates that, descriptive statistics for all variables that the average share price of the banks which is registered in CSE is 108.9062. The minimum share price is LKR 10.75 and the maximum recorded as LKR 399.90. Standard deviation of the share price is LKR 84.09497. Average earning per share of the banks 11.4617,

the minimum earning per share is LKR 10 and maximum earning per share recorded as LKR 55.31 and standard deviation of earning per share is LKR 10.01816. Average return on equity of the banks 14.6525, the minimum return on equity is LKR 70 and maximum return on equity recorded as LKR 42.35 and standard deviation of return on equity is LKR 7.78982. Average earning yield of the banks 9.5341, the minimum earning yield is LKR 43 and maximum earning yield recorded as LKR 39.06, the standard deviation is LKR 5.38670 respectively.

Table 2: Correlation Matrix

		MPS	EPS	ROE	EY
MPS	Pearson correlation	1	.672**	.404**	.170
	Sig (2 tailed)		.000	.001	.193
EPS	Pearson correlation		1	.667**	.708**
	Sig (2 tailed)			.000	.000
ROE	Pearson correlation				.746**
	Sig (2 tailed)				.000

^{**.} Correlation is significant at the 0.01 level (2 tailed)

Table 2 clearly describes the relationship for all the pairs of variables. From that output, it can be found that, the correlation coefficient between EPS and MPS is 0.672, which is significance at 1% level. Based on that conclusion can be made that there is a strong and positive correlation between EPS and share price at 1% significance level. The correlation coefficient between ROE and MPS is 0.404 which is significance at 1% level. It indicates that there is moderate positive correlation between ROE and MPS at 1%. The correlation coefficient between EY and MPS is 0.170 which is positive correlation with MPS.

Table 3: Regression Analysis

	Dependent variable			
Independent				
variables	coefficient	t-statistic	sig	
Constant	78.435	5.486	.000	
EPS	8.563	9.058	.000	
ROE	3.304	2.563	.013	
EY	-12.175	-6.189	.000	
R	0.822			
\mathbb{R}^2	0.676			
Adjusted R ²	0.659			
P value	0.000			

It is found that from the Table 4, we can observe stock price movement is influenced by value relevance of accounting information by 67.6%. Remaining 32.4% are determined by other factors. Based on the coefficient of stock price movement relating EPS, ROE and EY are 8.5631, 3.3041, and -12.175 respectively. Thus confirm significantly impact of value relevance of accounting information on stock price movement.

Table 4: Hypotheses Testing

No	Hypotheses	Results	Tools
H_1	The value relevance of accounting information is	Partially	Correlation
	significantly correlated with stock price movement	accepted	
H_{1a}	Earnings per share significantly correlated with	Accepted	Correlation
	market price per share		
H_{1b}	Return on equity significantly correlated with market	Accepted	Correlation
	price per share		
H_{1c}	Earning yield significantly correlated with market	Rejected	Correlation
	price per share		
H_2	There is an impact of value relevance of accounting	Accepted	Regression
	information on stock price movement		

H_{2a}	Earnings per share impact on the market price per share	Accepted	Regression
H _{2b}		Accepted	Regression
H_{2c}	Earning yield impact on the market price per share	Accepted	Regression

Conclusion

The present study has been undertaken to examine the empirical relationship between share prices and explanatory variables such as EPS, ROE and EY for the period 2009-2014. The result revealed that the accounting information such as EPS and ROE were significantly correlated with share price at 1% significance level and also has strong positive correlation. The EY ratio positive correlated with share price. From the regression analysis it can be concluded that value relevance of accounting information such as EPS and EY are significance impact on share price at 1% significance level at the same time ROE also have the significant impact on share price at 5% significance level respectively. Finally the conclusion can be made that value relevance of accounting information has the significant impact on share price and value relevance of accounting information is significantly correlated with share price.

References

- [1] Al-Shubiri, FN 2010, 'Analysis the determinants of market stock price movements: An empirical study of Jordanian commercial banks', *International Journal of Business and Management*, vol.5, no.10, p.137.
- [2] Balasundaram, N 2013, 'The Value Relevance of Accounting Information and Its Impact on Market Vulnerability: A Study of Listed Manufacturing Companies in Sri Lanka', Merit Research Journal of Business and Management, vol.1, no.2, pp.30-36.
- [3] Oyerinde, DT 2011, 'Value-relevance of accounting information in the Nigerian stock market' (doctoral dissertation, School of Postgraduate Studies, Covenant University, Ota).
- [4] Saunders, M, Lewis, P, & Thornhill, A 2009, 'Research methods for business students' (5th ed.). Italy: Pearson Education Limited.
- [5] Shehzad, K, & Islamail, A 2014, 'Value Relevance of Accounting Information and Its Impact on Stock Prices: Case Study of Listed Banks At Karachi Stock Exchange', *Journal of Economic Info*, vol. 3, no. 1, pp. 40-48.
- [6] Vijitha, P, & Nimalathasan, B 2014, 'Value relevance of accounting information and share price: A study of listed manufacturing companies in Sri Lanka', *Merit Research Journal of Business and Management*, vol. 2, no. 1, pp. 1-6.