

An Empirical Study of the Value Relevance of Accounting Information on Investor's Decisions in Financial Sector in Sri Lanka

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Abstract

The study focuses to analyze the value relevance of accounting information on investor's decisions. The research objectives are to identify the relationship between value relevance of accounting information and market price and to find out the impact of value relevance of accounting information on investor's decisions. For this study a sample of 21 banking, finance and insurance companies were used in Colombo Stock Exchange in Sri Lanka over period of 05 years from 2009 to 2013. Market price were used as dependent variable and return on equity, earning yield, net assets value per share, earning per share were used as independent variable. Correlation analysis and multiple regression analysis were used to find out the relationship and impact of independent and dependent variables.

The result revealed that earning per share and net assets value per share has a positive significant relationship on market price. Further return on equity and earning yield has no significant relationship with market price. Moreover finding revealed that the value relevance of accounting information has significant impact on market price.

Keywords: Market price, Earning per share, Earning yield

Introduction

In recent times, the value relevance of financial information has been increasingly concerned by the researchers (Hellstron, 2005). It is one of the basic attribute of quality of the financial statements. The concept of the value relevance of accounting information is defined as the ability of accounting numbers to summarize the information underlying the stock prices, thus the value relevance is indicated that there is a relationship between financial information and market prices (Jianwei & Chunjiao, 2007).

Hendrick (1976) indicated that for financial reporting to be effective, accounting information should be completed as relevant and reliable. Further Germon & Meek (2001) explained that the primary purpose of the financial statements is to provide information about a company in order to make better decisions for users particularly the investors. It should also increase the knowledge of the users and give a decision maker the capacity to predict future actions. Therefore, relevance accounting information can be described as an essential pre requisite for stock market growth (Oyerinde, 2009). According to the

previous studies, many researchers have conducted to identify relationship between market price per share as the dependent variable and a set of independent variables such as ROE, EY, NAVPS and EPS.

Statement of Research Problem

Value relevance on accounting information is a major issue especially in financial sectors and in order to explain the impact of value relevance on accounting information on investment decision. Different researchers had been carried out in different parts of the world especially in developing countries. Therefore, this study tries to find out the impact of value relevance of accounting information on investor's decisions of the Sri Lankan banking financial and insurance companies.

The financial sector in Sri Lanka is very important due to their critical role in the economy. The performance of the banking sector, which holds the dominant position in the financial sector in Sri Lanka (Financial System Stability Review, 2008). There are number of studies, which focused on other sectors in other countries but very few research have been conducted in Sri Lanka (Vijitha &Nimalathan, 2014;Tharmila &Nimalathasam, 2013; Sulaima &Jahfer 2013;Perera &Thikawala, 2010). But financial sector has not been investigated in Sri Lanka. Therefore, the research problem is "Does Accounting Information has lost their relevance on investor's decisions in the banking, financial and insurance companies in Sri Lanka?"

Research Questions

RQ1: Does Value relevance of accounting information have the impact on market price?

RQ2: What relationship exists between value relevance of accounting information and market price?

Research Objectives

The main objective of the study is to examine the impact of value relevance of accounting information on investor's decisions in banking, financial and insurance companies in Sri Lanka. Further to find out the relationship between value relevance of accounting information and investor's decisions in banking, financial and insurance companies in Sri Lanka.

Literature Review

The factors affecting on investor's decisions can be described as return, safety, liquidity and risk (Pandy 2010). Risk can be divided in to two that is systematic risk and unsystematic risk. As the society is dynamic, changes occur in the economic, political and social systems constantly. These changes have an influence on the performance of companies and thereby on their stock prices. But these changes affect all companies and all securities in varying degrees. Economic and political instability adversely affects all industries and companies. When an economy moves into recession, corporate profits will shift downwards and stock prices of most companies may decline. Thus, the impact of economic, political and social changes is system-wide and that portion of total variability in security returns caused by such system-wide factors is referred to as systematic risk.

Systematic risk is further subdivided into interest rate risk, market risk, and purchasing power risk (Kevin, 2008).

Jianwei & Chunjiao (2007) explained that the concept of the value relevance of accounting information is the ability of accounting numbers to summarize the information underlying the stock prices. The nature of accounting information can be point out as; it is designed to be used in making financial decisions.

There are few studies related with accounting information and investor's decisions in Sri Lanka. Perera & Thikawala, 2010 conducted a study to examine the relevance of accounting information on investors' decisions by using 6 commercial banks in Sri Lanka over the period from 2005-2009. They found that return on equity (ROE) is significantly related with the share price. Further found that EPS, Earning Yield and ROE has not declined its value relevance and they explained that investors react according to the aggregate of accounting information, which published in financial statements. Finally they found accounting information has the ability to explain the share prices of the banking sector, in the CSE in Sri Lanka.

Sulaima & Jahfer (2013) investigated the value relevance of accounting information in Sri Lanka. It was proved that the accounting information is value relevant in Sri Lanka with sample of 100 companies listed in the CSE representing all the industry sectors except banking finance and insurance sector. Further they compare the Ohlson model with the alternative model developed in there study revealed that both models are value relevant to Sri Lankan data. They found that alternative model with operating cash flow per share is more informative than the original Ohlson's (1995) price model in Sri Lanka.

Tharmila & Nimalathasam (2013) examined the impact of value relevance of accounting information on market vulnerability of the listed manufacturing companies in Colombo stock exchange (CSE). The results revealed that earning per share (EPS) and net assets value per share (NAVPS) significantly impact on market vulnerability. Further EPS and NAVPS are significantly correlated with market vulnerability. Vijitha. & Nimalathasan (2014) conducted a research to provide empirical evidence concerning value relevance of accounting information such as earning per share (EPS), net assets value per share (NAVPS), return on equity (ROE) and price earnings ratio (P/R) to share prices (SP) of manufacturing companies in Colombo Stock Exchange (CSE). Findings of that research revealed 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.

Methodology

The secondary data were used in this analysis. The main source of data was gathered from annual report of selected companies over period from 2009 to 2013. The researchers used convenient sampling technique. There are 48 companies listed under banking, financial and insurance sector, even though for this study 21 companies were selected.

For the sample selection the researchers used the following criteria,

- The company had been listed on the Colombo Stock Exchange during the period year from 2009 to 2013. Some companies were missing over the period of study.
- The firms have the necessary financial statement data.

Conceptual Framework

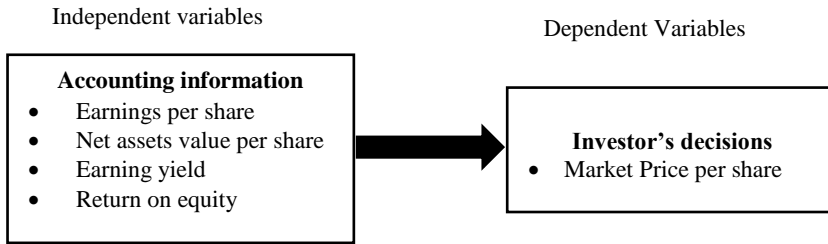


Figure 1. Conceptual Framework

Hypotheses

The researchers developed four alternative hypotheses and four null hypotheses.

H_{a1}: There is a significant impact of accounting information on MP

H₀₁: There is no significant impact of accounting information on MP

H_{a2}: There is a significant relationship between EPS and MP

H₀₃: There is no significant relationship between EPS and MP

H_{a3}: There is a significant relationship between NAVPS and MP

H₀₃: There is no significant relationship between NAVPS and MP

H_{a4}: There is a significant relationship between ROE and MP

H₀₄: There is no significant relationship between ROE and MP

H_{a5}: There is a significant relationship between EY and MP

H₀₅: There is no significant relationship between EY and MP

Analysis

Descriptive Statistics

Table 1 provides the Summary of descriptive statistics information for the variables of banking and financial sectors. It presents the sample size minimum, maximum, mean, standard deviation, skewness and kurtosis for the variables.

Table 1. Results of the Descriptive Analysis of the Data for the Overall Sample

	N	Minimum	Maximum	Mean	Std. Deviation	Skewness	Kurtosis		
	Statist	Statist	Statistic	Statistic	Statistic	Statist	Std. Error	Statist	Std. Error
EPS	105	-5.42	210.33	18.0611	31.39302	4.229	.236	21.207	.467
NAVPS	105	2.29	1364.89	122.5860	196.07740	3.656	.236	17.022	.467
ROE	105	-43.16	111.24	15.8207	17.18127	2.283	.236	14.516	.467
EY	105	-35.34	59.85	10.4528	11.43672	.686	.236	7.622	.467
MP	105	5.75	856.00	154.4067	182.13637	2.486	.236	6.411	.467
Valid N	105								

Table 1 shows the Descriptive statistics for all variables. The average market price of the banking and financial institutions, which registered in Colombo Stock Exchange, is Rs. 154.40. The minimum market price is Rs. 5.75 and the maximum recorded as Rs. 856.00. Standard deviation of share price is Rs. 182.14. The distribution of market price positively skewed and it is 2.486 and the kurtosis is 6.411. Average earning per share of the banking financial and insurance companies is Rs. 18.04. The minimum earning per share is Rs - 5.42 and the maximum recorded as Rs. 210.33. Standard deviation of share price is Rs. 31.39. NAVPS's minimum and maximum values are Rs. 2.29 and Rs.1364.89 respectively. Its mean value is 122.57. The standard deviation is Rs.196.08. The distribution of earning per share and net assets value per share positively skewed and it is 4.229, 3.656 respectively and the kurtosis is 21.207, 17.022 respectively. Average return on equity and earning yield of the banking, financial and insurance institutions, which registered in Colombo Stock Exchange, is Rs. 15.82 and Rs. 10.45 respectively. The minimum return on equity is Rs. -43.16 and Rs. 111.24 recorded as the maximum. Further, Rs. -35.34 recorded as the minimum earning yield and the maximum is Rs. 59.85. Standard deviation of return on equity and earning yield is Rs. 17.18 and Rs. 11.44 respectively. The distribution of return on equity and earning yield positively skewed and it is 2.283, 0.686 respectively and the kurtosis is 14.516, 7.622 respectively.

Correlation Analysis

Table 2. Result of Correlation analysis of independent variables and dependent Variables

		MP	EPS	NAVPS	ROE	EY
EPS	Pearson Correlation	.768**	1			
	Sig. (2-tailed)	.000				
NAVPS	Pearson Correlation	.686**	.722**	1		
	Sig. (2-tailed)	.000	.000			
ROE	Pearson Correlation	.038	.147	-.047	1	
	Sig. (2-tailed)	.699	.134	.631		
EY	Pearson Correlation	.093	.404**	.283**	.500**	1
	Sig. (2-tailed)	.344	.000	.003	.000	

** . Correlation is significant at the 0.01 level (2-tailed).

Table 02 indicated the overall result of correlation coefficient of independent and dependent variables. Correlation coefficient between MP and EPS is 0.768, p value is 0.000 which is less than < 0.05 which describes the significant positive relationship between market price and earnings per share. It explained that if EPS increased by 1 percent, MP increased by 0.768 percent, other hand, if EPS reduced by 1 percent, MP also reduced by 0.768 percent. Correlation coefficient of MP and NAVPS is 0.686, p value is 0.000 which is < 0.05 which describes the positive significant relationship between market price and net asset value per share. Correlation coefficient of MP and ROE is 0.038 p value more than 0.05 ($p = 0.699$) which describes there is no significant relationship between MP and return on equity. The correlation coefficient between MP and EY is 0.344 which is higher than the 0.05. When consider about correlation coefficient of MP and

EY is 0.093 which describes there is no significant the relationship between market price and earning yield.

Multiple Regressions Analysis

Table 3. Summary of the Result of Multiple Regression Analysis

Detail	Dependent Variable: MP			
	Value	β - value	T Value	Sig.
(Constant)		84.165	5.365	.000
EPS		3.826	7.759	.000
N V S		0283	3.674	.000
ROE		1.209	1.716	.089
EY		-5.043	-4 520	.000
R	.831			
R ²	.691			
Adj. R ²	.678			
Std. Error	103.29725			
F Value	55.833			
Sig (P. Value)	.0000			

Source: SPSS output

ANOVA table of this model indicate that the overall model is significant since the p-value is (0.000). Because alpha value of 0.05 Here $p < 0.05$, which indicates that, the model applied can statistically predict the outcome variable of MP. SPSS Output of model summary of the multiple regression analysis describes the R square value of 0.691, which indicates that 69.1 percent of the observed variability in MP is explained by the independent variable of EPS, NAVPS, ROE and EY. Further finding reveals that, other factors have 30.9 percent impact on MP in banking and financial institutions in Sri Lanka. Multi regression was run to test the all variable to find the impact of value relevance of accounting information on MP. Followings are the regression equation model value of α and β in the result is,

$$MP = 84.165 + 3.826EPS_t + 0.283NAVPS_t + 1.209ROE_t - 5.043EY_t$$

This multiple linear regression equation shows that β equals to 3.826, 0.283, 1.209, -5.043. That means slop of the regression line, which simply indicates that there is a significant impact of EPS, NAVPS, and EY on MP. MP has a significant impact with EPS ($p_{(0.000)} < 0.05$), NAVPS ($p_{(0.000)} < 0.05$), and EY ($p_{(0.000)} < 0.05$). The value of " α " is 84.165. In this regression EPS, NAVPS and EY are highly significant impact with the regression model and other variable of ROE is not statistically significant impact with MP.

Table 4. Hypotheses Testing

	Alternative Hypothesis	Null Hypothesis
There is a significant impact of accounting information on MP	Accepted(H_{a1})	Rejected (H_{01})
There is a significant relationship between EPS and MP	Accepted(H_{a2})	Rejected (H_{02})
There is a significant relationship between NAVPS and MP	Accepted(H_{a3})	Rejected (H_{03})
There is a significant relationship between ROE and MP	Rejected(H_{a4})	Accepted (H_{04})
There is a significant relationship of EY on MP	Rejected(H_{a5})	Accepted (H_{05})

In testing of Hypothesis₁, Table 03 pointed out the significance value is 0.000 and R² is 0.691. Therefore finding revealed that there is a significant impact of accounting information on MP. So the Hypothesis₁ is accepted and H₀₁ should be rejected. In testing of Hypothesis₂, the table-02 describe that the calculated significant value is 0.000) which is less than alpha value (0.05), therefore the null hypothesis H₀₂ should be rejected and alternative hypothesis H_{a2} should be accepted. And also testing of hypothesis H₃, since calculated significant value (0.000) alternative hypothesis H_{a3} should be accepted and null hypothesis H₀₃ should be rejected. The research alternative hypothesis H_{a4} was not accepted and null hypothesis is H₀₄ accepted in the analysis, which pointed out there is no significant relationship of ROE on Market price. These findings were agreed with the previous studies as discussed in the literature (Tharmila & Nimalathasan, (2013), Vijitha & Nimalathasan, (2014). The research alternative hypothesis H_{a5} was not accepted and null hypothesis H₀₅ accepted in the analysis. That analysis also pointed out there is no significant relationship of EY on MP.

Conclusion

The result revealed that the accounting information such as EPS, NAVPS, were significantly positively correlated with market price at 1% significance level and has strong significant positive correlation. The ROE and EY has no significant correlation with market price. From the regression analysis that value relevance of accounting information has the significant impact on market price per share at 1% significance level. Finally, the conclusion can be made that value relevance of accounting information has the significant impact on market price. These findings were agreed with the previous studies as discussed in the literature Donto et al (2000), Hadi, (2004), Oyerinde, (2009), Perera & Thikawala, (2010), Sulaima & Jahfer, (2013), Abadi et al (2013), Tharmila & Nimalathasan, (2013), Vijitha & Nimalathasan, (2014).

Directions for Future Research

The results of the current study related to the finance sector. As such, future research may consider other sectors of CSE and extend the study and develop significantly results to the CSE. Further, this value relevant test does not distinguish between the accounting regulation and its actual implementation. This issue should be address in the future. Further investigation of the influence of business culture for the value relevance of accounting information of market price is another area of research interest as global business cultures vary significantly.

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