Full Length Research Paper

Value relevance of accounting information and share price: A study of listed manufacturing companies in Sri Lanka

Vijitha P. and *Nimalathasan B.

Abstract

The purpose of this research is to provide empirical evidence concerning value relevance of accounting information 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). Quantitative approaches were used in this study. For conducting this research, data were collected from secondary sources mainly from financial report of the selected companies, which were published by CSE in Sri Lanka. Findings of this 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.

Keywords: Value Relevance of Accounting Information, Share Price and Colombo Stock Exchange (CSE).

INTRODUCTION

In recent times, the value relevance of financial information has been increasingly concerned by the researchers (Hellstron, 2005). Value relevance 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 by a statistical association between financial information and prices or returns” (Jianwei and Chunjiao, 2007).

Listed companies use financial statements as one of the major medium of communication with their stakeholders. Therefore, stock market regulators and accounting standards setters trying to improve the quality of financial statements in order to increase the transparency level in financial reporting (Vishnani and Shah, 2008). Financial Statements will consist of different type of information such as Financial Information or Accounting Information and Non Financial Information or Non Accounting Information. Accounting Information is information which describes an account for a utility. It processes financial transactions to provide external reporting to outside parties such as to stockholders, investors, creditors, and government agencies etc. Non accounting information is information which cannot be measured in monetary terms to make investment decisions by the investors (Cited by Perera and Thrikawala, 2010).

For financial reporting to be effective, accounting information should be completed as relevant and reliable (Hendricks, 1976). 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 (Germon and Meek, 2001). 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 NAVPS and EPS. This study investigates the value relevance of accounting data in the listed manufacturing companies under the Colombo Stock Exchange (CSE) over a period of 5 years from 2008 to 2012.

**Statement of the problem**

The purposes of accounting information are to provide information about a business’s assets, liabilities, equity, revenues, income, expenses, profits and losses, cash flows. It assists users predict future performance of a business. This study investigates the relative value relevance of the financial information of the companies listed in Colombo Stock Exchange. In any country, increase of investment in capital market leads to improve strength of the capital market and development of economy.

Investors rely on accounting information in their pricing of shares and companies which provide good quality information have thus an advantage in a lower cost of capital. Investors in developed counties are keen on the financial information of the intended investing companies. So that the investigation of the value relevance on financial information with relevant to the stock prices is important matter for the developing countries like Sri Lanka.

**Objectives of the study**

Main objective of the study is to examine the impact of value relevance of accounting information on share price. To achieve the main objective, the following sub objectives are considered.

- Identify the variables of value relevance of accounting information.
- Find out the relationship between value relevance of accounting information and share price.
- Suggest some measures to enhance the result.

**Review of literature**

A different scenario is found in the study on CSE taking 6 commercial banks registered under the CSE, it is found that EPS, Earning Yield and ROE has not declined its value relevance. Further it explained that investors react according to the aggregate of accounting information which published in financial statements. Accounting information has the ability to explain the share prices of the banking sector which registered in the CSE in Sri Lanka.

Another study has also been conducted in Sri Lanka among 100 companies listed in CSE representing all the industry sectors except Banking Finance and Insurance sector. Karunarathne and Rajapakse have studied an empirical research to determine the value relevance of financial statements’ information and used Return model as well as Price model. It revealed that the value relevance of accounting information under the Price model has more explanatory power than Return Model.

In an analysis of Dhaka Stock Exchange (DSE) consisting of 105 companies from 2000 to 2010 it is found that negative relationship exist between changes in NAVPS and changes in share price (Miah, 2012). Sharma (2011) has undertaken a research to examine the empirical relationship between equity share prices and explanatory variables such as: book value per share, dividend per share, EPS, price earnings ratio, dividend yield, dividend payout, size in terms of sale in Indian Market. According to that EPS, dividend per share and book value per share has significant impact on the market price of share. Further, results indicated that dividend per share and EPS being the strongest determinants of market price.

Kumar and Hundal (1986) examined the impact of dividend per share, earning per share net asset value per share, leverage ratio on market price of share by using the linear regression model between India and Selected Asian Markets. But they found dividend policy was the more sensitive factors in affecting share price. However, the relationship is also affected by the following: persistence of earnings, positive earnings or negative earnings, frequency of reporting and efficiency of market.

Pourheydari, Aflatoon and Nikbakhat (2008) compared the value relevance of book value and dividends versus book value and reported earnings in the TSE from 1996 to the end of 2004. The results of their research indicated that there was a positive relationship between dividends, book value and earning, with stock market value in the TSE. Safahjo, Pourheydari and Solaimani (2005) examined the empirical relationship between EPS and book value with stock market value for the 8-year period from 1997 to 2002. They found that there was a significant relationship between EPS, BV and price.

Andriantomo and Yudianti (2013) have conducted a research concerning value relevance of earnings and book values to stock prices in Indonesia Stock Exchange (ISE). According to that the results indicate that earnings and book values simultaneously are relevant informa-
Oyerinde (2009) investigated the value relevance of accounting data to determine if there is a relationship between accounting numbers and share prices among top 30 companies in the Nigerian Stock Market (NSM) over the year 2001 to 2004. He explained the correlation between accounting information such as EPS, ROE, Earning Yield (EY) and Market Price per Share (MPS). Germon et al, 2000 conducted another analysis of NSM consisting top 30 companies from 2001 to 2004. They found that the relationship between share price and EPS is high but the ROE is very low.

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.

Abayadeera (2010) tested for the value relevance of financial and non-financial information in high-tech industries in Australia with a sample size of 91 companies running through various sectors of the Australian economy. His studies showed that value relevance declined in earnings but increase in book value. He also found out in his study, with overall evidence, that the book value is the most significant factor and earnings are the least significant factor in deciding share prices in high-tech industries in Australia. This study further supports other studies showed value relevance declined in book value but increase in earnings.

The Ohlson’s (1995) Equity Valuation was explicitly applied to examine the value relevance of financial and nonfinancial information with an overall result that provided evidence that book value is the most significant factor and earnings are the least significant factor in deciding share prices in high-tech industries in Australia.

From the above literatures, we can see the research related to this study has been conducted in Sri Lanka among six commercials banks and 100 companies in CSE. But, the research on manufacturing companies in CSE has not been investigated. Hence, this present study fulfills the research gap.

RQ1: What are the variables of value relevance of accounting information?
RQ2: What relationship exists between value relevance of accounting information and share price?
RQ3: Does Value relevance of accounting information have the impact on share price?

Conceptual framework

From the literature, the conceptual model has been developed by the researcher to carry out the research. (Figure 1)

Hypotheses

Possible hypothesis are formulated based on conceptualization of research problem in order to achieve the research objective.

H1: Value relevance of accounting information has the significant impact on share price.
H2: Value relevance of accounting information significantly correlated with share price.

RESEARCH METHODOLOGY

Sampling Design

The manufacturing companies registered under the CSE are considered as the area of this study. Among them, 20
companies were selected for this study as per convenience. These data consisted of 5 years period from 2008 to 2012.

**Data sources**

This study requires secondary which is collected from accounting books, studies and researches which are written by many authors in different areas such as in the world as well as within country and financial statement of the particular companies.

**Reliability of the scales and validity of the data**

Financial statement which is published by the registered companies under the CSE is reliable and validity since these reports is audited.

**Data presentation and analysis**

According to the Table 1 it can be seen that descriptive statistics of the accounting information of manufacturing companies which comprise minimum, maximum, mean and Standard Deviation. Highest value of standard deviation of accounting information is perceived in NAVPS and lowest standard deviation is recorded in EPS. EPS and ROE indicate the negative minimum value. As per the constructed value, highest average value of accounting information is indicated by the Market price per share and average value of EPS and ROE is very low.
Table 3. Model Summary

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.933&lt;sup&gt;a&lt;/sup&gt;</td>
<td>.871</td>
<td>.837</td>
<td>18.52299</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Price Earnings Ratio, Return on Equity, Net Assets Value Per Share, Earning Per Share  
b. Dependent Variable: Market Price Per Share

Table 4. ANOVA<sup>b</sup>

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Regression</td>
<td>4</td>
<td>8691.892</td>
<td>25.333</td>
<td>.000&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>15</td>
<td>343.101</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>39914.088</td>
<td>19</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Price Earnings Ratio, Return on Equity, Net Assets Value Per Share, Earning Per Share  
b. Dependent Variable: Market Price Per Share

Table 5. Coefficients table in the Regression analysis

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
</tr>
<tr>
<td>1</td>
<td>(Constant)</td>
<td>22.984</td>
</tr>
<tr>
<td></td>
<td>EPS</td>
<td>5.753</td>
</tr>
<tr>
<td></td>
<td>NAVPS</td>
<td>.231</td>
</tr>
<tr>
<td></td>
<td>ROE</td>
<td>.305</td>
</tr>
<tr>
<td></td>
<td>P/E</td>
<td>-.158</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Market Price Per Share

Correlations analysis

Table 2 clearly describes the relationship for all the pairs of variables. From the output, it can be found that, the correlation coefficient between EPS and share price is 0.908 which is significance at 1% level. Based on that conclusion can be made that there is a strong positive correlation between EPS and share price at 1% significance level. The correlation coefficient between NAVPS and share price is 0.635 which is significance at 1% level. It indicated that there is a strong positive correlation between NAVPS and share price at 1%. The correlation coefficient between ROE and share price is 0.583 which is significance at 1% level. It can be concluded that there is a strong of positive correlation between ROE and share price at 1% level.

But the correlation coefficient between P/E and share price is -0.444 which is significance at 5% level. There is a week negative relationship between P/E and share price.

Regressions analysis

The table 3, Model summary shows the impact of independent variable and dependent variable. According to that Adjusted R square is 0.837. It means that there is 83.7 % of the impact of the independent variable on the dependent variable. It indicates that value relevance of accounting information has 83.7% impact on share price.

From the table 4, it can be found that the accounting information has the significant impact on share price at 1% significance level.

Table 5 illustrates the coefficient value of regression analysis. It clearly shows what extent each independent variable impact on share price. Based on that, the p value for beta coefficient of EPS is 0.000 which is significance at 1% level. It means the EPS significantly impact on share price. At the same time, the p value for beta coefficient of NAVPS is 0.062 which is significant at 10% level. But the p value for beta coefficient of ROE and P/E ratio are 0.293 and 0.712 respectively which are not significance. Therefore it can be concluded that except
EPS and NAVPS other independent variable such as ROE and P/E ratio does not have significant impact on share price.

From the table 5, the regression model can be retrieved as follows.

\[
Sp = \beta_0 + \beta_1 \text{EPS} + \beta_2 \text{NAVPS} + \beta_3 \text{ROE} + \beta_4 \text{P/E} + e
\]

\[
Sp = 22.984X0 + 5.753(\text{EPS}) + 0.231(\text{NAVPS}) + 0.305(\text{ROE}) + (-0.158)(\text{P/E}) + e
\]

CONCLUSION

The present study has been undertaken to examine the empirical relationship between share prices and explanatory variables such as NAVPS, EPS, P/E, ROE, for the period 2007-2011. The result revealed that the accounting information such as EPS, NAVPS, and ROE were significantly correlated with share price at 1% significance level and also has strong positive correlation. The P/E ratio was also negatively correlated with share price at 5% significance level. From the regression analysis it can be concluded that value relevance of accounting information has the significant impact on share price at 1% significance level. At the same time EPS and NAVPS also have the significant impact on share price at 1% and 10% significance level respectively other than ROE and P/E ratio.

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


