

**RELEVANCE OF FINANCIAL ACCOUNTING INFORMATION ON INVESTORS' DECISIONS: A SPECIAL REFERENCE TO THE BANKING SECTOR IN SRI LANKA**

K.S.S Kanthi<sup>1</sup> and U.G.A.C. Karunananda<sup>2</sup>

Department of Accountancy, Wayamba University of Sri Lanka, Kuliypitiya, Sri Lanka

<sup>1</sup>susanjalas@yahoo.com <sup>2</sup>ayoma\_karunananda@yahoo.com

**ABSTRACT**

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. Accounting Information contained in financial statements to be accurate and transparent enough to provide an indication of a business performance and financial condition. Recent empirical work has explored that accounting information decreased their relevance over the past few decades. Further, present empirical evidences state that, investors tend to focus on information other than the published accounting information such as non financial information, short term capital gains and tend to be speculative or irrational for unusual events.

Therefore, this study attempts to addresses the relevance of Accounting Information on investor's stock market decisions in Commercial Banks registered under Colombo Stock Exchange (CSE) in Sri Lanka. The relevance of accounting data was measured by correlation coefficient between Market Price per Share (MPS) and selected accounting information such as Earning per Share (EPS), Return on Equity (ROE) and Earning Yield (EY). The data analysis was based on the Accounting Information in the published financial statements of Commercial banks. It covers a period of 5 years from 2007 to 2011. According to the findings there is a relationship between Accounting Information and Market Price per Share. Further it revealed that investors still consider Accounting Information which contain in the published financial statements of Commercial Banks registered under CSE for the stock market decisions in Sri Lanka.

**Key words:** Accounting Information, Earning per Share, Earning Yield, Market Price per Share, Return on Equity.

**1. INTRODUCTION**

A financial statement is a formal record of the financial activities of a business, persons or other entry for a business enterprise ,all the relevant financial information, presented in a structured manner and in a form easy to understand , are called the financial statements. There are five basic financial statements. They are; Statement of Financial Position, Statement of Comprehensive Income, Statement of Changes in Equity, Statement of Cash Flows and set of Notes & Accounting policies to the financial statement. These statements provide external reporting to outside parties such as stockholders, prospective investors, financial institutions, government agencies, creditors etc.

Financial information is essential in making sound investment decisions and it will reduce the informational asymmetry problem between the firm's managers and the investors (Hossain, D. M., Khan, A., Yasmin, I. 2004). Further, Listed companies use financial statement as one of the major medium of communication with their stakeholders. Therefore stock market regulators and Accounting Standards setters are trying to improve the quality of financial statement in order to increase the transparency level in financial reporting (Vishnani and Shah, 2008).

### **1.1 Research Problem**

As per the Financial Systems Stability review, 2008; 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. There are 289 active companies whose shares are being traded in the Colombo Stock Exchange (CSE) in 2013 representing 21 sectors. Out of these 289 companies Commercial Bank of Ceylon Ltd, Hatton National Bank Ltd, Nations Trust Bank Ltd, Pan Asia Bank Corporation Ltd, Sampath Bank Ltd, Seylan Bank Ltd, NDB Bank, DFCC Bank, have registered and active in Sri Lanka as registered Commercial Bank in CSE. Commercial Banks are largest owner of the total assets and deposits liabilities in the financial system. Further, the increase in total revenue is mainly attributed to manufacturing sector and secondly the Banking Sector.

There are number of studies which focused on investors of Banking Sector of countries especially in internationally. Based on the Ohlson's model, Dung in 2010 carried out his study on value relevance of financial statement information in Vietnamese stock market. The findings were contrary to the previous study and he concluded that financial statement information was not related to stock prices. Overinde in 2009 carried out the investigation to find out the value relevance of Accounting Information in emerging stock market in Nigeria and he concluded that there is a relationship between Market price and the Accounting Information. Further he concluded that without confidence in Accounting Information, investors in the Nigerian stock market will not invest in stocks.

Although there has been a number of studies on this topic in internationally, it is rare to find prior research in Sri Lanka especially in the Banking Sector (Trikawala and Perera, 2010). Therefore this research attempts to find out whether there is relationship between accounting information and share prices in Sri Lankan Banking sector.

Accordingly the research question is developed as follows;

“Does Accounting Information relevant on investor's decisions in the Banking Sector in Sri Lanka?”

### **1.2 Objective of the Study**

Major objective of the study is “To examine the relevance of Accounting Information on investors' decisions in Sri Lankan Banking Sector”.

### 1.3 Significance of the Study

Accounting Information contained in financial statements to be accurate and transparent enough to provide an indication of a business performance and financial condition to decision makers including investors. In financial statement includes both Accounting and Non-Accounting Information. Accounting Information increases the knowledge of the users and gives decision makers the capacity to predict future actions.

The value relevance of Accounting Information is a major concern for investors, regulators & other users of financial reports. Accounting Information is potentially more important and powerful for participants in stock market. Financial statement information is relevant when it influence user's economic decisions by helping them evaluate past, present or future events relating to an entity. Therefore, relevance Accounting Information can be described as an essential pre requisite in investment decision.

Recent empirical studies explored that Accounting Information in published financial statements lost their relevance over the periods of time (Ball & Brown 1968, Oyerinde 2009). In United Kingdom, it has found that the financial statement was considered as the least effective means of communicating information. But, this study is perhaps useful to identify that there is relationship between Accounting Information and share price. Investors can use Accounting Information to make investment decision. By knowing importance of Accounting Information, investors can make very useful investment decision.

## 2. METHODOLOGY

The relevance of accounting data will be measured by correlation coefficient between Market Price per Share (MPS) and selected Accounting Information such as Earning per Share (EPS), Return on Equity (ROE), and Earning Yield (EY). The data analysis will be based on the Accounting Information in the published financial statement of Commercial Banks registered under CSE. It covers a period of 5 years from 2007 to 2011.

The model specification is as follows:

$$MPS = f(X_1, X_2, X_3)$$

*MPS = Market Price per Share (Investor's Decision)*

*X<sub>1</sub> = Earnings per Share (EPS)*

*X<sub>2</sub> = Return on Equity (ROE)*

*X<sub>3</sub> = Earning Yield (EY)*

Based on the conceptual model, the following regression models have been formulated for this study.

To test the relationship between Market Price per Share and Earning per Share, following single linear regression model is used.

$$\text{MPS} = a + b X_1$$

To test the relationship between Market Price per Share and Return on Equity, following single linear regression model is used.

$$\text{MPS} = a + b X_2$$

To test the relationship between Market Price per Share and Earning Yield, following single linear regression model is used.

$$\text{MPS} = a + b X_3$$

To test the relationship between Market Price per Share and Earning per Share, Return on Equity, Earning Yield, following multiple regression model is used.

$$\text{MPS} = a + b_1 X_1 + b_2 X_2 + b_3 X_3$$

## **2.1 Sampling Method**

### **2.1.1 Population of the Study**

Population of the study is the Commercial Banks registered under Colombo Stock Exchange.

### **2.1.2 Sample of the Study**

In this study due to the larger size of the population the study is selected a sample amounting 05 Commercial Banks. Throughout the study the sample has been used to represent the whole population while assuming that the selected sample is equipped with all tested factors that are belongs to the population. Therefore, following selected commercial Banks are mentioned.

1. Commercial Bank of Ceylon PLC
2. Hatton National Bank PLC
3. Nations Trust Bank PLC
4. Sampath Bank PLC
5. Seylan Bank PLC

### 2.1.3 Data Collection

This research was mainly conducted based on secondary data collected from banks' Annual Reports from 2007 to 2011.

## 3. DATA ANALYSIS AND PRESENTATION

For the purpose of analyzing data both descriptive statistics and inferential statistics are used.

### 3.1 Descriptive Statistics

Descriptive analysis for the sample is performed on the dependent variable (Market price per Share) and the independent variables (Earning per share, Return on Equity, Earning Yield). The analysis examines the mean, standard deviation and ranges of the data.

**Table 1 Descriptive Statistics for the Period from 2007 to 2011**

|                        | Mean  | Standard Deviation | Minimum | Maximum |
|------------------------|-------|--------------------|---------|---------|
| Market Price Per Share | 119.1 | 70.1               | 40.1    | 183.6   |
| Earnings Per Share     | 11.27 | 7.53               | 3.90    | 20.95   |
| Return On Equity       | 15.75 | 3.42               | 9.88    | 18.20   |
| Earning Yield          | 11.42 | 3.09               | 7.72    | 16.26   |

Table 1 shows descriptive statistics for all variables during the period from 2007 to 2011. According to the mean value the average share price of the commercial banks which registered in Colombo Stock Exchange is Rs. 119.10/-. The minimum share price recorded as Rs. 40.10/- and the maximum recorded as Rs.183.60/-. Standard deviation of share price is Rs.70.10/-.

Average Earning per Share of the commercial banks is Rs.11.27/-. The minimum Earning per Share is Rs. 3.90/- and the maximum recorded as Rs. 20.95/-. Standard deviation of share price is Rs.7.53/-.

Average Return on Equity and Earning Yield of the commercial banks which registered in Colombo Stock Exchange is Rs.15.75/- and Rs.11.42/- respectively. The minimum Return on Equity is Rs. 9.88/- and Rs. 18.20/- recorded as the maximum. Further, Rs. 7.72/- recorded as the minimum Earning Yield and the maximum is Rs. 16.26/-. Standard deviation of Return on Equity and Earning Yield is Rs. 3.42/- and Rs. 3.09/- respectively.

### 3.2. Correlation and Regression Analysis

#### 3.2.1 Correlation of Data

Co-variation or association between variables - Earning per share, Earning Yield, Return on Equity are as follows;

Table 2 Correlation Matrix

|     | EPS | ROE   | EY    | MPS   |
|-----|-----|-------|-------|-------|
| EPS | 1   | 0.733 | 0.627 | 0.835 |
| ROE |     | 1     | 0.312 | 0.748 |
| EY  |     |       | 1     | 0.097 |
| MPS |     |       |       | 1     |

According to the table 2, the correlation between Market Price per Share and Earning per Share is 0.835, which shows highly positive correlated. As well as Return on Equity is highly correlated with the Market Price per Share, because correlation indicates 0.748. But Market Price per Share and Earning Yield has a correlation of 0.097, which is a poor Relationship.

### 3.2.2 Regression Analysis

Table 3, 4, 5 and 6 presents findings of regression analysis.

Table 3 Relationship between Market Price per Share and Earning Per Share

| Year | R    | R <sup>2</sup> | Ad R <sup>2</sup> |
|------|------|----------------|-------------------|
| 2007 | .983 | .966           | .955              |
| 2008 | .927 | .860           | .813              |
| 2009 | .935 | .875           | .833              |
| 2010 | .627 | .393           | .190              |
| 2011 | .960 | .923           | .897              |

According to the table 3, the R<sup>2</sup> was 96.6%, 86%, 87.5%, 39.3% and 92.3% for 2007, 2008, 2009, 2010 and 2011 respectively. This implies that Earning per Share is able to explain R<sup>2</sup> 96.6%, 86%, 87.5%, 39.3% and 92.3% variation in Market Price per Share reported in 2007, 2008, 2009, 2010 and 2011 respectively. R<sup>2</sup> has gradually decreased up to 2010 and in 2011 it was increased to 0.923.

Table 4: Relationship between Market Price per Share and Return on Equity

| Year | R    | R <sup>2</sup> | Ad R <sup>2</sup> |
|------|------|----------------|-------------------|
| 2007 | .480 | .230           | -.260             |
| 2008 | .512 | .262           | .017              |
| 2009 | .757 | .573           | .430              |
| 2010 | .530 | .281           | .041              |
| 2011 | .414 | .171           | -.105             |

The R<sup>2</sup> is 23%, 26.2%, 57.3%, 28.1% and 17.1% for 2007, 2008, 2009, 2010 and 2011 respectively. This implies that Return on Equity has an ability to explain 23%, 26.2%, 57.3%, 28.1% and 17.1% variation in Market Price per Share. In the years 2007, 2008 and 2009 R<sup>2</sup> is increased up to 0.573 and by 2011 it is declined significantly. This suggest that Return on Equity has declined their explain ability about Market Price per Share in later period.

**Table 5: The Relationship between Market Price per and Earning Yield**

| Year | R    | R <sup>2</sup> | Ad R <sup>2</sup> |
|------|------|----------------|-------------------|
| 2007 | .613 | .376           | .168              |
| 2008 | .748 | .559           | .412              |
| 2009 | .508 | .258           | .010              |
| 2010 | .278 | .077           | -.230             |
| 2011 | .561 | .314           | .086              |

According to the table 5, R<sup>2</sup> for the period of 2007-2011 are considerably low. The R<sup>2</sup> is 37.6%, 55.9%, 25.8%, 7.7% and 31.4% for 2007, 2008, 2009, 2010 and 2011 respectively. This implied that 37.6%, 55.9%, 25.8%, 7.7% and 31.4% variation in Market Price per Share is explained by Earning Yield in 2007, 2008, 2009, 2010 and 2011 respectively.

Joint explanatory power of Earning per Share, Earning Yield and Return on Equity were analyzed in Table 6. Before testing this, to assess multicollinearity, Variance Inflation Factor (VIF) is used. The VIF records 1.85 and it proves that there is no co-linearity associated among the variables.

**Table 6: The Relationship among Market Price per Share and Earning per Share, Return on Equity, Earning Yield**

| Year | R    | R <sup>2</sup> | Ad R <sup>2</sup> |
|------|------|----------------|-------------------|
| 2007 | .914 | .836           | .667              |
| 2008 | .985 | .857           | .765              |
| 2009 | .997 | .994           | .976              |
| 2010 | .987 | .978           | .912              |
| 2011 | .999 | .998           | .997              |

The results in the Table 6 indicate that 83.6%, 85.7%, 99.4% 97.8% and 99.8% variation in Market Price per Share is explained by financial information such as Earning per Share, Earning Yield and Return on Equity in 2007, 2008, 2009, 2010 and 2011 respectively. This suggests that Accounting Information has ability to explain dependent variable (i.e. Market Price per Share). In 2010 R<sup>2</sup> is declined to 0.978 and increased it again in the subsequent year. These finding were agreed with the previous studies as discussed.

## 5. CONCLUSIONS AND RECOMMENDATIONS

This study investigated the effects of several influences on stock prices in selected Sri Lankan Banks using annual data for the period from year 2007 to 2011. A multiple regression model and simple regression model were used to find out relationships and for examining the impact of selected variables on stock prices. The fitted regression model reveals strong relationships between independent variables and Market price of shares.

The results of this study are consistent with most of the findings provided in the literature (Dontoh et. al 2000, Hadi, M.M. 2004, Oyerinde 2009, Perera R.A.A.S, Trikawala S.S., 2010). This study has endeavored the relevance of financial

information of listed banks in Sri Lanka. The overall results on accounting numbers presented in this study indicate that the Earning per share, Earning Yield, and Return on Equity has increased its value relevance.

Accounting Information has the ability to explain the share prices of the Banking Sector which registered in the Colombo Stock Exchange in Sri Lanka. Further, without confidence in accounting numbers as a whole, investors will not take their investment decision. This depict that investors generally not focus on short term capital gain or irrational for unusual events. Therefore, Accounting Standard setter should enhance the quality of the financial reporting in order to increase the value relevance of financial statements.

## **REFERENCES**

Annual Reports from 2007 to 2011 of selected Banks.

Ball R., Brown P. (1968), "An empirical evaluation of Accounting numbers", *Journal of Accounting Research*, Vol 6, pp 159 – 177.

Department of Census and Statistics, Statistical Abstract, 2008

Dung N. V. (2010), Value Relevance of Financial Statement Information: A Flexible Application of Modern Theories to the Vietnamese stock Market, Working Paper (Foreign Trade University).

Dontoh A., Radhakrishnan S. and Ronen J. (2000), The declining value relevance of accounting information and non information based trading: An empirical analysis, Working Paper (University of New York).

Francis J., Schipper K., (1999) "Have financial statements lost their relevance". *Journal of Accounting Research*,

Guthrie J. (2007) "The death of the annual report", Working Paper. University of Sydney.

Germon H., Meek G. (2001), *Accounting: An international perspective*. Mc Graw Hill.

Hendrick J. A., (1976), The impact of human resources Accounting Information on stock investment decisions – An empirical study, "The Accounting review"

Hossain D.M., Khan A., Yasmin I. (2004). "The Nature of Voluntary Disclosure on Human Resource in the Annual Reports of Bangladeshi Companies". *Journal of Business Studies*.

Hadi M. M. (2004), "The importance of accounting information to the investors in Banking Sector in Kuwait". Working Paper, University of Kuwait.



- Meyer C. (2007), Share holder value accounting the value relevance of financial statements data and the determinants of accounting methods choices.
- Nilson, H. (2003), “Essays on the value relevance of the Financial Statement information”, Working Paper.
- Oyerinde D.T. (2009), “Value relevance of Accounting Information in emerging stock market in Nigeria”
- Vishnani S., Shah B.K. (2008), “Value relevance of published financial statements- with special Emphasis on impact of cash flow reporting”, International Research Journal of Finance and Economics.