ASSOCIATION OF ACCOUNTING INFORMATION ON STOCK PRICES OF LICENSEDD COMMERCIAL BANKS IN SRI LANKA

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Abstract

The value relevance of accounting information has become one of the most researched area among accounting researchers. However the value relevance literature provides contradictory conclusions on the association between accounting information and stock prices in different stock exchanges including both developed and developing market settings whilst there is a very limited knowledge in this regard in Sri Lankan Context. Hence this paper focused on examining the association between accounting information and stock prices of licensed commercial banks in Sri Lanka to bridge the knowledge gap in Sri Lankan context. The study conducted based on the hypothesis that there is significant association between accounting information and stock prices in licensed commercial banks in Sri Lanka. Core Capital Adequacy Ratio, Total Capital Adequacy Ratio, Net Non Performing Advances Ratio, Interest Margin, Return on Assets, Return on equity and Statutory liquid Assets Ratio were used as proxy for accounting information. The sample period of the study spans for 5 years from 2007 to 2011. The relevant data was collected from the CSE data library and the published annual reports of all the licensed Commercial Banks whose data is available for the sample period. Both descriptive statistics and inferential statistics were used to analyze data.

The statistical analysis revealed that 36% of variations of share prices of Licensed Commercial Banks in Sri Lanka could be explained through the independent variables under study. Further this study revealed that there is a significant relationship between share price and Interest Margin, Return on Equity and Return on Asset. Accordingly this study concluded that there is an association between the accounting information and the share prices of the licensed commercial banks in Sri Lanka hence the accounting information is value relevance in determining share prices of such companies.

Key Words: Accounting information, Licensed Commercial Banks, Share price, Value relevance

Introduction

The prime objective of financial accounting is to provide information to the interested parties to facilitate their economic decision making. However the value relevance of accounting information has become a debating issue since more than three decades. Accounting researchers have devoted considerable time and efforts analyzing the relation between stock prices and accounting

disclosures. One such primary focus of accounting research is to assess whether stock prices move in the direction and magnitude of reported earnings when the earnings information is disclosed to the capital market (Lim and Park, 2011). The value relevance of accounting information on market prices or returns of common stocks has been extensively researched in the accounting history after the seminal work of Ball and Brown (1968) and Beaver (1968).

Widespread theoretical and empirical studies on the phenomena of value relevance of accounting information provides contradictory conclusions on the association between accounting information and the prices of common stocks. Some researchers have shown that the association between accounting information and prices of the common stocks are increasing overtime and some have claimed that such relationship is declining overtime while some other scholars have criticized the accounting information provided through financial statements on their extensive reliance of estimates, historical view, ignorance of the cost of equity capital, subjective opinion of accountants and availability of different accounting methods. For example Collins, Maydew and Weiss (1997); Francis and Schipper (1999); Ely and Waymire (1999); Collins, Lie and Xie (2009); Glezacos (2012) among others have shown that the value relevance of accounting earnings to stock prices or returns increase in over time while Brown, Lo and Lys (1999); Lew and Zarowin (1999); Dontoh, Radhakrishnan and Ronen (2004) among others; argued that the value relevance of accounting earnings has declined over time. But Hunt (1985), Jensen and Murphy (1990), and Tortella and Brusco (2003) criticized the value relevance of accounting information stating different reasons.
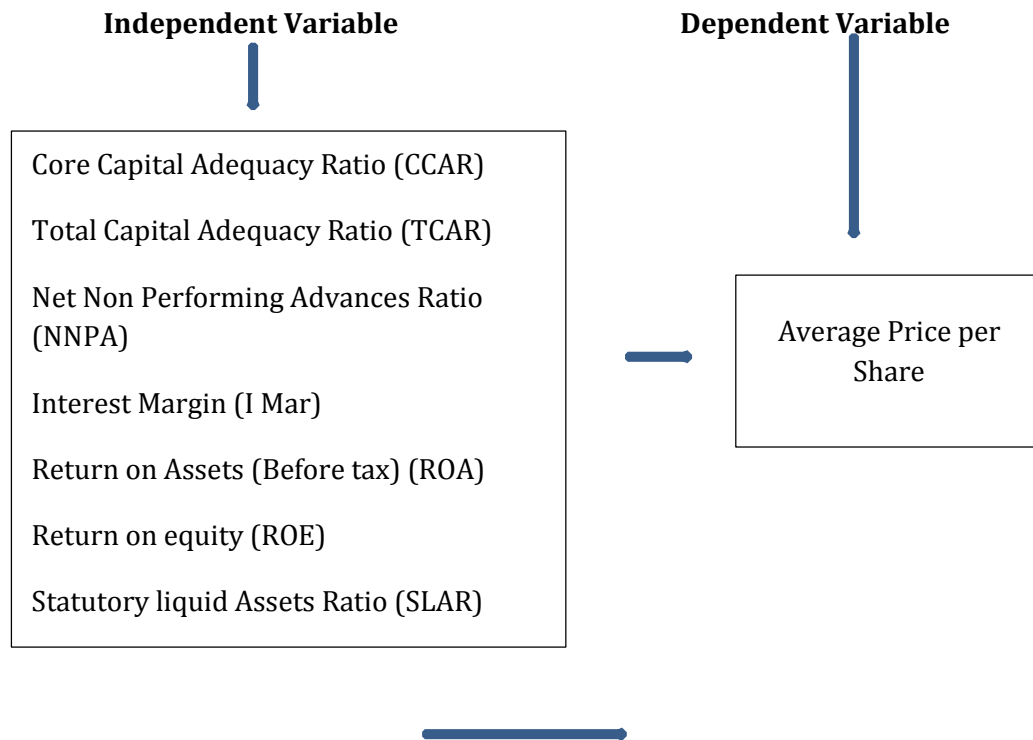
Since the value relevance literature provides mix and contradictory conclusions on the association between accounting information and share prices and the relative low level of knowledge in this regard in Sri Lankan context this study was conducted with the aim of determining the association between accounting information and share prices of licensed commercial banks in Sri Lanka.

Objective of the study

The general objective of this study is to determine the value relevance of accounting information in determining the share prices of licensed commercial banks in Sri Lanka.

Methodology

Conceptual framework

Independent Variable   **Dependent Variable**

Core Capital Adequacy Ratio (CCAR)

Total Capital Adequacy Ratio (TCAR)

Net Non Performing Advances Ratio
(NNPA)

Interest Margin (I Mar)   Average Price per
                                                                          Share
Return on Assets (Before tax) (ROA)

Return on equity (ROE)

Statutory liquid Assets Ratio (SLAR)

List of Hypothesis

H1: There is a significant relationship between Core Capital Adequacy
Ratio and Average Share Price of Licensed Commercial Banks in Sri
Lanka

H2: There is a significant relationship between Total Capital Adequacy
Ratio and Average Share Price of Licensed Commercial Banks in Sri
Lanka

H3: There is a significant relationship between Net Non Performing
Advances Ratio and Average Share Prices of Licensed Commercial Banks
in Sri Lanka

H4: There is a significant relationship between Interest Margin and
Average Share Prices of Licensed Commercial Banks in Sri Lanka

H5: There is a significant relationship between Return on Assets and
Average Share Prices of Licensed Commercial Banks in Sri Lanka

H6: There is a significant relationship between Return on equity and Average Share Prices of Licensed Commercial Banks in Sri Lanka

H7: There is a significant relationship between Statutory liquid Assets Ratio and Average Share Prices of Licensed Commercial Banks in Sri Lanka

Population and Sample

The population of this study is all the licensed commercial banks listed in Colombo Stock Exchange (CSE). Currently there are 8 licensed commercial banks registered in CSE out of which, 7 banks qualified for being in the sample. The sample period spans for 5 years from the year 2007 to 2011.

Data and data collection

The entire study was based on secondary data. The required data was collected from the data library of the Colombo Stock Exchange and from the relevant companies. By collecting raw data the relevant calculations were done by the researcher using Excel work sheet. The daily closing prices of each stock were collected from the CSE data library in order to calculate the annual average stock price of the sample companies. The published financial statements of the sample companies were collected to calculate the independent variables of the study.

Operationalization of variables

The dependent variable of the study is Share Price of the sample companies. Annual average share price was considered as the price per share. The daily closing prices were collected and aggregated for the year and average price was calculated by dividing it by 365 days.

The independent variable of the study is accounting information. Core Capital Adequacy Ratio, Total Capital Adequacy Ratio, Net Non Performing Advances Ratio, Interest Margin, Return on Assets, Return on equity and Statutory liquid Assets Ratio were used as proxy for accounting information. Such ratios were considered in this study as the independent variables due to the reason that the Central Bank of Sri Lanka has made it mandatory to disclose such ratios for the licensed commercial banks in Sri Lanka. Those ratios were calculated using following formulas in accordance with the central bank guidelines.

$$\text{Core Capital Adequacy Ratio} \qquad = \frac{\text{Tier 1 Capital}}{\text{Risk−Weighted Assets}} * 100$$

$$\text{Total Capital Adequacy Ratio} = \frac{\text{Total Capital Base}}{\text{Risk−Weighted Assets}} * 100$$
$$=$$

Net Non Performing Advances Ratio

$$\frac{\text{Total Gross Non-Performing Loan \& Advances -Total Interest in Suspense-Total Provisions)}}{(\text{Total Gross Loans \& Advances-Total Interest In Suspense})}$$

Interest Margin $= \frac{\text{Net Interest Income(annualised)}}{\text{AverageValue of Total Assets}} * 100$

Return on Assets (Before tax) $= \frac{\text{Profits After Tax (annualised)}}{\text{Average Value of Total Assets}} * 100$

Return on equity $= \frac{\text{Profits After Tax (annualised)}}{\text{Average Value of Capital Funds}} * 100$

Statutory liquid Assets Ratio $= \frac{\text{Average Liquid Assets}}{\text{Liabilities Base}} * 100$

Data Analysis

Pearson product moment correlation coefficient and the regression analysis were used to analyze the data. The correlation coefficient was used to measure the association between accounting information and the average share price in each year. The explanatory powers of accounting information on stock price were determined by multiple regression analysis. The multiple regression equation for the study was developed and shown below.

ASP= β 0 + β 1 CCAR+ β 2 TCAR + β 3 NNPA + β 4 IMAR+ β 5 ROA + β 6 ROE + β 7 SLAR

Results and discussion

The correlation between independent and dependent variables

	Pearson Correlation	P Value (2-tailed)	Result
Core Capital Adequacy Ratio	-.023	0.895	H0 not rejected
Total Capital Adequacy Ratio	0.205	0.238	H0 not rejected
Net Non Performing Advances Ratio	-0.391	0.20	H0 not rejected
Interest Margin	-0.388	0.021	H0 rejected

Return on Asset	0.595	0.000	H0 rejected
Return on Equity	0.344	0.023	H0 rejected
Statutory Liquid Asset Ratio	-0.167	0.337	H0 not rejected

The results of the correlation coefficient analysis depicts that there is a negative relationship between share price and the four independent variable constructs namely, Core Capital Adequacy Ratio, Net Non Performing Advances Ratio, Interest Margin and Statutory Liquid Asset Ratio while there is a positive correlation between share price and Total capital adequacy ratio, Return on Asset and Return on Equity.

The regression model

ASP= 210 - 8.03 CCAR + 5.10 TCAR + 0.92 NNPA - 32.8 IMAR. + 94.5 ROA - 3.41 ROE -0.29 SLAR

The adjusted R square value of the multiple regression model was 36%. This indicates that 36% of variations in dependent variable can be explained through the independent variable.

Conclusion

This study was carried out for the purpose of examining the association between accounting information and share prices of licensed commercial banks in Sri Lanka. The statistical analysis revealed that 36% of variations of share prices of Licensed Commercial Banks in Sri Lanka could be explained through the independent variables under study. Further this study revealed that the Return on Asset shows the highest positive correlation with Share price while there is a significant relationship between share price and other two variables namely Interest Margin and Return on equity.

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