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# A STUDY ON MARKET VALUE ADDED WITH ECONOMIC VALUE ADDED AND PROFITABILITY PERFORMANCE OF LISTED FINANCIAL COMPANIES IN SRILANKA

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**ABSTRACT**

*The purpose of this study is to compare the Economic Value Added (EVA) and Market Value Added (MVA) with Profitability Performance of listed financial companies in Colombo Stock Exchange (CSE). This study used a sample of 20 firms and 02 year observations (2012-2013) from the industry of bank, finance and insurance companies and applied the ordinary least square regression to test the content of EVA and MVA measures. Pearson correlation coefficient and regression methods were used to analysis the data. The results indicated that there are significant association between EVA, and ROE with MVA, but there is not significant association between ROA and MVA.*

**KEYWORDS**: *Economic value added (EVA), Market value added (MVA) and Colombo Stock Exchange (CSE)*

## INTRODUCTION

The term EVA is defined as the difference between the company's net operating profits after taxes and the cost of capital employed in generating those profits in a financial year. If EVA is positive, the company creates shareholder's wealth and if the EVA is negative then the shareholder's wealth is destroyed. The term MVA is defined as the excess of market value of capital (both debt and equity) over the book value of capital. If the MVA is positive, the company has created wealth for its shareholders, (Stewart, 1991). While EVA is an accounting based measure for the corporate performance of one year, MVA is a market generated number. MVA is cumulative measure of the value created by the management in excess of the capital invested.

## RESEARCH PROBLEM

The differences and similarities between the calculations of EVA and MVA should be aware in the today's business context since these lead to enhance the value additions to the firms. This study is providing a guide to calculating the EVA and MVA in the context of Sri Lankan listed companies. According to the past research, the author has identified most of previous studies have been conducted within developed countries are high but studies conducted from a developing country's perspective is rare. In order to fulfill this research gap this research study has been undertaken. Based on the literature review and the research problem identified above, the following research question is formed.

What relationship does exist among MVA, EVA, ROA and ROE of the selected listed companies?

## OBJECTIVES OF THE STUDY

- To find out the relationship among MVA, EVA, ROA and ROE of selected listed companies.
- To investigate the impact of MVA on EVA, ROA and ROE of selected listed companies.

## RESEARCH METHODOLOGY

### Sample:-

For the study, Secondary data has been collected from the annual reports over the period of two years, from 2012 to 2013 from the industry of bank, finance and insurance companies which is listed in CSE based on the simple random sampling technique. The sample size is 40 (20 firms and 02 year observations).

### Variables:-

The collected financial data (2012-2013) are analyzed with the EVA and MVA. Dependent variable is MVA whereas independent variables are EVA, ROE and ROA.

### Hypotheses of the study:-

Based on the research question and objectives of the study and following hypotheses have been formulated:

**$H_1$**: There is a significant association between EVA and MVA.

**$H_2$:** There is a significant association between ROA and MVA.

**$H_3$:** There is a significant association between ROE and MVA.

## DATA PRESENTATION

Calculation of EVA for Peoples' Leasing and Finance PLC is given below.

**Table 1: Calculation of cost of funds**

| Particulars | LKR' Mn | Weights | WACC |
|---|---|---|---|
| **Long term debt** | 3473.2 | 0.16 | 355.29 |
| **Ordinary share capital** | 9521.5 | 0.45 | 1290 |
| **Preference share capital** | 3215.5 | 0.15 | 282 |
| **Statutory reserve funds** | 1016.1 | 0.05 | 50.8 |
| **Retained earnings** | 4001.9 | 0.19 | 420.3 |
| **Total** | 21228.2 | | |
| **Cost of funds** | | | 2291.59 |

*Source: calculations based on the annual report of Peoples' Leasing and Finance PLC(2012-2013).*

**Table 2: Cost of funds**

| Year | Cost of funds (LKR' Mn) |
|---|---|
| **2012** | 2585.56 |
| **2013** | 2291.59 |

*Source: calculations based on the annual report of Peoples' Leasing and Finance PLC (2012-2013).*

*Calculaton of after tax cost of debt*

*Cost of debt (kd) = Interest (1-Tax)/ Debt*

**Table 3: Cost of debt**

| | |
|---|---|
| **Long term debt** | **0.87** |
| **Interest** | 0.07 |
| **Tax** | 28% |
| **1-tax** | 72% |
| **Cost (kd)** | 5.2 |

*Source: calculations based on the annual report of Peoples' Leasing and Finance PLC(2012-2013).*

Calculation of EVA is as follows:

**Table 4: EVA**

| Particulars | LKR' Mn |
|---|---|
| **NOPAT** | 3655.89 |
| **(less) Cost of funds** | (2291.59) |
| **EVA** | 1364.30 |

*Source: calculations based on the annual report of Peoples' Leasing and Finance PLC(2012-2013).*

**Table 5: Calculation of EVA for Peoples' Leasing and Finance PLC**

| | 2013 (LKR' Mn) | 2012 (LKR' Mn) |
|---|---|---|
| **Shareholders' fund** | 1347.86 | 841.72 |
| **Accumulated provisions for impairment changes** | 19195.93 | 18022.69 |
| | **205473.79** | **18864.41** |
| **Profit attributable to** | 3123.75 | 2849.96 |
| **Shareholders** | 1217.75 | 697.64 |
| **+ Impairment provision** | (685.61) | 515.00 |
| **-disposal losses** | 3655.89 | 3132.60 |
| **Economic cost** | 11.63 | 14.31 |
| **Economic cost** | 2291.59 | 2585.56 |
| EVA | 1364.30 | 547.04 |

*Source: calculations based on the annual report of Peoples' Leasing and Finance PLC(2012-2013).*

**Table 6: Calculation of MVA for Peoples' Leasing and Finance PLC**

| | 2013 (LKR' Mn) | 2012 (LKR' Mn) |
|---|---|---|
| **Market capitalization** | 22592.33 | 20436.00 |
| Less: **equity owners** | | |
| **Shareholders fund** | 19195.93 | 18022.69 |
| **Total equity owners' fund** | (19195.93) | (18022.69) |
| MVA | 3396.10 | 2413.31 |

*Source: calculations based on the annual report of Peoples' Leasing and Finance PLC (2012-2013).*

## RESULTS

ROA, ROE, EVA and MVA of the selected companies for the year 2012-2013 are analyzed through the SPSS software. In the inference statistics, correlation and regression test have been used.

**Table 7: One-Way ANOVA**

| Model | Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|
| **Regression** | 2.52E+15 | 2 | 6.012E+10 | 74.537 | 0.0000 |
| **Result** | 2.64E+15 | 38 | 6.034E+11 | | |
| **Total** | 5.25E+15 | 40 | | | |

The results of ANOVA test in table 7 reveal that the significance level test is less than 5%. Therefore, there are linear relationship between EVA, ROA, and ROE with MVA.

**Table 8: Regression analysis and hypotheses testing**

| Independent Variables | Independent Variable | | | | | | |
|---|---|---|---|---|---|---|---|
| | **β** | **t** | **Sig.** | **Hypotheses testing** | **Adjusted $R^2$** | **Sig.** | **$R^2$** |
| **$\beta_0$** | 637131.12 | 2.9827 | 0.0075 | | | | |
| **EVA** | 6.9167 | 11.4656 | 0.0000 | Accept | | | |
| **ROA** | 3050.156 | 0.7221 | 0.4235 | Reject | 0.7273 | 0.0000 | 0.7313 |
| **ROE** | -347.6351 | -4.8627 | 0.0000 | Accept | | | |

According to the regression analysis, results show that there are relationship between EVA, ROA, and ROE with MVA. Independent variables can exhibit 73% changes in MVA, and other variables can reveal 27% of changes in MVA. Findings also illustrate that there are significant association between EVA and ROE with MVA, because the significance of P is less than 5%. And also, there is not significant correlation between ROA and MVA, because the significant of P is more than 5%.

## CONCLUSION

This study investigates the relationship between EVA, ROE, and ROA with MVA in selected listed companies in CSE over the period 2012-2013. The results revel that there are significant relation

between EVA and ROE with MVA, but there is not significant association between ROA and MVA. The findings shown EVA is effective measure in describing the firm's stock market value. The selected listed companies used EVA with other measures to evaluating the company performance. These measures can facilitate the managers in order to consider all the cost of capital (debt and equity) and capital returns for improving the company performance and maximizing the wealth of shareholders. According to the hypotheses testing, $H_1$ is accepted, $H_2$ is rejected and $H_3$ is accepted.

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