

“Impact of Economic Value Added on Market Value Added”: Special Reference to Selected Private Banks in Sri Lanka.

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Abstract

Economic Value Added [EVA] is a performance measures developed by Stern Steward & that attempt to measure the true economic profit produced by a company. A metric is useful for investors who wish to determine how well a company has produced value for its investors. Market Value Added [MVA] as set by the market and expected future economic profits. MVA is a wealth metric. The main objective of this study is to find out the impact of Economic Value Added on Market Value Added in selected private banks in Sri Lanka. To attain this objective, distinctive methodologies which are consistent with the previous research studies have been used. Convenience sampling technique is used to draw the sample from the private banks. Such as Hatton National bank, Commercial bank, Sampath bank, Nations Trust bank, Development Finance Corporation of Ceylon and Seylan bank. Secondary data are collected for the study which consisted annual reports of said banks during the period of 2006-2012 (7 years). Operational hypotheses are formulated which have been tested using correlation and regression analysis. The results revealed that there is a significant relationship between EVA and MVA. In addition Economic Value Added [EVA] has a significant impact on Market Value Added [MVA]. This study is beneficial to the academicians, policymakers, practitioners and researchers to formulate the suitable policy in Sri Lanka as well as other similar countries.

Key words: Economic Value Added, Market Value Added, Private Banks.

Background of the Study

Banks occupy a dominant position in the development of a country. Banks cater to the needs of agriculturists, industrialists, traders and to all other sections of the society. It facilitates to accelerate the economic growth of a country and steer the wheels of the economy towards its goal of self reliance in all fields. Present time banks are facing steep competition, technological changes and innovation. So effective management helps to provide better services and expand their activities. The managers make strategic planning for bank performance. Therefore they need creativity, innovation and intuition. Banking sector is considered to be important source of financing for most businesses. Financial performance will lead to improved functions and activities. Banks their internal as well as external environments are becoming more complex. In this dynamic society the managers must be able to anticipate changes and their impact and take appropriate measures to deal with these changes.

Advancement of the nature of business and management performance has pushed the need of people to build a more effective and structured financial measurement. According to the article of The Chartered Institute of Management Accountants (CIMA), Latest Trends in Corporate Performance Measurement (1992), many companies experienced difficulties in implementing measurement frameworks. The issues from the 1990s are still relevant today related to variables to measure, ways to access data, and so on. Effective performance measurement is believed to be of key importance in ensuring the successful implementation of an organization's strategy. The result of the performance measurement will help the managers to produce effective decision-making processes whether at the operational or strategic level.

Recent years have developed a new approach to performance assessment of banks. That is Economic Value Added (EVA) Market Value Added (MVA). The term EVA (Economic Value Added) initially raised by Stern Stewart Management Service in 1989. Later this concept was popularized by G. Bannet Steward, III, Managing Partner of Stern Stewart & CO. in 1991. Since then, more than 300 companies were adopted these disciplines in the world.

De Kluyver & Pearce (2006) stated that EVA is a value-based financial performance measure that focuses on economic value creation, which comes from its use of cost of capital that is generally, refers to financial wealth

used to start or maintain the business. On the other hand, Market Value Added (MVA) is defined as the difference between the equity market valuation of a listed/quoted company and the sum of the adjusted book value of debt and equity invested in the company. It is equal to the present value of future expected EVA.

The concept of EVA and MVA is a relatively new approach to assessing corporate performance. Unlike conventional corporate performance measures that require comparative analysis with similar companies in the industry, while the EVA and MVA can stand on its own. EVA and MVA method is successfully created company is the most relevant factor in the formation of the company that eventually will affect the financial performance. This study evaluates the impact and relationship between Economic Value Added and Market Value Added (MVA) of banks which are the modern concepts introduced for the purpose of evaluate the performance of banks.

Objectives

The main objective of the study is to find out the impact of Economic Value Added on Market Value Added

Secondary objectives are:

- To reveal the relationship between Economic Value Added and Market Value Added.
- To suggest the banking institutions to enhance the market value added through economic value added context.

Review of Literature

Stern Stewart Co. (1989) investigated that the best 1000 industrial and services companies in the United States of America in “EVA versus traditional accounting measures of performance as drivers of shareholder value”(Stewart, 1989), after he had become disillusioned with the company rankings of the magazine Business Week at the time. These rankings were based on market capitalization and not on performance. Stern Stewart & Co. began to rank companies based on MVA. As they had expected, the new rankings were dramatically different from the Business Week rankings. They did some research on the EVA and MVA of 613 companies in the USA. The companies were ranked in terms of the average EVA for 1987 and 1988. The research found that for companies with a positive EVA, there was a very high level of correlation between the level of EVA and the level of MVA, both for the average values used and the changes in values. The relationship for the changes in values was even better than that for the average values. For the groups of companies with a negative EVA, the correlation between the EVA and MVA levels was not as good.

Stewart (1990) identified that MVA is identical by meaning with the market-to-book ratio. The difference is only that MVA is an absolute measure and market-to-book ratio is a relative measure. If MVA is positive that means that market-to-book ratio is more than one. Negative MVA means market-to-book ratio less than one. If a company's rate of return exceeds its cost of capital, the company will sell on the stock markets with premium compared to the original capital (has positive MVA). On the other hand, companies that have rate of return smaller than their cost of capital sell with discount compared to the original capital invested in company. Whether a company has positive or negative MVA depends on the level of rate of return compared to the cost of capital. All this applies to EVA also. Thus positive EVA means also positive MVA and vice versa. But, MVA is not a performance metric like EVA, rather it is a wealth metric, measuring the level of value a company has accumulated over time.

Stewart (1991) intended that in which the author exposed his views about the usefulness of EVA as the basis of performance measurement of a company and its management at a total or a divisional level. In his empirical research he examined the informational content of EVA canvassing 613 American companies comparing two periods, namely 1984–85 and 1987–88. He found a strong correlation between EVA and MVA, which becomes more apparent when the changes in EVA and MVA are considered giving about 97%. However, for companies with a negative EVA the association becomes less obvious, because of the increased probability of liquidation or acquisition, which sets a lower limit on the market value of these companies.

Stern (1996) argued that the key operating measure of corporate performance is not popular accounting measures such as earnings, earnings growth, dividends, dividend growth, ROE, or even cash flow, but in fact EVA. The changes in the market value of a selected group of companies (specifically their MVAs) have been shown to have a relatively low correlation with the above accounting measures.

Lehn and Makhija (1996) conducted a study to find out how well EVA and MVA relate to share price performance and to see whether chief executive officer (CEO) turnover is related to EVA and MVA. They selected 241 large US companies and computed six performance measures per company for four years (1987,

1988, 1992, 1993), namely three accounting rates of return (ROA, ROE and return on sales [ROS]), share returns (dividends and changes in share price), EVA and MVA. All six measures correlated positively with share returns. EVA correlated slightly better with the share returns than the other measures did. The study revealed that the CEOs of companies with high EVAs and MVAs had much lower rates of dismissal than CEOs responsible for low EVAs and MVAs. As expected, a strong inverse relationship was found between share prices and CEO turnover. The study prove that a greater focus on business activities leads to higher levels of EVA and MVA and concluded that EVA and MVA are effective performance measures that contain information about the quality of strategic decisions and that serve as signals of strategic change.

Kramer and Pushner (1997) studied the strength of the relationship between EVA and MVA, using the Stern Stewart 1000 companies for the period between 1982 and 1992. They found that although MVA and NOPAT were positive on average, the average EVA over the period was negative. This illustrated the significant impact of the cost of capital and the high future growth expectations for EVA. NOPAT explained more of the total variations in market value than EVA did changes in EVA were negatively related to changes in MVA, while the correlation between changes in MVA and changes in NOPAT was positive. These authors suggest that this means that the market is more likely to react favorably to profits than to EVA, at least in the short term.

Kramer and Pushner (1997) tested the hypothesis that EVA is highly correlated with MVA. The study concluded that no clear evidence to support the contention that EVA is the best internal measure of corporate success in adding value to shareholder investments. On the contrary, the market seems more focused on 'Profit' than EVA. The study found that there is no clear advantage to shareholders in looking at EVA, as the accounting return on their investment is NOPAT.

Isa and Lo (2001) identified positive EVA as wealth creators and negative EVA as wealth destroyers. This study conducted on these two EVA samples, in identifying whether these samples behave differently in terms of the explanatory power of EVA on MVA. The correlation between the positive EVA and the negative EVA against MVA were studied. It concluded that, there is a strong positive relationship between EVA and market values for value creators, while the negative relationship for value destroyers is inconsistent with expectations. They found that positive EVA is higher correlated with MVA.

Brigham and Ehrhardt (2002) stated that MVA is deemed to have the highest relationship with EVA rather than other financial measures. There are two observations of EVA and MVA. First, there is a direct relationship between MVA and EVA. If a company has a history of negative EVAs, then its MVA will probably be negative, and vice versa if it has a history of positive EVAs. Second, when EVAs or MVAs are used to evaluate managerial performance as part of an incentive compensation program, EVA is the measure that is typically used.

Fernandez (2003) revealed a different approach by examining the correlation coefficients between EVA and MVA for a sample of 582 American companies for the period 1983–97, it was shown that for 296 firms of the sample the changes in the NOPAT had higher correlation with the changes in MVA than the corresponding changes in EVA, while for 210 sample firms the correlation between changes in EVA and MVA was negative.

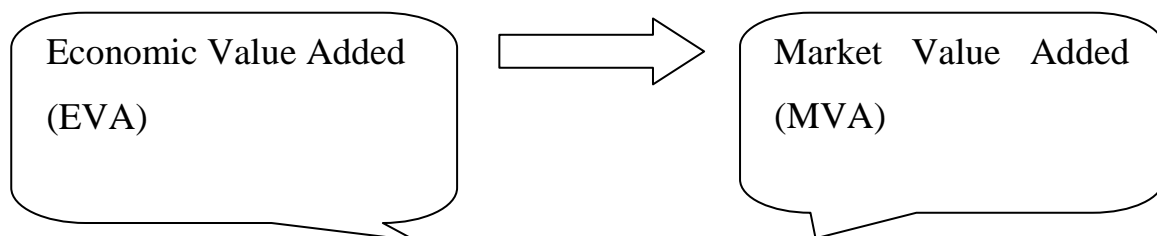
Singh et al (2004) examined an appropriate way of evaluating bank's performance and also found out which Indian banks have been able to create (or destroy) shareholders' wealth since 1998- 1999 to 2002-2003. This study is based on 28 Indian private and public sector banks that are listed on the Bombay Stock Exchange (BSE). The study suggested that the relationship between EVA and MVA is statistically significant. The study showed impressive performance in terms of EVA by banks such as State Bank of Bikaner and Jaipur, Jammu and Kashmir Bank, Global Trust Bank and Indusind Bank.

Pratiwi Putri, and Ruben Garcia (2008) examined the relationship between Economic Value Added (EVA) and Market Value Added (MVA) with the reported earnings. Thus, the purpose is to gain better understanding in the use of EVA and MVA in relation to the reported earnings in certain purposes from different regression models. With the sample of 40 Indonesian listed companies in Indonesia Stock Exchange from year 2004 to 2007, the hypothesis testing is used to find the relationships among variables. The author use formula for calculating EVA and MVA to be use in four models of regression analysis against reported earnings. This study found evidence in the relationships between EVA and MVA with reported earnings, and the highest correlation among the models is relationship within the same year period, which can be used for evaluation purposes. Only the relationship of the EVA in the previous year and reported earnings changes is proved not significant. Still, MVA is more significant in explaining its relationship with reported earnings rather than EVA.

Saputra Agung T (2010) argued that how far the influence of Economic Value Added (EVA) and Market Value Added (MVA) on the Stock Return. Research is using Regression method, which is to know about using more than one variable in influencing other variables. The sample used is a manufacturing company which is registered as issuers in Indonesia Stock Exchange from the year 2008-2009 as many as 15 samples. Data analysis is done by using Multiple Linear Regression, is used to describe the degree of correlation between independent variables with the dependent variable is expressed with varying degrees of relationship, coefficient of determination, used to measure how big the independent variables can explain the dependent variable, hypothesis testing by t-test, is used to determine whether or not a significant independent variable on the dependent variable individually for each variable and the f-count is used to find out together. T-test results showed that EVA and MVA have no significant relationship to the Return of Shares and based on the F test rejected H_0 to be accepted and that means there is no significant effect simultaneously or together. On this basis, for investors who will invest their shares in manufacturing companies should consider other variables outside of EVA and MVA as a consideration to predict earnings in an investment.

Variety of authors said that there is a significant relationship between Economic Value Added and Market Value Added and also there is an impact of EVA on MVA. Based on the empirical studies, following conceptual model is formulated by the researcher.

Figure 1: Conceptualization



Hypotheses

Following hypotheses are formulated to find out the significant impact of economic value added on market value added and relationship between them.

H₁: There is a significant impact of Economic Value Added on Market Value Added.

H₂: There is a significant relationship between Economic Value Added & Market Value Added.

Methodology

Data Collection

Secondary data which are collected from the annual reports of banks have been utilized in this study. Further, textbooks, journals and internet search engines were utilized for this study.

Sample

Convenience sampling technique is used to draw the sample from private banks. Such as Hatton National bank, Commercial bank, Sampath bank, Nations Trust Bank, Development Finance Corporation of Ceylon and Seylan bank, which are situated in Sri Lanka. Seven financial year (2006-2012) data is collected of each bank for this study.

Data analysis method

Various statistical methods have been employed to compare the data. Inferential statistics involves in drawing conclusions about a population based only on sample data. It includes Correlation analysis and regression analysis. Correlation analysis is used to find out the significant relationship between Economic Value added and Market Value Added. Regression analysis is used to find out the significant impact of Economic Value added on Market Value Added (SPSS- 16 version has been utilized in this study).

Operationalisation

Table No 01: Operationalisation

Concept	Variables	Indicators	Measurements
Economic Value Added	EVA	NOPAT	Ratios
		WACC	
		Invested Capital	
Market Value Added	MVA	Common Stock	Ratios
		Long-term debt	
		Short-term debt	

Where:

NOPAT: Net Operating Profit After Tax

WACC: Weighted Average Cost of Capital

EVA: Economic Value Added

MVA: Market Value Added

Results

Correlation Analysis

The purpose of correlation analysis is to find out the significant relationship between Economic Value added and Market Value Added. Table No 02 presents the results of the correlation analysis.

Table No 02: Correlation Analysis

	EVA	MVA
EVA - Pearson	1	0.870*
Sig(2 tailed)		0.024
MVA - Pearson	0.870*	1
Sig(2 tailed)	0.024	

*Correlation is significant at the 0.05 level (2 - tailed)

Table 02 shows the correlation value of 0.870* which is significant at 0.05 levels ($0.05 > 0.024$), and it can be clearly pointed out that, there is a significant positive relationship between Economic Value Added and Market Value Added.

Regression Analysis

The purpose of regression analysis is to find out the significant impact of Economic Value Added on Market Value Added. Table No 03 presents the results of the Regression analysis in which, Economic Value Added is considered as independent variable. And Market Value Added is considered as dependent variable.

Table No 03: Regression analysis

Variables	MVA
Unstandardized Coefficients- B Constant	27284.38
EVA	123.98
R Square	0.756
Significant in Constant	0.696
Significant in EVA	0.024

Table no 3 illustrates that the Economic Value Added [EVA] has higher impact on Market Value Added [MVA] by 75.6%. The remaining 24.4% is influenced by other factors.

Hypotheses Testing

Where researcher observed that, whether there is a relationship between variables or not, Based on P value. At the same time, whether there is an impact or not, based on significant value. Where, Correlation value is 0.870* ($P < 0.05$). So, there is a significant relationship between economic value added and market value added. Hence, H_1 is accepted.

There is a 75% impact of Economic Value Added on market value added with 0.05 significant levels. So, H_2 is also accepted.

Conclusion

Based on the overall study findings, there is a positive relationship between Economic Value Added and Market Value Added ($r=0.870^*$). Hence, we can conclude that there is a significant relationship between EVA and MVA ($P>0.024$). Private Banks have high financial indicators. Such Financial indicators are EVA and MVA. Based on the regression analysis, Researcher found that, MVA is influenced significantly by EVA.

Some research findings revealed that the EVA has the positive relationship with MVA. It means, that, the EVA is positively correlated with MVA (Stern Stewart, 1989; Kramer & Pushner, 1997; Isa & Lo, 2001; and Brigham & Ehrhardt, 2002).

Recommendations

The following suggestions are put forwarded to increase the financial performance and value of banks. Banks invest the money any useful ways and different locations in order to get maximum return on investment and reduce risk. So return is higher than cost of capital. Increased EVA and MVA lead to higher financial performance.

Analysis shows that, management of the bank must use the fund for loan maximum, but recovery of the loan should carefully dealt by them, which is major problem in Sri Lanka' banks. Representatives can be appointed from different places for visiting and collecting loans from customers. Providing commission or bonus based on the amount of recovery may be motivated them in quick recovery which will benefits to the banks. Now a day, some banks face the liquidity problems. So banks must have buffer cash to resolve the immediate liquidity problems. Bankers now will have to constantly seek to invest in technology and able to be open to strategic alliance, merger, acquisition and restructuring exercises for adding EVA to shareholders wealth all the time.

Finally, the study provides bank managers with understanding of activities that would enhance their bank's financial performances. The results of this study imply that it might be necessary for a bank management to take all the required decisions to enhance the financial positions of the bank.

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