The Impact of Financial Measures on Stock Returns in Malaysian Companies

Ridzwan Bakar1*, Abadan Jasmon1, Taher Amouz2

1Faculty of Management, Multimedia University, Cyberjaya, 63100, Malaysia
2Graduate School of Management, Multimedia University, Cyberjaya, 63100, Malaysia

Abstract The idea of the superiority of EVA was found and advocated by Stern Stewart (1991)[4] and after that many researchers have investigated this field to find out whether this theory is supported in their selected scope and sample. The main purpose of this study is to investigate the superiority of Economic Value Added (EVA) in terms of information content in predicting stock return over other financial measures like earnings. The evidence collected from Malaysian listed companies in order to find out if this hypothesis is supported in Malaysia as a sample of a developing country. The aim is to find out whether Economic Value Added (EVA), Net Income (NI) or Cash Flow from Operating activities (CFO) has the most significant relationship with stock return and which one is superior in terms of explaining the variation in stock return. The result indicates that EVA is not superior to earnings (NI) or cash flow in terms of explaining stock return variation. The result shows NI outperforms EVA and CFO in terms of explaining stock return variation and EVA has a significant relationship with stock return but in an opposite position.

Keywords Economic Value Added (EVA), Net Income (NI), Cash Flow from Operating Activities (CFO), Financial Measures

1. Introduction

Previous researches signify that unfortunately researchers were not able to find a specified accounting measure that defines the variation of stock return or shareholder wealth. In assessing firm’s performance, each financial measure used must be correlated with stock return. Traditional performance measures like Net Operating Income After Tax (NOPAT), Earning Per Share (EPS), Return On Investment (ROI) and Return On Equity (ROE) were not very useful in measuring corporate performance because they are not able to fully incorporate cost of capital. For centuries, researchers have claimed that to create wealth, firms must earn beyond their cost of capital[2]. Finally in the twentieth century, economists have operationalized this concept under the name of residual income (RI). Solomons[3] claimed that RI is an internal as well as an external measure (for financial reporting) of company performance. Then, RI has been redefined as a new measure in the scope of both internal and external efficiency measurement with the name, Economic Value Added (EVA). In EVA calculation, the cost of capital must be considered which means an advisable expense must be deducted in terms of weighted cost capital from the operating profit of an enterprise, so EVA can be interpreted as genuine meaning for economic profit of a company or the amount which exceeds/falls short from minimum rate which is required as return for shareholders by investing their money in other investments with the same risk.

The key objectives of this study is to investigate the relationship between EVA, Net Income (NI) and Cash Flow from Operating activities (CFO) with stock return and to find out if EVA is a superior measure for company performance in terms of outperforming other two measures in Malaysian listed companies as a sample of developing countries.

Research Questions:
1. What is the relationship between Economic Value Added (EVA) and stock return in Malaysian listed companies?
2. What is the relationship between NI and stock return in Malaysian listed companies?
3. What is the relationship between CFO and stock return in Malaysian listed companies?
4. Which of three aforementioned performance measures (EVA, NI and CFO) would outperform the other two in terms of explaining stock return variation?

2. Literature Review

A new contrive was regulated in 1990 in United States to measure efficiency; this concept is called EVA, which is, indeed a referral to the formulation that had been forwarded by Alfred Marshall[2] in the early nineteenth
century. EVA is pioneered and advocated by Stern Stewart (and company)[4] which is a US based business consultant. Previously earnings or cash were used to gauge performance but Stern Stewart (and company)[4] discussed the concept of EVA as a performance measure which could be an alternative for operating cash flow or earnings as gauges for both external and/or internal efficiency of a company.

Further supports for EVA theory have also been originated from other literatures. Fortune (a very famous magazine)[5] has called EVA “one of the most controversial financial notion of recent days” and also “for generating wealth in corporations. EVA would be a genuine clue” (30 September 1993)[5] and it added “A novel method to detect hot deals” (9 December 1996)[5] and as cited in Chew and Stern Stewart[6], it had started to print EVA rankings since 1993. The demand toward a gauge of total efficiency factor in the information age has become a reason for the growing popularity of EVA among other things.

As a matter of fact, experiential propagations in recent years expressed that, researchers came to the conclusion that no specific accounting based gauge exist that could be relied on in order to explain changes in stock return or shareholders wealth (Riahi-Belkaoui, 1993, Lehn and Makhija, 1997[7], Chen and Dodd, 1997[1], Rogerson, 1997). Due to the fact that different groups may be concerned about various perspectives of corporation efficiency, such measures become invaluable. Stern Stewart[4] stated that, this new notion, EVA, is a fiscal efficiency evaluation which has the closest meaning to the correct measurement of true economic profit of a company rather than other performance measures. Literature also advocate that this performance measure, EVA, is most directly linked to shareholder wealth creation or the stock return over time. EVA is the best way to clarify changes in shareholder wealth.

Findings of the value-relevance studies totally indicate that accounting-based information potentially has some influences on the stock prices. Although the more recent studies indicate that earning is not very reliable because of its precautionary nature but many other empirical literature, claim that earnings commonly dominates almost all other performance and effectiveness measuring tools in explaining the company’s stock returns.

In contrast with Stem Stewart hypothesis of EVA superiority, Biddle et al.[8] concluded that neither EVA nor RI dominates accrual earnings in its contribution with stock market returns. Similarly, Chen and Dodd[1] demonstrated that a single EVA method like standardised EVA, average EVA per share, return on capital, capital growth and return on capital minus the cost of capital could be considered as only less than 26 percent in explaining the changes in stock returns.

3. Research Methodology

In order to test the hypotheses, researcher chooses the sample from the Market Capitalization point of view (80% of total market capitalization). Total market capitalization of the Malaysian market was around RM 1207 billion; then 80% of total is calculated which is equivalent to RM 966 billion. Then, some companies have been removed from the data list because of missing data and the remaining sample market capitalization became around RM 869 billion which is equivalent to 72% of the total. This amount pertained to 510 companies-years; here, it consisted of 85 companies over a period of 6 years from 2006-2011.

The secondary data have been collected from annual report of companies which is extracted from Bursa Malaysia website, Data Stream database and Yahoo Finance website. Since in this study data consist of both cross sectional and time series data set, Panel Data regression run in STATA software. The core model in this study is:

\[ Y_{it} = \beta_0 + \beta_1 X_{1it} + \ldots + \beta_k X_{kit} + \gamma_2 E_{2it} + \ldots + \gamma_n E_{nit} + u_{it} \]  

Where:
\[ Y_{it} : \text{The dependent variable (DV) where } i = \text{entity and } t = \text{time.} \]
\[ X_k : \text{Represents independent variables} \]
\[ \beta_k : \text{The coefficient for the independent variables} \]
\[ u_{it} : \text{The error} \]
\[ E_{nit} : \text{The dummy variable.} \]
\[ \gamma_n : \text{Is the coefficient for dummy variable.} \]

(Panel Data Analysis manual (using stata 10.x) version 4.1 Oscar Torres-Reyna Princeton University.)

4. Model Development

Stock Return (RI) = Cons + \beta_1 (EVA) + \beta_2 (NI) + \beta_3 (CFO) + \alpha

Where:
\[ \beta_1 : \text{The coefficient for EVA} \]
\[ \beta_2 : \text{The coefficient for NI} \]
\[ \beta_3 : \text{The coefficient for CFO} \]
\[ \alpha : \text{The error for equation} \]

5. Findings

After running different panel data regression tests, LM test, Random Effect test and Fixed Effect test results indicates that Fixed Effect test would give the best model for defining the relationship between independent variables and dependent variable.

5.1. Result Indication

1. EVA has a negative significant relationship with stock return and it affects stock return in an opposite direction which means when EVA increases, the stock return will decrease.
2. NI has a positive significant correlation with stock return, which means when NI increases, stock return will increase as well. It indicates that in Malaysia, Net Income is related to stock return and it can be used for explaining stock return variation.
3. Cash Flow from Operating activities (CFO) has no
significant relationship with stock return or stock return is not affected by CFO.

4. Earnings (NI) outperform EVA in predicting stock return and in terms of association between EVA and stock return, earnings have a more significant relationship with stock return also EVA outperform CFO.

6. Summary and Conclusions

The final conclusion is that EVA and NI are significantly related to stock return but CFO is not correlated with stock return. The last conclusion is that NI outperforms EVA and CFO in explaining stock return variation and in Malaysia, EVA is not a superior financial measure in predicting stock return. Although the result did not support the Stern Stewart theory of EVA superiority but it was consistent with some other important studies like Biddle et al.[8].

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REFERENCES


