Comparing Traditional and Economic Performance Measures for Creating Shareholder’s Value: a Perspective from Malaysia

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Abstract
This study investigates the importance of economic value added for the shareholders wealth maximization. Economic value added (EVA) is a value based performance measurement tool that inclines the agency conflict issues between managers and shareholders. Using a sample of 28 construction public listed companies in main board of Bursa Malaysia and using panel data with fixed effects during the period of 2003 to 2012, the findings of the study revealed that there is a positive and significant relationship between EVA and shareholder’s wealth maximization. The more the managers produce EVA, the more shareholders’ wealth maximization will be created. The finding shows significant support for EVA, but EVA was not reported by the companies and is not been used by investors for their investment decisions. Thus it is recommended for the managers to focus more attention to the criteria of EVA in evaluating shareholder’s value.

Key words
Economic Value Added, traditional measures, Shareholder’s wealth, construction companies, Malaysia

1. Introduction
It has been argued by shareholders often that directors never maximize the wealth of shareholders. The main goal of managers is to attempt to maximize shareholder’s wealth. But sometimes the manager’s decisions favour the interest of non shareholders or stakeholders at the expense of shareholders (Mocsary, 2013). Thus it had become crucial for the shareholders to measure their value and take an effective investment decisions based on the financial performance of the firm and identify whether the firm cover the cost of capital. Furthermore, Irala et al. (2006) mentioned that managers are encouraged to undergo projects that could increase shareholder’s wealth using measurement tools like economic value added (EVA).

There are traditional measures like earnings per share (EPS), dividend per share (DPS), return on equity (ROE), return on assets (ROA), and the like have been used by the shareholders to measure performance appraisals. Such traditional measures have been criticized due to not inclusion of cost of capital resources of the firm (Hasani and Fathi, 2012). Thus in order to overcome such issues economic value based measures like economic value added (EVA), Market Value Added (MVA), Cash Value Added (CVA) and Shareholder Value Added (SVA) were proposed (Al Mamun, Entebang, & Mansor, 2012; Erasmus, 2008).
1.1. Economic value added (EVA)

Economic Value Added was reintroduced by Stern Stewart Company in 1980’s after being introduced first by General Motors in 1920 and then forgotten. EVA is a measurement tool used to replace the traditional value measures. The primary aim of management is to increase value of shareholders. According to (Stewart, 1991) “The main goal of the firm is to increase its EVA. Taking it as an investigation and forgetting the traditional measures as fault and invaluable measures must only matter with EVA”.

Basic formula for EVA first proposed by Stern and Stewart Corporation is:

\[ EVA = NOPAT - (\text{Cost of capital} \times \text{Capital employed}) \]  

(1)

Where:

\[ NOPAT = \text{Net Operating Profits after Taxes}; \]
\[ \text{Capital employed} = \text{Capital invested by debt holders and equity holders}; \]
\[ \text{Cost of Capital} = \text{Weighted average of the cost of debt and cost of equity after taxes}. \]

EVA is closely related to Net Present Value. If the increase in EVA on a year to year basis is achieved at the expense of the EVA of future projects to gain from the EVA in the current year may be more than offset by the present value of the loss of EVA from the future periods. However there are unique relationship between EVA and firm value. According to Ray (2010) where there is increase in EVA is achieved by an increase in the cost of capital, the firm value may decrease even though EVA increases. According to De Hart and De Wet (2008), “EVA in terms of financial performance is considered as ‘true bottom line’ taking into account full cost of capital for determining residual income that is also known as economic profit”.

Economic value added is a residual income that attempts to increase firm’s revenue, minimizes operating expenses that are required to generate revenue, enhance production of same goods and services utilizing less capital, identify opportunities to capital additionally that earn more than the charged capital, and finally reduces the cost of capital (Pratiwi, 2008). Accounting measures have been transferred to economic measures through the transfer pricing methodologies. The comparison of accounting profit and economic profit shown by King (2009) is the cornerstone of the current transfer pricing regime. Economic rate of return is product market equalized under competitive conditions. According to Stewart (1991) economic value added is the financial measurement tool that is able to calculate and capture economic profit for the company.

1.2. Aims and Objectives

The aim of the study is to provide financial strategy matrix based on generating EVA and manage sales growth of the construction companies listed in the Bursa Malaysia Index Malaysia. The following are the objectives of the study to provide investors a strategic approach:

- To understand the weakness of the existing traditional performance measures;
- To study the relationship between EVA, and its reflection on shareholder’s wealth;
- To provide an understanding to the investors in relation to the financial measurement tools and stock returns used in their investment decisions.

1.3. Disadvantages of Traditional Measures

The traditional measures like EPS, ROA, ROE, ROCE, RONW and others like are simple to calculate and determine the performance of managers, but have some of the flaws that are as follows:

- As income and investment are not defined to ensure their consistency there is possibility of income manipulation.
- Income manipulation is possible if different managers of different unit make different choice of accounting.
Managers may be motivated to keep old assets and do not replace them in order to improve performance. But this move in future may decrease the performance.

Cash flow and time value of measure is not considered by income based on accrual accounting. These measures focus on the performance of managers of units but do not measure performance in relation to the objective of the company.

Not all the cost of capital is considered by these measures and only cost of debts are considered. Thus to overcome these weaknesses there is a need to develop Economic Value Added measure that is a simple notion of residual income and provide the investors to earn an adequate rate of returns that is enough to compensate the risk taken by them. There has been very little empirical research on EVA and its importance in the developing countries like Malaysia. Thus the review of the Malaysian Construction industries is recognized as a new aspect. This study of EVA analysis is reviewed totally as a new theme in this sector thus collecting information and review the literature towards this topic is pertained providing an immense scope as the relevance, utility of EVA for making economic decisions, users, investors and shareholders has not yet demonstrated this concept.

2. Literature on traditional value measures

Traditional measures are based on earnings. Traditional measures are being used by managers for years to calculate financial performance. Some of these traditional measures used in performance measurement considered for the study are: Return on Investment (ROI), Return on Equity (ROE), Earnings per Share (EPS), Return on Net Worth (RONW), and Return on capital Employed (ROCE).

2.1. Earnings per Share (EPS)

EPS is still considered as a very powerful performance measurement tool amongst investment analysts. But there are several weakness and other characteristics of EPS that makes it inappropriate and unreliable measure of performance. Firms that do not pay all of its earnings as dividends and kept some part aside are expected to have high EPS from one year to the next. The problem for the reinvested portion of earnings is able to maintain its capital structure without borrowings and leads to increase in assets with higher earnings and higher EPS. The portion of a company’s profit allocated to each outstanding shares of common stock. Earnings per share as an indicator of a company’s profitability are calculated as:

$$\text{EPS} = \frac{\text{Net Income} - \text{Dividends on Preferred Stock}}{\text{Average Outstanding Shares}}$$  \hspace{1cm} (2)

For the calculation of Net income there is a need of total sales, cost of goods, financing costs, and income tax. Total revenue is taken adjusting the cost of goods sold, depreciation, interest, income taxes and other expenses. This financial information is found in company’s income statement and is an important measure of profitability in over a specific time period. When calculating EPS, it is more accurate to use a weighted average number of shares outstanding over the reporting term, because the number of shares outstanding can change over time. According to Chatfield, Dalbor, and Willie (2005) shareholder value for the company is strongly influenced by analysis estimates of the company’s future earnings per share (EPS).

2.2. Return on Equity (ROE)

ROE is considered as one of the best performance measurement tool by the investors. ROE is calculated by taking net income after tax of a given year and divided it by the book value of equity at the beginning of the year. Equity is consisted of the issued ordinary share capital plus the share premium and reserves. Formula for calculating ROE are as follows:

$$\text{ROE} = \frac{\text{Earnings}}{\text{Sales}} \times \frac{\text{Sales}}{\text{Assets}} \times \frac{\text{Assets}}{\text{Equity}}$$  \hspace{1cm} (3)
One of the main problems associated with ROE is that the flaws inherent in earnings also affect OE. ROE is very sensitive to change in financial gearing.

2.3. Return on Assets (ROA)

The next traditional accounting measure considered for the study in order to understand shareholder’s value creation was ROA. ROA is an indicator that shows the profitability of the company in relation to its total assets. ROA using the DuPont analysis is a financial element that shows the capital intensity of the company. For calculation of Return on Assets, financial information on net income and total assets of the companies are necessary. ROA is calculated as:

\[
ROA = \frac{Net \ income}{Total \ assets} \quad (4)
\]

2.4. Return on net worth (RONW)

RONW is the net income divided by owner’s equity. RONW is used to measure performance in the perspective of shareholders. RONW is calculated as:

\[
RONW = \frac{Net \ income}{Owner’s \ equity} \quad (5)
\]

Owner’s equity

According to Malik (2004) RONW was found to be positively related to shareholders value. Thus it is important to investigate the relationship between RONW and CSV in this study.

2.5. Return on Capital Employed (ROCE)

Capital employed is defined as gross capital employed or net capital employed. The primary of the investment decision in any business is to earn satisfactory return on capital invested. Thus the return on capital employed is used to measure of success of a business in realizing the final objective of the shareholders to get respective return. Return on capital employed provides the relationship between the net income and the net asset invested. It provides the percentage of return on net asset invested in the business and is also used to know the overall profitability and efficiency of the business.

Capital employed refers to total capital, capital reserves, revenue reserves, debentures and long term loans. Capital employed is calculated from the asset side by adding the following:

- The fixed assets should be included at their net values at original cost or at replacement cost after deducting depreciation. During the inflation period fixed asset must be transferred to replacement cost i.e. the current market value of the asset.
- Investments inside the business
- All current assets such as cash in hand, cash at bank, sundry debtors, bills receivables, stock etc.
Current liabilities are deducted from the total of the assets to find out net capital employed. Currently it is very important to considered assets at their replacement cost, regarding the valuation of fixed costs. This is with the view to providing for the continuing problems of inflations during the current years. Under the replacement cost methods the fixed assets are revalue on the basis of their current market prices either by reference to reliable published index numbers, or on valuation of experts. Return on capital employed (ROCE) or the profitability of the company has to exceed its cost of capital. A firm’s profitability can be improved by three basic value drivers: higher revenues, lower costs and lower capital employed. In order to increase profitability management has to identify those initiatives that provide a considerable leverage on profitability.

2.6. Shareholder’s value creation

CSV is a measure that was first developed by (Rappaport, 1986). Recent management trend have focused on the importance of shareholder wealth creation as the goal of any business enterprise. The ability of the business to create shareholder wealth is increasingly seen as the key indicator of management and business performance. Total return to shareholders is one of the shareholder value measures and most direct measures of the return received by shareholders (Powers, 2010).

Shareholder value analysis provides a framework for linking management decision and strategies to value creation. Shareholder value analysis insists the managers to take decision that can create value for the shareholders. The management is required to pay attention to such value for shareholders while taking investment and financing decisions. Shareholder value analysis helps the management to concentrate on activities which create value to the shareholders rather than short term profitability. Managers should identify value drivers which lead to increase shareholder’s value.

Shareholder’s investment in the business is totally excluded in traditional financial measures and is ignored inappropriately to handle many business decisions that are tradeoffs between profit margin and capital utilization.

\[ \text{Created Shareholder’s value} = \text{Equity Market Value} \times (\text{Shareholder return} - \text{Ke}) \]  \hspace{1cm} (6)

Where,

\[ \text{Ke} = (\text{Risk free rate} + \text{Risk Premium}) \times \text{beta} \]  \hspace{1cm} (7)

\[ \text{Shareholder’s return} = \frac{\text{Shareholder value added}}{\text{Equity market value}} \]  \hspace{1cm} (8)
According to Agrawal (2012), “Shareholder value added is the term used for the difference between the wealth held by the shareholders at the end of a given year and the wealth they held the previous year”. The increase of equity market value is not the shareholder value added. Shareholder value added is defined as the difference between the values of shares held by shareholders at the end of a financial year to the wealth held in previous year. For the calculation of Shareholder value added, changes in market price of shares during the financial year and the dividend or return paid to the shareholders is required.

2.7. Previous Studies and Background Information

Numerous studies have been investigated towards importance of EVA as a value based measure for shareholders and mitigating the conflicts between managers and shareholders (Jensen, 1986). D. Young (1997) provided three importance of EVA: (1) It is not bound to GAAP principles and adjustment can be made as per the economic value numbers for shareholders, (2) Firms have been pushed to adopt EVA concept not only in higher level but also with lower level including managers and employees working for the shareholder’s value creation and (3) EVA provides the measurement system that helps shareholders to understand performance appraisals and compensation for managerial performance.

Jodlbauer (2012) mentioned that shareholder value are rooted in the idea that the return on the capital required for doing business has to be higher than the interest rate the business has to pay for the capital lenders and shareholders. Li and Tang (2011), empirically investigated 14 telecom operators investigating factors influencing telecom operators economic value added and found that growth speeds are not significant in improving telecom operator’s EVA. Sharma and Kumar (2010), reviewed literature of 112 previous researches published on EVA following a descriptive method found that there is a need to focus on implementation issues, adjustments in accounting. From the evidence of developed economies, EVA is a strategy, or discounting techniques like NPV, IRR and managerial performance that are the aspects of EVA.

According to Tong et al. (2010), EVA was found to be significant and positively related to corporate value as compared to Balanced Scorecard (BSC). Furthermore, Wang and Fan (2010) utilized EVA concept that focuses on value creation attending comprehensive measurement of service oriented enterprises and found that the firm have negative EVA but positive net income.

Taufil et al. (2008) compared value based measures with traditional or conventional performance measurement accounting tools and found that EVA is superior to ROE & ROA in Banks Stock Returns. Pandey (2005) mentioned that economic profitability is the concept of EVA for measuring shareholder’s value. The finding revealed that there is a strong association between economic profitability and shareholder value. According to previous researchers Stewart (1991), Stern (1993), Uyemura et al. (1996), Young and O’byrne (2001) confirmed that EVA is superior that other financial measurement performance indicators for explaining shareholder’s wealth. The following are the research hypothesis considered for the study:

- **H1**: EVA is positively influenced on created shareholder’s value;
- **H2**: EPS is positively influenced on created shareholder’s value;
- **H3**: ROE is positively influenced on created shareholder’s value;
- **H4**: ROA is positively influenced on created shareholder’s value;
- **H5**: RONW is positively influenced on created shareholder’s value;
- **H5**: ROCE is positively influenced on created shareholder’s value.

3. Methodology of research

All the financial information based on the variables necessary for the study has been sourced from Kuala Lumpur stock exchange and Thomson Reuter data based. The risk free rate information has been extracted from the annual reports of Bank Negara Malaysia. Panel data analysis with fixed effects was utilized as research design as this type of data are most useful when we suspect that the outcome variable depends on explanatory variables which are not observable but correlated with the observed explanatory variables (Schmidheiny and Basel, 2011). According to Baltagi (2008) panel data unlike cross sectional data helps controlling for unobserved heterogeneity through individual effect. This helps in controlling the
effect of economic and traditional measure variables on shareholder’s value. Thus we use two way effects model as follows:

$$(SVA/EMV) = \beta_0 + \beta_1 (NOPAT - CoC) + \beta_2 (EPS) + \beta_3 (ROE) + \beta_4 (ROA) + \beta_5 (ROCE) + \beta_6 (RONW) + e_t$$  \hspace{1cm} (9)$$

Here, SVA is shareholder value added, EMV is equity market value, NOPAT is net operating profit after taxes, CoC is cost of capital, EPS is earnings per share, ROE is return of equity, ROA is return on assets, ROCE is return on capital employed and RONW is return on net worth. Given than at constant growth rate $g$, $(NOPAT - CoC)$ increases shareholder’s value with high shareholder value added and equity market value ratio. Hence the sign $\beta_1$ is expected to be positive.

The study is based on secondary data and there are two kinds of data and information collected which are as follows:

1. Historical information of construction companies;
2. Financial reports of construction companies.

Historical information for the companies is particularly having been collected from the research statistics department of security commission Malaysia. Annual report for the companies have been collected from company’s website, furthermore, data have also been collected from some libraries of different universities and colleges, but information collected from Bank Negara Malaysia (BNM) and Construction Industry Development Board (CIDB) was very useful.

The current study is based on the secondary data covering a period of 10 years ranging from 2003 to 2012. The purpose of considering long time period for the investigation of the study is to decrease instability and cycles of business that might affect the results of the study. Since construction companies in Malaysia are considered as one of the major economic sectors, the author had an interest in the construction industry to recognize as a basic. The sample covers construction companies that are listed in main board of Bursa Malaysia stock exchange. The firms in the population were selected based on the following criteria:

- Construction companies that have been listed on Kuala Lumpur stock exchange in or before 2003;
- They must be existed in main board of Bursa Malaysia till the financial year 2012;
- They must have positive values for average operating income during the study period.

The firms must have ability towards profitable relatively, furthermore, multinational companies, assembling companies that are not based on infrastructure, companies comes under sick industrial companies were excluded in order to maintain comparability and consistency. On the other hand, the construction industry is one of the core industries in the Malaysian economy and this industry is recognized as a basic mother industry. Therefore, any achievement in this area is extendable in other industries. The study covers selected construction companies listed in main board of Bursa Malaysia. There are more than 100 companies that are involved in construction activities in Malaysia. Forty three of these companies have been listed and active in main board of Bursa Malaysia stock exchange. From the total 43 companies only 28 companies were taken into consideration for further analysis and 15 companies were excluded due to non availability of financial database from the year 2003 to 2012.

4. Findings and Discussions

Table 1 shows the descriptive statistics of the independent and dependent variables. These variables reflect with the dependent variable created shareholder’s value (CSV). The variables also refer to the level of acceptability and understanding of CSV and adopted by shareholders as measurement tool. Overall the mean of the variables was found to be negative for EVA and CSV which was in line with prior research examined in terms of shareholder’s value creation and measurement tools.

The hypothesis aims to test the selected measurement tools influencing and significantly relation to created shareholder’s value for the selected construction companies listed in Bursa Malaysia for the year 2003 to 2012. The more influence the measurement tools have on CSV, the more likely the tool will be adopted by the shareholders. The result of the multiple regression analysis between the independent variables: EVA, EPS, ROE, ROA, RONW and ROCE measuring the CSV are presented in table 3, 4 and 5 respectively. Table 3 represents the regression model results that examine the value based and
traditional measurement tools in terms of independent variables. The model is significant with adjusted $R^2$ of 0.885. This means that the six independent variables utilized in this study influences 88.5 percent towards the shareholders value creation for the selected construction companies of Malaysia. Table 4 shows the ANOVA analysis identifying that the independent variables are significantly related to the created shareholders value, the F value of 26.925 with $p < 0.000$.

**Table 1. Descriptive Statistics for independent and dependent variables**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Independent Variables</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EVA</td>
<td>-52487.5</td>
<td>3484.70</td>
<td>-7811</td>
</tr>
<tr>
<td>EPS</td>
<td>-24.12</td>
<td>23.54</td>
<td>7.579</td>
</tr>
<tr>
<td>ROE</td>
<td>- .17</td>
<td>.63</td>
<td>.0521</td>
</tr>
<tr>
<td>ROA</td>
<td>-6.60</td>
<td>20.71</td>
<td>3.783</td>
</tr>
<tr>
<td>RONW</td>
<td>-10.70</td>
<td>55.70</td>
<td>17.40</td>
</tr>
<tr>
<td>ROCE</td>
<td>-25.20</td>
<td>43.20</td>
<td>12.971</td>
</tr>
<tr>
<td><strong>Dependent variable</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CSV</td>
<td>-34.81</td>
<td>27.72</td>
<td>-4.750</td>
</tr>
</tbody>
</table>

**Table 2. Spearman correlation for independent and dependent variables**

<table>
<thead>
<tr>
<th></th>
<th>CSV</th>
<th>EVA</th>
<th>EPS</th>
<th>ROE</th>
<th>ROA</th>
<th>RONW</th>
<th>ROCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSV</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EVA</td>
<td>.673**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EPS</td>
<td>.438**</td>
<td>-.236</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ROE</td>
<td>-.016</td>
<td>.106</td>
<td>-.068</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ROA</td>
<td>.206**</td>
<td>.164</td>
<td>.354**</td>
<td>-.070</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RONW</td>
<td>.230**</td>
<td>.213</td>
<td>.315**</td>
<td>.226</td>
<td>.200*</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>ROCE</td>
<td>.346**</td>
<td>.044</td>
<td>.614</td>
<td>-.139</td>
<td>.264*</td>
<td>.767**</td>
<td>1</td>
</tr>
</tbody>
</table>

Note: *** $p < 0.001$, ** $p < 0.05$, * $p < 0.10$

Taking a closer look, Table 2 shows the correlation between the independent and dependent variables for the construction companies from the year 2003 to 2012. The relationship between CSV and EVA was found to be significant and 67.3%. Furthermore, no other traditional measure except ROCE was significantly having relationship with CSV. This means that the traditional measures are not able to explain the CSV for the selected construction companies.

**Table 3. Multiple regression analysis for independent and dependent variables**

<table>
<thead>
<tr>
<th>Model</th>
<th>$R$</th>
<th>Adj.$R^2$</th>
<th>SE of the estimates</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.941</td>
<td>0.885***</td>
<td>5.97</td>
</tr>
</tbody>
</table>

Note: *** $p < 0.001$, ** $p < 0.05$, * $p < 0.10$

**Table 4. ANOVA analysis for independent and dependent variables**

<table>
<thead>
<tr>
<th></th>
<th>Sum of Squares</th>
<th>df</th>
<th>$F$</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>5771.246</td>
<td>6</td>
<td>26.925</td>
<td>.000^6</td>
</tr>
<tr>
<td>Residual</td>
<td>750.218</td>
<td>21</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>6521.464</td>
<td>27</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: $F$-critical (df for denominator n - $\beta$ - 1 = 27 - 6 - 1 = 20), df for numerator = 5); and confidence level of 95% interval is 2.28
Table 5. Regression coefficient for independent and dependent variables

<table>
<thead>
<tr>
<th></th>
<th>Un standardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
<th>Collinearity Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
<td></td>
<td>B</td>
</tr>
<tr>
<td>(Constant)</td>
<td>-.745</td>
<td>2.107</td>
<td>-.354</td>
<td>.727</td>
<td></td>
</tr>
<tr>
<td>EVA</td>
<td>.001</td>
<td>.000</td>
<td>.925***</td>
<td>11.145</td>
<td>.000</td>
</tr>
<tr>
<td>EPS</td>
<td>1.130</td>
<td>.164</td>
<td>.770***</td>
<td>6.880</td>
<td>.000</td>
</tr>
<tr>
<td>ROE</td>
<td>-.039</td>
<td>.097</td>
<td>-.037</td>
<td>-.405</td>
<td>.690</td>
</tr>
<tr>
<td>ROA</td>
<td>-.496</td>
<td>.217</td>
<td>-.189**</td>
<td>-.285</td>
<td>.033</td>
</tr>
<tr>
<td>RONW</td>
<td>-.181</td>
<td>.160</td>
<td>-.168</td>
<td>-1.131</td>
<td>.271</td>
</tr>
<tr>
<td>ROCE</td>
<td>.008</td>
<td>.207</td>
<td>.007</td>
<td>.038</td>
<td>.970</td>
</tr>
</tbody>
</table>

Note: *** p <0.001, ** p <0.05, * p <0.10

The results indicate that from the value based economic measure; the preceding discussion puts EVA into a conclusive and positive light. The result revealed that created shareholders value is influenced by the factors utilized in this study. From the six variables the significant level of EVA is 0.000 and lower than 0.05. Thus H1 is accepted rejecting the null hypothesis. Furthermore, H2 investigating the influence of EPS on CSV was also found to be significantly influenced at p value <0.05. Thus H2 is also accepted. H3 investigating the influence of ROE on CSV was not significant (p value >005), thus was rejected. In addition, H4 investigating the influence of ROA on CSV was found to be negatively influenced with significant level (P<0.05) rejecting the hypothesis H4. Finally the fifth and sixth hypothesis between RONW, ROCE on CSV were not significant and were rejected.

5. Conclusions and recommendations

Thus in conclusion, when comparing the economic measure (EVA) and traditional measures (EPS, ROE, ROA, RONW and ROCE) utilized in this study to investigate their influence on CSV, economic measure is more accurate to create shareholders value. The more the managers produce EVA, the more shareholders’ wealth maximization will be created. The finding shows significant support for EVA, but EVA was not reported by the companies and is not been used by investors for their investment decisions. Thus it is recommended for the managers to focus more attention to the criteria of EVA in evaluating shareholder’s value. The finding showed that EPS as a traditional measure is still enables to measure shareholder’s value creation. Thus it is highly recommended to perform a comparative investigation between EVA and EPS towards created shareholder’s value.

This research has been investigated in the selected construction companies listed in the main market of Bursa Malaysia. Further research can be tested separately in different industries and sector in order to make this issue practical and validate the result depicted from this study. There are different aspects to calculate the financial measurement tools utilized in this study, thus it is suggested to use other formulas and methods in order to confirm the relationship for the variables.

References


