

## **INVESTIGATING SHAREHOLDER'S WEALTH CREATION THROUGH ECONOMIC VALUE BASED MEASUREMENT TOOLS**

***Shrikant Krupasindhu Panigrahi\****

University Malaysia Pahang, Kuantan, Malaysia

***Yuserrie Bin Zainuddin***

University Malaysia Pahang, Kuantan, Malaysia

***Noor Azlinna Binti Azizan***

University Malaysia Pahang, Kuantan, Malaysia

### **ABSTRACT**

Profit maximization and increasing shareholder's wealth have been one of the most crucial concepts for the organization. The corporate manager and shareholders rely upon the traditional accounting measures like net income, Earnings per share (EPS), Return on Equity (ROE), Return on Net worth (RONW), Return on Capital Employed (ROCE) to measure the value created by the firm. But this study utilizes economic measures like Economic Value Added (EVA) and Market Value Added (MVA) combined with the accounting measures to perform a comparative study in order to conclude the most appropriate measures for the creation of shareholder's wealth. The EVA of 28 construction companies from the total 43 construction companies listed in Bursa Malaysia were selected for the study and analyzed during the period of 2003 to 2012. Overall the result for the study found that very few of the construction companies were having positive EVA for the creation of Shareholder's wealth. It was also found that there is a strong relationship between created shareholder's value and economic value added. Thus it is very important to know that whether in the long run the shareholders wealth would be maximized through the usage of EVA as a performance measurement tool. Furthermore, depending on the statement of EVA concept rather than accounting measures would help the shareholder's for future investment decisions and managing their investment portfolios.

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**Corresponding Author's Email Address:** [shri16june@gmail.com](mailto:shri16june@gmail.com)

### **INTRODUCTION**

This study is investigated to know the relationship between economic measures and shareholder's value for the construction industry listed in Bursa Malaysia. Maximizing shareholders value has become a new challenge for the organizations. It has been traditional goal for the managers of corporate level to maximize shareholder's value.

It has been an major goal of organization in the past few decades to make a revolutionary change in the measurement of performance from traditional profit based measures like Earning per Share (EPS), Return on Capital Employed (ROCE), Return on Net Worth (RONW), Net Profit Margin (NPM), Operating Profit Margin (OPM), to the new modern economic value based performance measures like Market value Added (MVA), Shareholder's Value Added (SVA), Cash Value Added (CVA), Economic Value Added (EVA). From the above mentioned concepts in recognition to accounting and financial literature, Earning per share (EPS) has received high attention as an important tool to measure shareholder's value (Kapoor 2011).

In the market price of the common stock of companies shareholder's value is represented through the function of the company's investments, financing and dividend decisions. Among the most crucial decisions to be taken for efficient performance and attainment of objectives in any organization are the decisions relating to dividend. In the financial perspective of the firm's growth strategy, dividend decisions taken by the managers are very crucial in the organization. The objective of the finance manager should be to find out an optimal dividend policy that will enhance value of the firm. It is often argued that the share prices of a firm tend to be reduced whenever there is a reduction in the dividend payments.

In addition, Appannan and Sim (2011) mentioned that Malaysia as a developing country still lack with research on dividend policy and its determinants for the listed companies. Pandey (2003), found that plantation and consumer product sectors in Malaysia are paying high dividends due to their higher surplus in cash. Thus dividend payout decisions by managers are proxied in this study for investigating enhancement of shareholder's value.

Traditional performance measures are not able to adequately consider company's true cost of capital investment. Even though the traditional profit measures of net income includes depreciation costs (Historical fixed cost and long term assets) and interest cost (Cost of Debt). But the Net Income does not include the equity

cost that determines the returns of investors. Thus, the performance measures based on net income and operating income promotes and helps managers on short term decision making.

### **Background of the study**

Malaysia as a developing country has a diverse economy including sectors like construction, consumer products, industrial products, plantation, properties, technology and trading services. Construction companies in Malaysia contribute 3.5% to GDP making an important role in the Malaysian economy. Thus the construction companies could be described as main economic driver for Malaysia (MGCC 2014). There has been great demand by the investors focusing on shareholder's value creation.

As the research is done on EVA and shareholder's value, the aim of the research is to determine whether positive EVA would leads to growth of share price for construction industry listed in Kuala Lumpur Stock Exchange (KLSE index). An economic decline in demand and reduction in real estate had greatly influenced the monetary policy of Malaysia. The construction industry sector is an important part of Malaysian economy. Construction industry contributes 5% of GDP and employs 3% of workforce. For the Malaysian market construction industry contributed 5% of GDP for year 2010 – 2011 (Malaysian Economic Report 2010 – 2011).

Since the financial crisis in 1998, the construction sector growth rate has not reached anywhere near the pre-1998 growth rates reaching its highest at 2.1% in 2001 and declining to 2.0% in 2002, 1.5% in 2003 and into a contraction of -1.5% in 2004 estimated to improve to -1.1% in 2005. The construction industry gave itself ten years, from 2006 until 2015, to rectify the weaknesses and to improve the industry's performance as well as its image. Thus it is viable to study the growth rate of construction industry from 2003 till 2012 and evaluate the key performance indicators influencing the wealth of the shareholders of this sector. The construction sector in the fiscal year 2009 was expanded by 5.8% as compared to other economic sectors in Malaysia. The strong growth of this sector reflected in the second quarter of 2009 where the growth remained to 4.5% followed by the 3<sup>rd</sup> quarter 7.9 and 4<sup>th</sup> quarter by 9.3%. This strong growth of sector contributed heavily in the economic stimuli of the country (BNM, 2010).

Isa, et al (2006) stated that construction industry have played a key role in the socio economic development of all the countries. Furthermore, Arif and Egbu (2010) uttered that Malaysian companies since mid of 1970s have been investing abroad. With the formation of ASEAN Free Trade Area in 1992, Malaysian companies were to invest abroad in the ASEAN countries. Isa, et al (2006) also stated that globalization of construction market bring along competition and challenges but also provides opportunities by opening new markets. Construction industry in Malaysia is divided into two main categories: i.e. General construction and Special Trade Works (CIDB, 2007). Malaysian Construction industry has been considered as the population under study. There are several reasons that why Construction industry sector was chosen as population of ongoing research which has been explained as follows:

- The construction sector is one of the productive sectors that contribute constantly to the economy of Malaysia.
- The growth rate of this sector fluctuates heavily as it is related to other sectors. This shows that the demand of construction is heavily sensitive to developments in other sectors of the economy.

Without diverting the attention to the ongoing research on Shareholder's value through financial measures approach, it is now clear that the financial objective of construction industry need to be balanced. The shareholders in the market always have the option to withdraw their investment and diversified their investment portfolio to any other investment that gives good return and compensate (De Wet 2010). The main objective of any firm is to maximize net profit and wealth of shareholders. It has been always a debatable issue of using measurement tools to evaluate the wealth of shareholders. There are various traditional measures and economic measures to identify shareholder's wealth (Bhunia 2012). The concept of shareholder's value indicates the performance of the companies in the real market and the financial wealth of such companies (Liow and Ooi 2004). Thus in order to identify the shareholder's wealth, value based economic measures like Economic Value Added (EVA) and Market Value Added (MVA) have been utilized as an important ramification.

### **Relevance of the study**

Previous studies on the shareholder's value creation being performed in developed countries. This study is undertaken from the emerging market Malaysia focusing on the construction sector respectively. The major objective of the study is to examine the impact of financial measures on shareholder's value in Malaysian construction firm's context through the applicability of Lintner model. This research attempts to suggest how at

the micro level financial managers can work in the favor of shareholder's wealth handling asymmetric information, agency costs, transaction costs, and taxes. In Malaysian context very few studies have focused on the shareholder's value through economic measures like EVA and MVA for the construction companies.

This study is a replication of study and is being built on the study done by Akbar Aminimehr at Poona College of Arts, Science and Commerce Pune title: Study of measurement of wealth creation by car manufacturers through economic value added concept between 2001 and 2005. Different economy and different sectors are the two main differences between the two researches. Also the measurement and constraints and research approach differs from each other.

Thus the study is focused of the following objectives:

1. To empirically examine the effect of EVA on shareholder's wealth by the selected construction companies.
2. To analyze the influence of MVA on the shareholder's value for the selected construction companies.
3. To provide an understanding to the investors in relation to the financial measurement tools and stock returns used in their investment decisions.

One of the basic and fundamental roles of the managers is to maximize shareholder's value. Maximization of shareholder's value means maximizing the wealth and net worth of the company. Maximization in shareholder's value is reflected by the share price increase in the market place. Thus wealth maximization results to maximizing the market price of the shares.

## **LITERATURE REVIEW**

Profit and loss statement and Balance Sheet are the two important financial statement reports that are very famous in the corporate to know and evaluate the performance. Profit and loss statement shows the result of normally one year of period while Balance Sheet shows the financial position of the assets, liabilities and equity at the fiscal year end. This shows that both the statement shows the past performance of the company. But stock price is basically decided by considering the future growth of the company; no doubt the investors review the historical income and financial position of the company. As the future growth of the company is not included in the profit and loss statement and Balance Sheet statement, it is very difficult for the investors to calculate company value and stock price from these historical financial statements. Based on Profit and Loss statement, Net income and Return on Equity (ROE) are very popular evaluation index for the company. Also there is another evaluation method called Discounted Cash Flow (DCF) that calculates the present value of the company and its future cash flow through forecasting.

Furthermore, Minchington and Francis (2000) found three main difficulties for the implementation of new measures in practices. Firstly there is possible lack of awareness of new measures even if there are very active promotions by the management consultants. Once the measures are being selected the barrier to the implementation includes technical difficulties like establishment of cost of capital and the capital assets. There are also some of the organizational barriers like time and resistance to change; organizations may encounter cultural and political difficulties in gaining acceptance and ownership of new measures. It is also a fact that the income given in the Profit and Loss statement does not equal the cash inflow, and this arises with the company going bankrupt due to lack of cash, even though the company is making good profit. Companies have to spend their cash in new inventories to increase their sales but they are not able to collect cash from customer very soon. Thus rapid growing can easily go short on cash to pay their investors in the early stages. It is also a matter of fact that the company can run the business as long as they have enough cash instead of negative income. Thus according to the investors cash flows is very important to know rather than the accounting profit that measures corporate value and performance. Thus the method that is helpful for the investors to know the capital inefficiency using their expected return has been developed by researchers.

Rajesh, Raman et al. (2012) investigated a comparative study between EVA and MVA for the selected cement companies in India and found that EVA and MVA play an important role in order to assess the financial performance of the companies. The findings also proved the two measures (EVA and MVA) provide consistent shareholder's value creation activities.

Sharma & Kumar (2010) presented a narrative literature review of published papers on EVA from 1994 to 2008. They found that studies that have been conducted in advanced economy have largely found to be supporting EVA as compared to less developing economies.

Aminimehr and Iqbal (2008) through the trend analysis and pearson correlation analysis investigated the relationship between EVA and MVA. The study found that there is significant negative relationship between them.

Mahmood et al (2008) examined the role of EVA to identify Malaysian property companies from the year 1997 to 2006 and found that most of the companies failed to cover the shareholder's wealth.

De Wet (2005) investigated the correlation between EVA and accounting measures like EPS, DPS, ROA, ROE and found that there is little correlation between them.

O'Byrne (1996), linked EVA with MVA and investor's expectation using nine year data for the period from 1985 to 1993 for companies in the 1993. Initial finding shows that Free cash flow (FCF) was able to explain 0% of the change in the market value divided by the capital ratio, whereas the R square for NOPAT was 33% and for EVA was 31%. There was some adjustment made to the original model. EVA multipliers were bigger for companies with a positive EVA compared to companies with a negative EVA. Then a bigger multiple was used for companies with more invested capital. This adjustment showed that EVA explained 31% of the variance in the market values whereas NOPAT showed 17%.

Uyemura, Kantor et al. (1996), used a sample of 100 largest banks of United States for the period of ten years from 1986 to 1995 to calculate the correlations between MVA and EVA including with four accounting measures like net income, EPS, ROE and ROA. The regression analysis measured with the variables as performance measures identified EVA as the most powerful performance measures as compared to other accounting measures to explain MVA and shareholder's wealth.

Thus from the above mentioned previous researches it is evident that both the measures play a crucial role for shareholder's wealth creation. Thus it is obvious to investigate the relationship between MVA, EVA and CSV. The performance measures referring to increase shareholder value need to be executed carefully by managers and executives carefully due to pitfalls in accounting measures. Traditional accounting measure like earnings per share when continue to be widely used is averse with many risks. Thus the aim of the research is to determine the influence of economic measures on the shareholder's value creation for the construction industry Malaysia for the period of 2003 to 2012.

## **RESEARCH METHODOLOGY**

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.

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 Kuala Lumpur stock exchange (KLSE).

Annual reports that are published for the companies include:

1. Balanced sheets
2. Income statement
3. Cash flow statement
4. Narrative report sections;

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 Kuala Lumpur 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 KLSE 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 some construction Companies listed in Kuala Lumpur stock exchange. 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 Kuala Lumpur 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. To meet the objective of the study the analysis is divided into the following sections:

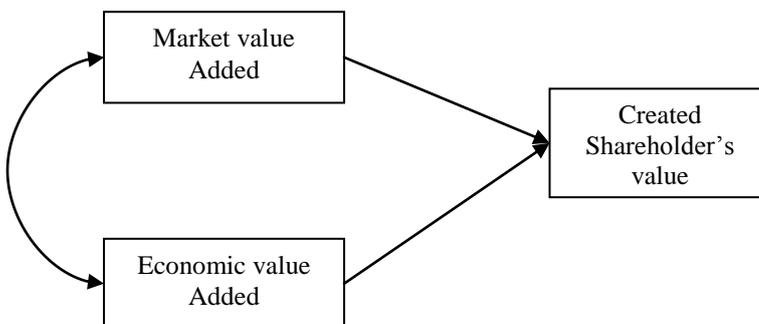
1. The analysis that indicates position of shareholder’s value creation in Malaysian construction companies;
2. The analysis about economic value added for creation of shareholder’s value
3. Analyze the relationship between economic measures and traditional measures in addition to management decisions as performance measurement tools for the creation of shareholder’s value;

In order to achieve the aim of the study the researcher had utilized trend analysis into the three sections: In the trend analysis the researcher followed the trend of the variables such as Created shareholder’s value (CSV), Economic Value Added (EVA) and Market Value Added (MVA) for the construction companies of Malaysia. Calculation of figures for the formula of the variables has been performed and the data were compared with figures, graphs and trends and the growth rate of the mentioned variables. In order to find the relationship between the utilized variables Pearson correlation between the variables were examined. In order to fulfill the purpose of the study, Microsoft Excel and SPSS statistical software was taken into consideration. Furthermore, multivariate analysis was also conducted in order to identify the influence on the measurement tools considered for the research on the enhancement of shareholder’s value.

### Research Framework and Hypothesis

Below is the conceptual model for the study investigating the impact of MVA and EVA as economic based measures on shareholder’s wealth creation.

**FIGURE.1. CONCEPTUAL FRAMEWORK FOR THE STUDY**



The following are the research hypothesis considered for the study:

- H1: EVA is confirmed to be the best economic measure to identify shareholder’s wealth
- H2: MVA is confirmed to be the best economic measure to identify shareholder’s wealth
- H3: There is significant positive relationship between EVA and CSV
- H4: There is significant positive relationship between MVA and CSV

The selected construction companies considered as a sample for the study are depicted below:

**TABLE 1. LIST OF THE CONSTRUCTION COMPANIES**

1	Muhibbah Engineering Berhad	15	Hock Seng Berhad
2	Binapuri Holdings Berhad	16	PLB Engineering Berhad
3	Ho Hup Construction Berhad	17	Ekovest Berhad

4	Kumpulan Jetson Berhad	18	Bina Goodyear Berhad
5	Ahmad Zaki Corporate Berhad	19	Gamuda Berhad
6	TRC Synergy Berhad	20	Gadang Berhad
7	Protasco Berhad	21	Fajarbaru Berhad
8	TSR Capital Berhad	22	Pintaras Berhad
9	Crest Builder	23	MTD ACPI Engineering Berhad
10	Malaysian Resource Corp. Berhad	24	Brem Holding Berhad
11	Mitrajaya Holdings Berhad	25	Ireka Corporation Berhad
12	Principitek Corporation Berhad	26	Zelan Berhad
13	DKLS Industries Berhad	27	IJM corporation Berhad
14	Bina Darulaman Berhad	28	Merge Energy Berhad

*Source: Bursa Malaysia Website*

### Analysis tools

EVA is calculated as:

$$\text{EVA} = \text{NOPAT} - \text{Capital Employed} * \text{WACC} \dots\dots\dots (1)$$

Where,

$$\text{Capital employed} = \text{Average of Debt} + \text{Average of Equity} \dots\dots\dots (2)$$

$$\text{WACC} = (\text{Average of Debt} * \text{Rate of Interest Post Tax}) + \text{Average of Equity Capital} * \text{Rate of Cost of Equity} / \text{Average capital Employed} \dots\dots\dots (3)$$

$$\text{MVA} = \text{Equity Market Value} - \text{Book value of Equity} \dots\dots\dots (4)$$

Where,

$$\text{Equity Market Value} = \text{Number of shares issued} * \text{Share price} \dots\dots\dots (5)$$

$$\text{Created Shareholder's value} = \text{Equity Market Value} * (\text{Shareholder return} - \text{Ke}) \dots\dots (6)$$

Where,

$$\text{Ke} = (\text{Risk free rate} + \text{Risk Premium}) * \text{beta} \dots\dots\dots (7)$$

$$\text{Shareholder's return} = \text{Shareholder value added} / \text{Equity market value} \dots\dots\dots (8)$$

The calculation of total MVA, EVA and CSV is provided in below Table.

**TABLE 2. TOTAL VALUE OF MVA FROM THE YEAR 2003 TO 2012 FOR THE CONSTRUCTION COMPANIES**

Companies	Total of MVA	Total of CSV	Total of EVA
Muhibbah	29525	-8004384.7	-27849.6
Binapuri	-9279	-521634.8	3484.7
Ho Hup	18904	-2539109.2	1840.2
Kumpulan Jetson	-32879	-928309.8	-3762.7
Ahmad Zaki	-21176	-1038983.3	-3883.9
TRC Synergy	-45328	-428289.1	-1500.8
Protasco	-22939	1243125.5	787.2
TSR Capital	-12514	227550.5	-97.1
Crest Builder	-93690	1188604.8	83.4

MRCB	559489	-25175480	-20104.5
Mitrajaya	-88012	-1624192.4	-7206
Principtek	-42689	453293.7	-752.4
DKLS Industries	-131328	1318292.8	-62.6
Bina Darulaman	-126174	1672262.4	-114.4
Hock Seng	140038	-3880802.9	-1280.4
PLB Engineering	-13670	464711.3	-24.8
Ekovest	-25831	-688172.4	-701.2
Bina Goodyear	-38572	-702102.7	-3100.3
Gamuda Berhad	1767401	-58135718	-52487.5
Gadang Berhad	-66366	-178839.6	-885.2
Fajarbaru	-3864	-968136.7	-2979.4
Pintaras	-51904	2219277.6	223.2
MTD ACPI	-68022	-2989600.2	-12188.7
Brem Holding	-245177	640834.7	-384.7
Ireka Corporation	-90887	410614.7	-1351.5
Zelan Berhad	120527	-7506430.4	-36101.1
IJM corporation	-95983	-33085041	-48540.1
Merge Energy	-3993	-255099.8	231
<b>Total</b>	<b>46629</b>	<b>-4957563</b>	<b>-7811</b>

*Source: Calculated for the study*

EVA is known as the best value measurement tool for the shareholders as it has strong relation with MVA. MVA shows the additional value added to the book value of the invested capital. For the calculation of MVA there was a need of data of number of ordinary shares issued, total shareholder's equity or book value of equity and market price of shares. Book value of equity and number of issued shares were obtained from annual reports of the selected construction companies whereas, share price of the selected construction companies were obtained from the historical share prices section in Bursa Malaysia website. From the product of number of shares issued and share price, equity market value is achieved which is subtracted with shareholder's equity to obtain MVA.

## DATA ANALYSIS

In order to confirm EVA to be the best performance measurement tool for the shareholders, the relationship between MVA, EVA and CSV have been considered. The relationship between EVA, MVA and Shareholder's wealth Creation have been literally reviews and analyzed and was found that EVA is the best measure to identify value of shareholders for the construction companies of Malaysia. Furthermore, De Lange (2010) investigated the relationship between shareholder's wealth creation, MVA and EVA and found significant relationship between them. In addition, shareholder's value is operationalized as Market Value Added (MVA).

**TABLE 3.TREND ANALYSIS OF THE VARIABLES IN THOUSANDS**

Year	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
MVA	-14	25	-93	-116	224	74	-142	66	286	156
EVA	-693	-1723	-2219	-2318	-2558	-8061	-31467	-10602	-6218	-12253
CSV	-1054	-1367	-895	-923	-4636	-6385	-3778	-7336	-11951	-11251

*Source: Prepared from annual report of the companies*

From the trend analysis depicted in the above table.5.9 market value added for the companies were positive in six years of the study whereas; in four years (2003, 2005, 2006 and 2009) were negative. The highest MVA for the construction companies was found in the year 2011 where MYR 286 million were added as market

value for the shareholders of the selected construction companies. Similarly it was noted that from the year 2003 to 2012 the EVA and CSV were found to be negative all over the years of investigation.

Pearson Correlation analysis was performed between MVA, EVA and CSV to confirm the relationship between them.

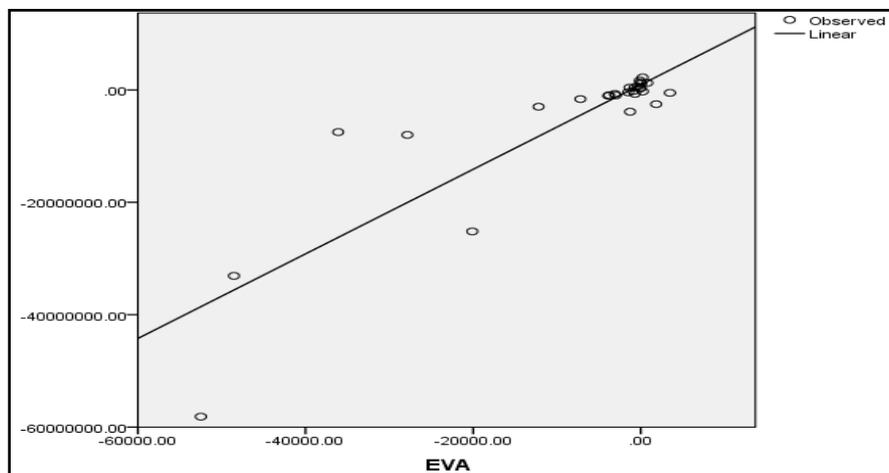
**TABLE 4. CORRELATION BETWEEN MVA, EVA AND CSV**

Variables	CSV	EVA	MVA
Created Shareholder's value	1		
Economic Value Added	.744**	1	
Market Value Added	-.575**	-0.158	1

\*\* Correlation is significant at the 0.01 level (2 tailed)

From the Pearson correlation coefficient between CSV, EVA and MVA as shown in the above table 5.10, the p value to be less than 0.01 except the relationship between EVA and MVA. It was found that there is no significant relationship between EVA and MVA. Previous researches explained in the literature review found MVA to be the present value of EVA. This means that there is a positive relation between them. Thus it is necessary to examine the relationship between EVA and MVA in further research. The table.2 also showed that there is 74.4% of correlation between CSV and EVA. It means that there is a complete positive correlation between CSV and EVA. Thus the hypothesis three EVA having positive relationship with created Shareholder's wealth is confirmed whereas; hypothesis four MVA having positive relationship with created shareholders wealth is rejected.

**FIGURE 2. CORRELATION BETWEEN THE VARIABLES**



The result of regression analysis provided in Table.3 in assessing the influence of economic measures (EVA and MVA) on the shareholder's wealth was found to have significantly influenced at p value less than 0.01. From the result it was revealed that there was R = 0.918 (91.8%) of influence of economic measures to create value for the shareholders. Thus the hypothesis one and two confirming the significant influence of EVA and MVA on CSV is accepted.

**TABLE 5. REGRESSION ANALYSIS FOR THE VARIABLES**

Model Summary <sup>b</sup>					
Model	R	R	Adjusted	Change Statistics	Durbin-

1	Square	R Square	R Square Change	F Change	df1	df2	Watson	
1	.958 <sup>a</sup>	0.918	0.912	0.918	140.39	2	25	2.716

*Note: a. Predictors: (Constant), EVA, b. Dependent Variable: CSV*

**TABLE 6. CORRELATION COEFFICIENT RESULTS FOR THE STUDY**

Model	Coefficients <sup>a</sup>			t	Sig.
	Unstandardized Coefficients	Standardized Coefficients			
	B	Std. Error	Beta		
1 (Constant)	-370831.7	848135		-0.437	0.666
EVA	477.885	63.171	0.553	7.565	0
MVA	-18.314	2.628	-0.51	-6.969	0

*Note: a. Dependent Variable: CSV*

The correlation beta coefficient provided in the above table showed that when there is one unit of increase in the usage of EVA concept by the companies there is 55.3% of increase in shareholder's value. Furthermore, regarding the beta coefficient of MVA concept, when there is one unit of decrease in MVA there is 51% of increase in shareholder's value. The constant value for the unstandardized coefficient was found to be not significant that confirms that without economic measures it would be adverse for the managers to create wealth for their shareholders.

## CONCLUSIONS

Thus in conclusion, EVA has been proved to be excellent performance measurement tool for motivating managers to increase their performance and create shareholder's wealth. Study based on the listed construction companies of Malaysia revealed that on a year to year basis negative MVA leads to negative EVA. The shareholder's wealth can be received wither by dividend or by appreciation of capital. Thus the forecast for the future growth of capital is very important for the shareholders. The comparison of shareholder's wealth with economic measures like MVA and EVA confirmed that shareholder's wealth creation through EVA would enable the construction companies to create value of their shareholders. From the regression findings there was in total 91.8% of influence of economic based measures to create shareholder's wealth for the construction companies. It was also found that MVA have negative significant influence on CSV.

The finding suggests that when there is negative EVA so the stocks will sell at negative MVA. The negative EVA and MVA is due to high fixed assets which makes the market value of the stocks to be reflected and in turn leads to negative rate of return. Such shares will be sold below the book value. The final result found that there is negative relationship between EVA and MVA. The negative relationship between MVA and CSV evidenced that managers have negative consequences for their shareholders. Thus it is very important to know that whether in the long run the shareholders wealth would be maximized through the usage of EVA as a performance measurement tool. Furthermore, depending on the statement of EVA concept rather than accounting measures would help the shareholder's for future investment decisions and managing their investment portfolios.

## REFERENCES

- Aminimehr, A. and B. A. Iqbal (2008). "Measurement and Investigation of Creation Shareholders' Wealth in Indian Car Manufacturer Companies." *Journal of Management and Social Sciences* 4(2): 142-156.
- Appannan, S. and L. W. Sim (2011). A Study on Leading Determinants of Dividend Policy in Malaysia Listed Companies for Food Industry Under Consumer Product Sector. 2<sup>nd</sup> International Conference on Business and Economic Research.
- Arif, M. and C. Egbu (2010). "Making a case for offsite construction in China." *Engineering, Construction and Architectural Management* 17(6): 536-548.

- Bhunia, A. (2012). "Relationship between shareholder's value and financial variables-a study of maximise shareholder value." *Journal of Marketing and Business Research* **1**(1): 006-016.
- De Lange, D. E. (2010). *Research companion to green international management studies: A guide for future research, collaboration and review writing*, Edward Elgar Publishing.
- De Wet, J. (2010). "An analysis of strategic performance measures of companies listed on the JSE Securities Exchange South Africa." Available at SSRN 1656324.
- De Wet, J. H. (2005). "EVA versus traditional accounting measures of performance as drivers of shareholder value—A comparative analysis." *Meditari Accountancy Research* **13**(2): 1-16.
- Isa, C. M. M., H. Adnan, I. R. Endut and N. Basrah (2006). "Malaysian Contractors'opinions Towards International Market Expansion." *Organising Committee*: 287.
- Kapoor, S. (2011). "Impact of dividend policy on shareholders' value: a study of Indian firms."
- Liow, K. H. and J. T. Ooi (2004). "Does corporate real estate create wealth for shareholders?" *Journal of Property Investment & Finance* **22**(5): 386-400.
- Mahmood, W., W. Mansor and Y. Norfarah Hani (2008). "Creating Wealth for Shareholders: Evaluating the Performance of the Malaysia Property Companies."
- MGCC, M. G. C. o. C. a. I. (2014). "The Size of Construction Industry in Malaysia." from <http://www.malaysia.ahk.de/en>.
- Minchington, C. and G. Francis (2000). "Divisional performance measures: EVAR as a proxy for shareholder wealth." *International Journal of Business Performance Management* **2**(1): 98-108.
- O'Byrne, S. F. (1996). "EVA® and market value." *Journal of Applied Corporate Finance* **9**(1): 116-126.
- Pandey, I. M. (2003). "Corporate dividend policy and behaviour: the Malaysian evidence." *Asian Academy of Management Journal* **8**(1): 17-32.
- Rajesh, M., R. Raman and R. Narayan (2012). "An Empirical Study On Eva And Mva Approach." *International Journal Of Marketing, Financial Services & Management Research* **1**(3).
- Sharma, A. K. and S. Kumar (2010). "Economic value added (EVA)-literature review and relevant issues." *International Journal of Economics and Finance* **2**(2): P200.
- Uyemura, D. G., C. C. Kantor and J. M. Pettit (1996). "EVA® for banks: Value creation, risk management, and profitability measurement." *Journal of Applied Corporate Finance* **9**(2): 94-109.