ACCOUNTING CRITERIA AND ECONOMIC PERFORMANCE EVALUATION WITH STOCK RETURN: IRANIAN SCENARIO

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ABSTRACT

The main objective of investors from investing in share companies is increasing wealth; which can be achieved by return acquiring from purchased shares. The purpose of current study is to investigate the possible relation between Stock returns the tow independent variables (Economic Value Added and Tobin’s Q Ratio reported by companies). The outcome of the study can suggest criteria to investors to make a convenient decision in comparison between different shares. Totally 120 listed companies in Tehran Stock Exchange are chosen during 2005-2009 as a sample of the study. The results indicate that the 95 percent confidence level, Tobin Q indicator variable relationship with stock returns is significant but the economic value is not significant relation with stock returns. Moreover, these two independent variables, together can explain stock returns. Determination coefficient obtained for the above relationship shows that only part of the independent variables could explain the stock returns and investors should evaluate stock returns, other factors are also considered.

Keywords: Economic value added, Tobin's Q Ratio, Stock return.

INTRODUCTION

Now days, a lot of companies conduct their affairs and control of professional managers utilize. Shareholders in these companies in their resources available to managers and administrators on how to use the resources they decide consequently; due separation of ownership from management, the owners always concerned about good performance in the use of resources and create value for companies and consequently is increasing shareholder wealth. In addition to shareholders, board of economic performance for the creditors to decide on the amount and rate of credit is important. Therefore; order to attract investors’ confidence should properly evaluate corporate performance and ultimately their value expectations and provided good returns they receive from profitable business operations can provide. In practice, since several methods for evaluating the performance occurred in these methods there are various indicators that they are calculated from data obtained from accounting information, market, economic or combination of them used. At any time, owners of tools to evaluate management performance and use different criteria have always been followed by the best standards, so that efforts to achieve efficient management and performance evaluation criteria in order to create value for the company to achieve the goal of maximizing shareholder wealth continues Other aspects; create value for companies that are leading to changes in shareholder wealth, the pricing on the stock market, companies that actually the existence pricing supply and demand factors such as size, activity of speculators, the general market climate, important external events and sometimes important
political news and economic happen that this causes and factors other than the actual performance of domestic companies, the stock price volatility affect.

**RESEARCH’S MAIN OBJECTIVES**

Stock return is widely accepted as the best measure of external value creation and the one to measure corporate performance. The internal measure of value creation and corporate performance are related to fundamental analysis. Doing stronger fundamental analysis results to measuring more accurate intrinsic value. Economic value added pinpoints the ability of value creation and performance measurement from an internal view and Tobin Q ratio as a stock valuation model releases the other side of fundamental analysis frame work. As a result of preceding discussion, it is clear that the probable correlation between economic value added (as an internal measure) and Tobin Q ratio, Stock Returns maybe important for investors and decision makers.

**LITERATURE REVIEW**

Milbourn (1997) studied the correlation between economic value added measure and refined economic value added by the evaluated and they concluded that the economic value of refining capacity in the prediction value than standard value added to the economic. Machuga (2002) in research as economic value added, accounting for future income and financial analysis in relation to earnings per share forecast concluded that adjustments in economic value added additional information to explain the changes and future earnings per share. Cash flow and accrual components of earnings is.

Like Richard (2005) in research on changes associated with changes in the economic value of inflation have been studied shows that when inflation is low, change in economic value did not associated with changes in inflation. Griffith (2006) research in relation to rights and benefits and performance management chief executive circle began. their rights and benefits managers in five different groups, including salary, cash bonuses, advance, and pays total options granted were classified Scale and for performance evaluation of the market value ratio, Tobin Q and three-year stock returns, were used. And concluded that the size and performance, executives rights does not affect the risk while, term, title, ownership and age, law administrators studied the effect of severe and against previous findings and found that expected under the Advance Risk effect, strength or number of executives and managers combined Thresholds.

Vadiei and Rad Razavi (2008) Investment in research to investigate the effect of VAT paid market research findings showed that:

a. News announcement taken from the cash capital increase and demands on increasing shareholder value the market is effective.

b. Action taken to increase capital from shareholders cash and demands on reducing the market value is effective.

c. Increase capital from retained earnings to shareholders in cash brought less effect on changes in market value is.

By reviewing the above mentioned literature the following question may arise:

I. Is there any correlation between Tobin Q ratio and stock returns?

II. Is there any correlation between EVA and stock returns?

III. Among EVA and Tobin Q ratio, which one is a good performance measure?
To answer these questions, research hypothesis are composed as follows:

**H01:** There is a meaningful correlation between Tobin Q ratio and Stock Returns.

**H02:** There is a meaningful correlation between EVA and stock returns.

**H03:** There is a meaningful correlation between EVA and Tobin Q ratio with Stock Returns and have more economic value than the returns on index is Tobin Q.

**EMPIRICAL METHODOLOGY**

The objective of this research is to examine the correlation between dependent and independent variables. Assuming that equity markets are efficient, Stock Returns may be used to compare the information content of performance measures in a regression based approach. Both relative and incremental information content comparisons are made the first methodological requirement is to specify the samples election method. Data base included 387 industrial companies in TSE during 2004-2008; this period is the prosperity of TSE and company's stocks are actually traded. For any given year under consideration, four criteria were used in selecting sample firms (i) the fiscal year- end of the firm is March 20, (ii) the firm according to the TSE conditions is actually traded, (iii) the relevant data are not missing .In final 120 industrial companies listed in Tehran Stock Exchange (TSE) are selected as sample.

The second methodological requirement is to specify collecting data and calculating variables. All the data used in this research are gathered from financial statements, Tadbir Pardaz and Novin Rahavard and TSE archive. EVA and Tobin Q ratio are independent and Stock Returns is dependent variables. Because of the information gathering limitations, EVA is calculated as follows:

\[ \text{EVA} = (\text{ROIC} - \text{WACC}) \times \text{IC}, \]

where

- \( \text{ROIC} \) = return on invested capital
- \( \text{WACC} \) = Weighted Average Cost of Capital
- \( \text{IC} \) = Invested Capital (at the beginning of the year)

Tobin Q ratio is calculated by dividing "Company market value at the end of the fiscal year" by "Book value assets". Stock Returns is computed from TSE archive.

The models that relate independent variables to stock returns are used to examine the hypothesis. SPSS software analyzed statistical data. Equation below shows the firm valuation model:

\[ Y_i = \beta_0 + \beta_1 X_1 i + \beta_2 X_2 i + \ldots + \beta_k X_k i + \epsilon_i \]

\( i \): the number of company, \( k \): independent variable

Research hypothesis are examined using the above model. In this study, the independent variable is normalized by Kolmogrov Smirnov test. Considering above, following models are drawn:

1. \( R_i = \beta_0 + \beta_1 \text{EVA}_i + \epsilon_i \)
2. \( R_i = \beta_0 + \beta_1 Q_i + \epsilon_i \)
3. \( R_i = \beta_0 + \beta_1 \text{EVA}_i + \beta_2 Q_i + \epsilon_i \)
The summary results of statistical test are given in table below.

### Table 1. Statistical results of the first hypothesis & second hypothesis

<table>
<thead>
<tr>
<th>Correlations</th>
<th>R</th>
<th>EVA</th>
<th>Correlations</th>
<th>R</th>
<th>Q</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson</td>
<td>1</td>
<td>0.87</td>
<td>Pearson</td>
<td>1</td>
<td>0.098</td>
</tr>
<tr>
<td>Correlation</td>
<td></td>
<td></td>
<td>Correlation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>0.205</td>
<td></td>
<td>Sig. (2-tailed)</td>
<td>0.021</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>600</td>
<td>600</td>
<td>N</td>
<td>600</td>
<td>600</td>
</tr>
</tbody>
</table>

According to Table (1) can be seen that the correlation coefficient between independent variables and dependent variable economic value equal to 0.87 returns. Probability is amount to evaluate the significance of more than 5 percent. So therefore there with 95 percent probability a significant relationship shall not be confirmed. According to Table (1) can be seen that the correlation coefficient between independent variables and dependent variable Tobin Q ratio equal to 0.098 returns. Probability is amount to evaluate the significance of less than 5 percent. So therefore there with 95 percent probability a significant relationship shall be confirmed.

### Table 2. Statistical results of the Third hypothesis

<table>
<thead>
<tr>
<th>Correlations</th>
<th>R</th>
<th>Q</th>
<th>EVA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson</td>
<td>1</td>
<td>0.101</td>
<td>0.159</td>
</tr>
<tr>
<td>Correlation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>0.027</td>
<td></td>
<td>0</td>
</tr>
<tr>
<td>N</td>
<td>600</td>
<td>600</td>
<td>600</td>
</tr>
<tr>
<td>Pearson</td>
<td>0.079</td>
<td>0.101</td>
<td>-0.002</td>
</tr>
<tr>
<td>Correlation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>0.057</td>
<td></td>
<td>0.965</td>
</tr>
<tr>
<td>N</td>
<td>600</td>
<td>600</td>
<td>600</td>
</tr>
<tr>
<td>Pearson</td>
<td>-0.022</td>
<td>0.101</td>
<td>1</td>
</tr>
<tr>
<td>Correlation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>0.599</td>
<td></td>
<td>0.965</td>
</tr>
<tr>
<td>N</td>
<td>600</td>
<td>600</td>
<td>600</td>
</tr>
</tbody>
</table>

Table 2 correlation between independent variables and the Tobin Q ratio of economic value associated with variable Stock returns are presented in all cases significant levels of less than 5 percent. Therefore with 95 percent probability significant correlation can be confirmed.
CONCLUSION

Review the results of tests of different hypotheses suggested by the results in this study that affected governing community in Iran is different. But what of the results of this research is obtained suggests that the Tobin Q ratio compared with the economic value of content, and enjoy more information can be considered as a variable accounting investors in the Tehran Stock Exchange be. The most important reason not to apply this distinction in the inflation rate and economic value that it relies on historical data values.

REFERENCES


Table 3. The summary results of statistical test

<table>
<thead>
<tr>
<th>No</th>
<th>Hypothesis</th>
<th>Result</th>
</tr>
</thead>
</table>
| 1  | H0: There is a correlation between Eva and Stock Returns  
H1: There is not a correlation between Eva and Stock Returns | H0 |
| 2  | H0: There is a correlation between Tobin Q ratio and Stock Returns.  
H1: There is not a correlation between Tobin Q ratio and Stock Returns | H1 |
| 3  | H0: There is a correlation between EVA and Tobin Q ratio with Stock Returns and have more economic value than the returns on index is Tobin Q.  
H1: There is not a correlation between EVA and Tobin Q ratio with Stock Returns and have more economic value than the returns on index is Tobin Q. | H0 |