Size and Rate of Book Value and Organizational Performance

Mohammad Malekmohamadi Faradonbeh, Farimah Behzadian, Sahar Biglari, Fatemeh Malekmohamadi Faradonbeh

INTRODUCTION

The assets value which is stated in balance sheet is called book value, and the initial amount to invest: the amount may be in net or gross costs like transfer fee, sales tax, etc. [2]. The book value is known as the assets net value in England. Book value is the calculated value of a company having two major applications [3].

1. The amount (book value) is the whole assets of a company which is received by the shareholders, if the company wants to pay off its assets.

2. Compare to company market value, book value can be the index of awareness of intrinsic value in low level and intrinsic value in high level of share.

In private investment, book value is the investment in money which is used to buy the government bonds or etc. [1].

When a stock was sold, the sales price is minus the interest book value (looses) added out of the investment [2]. The main issue of the research is to investigate the role and significance of the book value in corporation real value and their financial performance—the issue which is significant and decisive in companies success or failure. On the other hand, due to the growing interest and attention of renowned companies into book value significance, the study is also considered as an effort to the concept in the country.

Research outline:

In the study two fundamental variables—book value and financial performance—are measured after collecting the required data to the sample, then the relationship between two variables is investigated in the next step. The following diagram illustrates the research schematic. The separated hypothesis is modeled to each financial performance index deemed. As such, the present study contains five main hypothesizes and three secondary hypothesizes regarding the physical capital factors constructed.

1. The book value has a relationship with Stock Exchange corporation equity return.

2. The book value has a relationship with the return on equity.

3. The book value has a relationship with SEC employment productivity.

4. The book value has a relationship with the ratio of market value to the book value per share of SEC.

Keywords:
Size and rat, Book value, Organizational performance

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AR BRACT

Objective: The present study has investigated the relationship between the size and ratio of book value on the performance of accepted corporation in Tehran Stock Exchange using panel data method and estimating the equations. Method: 45 companies are under investigation which has been probed in between 1381-1390. Results: The results suggest the presence of the significant relationship between the size of company and its financial performance and the lack of relationship between the performance and the book value. More, the research findings has been discussed and investigated and the limitations and emphasis scope has been determined.

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Method:
The study is applied in adjective and descriptive in collecting the data. The study population includes the accepted active companies in Tehran Stock Exchange in between 1381-1390 (a decade). 45 were selected out of them using simple random sampling and the sampling relationship with no replacement from a finite population shown below.

\[ n = \frac{Nz^2_{\alpha} \sigma^2_x}{\varepsilon^2 (N - 1) + z^2_{\alpha} \sigma^2_x} \]

The research required data have been accumulated through the published financial documents of companies and software approved by Stock Exchange. After collecting the required data, the book value is measured based on the study model and financial performance and hypothesizes have been tested using linear regression technique.

Finding analysis:
Each research main hypothesis has been obtained through the generalized least square regression test, between the book value and its components with five indices of corporation financial performance according to the above model:

\[ Y_{it} = \beta_0 + \beta_1 VAIC_{it} + \varepsilon_{it} \]  
\[ Y_{it} = \beta_0 + \beta_1 VAIC_{it} + \beta_2 SCVA_{it} + \beta_3 VACA_{it} + \varepsilon_{it} \] 

Accordingly, \( Y_{it} \) is the corporation financial performance index which is based on two main relationships of test. In the equation (1) the book value influence on financial performance index and in the equation (2) the influence of each book value components on financial performance index is tested. The following tables illustrate the summary of regression test results regarding each five financial performance indices. It should be noted that each forenamed model has been estimated in retrospective regression.

<table>
<thead>
<tr>
<th>Table 2:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dependent variable</td>
</tr>
<tr>
<td>---------------------</td>
</tr>
<tr>
<td>Return on equity (ROE)</td>
</tr>
</tbody>
</table>

In testing the model (1), with regard to significance test of the coefficient \( \beta \) between two variables of the conceptual added value coefficient and the return rate of shareholder equity in the study population the significance level is less than error level (0.002) to the variable dependent to shareholders equity. Therefore, it indicates the significant and direct relationship between the book value and return on equity in confidence level 95%.

On the other hand, the test results of model (2) represent the significant, direct relationship between the variables human capital and physical capital with return on equity index. Regarding that the coefficient \( \beta \) of human capital index is greater than the other variables, this variable has the greatest share out of the influence of the book value on the return on equity.

<table>
<thead>
<tr>
<th>Table 3:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dependent variable</td>
</tr>
<tr>
<td>---------------------</td>
</tr>
<tr>
<td>Return on assets (ROA)</td>
</tr>
</tbody>
</table>

As shown in the table 3 in testing model (1) to the variable return on assets, since the significant level is less than 0.05 and the standardized \( \beta \) coefficient is also calculated 0.536, the results of linear regression test indicate the significant, direct relationship between the book value and return on assets.

On the other hand among the book value components there is a significant, direct relationship between the human & physical capital and return on assets to the variable dependent to return on assets in model test (2).

<table>
<thead>
<tr>
<th>Table 4:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dependent variable</td>
</tr>
<tr>
<td>---------------------</td>
</tr>
<tr>
<td>Employee productivity (EP)</td>
</tr>
</tbody>
</table>

The results of regression test suggest the significant, direct relationship between the variable book value and employee productivity index. The book value index has a positive influence on the employee productivity performance index alongside the standardized \( \beta \) coefficient 0.640.
The variable structural capital by the standardized β coefficient 0.645 and the variable human capital by the standardized β coefficient 0.597 among the book value components are also of two independent variables which have been determined in model (2).

**Table 5:**

<table>
<thead>
<tr>
<th>Dependent variable</th>
<th>Independent variable</th>
<th>Calculated T</th>
<th>Standardized coefficient</th>
<th>Significance level</th>
<th>Error level</th>
<th>Test results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Market value to book value (MV/BV)</td>
<td>Book value</td>
<td>3.047</td>
<td>0.513</td>
<td>0.005</td>
<td>0.05</td>
<td>Rejected H0</td>
</tr>
</tbody>
</table>

With regard to significance level from the model test (1), it can be claimed that the book value has a significant, direct relationship with market value index to the book value in confidence level 95%. The variables physical capital index & structural capital also have the significant, direct relationship with the book value in model test (2). Regarding that the physical capital index has the greatest β coefficient (0.791) among the dependent variables, the greatest influence of book value on market value index to book value belongs to physical capital index.

**Table 6:**

<table>
<thead>
<tr>
<th>Dependent variable</th>
<th>Independent variable</th>
<th>Calculated T</th>
<th>Standardized coefficient</th>
<th>Significance level</th>
<th>Error level</th>
<th>Test results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Earnings per share (EPS)</td>
<td>Book value</td>
<td>3.785</td>
<td>0.689</td>
<td>0.000</td>
<td>0.05</td>
<td>Rejected H0</td>
</tr>
</tbody>
</table>

As it is observed in table 6, regarding that the significance level of regression test of model (1) is less than error level, there is a significant relationship between book value and earnings per share. On the other hand, the whole component of book value has the significant, direct relationship with the performance index of earnings per share in model test (2).

**Discussion and conclusion:**

In the study, return on equity, returns on assets, employee productivity rate, the ratio of market value to the book value per share, and earnings per share were tested by regression. It was observed that each five financial performance indices have the direct relationship with the book value of the Stock Exchange companies.

More notion and emphasis on the book value in organizations, understanding the significance, the influence of the factor on the total performance of organizations, and its positive effect on creating the values in organizations can be recommended as an influential factor to improve the organizations financial performance. Since the human capital plays the pivotal role as a key factor to calculate the book value in the research model, providing a competitive environment to determine the employee income and wages level highly increase the efficiency of model research.

The remarkable point regarding the book value components in the research model is the significant, direct relationship between the human capital and each five performance indices. It confirms the important influence of human capital on financial performance of companies under investigation. In other words, the pivotal role of human capital in book value and consequently in financial performance is emphasized.

**REFERENCES**


