Investigating the relationship between changes in value relevance of accounting information and moving toward INAS (Iran National Accounting Standards)

ISMAEEL MOLLASHAHI¹
Master of Accounting
Department of Accounting
Zahedan Faculty of Humanities
Islamic Azad University, Zahedan Branch, Zahedan
Iran

ZOHREH HAJIHA
Professor and Faculty Member
Islamic Azad University, East Tehran Branch
Iran

Abstract:
Value relevance is being defined as the ability of information disclosed by financial statements to capture and summarize firm value. Codification of accounting standards is one of the cases that can have an effect on accounting information. The aim of this research was to investigate the relationship of accounting information relating to the national standards of accounting. In this research we used combinational Regression and panel methods to investigate value relevance of accounting information by using of information related to earnings and balance sheet and 117 samples of companies listed in Tehran Stock Exchange during 4 years (from 2009 to 2012). It was concluded that there is a meaningful and positive relationship between changes in the value relevance of accounting information related to earning and balance sheet and moving toward INAS (Iran National Accounting Standards). Also we found that there is not any

¹ Corresponding author: esmaeilmolashahi@yahoo.com
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meaningful relationship between changes in the value relevance of accounting information and company’s growth and size.

Key words: Value relevance, Accounting information, Iran National Accounting Standards

Introduction

The main question is whether Iran had sufficient reliability, i.e. whether the financial statements of the accounting information that is relevant features and whether investors could benefit from the blessings of the financial statements are reliable or not? Figures and financial reports are required as part of the decision-making process used in this report, and purpose of accounting is to provide information that will assist them in their economic judgments and decisions. To provide information about effective and can affect the investment decision and cause the country's economic boom and provide (Khodami Pour, Torkzadeh, 2011). One of the indications of this study was to investigate the value relevance of accounting information in the unique environment of the accounting. In accounting standards, rules and procedures have been changes revolutionary in recent years.

The Purpose of Research

More insight to changes in the value of the information and factors that value relevance of accounting information affects the reforms. The purpose of setting standards is harmonization of accounting practices and one of the things that can affect the value relevance of accounting information. Accounting Standards is the purpose of this study, the influence of the ideas of the framers manufacturer standards.
Theoretical Framework

The value of information is defined as the usefulness of financial statement information. Value relevance of financial statements does not exceed for investors decision was reliably between financial statement items and prices or stock returns strongly affected. "Relevance" to the users' evaluation of past and present events in their expectations about future events, confirms, modify or reject. Information that may be relevant, it should be useful for prediction and assessment, and the other at the right time and at the discretion of the decision maker as well. Reports are available in sets of financial statements to meet the needs of the users must be certain characteristics. The "relevance" is one of the seven quality attributes as "Troblad report" should be highlighted.

In all cases, the information that is most useful when more emphasis herein on economic substance and not the form of technical (Riahi Beloki, 2010). Accounting standards draw favorable aspect with the objective of enhancing the quality of accounting information and the role of accounting information. High-quality accountings standards must be pretty major shortcomings in financial reporting model are addressed. High-quality accounting standards, the ability of users of financial statements in the investment and credit decisions will increase. (Moresloei, 2011).

Background of Research

Lam et al (2013) in a study entitled "Changes in value relevance of accounting information over time" achieved to this conclusions that amendments of the smaller companies are more and changes in the market value of thriving stock, are usually less.
Oksana in study "Russian accounting system, the value of the data reported and view of the adoption of International Financial Reporting Standards" obtained conclusion that mandatory adoption of International Financial Reporting Standards in Russia, which will be completed in 2015 data quality is likely to improve.

Sibel Kargin (2013) in study entitled "The Effect of International Financial Reporting Standards on the value relevance of accounting information" came to the conclusion that value relevance of accounting information regarding the book value of the data has improved over the years 2011-2005, while the improvement in the value relevance of earnings has been observed.

Mehraei et al (2012) in a study entitled "The relationship between institutional ownership, institutional ownership concentration and value relevance of accounting information" concluded that there is significant between institutional ownership and institutional ownership concentration on value relevance of accounting information.

Khodami pour et al (2011) in study entitled "Taxation and conservatism in financial reporting and value relevance of accounting information" to conclusion that tax accounting information is not only about which companies provide not reduced but also increases the relevance of information.

**Hypotheses**

**First hypothesis:** there is significant positive relationship between value relevance of accounting information of profit and loss statement and move toward national standards in the accounting firms listed in Tehran Stock Exchange.

**Second hypothesis:** there is significant positive relationship between value relevance of accounting information in the balance sheet and move toward national standards of accounting firms listed in Tehran Stock Exchange.
Third hypothesis: There is significant positive relationship between size and growth of the company and the relevance of accounting information.

Materials and Methods

The study of classification based on the purpose of the research, applied research, the study was classified according to the method of descriptive research. Among the types of descriptive research, this study is correlational.

In this study, the financial statements of listed companies in Tehran Stock Exchange has been studied, in order to collect data from CD Tehran Stock Exchange and bring new software to be used, data processing was performed using EViews software and EXCEL. Scope of study's time is for each of surveyed companies since the beginning of 2009 until end of 2012 (four fiscal period of a year). Since in this study population is listed firms in Tehran Stock Exchange and also due to the time limit mentioned in this study, the following criteria to select the proper sample are being used:

1. The main features are listed in Tehran Stock Exchange.
2. Companies must be listed on the Stock Exchange in 2009.
3. Its fiscal year ending in March of each year shall be.
4. In the interval 88 to 91, with the exception of the common stock for the General Assembly or the adjusted earnings per share has not stopped.
5. Companies during the financial year should be considered.
6. Information needed to define the variables that should be available.
7. Among financial intermediaries and investment companies or specific industries such as electricity, gas and telephone are not.
According to what was said sampling. Due to sample size, and there is some inconsistency between the community members, the screening method selected. A total of 117 eligible participants were selected who were selected as:

Variables, method of measurement and modeling study
In this study, the relationship between the value of information and consider the factors that in this context, the relevance of the information desired, using a combination of panel data regression method, its relationship to the effect the simulation.

The dependent variable
Relevance of accounting information:
Change in value of the index over the previous year, which is calculated using regression models 1 and 2 (Lam et al, 2013).

Model 1 related with profit model (Lam et al, 2013)

\[ \text{RET}_{jt} = \rho_{0,t} + \rho_{1,t} \Delta \text{EARN-LMV}_{jt} + \rho_{2,t} \text{EARN-LMV}_{jt} \]

\text{RET} : The cumulative returns of the stock market for 12 months, three months after the fiscal year end
\Delta \text{EARN-LMV} : Changes unexpected profit before items divided by market value of equity at the beginning of period
\text{EARN-LMV} : Profit before unexpected items divided by market value of equity at the beginning of period.

Model 2 Model related with balance sheet (Lam et al, 2013)

\[ \text{MV-PS}_{jt} = \pi_{0,t} + \pi_{1,t} \text{ASSETS-PS}_{jt} + \pi_{2,t} \text{LIAB-PS}_{jt} \]

\text{MV-PS} : Market value per share at year end
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ASSETS-PS: Book value per share at year-end assets (book value of assets divided by the number of ordinary shares).

LIAB-PS: End of year book value debt ratio (total liabilities divided by the number of ordinary shares).

**Independent and control variables**

The overall regression model for the control to measure the independent variables is as follows (Lam et al, 2013):

\[
\Delta \text{VAL-RELM}_{jt} = \alpha \beta_1 \text{SIZE}_{jt} + \beta_2 \text{GROW}_{jt} + \beta_3 \text{DEBT}_{jt} + \beta_4 \text{SINDEX}_{jt} + \beta_5 \text{TANG}_{jt} + \epsilon
\]

- **GROW**: Market value to book value (control variable)
- **DEBT**: Long-term debt to assets ratio (control variable)
- **SINDEX**: Cumulative returns Tehran Stock Exchange (the independent variable)
- **TANG**: Tangible indicators of corporate assets, the proposed Almeida and Campello (2007) as follows: (the independent variable)

\[
\frac{(\text{Accounts receivable } \times 0.715) + (\text{inventories } \times 0.547) + (\text{fixed assets } \times 0.535) + (\text{cash})}{\text{Book value of capital}}
\]

**Results**

The following table shows the mean and median index and dispersion parameters such as standard deviation and skew for different variables were calculated strain.

Larger mean of the median shows large parts in data because the mean is influenced by the values of the data distribution is skew to the right. The skew to the left and vice versa, and in some cases the distribution of any variable is skew to the left.
Table 1: Descriptive statistics for variables

<table>
<thead>
<tr>
<th>variables</th>
<th>Observations</th>
<th>Mean</th>
<th>median</th>
<th>SD</th>
<th>Skew</th>
<th>Stretchability</th>
<th>minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>dVAL-RELM-A</td>
<td>465</td>
<td>0.42</td>
<td>0.34</td>
<td>0.35</td>
<td>0.77</td>
<td>0.98</td>
<td>0.00</td>
<td>1.94</td>
</tr>
<tr>
<td>dVAL-RELM-B</td>
<td>463</td>
<td>0.54</td>
<td>0.45</td>
<td>0.40</td>
<td>0.83</td>
<td>0.11</td>
<td>0.00</td>
<td>1.81</td>
</tr>
<tr>
<td>SIZE</td>
<td>468</td>
<td>5.89</td>
<td>5.84</td>
<td>0.59</td>
<td>0.43</td>
<td>0.55</td>
<td>4.36</td>
<td>7.81</td>
</tr>
<tr>
<td>GROW</td>
<td>468</td>
<td>587.84</td>
<td>172.46</td>
<td>1177.87</td>
<td>3.58</td>
<td>13.35</td>
<td>-197.80</td>
<td>7142.30</td>
</tr>
<tr>
<td>DEBT</td>
<td>468</td>
<td>0.08</td>
<td>0.05</td>
<td>0.09</td>
<td>2.34</td>
<td>6.36</td>
<td>0.00</td>
<td>0.57</td>
</tr>
<tr>
<td>SINDEX</td>
<td>468</td>
<td>0.49</td>
<td>0.42</td>
<td>0.23</td>
<td>0.19</td>
<td>-1.09</td>
<td>0.19</td>
<td>0.83</td>
</tr>
<tr>
<td>TANG</td>
<td>468</td>
<td>501.37</td>
<td>150.55</td>
<td>1084.95</td>
<td>3.54</td>
<td>12.75</td>
<td>-553.39</td>
<td>6520.51</td>
</tr>
</tbody>
</table>

Skew values for the dependent variables dVAL-RELM-A and dVAL-RELM-B respectively 0.77 and is 0.83 Indicates that these variables are relative symmetry of the distribution of this variable is similar to a normal distribution, GROW skew value equal to 3.58, DEBT is equal to 2.34 and 2.54 is equal to TANG skew to the right represents the distribution of the other variables are symmetric distribution.

Table 2: Kolmogorov-Smirnov test to assess the normality of the dependent variable

<table>
<thead>
<tr>
<th>Variable</th>
<th>Number</th>
<th>Normal parameters mean</th>
<th>Normal parameters SD</th>
<th>maximum difference Absolut e value positive</th>
<th>Negative</th>
<th>Z value Kolmogorov - Smirnov</th>
<th>Probability value</th>
</tr>
</thead>
<tbody>
<tr>
<td>dVAL-RELM-A</td>
<td>465</td>
<td>0.42</td>
<td>0.35</td>
<td>0.12</td>
<td>0.12</td>
<td>-0.11</td>
<td>1.18</td>
</tr>
<tr>
<td>dVAL-RELM-B</td>
<td>463</td>
<td>0.54</td>
<td>0.40</td>
<td>0.10</td>
<td>0.10</td>
<td>-0.09</td>
<td>1.00</td>
</tr>
</tbody>
</table>

Probability for the dependent variable dVAL-RELM-A and dVAL-RELM-B respectively 0.124 and is 0.268 .The null hypothesis (normality of variables) cannot be rejected for these variables to predict the distribution of the matching variables (skew and elongation indices close to zero) is normal. Elongation indices close to zero) is normal.
Analysis of panel

As mentioned earlier the appropriate model among the models (combined models, the fixed effects model or random effects model) is selected. Chow and Housman test for the detection of the appropriate model is presented in the table below:

Table 3. Chow test and Housman test to select the appropriate model

<table>
<thead>
<tr>
<th>Model</th>
<th>Chow’s test</th>
<th>Housman test</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Test of effects</td>
<td>df</td>
<td>Probability value</td>
</tr>
<tr>
<td>Model 1</td>
<td>F value</td>
<td>1.163</td>
<td>(116,337)</td>
</tr>
<tr>
<td>Model 2</td>
<td>F value</td>
<td>3.389</td>
<td>(116,341)</td>
</tr>
</tbody>
</table>

Chow's test for the equal probability model, i.e. the model without the effects is 0.15 and the likelihood for model II Chow's test is equal to 0.000, which is less than 0.05 so model with separate effects for the company. Probability value for the Housman test for the second model is equivalent to 0.81 random effects model is the model used.

Hypothesis testing

**First hypothesis:** there is significant positive relationship between value relevance of accounting information and move toward national standards in the accounting firms listed in Tehran Stock Exchange.

The results are given in the following table:
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Table 4: Multiple correlation coefficients, coefficient of determination, and the amount of F & Camera Watson

<table>
<thead>
<tr>
<th>Year</th>
<th>Multiple correlation</th>
<th>Coefficient of determination</th>
<th>Adjusted coefficient of determination</th>
<th>Camera Watson</th>
<th>F value</th>
<th>Sig.</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>88</td>
<td>0.33</td>
<td>0.11</td>
<td>0.07</td>
<td>1.88</td>
<td>2.74</td>
<td>0.023</td>
<td>Significant</td>
</tr>
<tr>
<td>89</td>
<td>0.33</td>
<td>0.11</td>
<td>0.07</td>
<td>1.73</td>
<td>2.65</td>
<td>0.027</td>
<td>Significant</td>
</tr>
<tr>
<td>90</td>
<td>0.37</td>
<td>0.14</td>
<td>0.10</td>
<td>2.02</td>
<td>3.42</td>
<td>0.007</td>
<td>Significant</td>
</tr>
<tr>
<td>91</td>
<td>0.49</td>
<td>0.24</td>
<td>0.20</td>
<td>1.89</td>
<td>6.70</td>
<td>0.000</td>
<td>Significant</td>
</tr>
</tbody>
</table>

Significant probability value F, for the period mentioned (with the exception of 88, which is not significant) is less than 0.05. So there is a significant model for the years listed. Over the years, the ratio has increased i.e., the relationship is stronger. Camera Watson value is close to 2, absence of residual autocorrelation, which is one of the assumptions of regression analysis shows. (So there is no autocorrelation of residuals).

Second hypothesis: there is significant positive relationship between value relevance of accounting information in the balance sheet and move toward national standards of accounting firms listed in Tehran Stock Exchange.

The results are given in the following table:

Table 5: Multiple correlation coefficients, coefficient of determination, the amount of F & Camera Watson

<table>
<thead>
<tr>
<th>Year</th>
<th>Multiple correlation</th>
<th>Coefficient of determination</th>
<th>Adjusted coefficient of determination</th>
<th>Camera Watson</th>
<th>F value</th>
<th>Sig.</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>88</td>
<td>0.33</td>
<td>0.11</td>
<td>0.07</td>
<td>1.88</td>
<td>2.74</td>
<td>0.023</td>
<td>Significant</td>
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<tr>
<td>89</td>
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<td>0.07</td>
<td>1.73</td>
<td>2.65</td>
<td>0.027</td>
<td>Significant</td>
</tr>
<tr>
<td>90</td>
<td>0.37</td>
<td>0.14</td>
<td>0.10</td>
<td>2.02</td>
<td>3.42</td>
<td>0.007</td>
<td>Significant</td>
</tr>
<tr>
<td>91</td>
<td>0.49</td>
<td>0.24</td>
<td>0.20</td>
<td>1.89</td>
<td>6.70</td>
<td>0.000</td>
<td>Significant</td>
</tr>
</tbody>
</table>
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Significant probability value F, for a given year, less than 5%, so the model is significant. As years have increased coefficient of determination show that the connection is strong. Camera Watson value is close to 2, absence of residual autocorrelation, which is one of the assumptions of regression analysis (So there is no autocorrelation of residuals).

Third hypothesis: there is significant positive relationship between size and growth of the company and the relevance of accounting information.

The model assumed in relation to the model of interest is as follows:

\[
dVAL-RELM-A_{it} = \beta_0 + \beta_1 SIZE_{it} + \beta_2 GROWTH_{it} + \beta_3 DEBT_{it} + \\
\beta_4 SINDEX_{it} + \beta_5 TANG_{it} + \epsilon_{it}
\]

Panel analysis is given in the following table:

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Coefficients</th>
<th>t</th>
<th>result</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>0.261</td>
<td>1.150</td>
<td>0.251</td>
<td>Meaningless</td>
</tr>
<tr>
<td>SIZE</td>
<td>0.026</td>
<td>0.672</td>
<td>0.502</td>
<td>Meaningless</td>
</tr>
<tr>
<td>GROW</td>
<td>-0.00003</td>
<td>-1.446</td>
<td>0.149</td>
<td>Meaningless</td>
</tr>
<tr>
<td>DEBT</td>
<td>0.371</td>
<td>2.110</td>
<td>0.035</td>
<td>Significant and positive</td>
</tr>
<tr>
<td>SINDEX</td>
<td>-0.079</td>
<td>-1.143</td>
<td>0.254</td>
<td>Meaningless</td>
</tr>
<tr>
<td>TANG</td>
<td>0.00006</td>
<td>2.697</td>
<td>0.007</td>
<td>Significant and positive</td>
</tr>
<tr>
<td>PH value</td>
<td>3.90</td>
<td></td>
<td>Probability value F</td>
<td>0.002</td>
</tr>
<tr>
<td>Coefficient of determination</td>
<td>0.04</td>
<td></td>
<td>Camera Watson</td>
<td>1.74</td>
</tr>
</tbody>
</table>

The above model is estimated with fixed effects significant probability F, is equal to 0.002. That's less than the 95 percent 0.05 is therefore null hypothesis is rejected at the 95% confidence level means that there is a significant model. The coefficient of determination is equal to 0.04 that is about 4% of the variability in the independent variables and control is discussed. Value is equal to 1.74 camera Watson has values close to 2, absence of residual autocorrelation, which is one of
the assumptions of regression analysis shows. (So there is no autocorrelation of residuals).
Value of t-statistics for the intercept is equal to 1.52 at the 95% confidence in the null hypothesis is not rejected, i.e. the intercept is not significant.

The model assumed in connection with the model of the balance sheet as follows:

\[ \text{dVAL} - \text{RELM} - B_{it} = \beta_0 + \beta_1 \text{SIZE}_{it} + \beta_2 \text{GROWTH}_{it} + \beta_3 \text{DEBT}_{it} + \beta_4 \text{SINDEX}_{it} + \beta_5 \text{TANG}_{it} + \epsilon_{it} \]

Panel analysis is given in the following table:

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Coefficients</th>
<th>t</th>
<th>result</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>0.504</td>
<td>1.524</td>
<td>0.128</td>
<td>Meaningless</td>
</tr>
<tr>
<td>SIZE</td>
<td>0.025</td>
<td>0.436</td>
<td>0.663</td>
<td>Meaningless</td>
</tr>
<tr>
<td>GROW</td>
<td>-0.00005</td>
<td>-1.722</td>
<td>0.086</td>
<td>Meaningless</td>
</tr>
<tr>
<td>DEBT</td>
<td>-0.671</td>
<td>-3.112</td>
<td>0.002</td>
<td>Significant and negative</td>
</tr>
<tr>
<td>SINDEX</td>
<td>-0.138</td>
<td>-2.212</td>
<td>0.028</td>
<td>Significant and negative</td>
</tr>
<tr>
<td>TANG</td>
<td>0.00008</td>
<td>3.067</td>
<td>0.002</td>
<td>Significant and positive</td>
</tr>
<tr>
<td></td>
<td>5.15</td>
<td>5.15</td>
<td>Probability value F</td>
<td>0.000</td>
</tr>
<tr>
<td></td>
<td>0.05</td>
<td>0.05</td>
<td>Camera Watson</td>
<td>1.62</td>
</tr>
</tbody>
</table>

The table above is an estimate of the model without a significant probability F, is equal to 0.000. This value is less than 0.05. The null hypothesis is rejected at the 95% confidence level, i.e. 95% of the mean c there. The coefficient of determination is equal to 0.05 this means that about 5% of the variability is explained by the independent variables and control. The camera Watson value is equal to 1.62. Value of t-statistics for the intercept is equal to 1.524 at the 95% confidence in the null hypothesis is not rejected, i.e. the intercept is not significant.

**Discussion and Conclusion**

According to the first hypothesis and according to increasing statistics annual in coefficient of determination and F, the
profit model, it can be concluded that value relevance of accounting information has increased over time, this means that there is significant positive relationship between value relevance of accounting information, income statement and move toward national standards in the accounting firms listed in Tehran Stock Exchange. This finding is consistent with research of Lam et al, 2013.

According to the second hypothesis and statistics and F, model of the balance sheet, it can be concluded that the annual increase in the coefficient of determination over time, the value relevance of accounting information is increased. This means that the value relevance of accounting information in the balance sheet and move toward national standards of accounting firms listed in Tehran Stock Exchange, there is a significant positive relationship. This finding is consistent with research, Lam et al,(2013).

The third hypothesis examines the relationship between firm size and growth of information relating to income statement, and balance sheet, It can be seen that the value relevance of accounting information for both the size and growth of the company has a significant relationship with R Kevin colleagues were not available. Relevance of accounting information is inversely related to the size and growth of the company, are not comparable.

Recommendations based on research

According to the first and second hypothesis is based on the hypothesis that there is a positive correlation between the value of information, balance sheet and profit and loss statement of the movement toward national standards, it is suggested; increases setting new standards and improving the relevance of accounting information and provide greater effect on investment decisions actually matter to stimulate the economy.
Suggestions for future research

In order to assess the relevance of accounting information from the balance sheet and income statement information is used. It is suggested that the information about the book and the information related to accruals and cash flows are used. In this study data of 2009 to 2012 has been studied. It is recommended that the value relevance of accounting information developed after 2001 standard, evaluated and compared with earlier years.

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