The effect of mandating accounting standards in Iran on the permanence of earnings of companies listed in Tehran Stock Exchange

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Abstract: The main goal of the present research is to study the effect of implementing accounting standards on the permanence of earnings of companies. The statistical sample of this research entails 84 companies accepted in Tehran Stock Exchange during 16 consequent years from 1996 to 2011. In first hypothesis of the present research it was predicted that the average earnings permanence of the companies before and after the obligations of applying accounting standards were meaningfully different. The results of testing this hypothesis showed that the differences of averages of earnings permanence in the two periods before and after the obligations enforced are not statistically meaningful. In second research hypothesis predicted that the necessitation of accounting standards has had a meaningful effect on earnings permanence of firms accepted in Tehran Stock Exchange. The research results showed the negative effects of accounting standards on earnings permanence.

Keywords: accounting standards, earnings permanence

1. Introduction

Although financial data can be extracted from different resources, financial statements comprise the main financial information resources. Therefore, they should have high quality and present related information. This is realized when the statements above are supplied based on valid rules that is accounting standards. Thus, the obligations to reveal information in financial statements cause the harmony and comparability capability effectively besides obligating the companies to reveal certain information to the investors [11].

Most national accounting standards in Iran are based on international accounting standards. Additionally the devising and publishing a standard is far from its complete administration. Regarding the results of a research carried out about observing the standards in Iran it was found out that the amount of observing revealing standards in preparing and presenting financial reports of firms accepted in Tehran Stock Exchange has been %90 [12].

2. The Statement of the Problem

Investors believe that fixed earnings can guarantee dividends distribution more compared to earnings with fluctuations. Also earnings fluctuations are considered as an important criterion in overall risk of the company and firms having more smooth earnings have less risks [3][4]. On the other hand, the more earnings permanence will result in higher predictability of it and it will help stockholders in assessing future cash flows greatly. Thus, companies that have permanent earnings are more favored by investors and considered a more appropriate location for investment [13].

Earnings permanence means continuity (repeating) the current earnings. The more permanence in earnings means more power of a company to maintain the current earnings and it is presupposed that earnings quality of the company is higher. Accounting standards are considered as a base for financial reporting and increase the quality of financial reports. When standards are observed the relatedness of information becomes more and analysts make fewer mistakes in predicting the figures. Thus, it is expected that there is a positive and meaningful relationship between necessitation of standards and the prediction ability of net earnings permanence in companies [5].

Accounting standards were obligated since 2001 in Iran by auditing organization and this may have improved the quality of financial reporting. A lot of researches have been carried out about the effects of administrating national and international accounting standards on financial reporting environment. However, in our country it was investigated less and there seems to be a big gap in this area. In the present research we will focus on this issue and try to trace and document the positive effects of implementing national accounting standards on the predictability of accounting earnings.

3. The effect of applying accounting standards on financial reporting environment

In a research carried out by Bartov & et al (2005) entitled: "A comparison of the relatedness of
international accounting standards and accounting standards in Germany and The United States” and used the data related to the years between 1998 and 2004 to study the relatedness of book value and earnings. The research results showed that in models based on return, accounting principles accepted in the United States could prepare more related accounting data than standards in Germany and international standards. Meanwhile in models based on market value, international accounting standards and the standards in Germany could prepare more related accounting data than accounting principles accepted in the United States [3].

El Shamy & Al-Qenae (2005) carried out a research in Kuwait market for a 20 years’ time period ended in 2004. They reported 4 items as their research findings as follows:

1) Book value and earnings have had considerable determining ability both in isolation and commonly.
2) The relatedness characteristics of book value and earnings integration have increased during the study period.
3) The relatedness of earnings during the study period has increased and the relatedness of book value has decreased.
4) Since 1990, the year international standards accepted in Kuwait, the relatedness of the integration of book value and earnings has increased and the relatedness of earnings and book value has decreased [6].

In a research carried out by Halim Kadri (2008) in Malaysia El Son’s model was used to measure the relationship between book value and earnings with market value of Malaysian companies before and after the acceptance of financial reporting standards. The results showed that there is a meaningful relationship between book value and earnings with market value during the periods under investigation and this relationship was stronger in information based on international financial reporting standards meaningfully [7].

In a research done by Eghbai & Imani which entitled: “The effect of necessitating the implementation of accounting standards in earnings quality” the data of firms accepted in Tehran stock exchange were investigated for the periods before and after the necessitation of standards in Iran. The results showed negative effects of standards on earnings quality. Thus, we cannot pose the weakness of the devised standards because there is a long distance between devising standards and the correct and complete implementation of them [4].

Accounting figures have a meaningful relationship with market value of stocks of companies. Thus, research about this relationship is not a new topic. But in these researches it was used to determine the market value of stock price at the end of the fiscal years while to assess the effects of accounting figures on market value, first we should measure the stock price figures in the related model after public publishing of financial statements that is after the general assembly to measure the effect of data presented in financial reports to affect the decision makings of stockholders and investors. In the present research the stock prices were extracted from information resources for all sample companies after the general assembly and opening the trademark of the companies in bourse and placed in the model.

4. Research Methodology

The research methodology here is descriptive and correlation type. It is descriptive because its goal is to describe the conditions or phenomena under investigation and know more about the present situation. It is correlation because the relationship between the variables is investigated. Also the present research is applied because we have studied the relationship between variables in Stock Exchanges.

5. Statistical population and research sample

The statistical population of the present research entails all firms accepted in Tehran Stock Exchange. Regarding the research variables we can describe the following conditions to implement in our systematic deletion sampling.

1. The companies should not be among investing companies, banks, insurance companies or financial intermediary ones.
2. The end of fiscal year should be end of Esfand (21st. March).
3. The company should be present in Stock Exchange during the years between 1996 to 2011.
4. The trademark for the company should be active and its stocks should have been transacted at least once in a year.

In the present research, the year 1996 was considered as the base and after implementing the conditions and observing them in systematic deletion sampling, 84 companies were chosen from among the statistical society in order to carry out the hypotheses' tests.

6. Research hypotheses

1. The average earnings permanence in firms accepted in Tehran Stock Exchange before and after the obligations of accounting standards are meaningfully different.
2. The necessitation of accounting standards has a meaningful effect on earnings permanence in firms accepted in Tehran Stock Exchange.

7. Variables
1.5. Independent variables
The independent variable of the present research is accounting standards in Iran which were necessitated since 2001. The effect of standards on the amount of earnings permanence during the two periods before and after their necessitation and the comparison of these two periods were carried out.

Accounting standards devise a basis for financial reporting and the type of treatment with events and transactions and dominate the work of an accountant. The basis to prepare and devise the standards is the theoretical concepts of financial reporting.

1.6. Dependent variables
The dependent variable of the present research is the amount of earnings permanence of the companies under investigations. The operational description and measuring method of this variable is as follows:

Earnings permanence assesses the continuity and permanence of earnings from one period to the following period and estimates the current period's earnings compared to the previous period's earnings through using the regression. The measurement method of this variable is as follows:

\[ EARN_{i,t} = \beta_0 + \beta_1 EARN_{i,t-1} + \epsilon_{i,t} \]

Where,
- \( EARN_{i,t} \): earnings of the current period before unprecedented items
- \( EARN_{i,t-1} \): earnings of the previous period before unprecedented items
- \( \epsilon_{i,t} \): regression model's residual
- \( \beta_1 \): (the independent variable coefficient) it is considered as the earnings permanence degree of the company.

8. Hypothesis test method
8.1. First Hypothesis test method
The goal of testing the first hypothesis is to compare the average earnings permanence in companies comprising our statistical society during the two periods before and after the necessitation of standards. First earnings permanence was measured separately for each period and the average of earnings permanence degree for each company was calculated for the two periods of before and after the necessitation of the standards. These figures were investigated through the comparison of the averages of the two statistical societies (t-test) and the existence of a meaningful difference between them was studied.

8.2. Second Hypothesis test method
The second hypothesis includes the main goal of the present research in which the effect of necessitating accounting standards on earnings permanence is measured. To test this hypothesis we will use Dechow & Dichow's model which will be adjusted based on the hypothesis and will be presented in the form of a multivariable regression equation as follows:

\[ EARN_{i,t} = \beta_0 + \beta_1 EARN_{i,t-1} + \beta_2 STANDARD_t + \beta_3 (EARN_{i,t-1} * STANDARD_t) + \epsilon_{i,t} \]

\( EARN_{i,t} \): earnings of the current period before unprecedented items
\( EARN_{i,t-1} \): earnings of the previous period before unprecedented items
\( STANDARD_t \): it is a virtual variable and if the model estimation period entails the administration of standards its amount will be 1 and if not it would equal 0.

In this hypothesis, \( \beta_3 \) shows the earnings permanence degree during the administration period of the standards.

9. Hypothesis test results
9.1. First Hypothesis test results
In first hypothesis of this research it was predicted that the average earnings permanence of firms accepted in Tehran Stock Exchange before and after the necessitation of accounting standards were meaningfully different. The research period for testing hypotheses was 16 successive years since 1993 to 2008 and this period included two equal periods of 8 years before and after the necessitation of accounting standards. The theoretical foundation of the first hypothesis is based on the fact that probably by administering the accounting standards and qualitative improvement of financial reporting environments the fluctuation level of earnings of companies in our statistical sample will decrease. This is one of the criteria for quality of accounting information which is expected to improve by implementing standards.

The results of earnings permanence pattern showed an additive trend of earnings permanence during the pass of time. But this should be tested statistically. Thus, we used testing the comparison of the averages of the two independent statistical societies. In this test the permanence degrees (\( \beta_1 \)) were measured for the years during the research, isolated into two groups of before and after the necessitation of accounting standards and the existence of a meaningful difference in the averages of these two groups were investigated statistically. Thus, testing the hypothesis included studying the existence of a meaningful difference statistically between the averages of the earnings permanence levels (the amounts of \( \beta_1 \)) during the two periods before and after the necessitation of standards.
The results of the statistical analysis of the coefficients of independent variables showed that all these variables have had a meaningful effect in the dependent variable of the test model because the meaningfulness level of the coefficients were less than the test error level (α=0.05). the amount of the coefficient β1 related to the variable EARN_i,t-1 which shows the earnings permanence for the total research period shows that it is 1.197 positive and meaningful. This finding shows that in statistical sample companies we have had earnings permanence during the total research period. The coefficient β3 related to the variable EARN_i,t-1*STANDARD_t which shows the earnings permanence for the accounting standards necessitation period show that the coefficient above with a size of -0.333 and meaningfulness level of 0.001 is negative and meaningful. This findings show that the necessitation of accounting standards has had a meaningful effect on net earnings permanence of the companies. But unpredictably this effect is negative. In other words, these findings show that by necessitating accounting standards, earnings permanence of the companies in our statistical sample under investigation has decreased.

Based on the findings above we can claim that in an assurance level of %95 necessitating accounting standards has had a meaningful effect in earnings permanence of the companies accepted in Tehran Stock Exchange. Thus, the second research hypothesis is approved in this level of assurance. In other words, no evidences were found to approve H0.

### 9.2. Second Hypothesis test results

In second research hypothesis it was predicted that the necessitation of accounting standards has had a meaningful effect on earnings permanence of firms accepted in Tehran Stock Exchange. The theoretical foundations of the second hypothesis is based on the fact that it seems that the incident of necessitating the companies in our statistical society under investigation to observe accounting standards in financial reporting has been effective over the quality of accounting information.

#### Figure 2: Second Hypothesis test results

\[
EARN_i,t = \beta_0 + \beta_1 EARN_i,t-1 + \beta_2 STANDARD_t + \beta_3 (EARN_i,t-1 * STANDARD_t) + \epsilon_i, t
\]

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<th>β 1</th>
<th>β 2</th>
<th>β 3</th>
<th>Coefficients value</th>
<th>P-values</th>
<th>D-W</th>
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<td>0.724</td>
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<tr>
<td>0.000</td>
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<td>0.001</td>
<td>(P-value)</td>
<td>1.331</td>
<td>0.333</td>
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The overall result of such an operation is that the image of a business unit will seem better that its real amount. The incentive to invest capital and financial resources will increase through external individuals of an
organization. In such conditions the principles and approaches of accounting will leave desirable results in financial reporting environments being supported by referents devising accounting standards to adjust the optimisms of managers, support the rights of beneficiaries and fair presentation of financial statements. If the results of the present research show the decrease in earnings permanence after necessitating accounting standards, it may be due to the positive effects of standards in controlling the opportunistic incentives of the managers. Regarding this perspective, the performance of national accounting standards in Iran is admirable.

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