INVESTIGATION INTO THE RELATIONSHIP BETWEEN ACCOUNTING QUALITY, DELAY IN FUTURE STOCK PRICE AND FUTURE STOCK RETURNS IN ACCEPTED COMPANIES IN TEHRAN STOCK EXCHANGE

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ABSTRACT
This research aims to study relationship between the accounting information quality, delay in stock price adjustment and future stock returns in accepted companies in Tehran stock exchange, so 92 numbers of companies have been investigated during time period of 2008-2011. Research literature was extracted by the library study method and required financial data was extracted by referring to financial statements and new gift 3 software and they were summarized, classified and computed by software Excel and they finally were analyzed through software including Eviews and Stata. The results showed by using accomplished statistical methods at the 955 level of confidence and by benefiting from regression and Pearson test that there is a significant relationship between accounting information quality and delay in stock price adjustment and future stock return.

Keywords: Accounting Information Quality, Delay in Stock Price Adjustment, Accruals and Future Stock Return

INTRODUCTION
The information role in the area of economic decision-making is vital and investors cannot appropriately specify investment opportunities and risks without enough information. The information should be given to investors in the appropriate time in order to be effective on decisions of users of financial statements. Timeliness is one of the features of information relatedness and it means that financial statements must be given to users when there is the opportunity to make the decision, judgment and taking action to considered issue for them (Financial Accounting Standards Board, statement number 2) (Khodadadi et al., in 2014). In the other words, financial information should be given to users before passing the time when users can judge and decide based on it.

Because financial information is very sensible toward passing the time and they sometime lose their value and usability in decision-making through passing time, however offering information is closer to the time of occurring related events, the information will be more on-time. The proof of this issue in financial reporting is closeness of the time of offering report to time of end of financial period. The reporting speed enhancement due to on-time application of information in adapting economic decisions by investors can lead to more companies’ financial information clarity and consequently it will lead to more capital market clarity that this issue can in turn have a considerable impact on financial and investment market attractions (Mahdavi & Jamalian, 2010).

Investors and stockholders always seek the information which helps them in selecting the best investment and the most appropriate portfolios. Accounting information quality is one of the main topics which influence investors’ decision-makings (Ahmadi & Jamali, 2013).

Financial researchers always seek the variables through which can predict stock return for future periods with more level of confidence compared with previous variables and models. Specifying the way of stock market reaction toward accounting information enjoy very much importance in recognition of capital market efficiency and also evaluating fundamental financial statements information usability. The experimental researches show that accounting figures have the power of predicting and the value of accounting information prediction power can be accepted as one of the accounting information qualitative features (Hendriksen and Breda, 2009).
Provided information by accounting information system is a part of information that investors apply them to predict future cash flows. Reconsideration in predicting future cash flows based on unqualified information compared with reconsideration in based on desirable qualified information leads to unknown estimation of stock price. Respecting lack of trust obtained from undesirable quality of information in stock price estimation provides a better understanding of the content of published information through passing time and learning of evaluating other investment also has led to improvement in reconsiderations in estimations and finally stock price adjustment with delay will occur (Rahmani et al., 2012). Delay in price adjustment is risky for seller and buyer and this risk is due to lack of completed reflection of information in price. Information’s completed and prompt reflection may have negative or positive effect on stock price. While seller and buyer expect earning without risk because of this selection and thus wrong choice event will not be unlikely (Callen et al., 2013). What that will be considered in this research is the study of relationship between accounting information quality with delay in stock price adjustment and prediction capability of future returns.

Research’s Theoretical Basics
Accounting Information Quality
Financial reporting quality is one the subjects which have been allocated a broad part of researches in accounting and financial management in recent years to itself. In these researches, financial reporting quality effects have been studied by using different criterion and company’s different dimensions such as capital cost, debt cost, investment efficiency, stock return, stock market value, etc. These effects have analyzed mainly based on lack of information asymmetry theory and agency relation. Information asymmetry means information inequality between two party of agreement which leads to creation of two categories of people including aware and unaware persons, the factor which influences the relationships between interested parties and company. Eazali and Ohara believe that companies can influence existing information asymmetry through using the amount, accuracy and totally quality of offered information (Fakhari & Taqavi, 2009). But what is the financial reporting criterion? Accounting interest based on commitment assumption is one of the main elements in financial reporting discussion. Accounting interest is a tool for overcoming the problems of measurement and assessment of the institutions which are continuing activity. Cash flows own timing problems and they are not considered as a suitable criterion for performance. In spite of this priority, commitment interest which is based on research principle and income specification may be not matched with company’s real cash flows. In fact, the level of company’s interest adjustment with the level of created cash flows indicate commitment items quality and decrease in this adjustment and its quality causes the increase in company’s information risk. Therefore, the difference between commitment interest and cash flows has been discussed as an interest quality criterion and totally financial reporting quality. In the most researches, commitment items quality has been used as financial reporting alternative (Fakhari & Taqavi, 2009).

Stock Price
Cash compensation which seller and buyer agree in order to exchange for a sheet of stock in a free exchange is named the stock price (Jafari, 2009). In the financial literatures of theories, there are different analyses for evaluating valuable papers (securities). There are two perspectives regarding determining stock price including: the group which they believe under the topic of technical analysts that through technical analysis can predict stock price in future. This group attempt to predict stock return through evaluating the stock price pattern in the past. The other group is fundamentalists. This group use fundamental analysis to analyze and determine stock price. In this analysis, it is assumed that stock enjoy innate value. Innate value includes both expected return and risk. The most financial and economic experts believe that current value is the best economic value estimation. Their reasoning is that this value is directly related to expect cash flows of future interests and it also includes time dimension of monetary value (Ahmad et al., 2005).

Stock Price Determination
Stock price is changeable every moment and due to change in market supply and demand. The numbers buyers of one share is more than the numbers of its sellers that means that purchase demand of a share is
more than its supply level for sale, that stock’s price will be increased and vice-versa. Supply and demand understanding and price changes arisen from it is very much, but that is difficult is the understanding what that leads to changes in supply and demand and it causes that someone be requested or buyers of certain share and some other be its approach or sellers.

Stock price determination is a very difficult task, it is obvious that the company which has published these securities will sell them by high possible price and purchasers or the people who want to invest in this stock are intended to buy it by the lowest possible price. The company’s stock price is determined more through supply and demand or by agencies, financing institutions, etc. A price should be determined for pricing that is logical, suitable and justice for Publisher Company and in the other hand; it should attract purchasers and investors’ view and motive them toward investment. The experience has shown that if a price is determined logically and appropriately, that stock price will be gradually took an ascending process (Fadavi, 2010).

One of the main cases for capital market’s growth and development is creating general knowledge related to the process of determining securities price including stock and effective factors on price and volume of stock interactions and interpreting main event such as capital increase announcement through supplying new stock. Stock supply causes that more share be at the disposal of stockholders and the exchanges volume is increased. Exchanges volume can be used as important and valuable information in investment decision-makings and some useful information related to current condition and future perspective of price are offered to decision-makers and investors. The companies which their exchanges volume is higher compared with other companies; they will have lower risk regarding lack of possibility to stock sale in market because of higher liquidity capability. Stock price mostly indicate market expectations of companies’ economic condition. So market indexes indicate condition and performance of total future economic. Securities (valuable papers) analysts, portfolio managers and other economic operators apply market indicator to study variables which influence total movement of stock prices and this market’s investment return can be compared with other investment opportunities such as investment in bonds, gold and foreign currency through evaluating stock market trend.

Return

Return is a driving force in investment process which creates incentive and it is considered as a reward for investors. The total return means the set of benefits which is awarded to share during the year. The main institutions’ performance evaluation criterion is usually stock return rate. This criterion singly has owned the information content for investors and it is used for evaluating performance. When this criterion is increased, it is a warning alarm for company and it shows the company’s performance inappropriate. This criterion owns very information content because performance evaluation based on market value reflects investors’ information perfectly (Rezayi & Soleimani, 2012).

Regarding return concept, Markoitz believes that it is possible that definition of return is different from one investment to another one but in any way investors prefer that earn the most of it rather the least of it. Fransis in this regard also believes that if we consider investment as a money investment which it is expected extra money will be earned of it, in this case every investor will contain a degree of risk which it is required loosing that money at the present time in order to achieve future return (Morad, 2004). Some other definitions of investment return have been stated which is as follows:

Return of one item of financial asset during one year can be interpreted in this manner: discount rate that if future cash flows are computed with it, the obtained present value will be equal to asset price (Pie, 2011).

Return of an investment is researchable cash flows which are earned by experts of that investment during a certain time period. Return is stated as a percentage of accomplished investment value at the beginning of period (Sadri, 2011).

Research Conceptual Framework

Theoretical framework of conceptual patterns is based on theoretic relations among a numbers of factors which have been specified regarding the important issues under study. This theoretical framework goes on logically through evaluating research history in the realm of issue. Respecting mentioning last
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researches and theoretical basics, researcher has offered the below conceptual model in order to study the relationship between research’s variables as self-constructed.

![Conceptual Model Diagram]

**Research Hypothesis**
1. There is a significant relationship between accounting information quality and delay in stock price adjustment in companies accepted in Tehran stock exchange.
2. There is a significant relationship between accounting information quality and stock future returns in companies accepted in Tehran stock exchange.

**MATERIALS AND METHODS**

**Research Methodology**

This is one applied research regarding research classification based on objective and it is an experimental research respecting this fact that it focuses on recognizing the cause and effect relations between variables and in which independent variable effect on dependent variable is important. It is correlational research regarding the method which has used to test hypotheses and it is placed at the area of accounting confirmative researches because it study the existing reality in stock exchange and deal with what that exist. It is also considered as post-event research based on the method of information collection.

The library method will be used in this research to collect data and information. In order to write and collect required information at the theoretical basic, some specialized domestic and foreign journals mainly have been used and required data and information mainly are collected from information banks of Tehran’s stock exchange and some software including tadbir Pardez, Sahra and new rah Avard. The companies which have the below features have been used in this research as sample:
1. Company's financial information exists for time period of 2008-2014
2. required companies should not a part of banks and financial intermediation, Leasing and other investment companies.
3. Fiscal year of company ends to 29 march in order to comparability of information
4. Exchange interval should not be more than two weeks.
5. Data completeness.

Some actions were took place to selected sample by the method of systematically omission by considering determined restrictions. In this research, data is analyzed by using research method and at last, final concluding will be done for report. Collected data will be computed by software Excel and they
will be analyzed through Eviews and Stata. Since we aim to study in this research the relationship between accounting information quality and delay in share price adjustment and capability to predict accepted companies in future returns at Tehran’s stock exchange, we will study their relationship by using regression test following evaluating descriptive statistic of research’s variables.

RESULTS AND DISCUSSION
Research Findings
Research Hypotheses Test
The Least Generalized Squares Method has been used in order to examine this research’s hypotheses.

First Hypothesis Test
The first hypothesis studies the relationship between accounting information quality and delay in share price adjustment and capability to predict accepted companies in future returns at Tehran’s stock exchange that this hypothesis is converted to statistical hypothesis to test and \( H_0 \) shows the claim and \( H_1 \) shows claim contradictory.

\( H_0: \) There is not a significant relationship between accounting information quality and delay in share price adjustment and capability to predict accepted companies in future returns at Tehran’s stock exchange.

\( H_1: \) There is a significant relationship between accounting information quality and delay in share price adjustment and capability to predict accepted companies in future returns at Tehran’s stock exchange.

\( H_0: \) \( p = 0 \) claim contradictory
\( H_1: \) \( p \neq 0 \) claim

The results obtained from this study have been shown in table 1.

Table 1: The results of model estimation for first hypothesis by using GLS method

<table>
<thead>
<tr>
<th>Variable topic</th>
<th>Symbol</th>
<th>Estimated coefficient</th>
<th>Standard error</th>
<th>T statistic</th>
<th>P-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Width of origin</td>
<td>A</td>
<td>-0.997</td>
<td>0.122</td>
<td>-8.125</td>
<td>0.000</td>
</tr>
<tr>
<td>Accounting information quality</td>
<td>QA</td>
<td>0.191</td>
<td>0.024</td>
<td>7.660</td>
<td>0.003</td>
</tr>
<tr>
<td>Institutional stockholders</td>
<td>INSOWN</td>
<td>-0.000</td>
<td>0.000</td>
<td>-1.557</td>
<td>0.120</td>
</tr>
<tr>
<td>Transactions turnover</td>
<td>TURN</td>
<td>-0.022</td>
<td>0.24</td>
<td>-0.919</td>
<td>0.358</td>
</tr>
<tr>
<td>Transaction days</td>
<td>TRADAY</td>
<td>0.001</td>
<td>6.67E-05</td>
<td>15.762</td>
<td>0.000</td>
</tr>
<tr>
<td>Company size</td>
<td>SIZE</td>
<td>0.079</td>
<td>0.008</td>
<td>9.356</td>
<td>0.000</td>
</tr>
<tr>
<td>Determination coefficient: 0.668</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Watson Durbin: 2.18</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Reference: research’s findings

Following making sure regarding establishing classic hypotheses, Generalized Squares Least Regression Method was used in order to model estimation respecting existence of variance dissimilarity. Table number 1 shows the results of model estimation for first hypothesis in brief. According to inserted results in this table, P-value of F statistic is less than 5%. It can be said that model is meaningful at the 95% level of confidence for first hypothesis and it enjoy high credibility due to high level of determination coefficient that is equal to 0.668. Respecting this fact that P-value is equal to 0.003 for B1 coefficient, research first hypothesis is not rejected at the 0.5% level of confidence and there is a significant relationship between accounting information quality and delay in stock price adjustment. With respect to its estimated positive coefficient that is equal to 0.191, this relationship is positive.

According to table number 1, monitoring variable estimated coefficient INSOWN (institutional stockholders) indicates lack of significant relationship between ratio of institutional stockholders and delay in stock price adjustment at the error level of 0.05%. Since this computed amount of p-value for
coefficient of this monitoring variable has obtained more than 0.05% (0.120), so it can be said that there is not a significant relationship between ratio of institutional stockholders and delay in stock price adjustment at the 95% level of confidence.

According to table number 1, monitoring variable estimated coefficient Turn (transaction turnover) indicates lack of significant relationship between transaction turnover and delay in stock price adjustment at the error level of 0.05%. Since this computed amount of p-value for coefficient of this monitoring variable has obtained more than 0.05% (0.358), so it can be said that there is not a significant relationship between transaction turnover and delay in stock price adjustment at the 95% level of confidence.

According to table number 1, monitoring variable estimated coefficient TRADAY (transaction days) indicates the existence of significant relationship between transaction days and delay in stock price adjustment at the error level of 0.05%. Since this computed amount of p-value for coefficient of this monitoring variable has obtained less than 0.05% (0.000) so it can be said that there is a significant relationship between transaction days and delay in stock price adjustment at the 95% level of confidence. Also respecting this fact that monitoring variable estimated coefficient (0.001) is positive, the relationship between transaction days and delay in stock price adjustment is positive (direct).

According to table number 1, monitoring variable estimated coefficient Size (company size) indicates existence of significant relationship between company size and delay in stock price adjustment at the error level of 0.05%. Since this computed amount of p-value for coefficient of this monitoring variable has obtained less than 0.05% (0.000) so it can be said that there is a significant relationship between company size and delay in stock price adjustment at the 95% level of confidence. Also respecting this fact that monitoring variable estimated coefficient (0.079) is positive, the relationship between company size and delay in stock price adjustment is positive (direct).

The Second Hypothesis Test
The second hypothesis studies the relationship between accounting information quality and stock future return in accepted companies at Tehran’s stock exchange that this hypothesis is converted to statistical hypothesis to test and H₀ shows the claim and H₁ shows claim contradictory. H₀: There is not a significant relationship between accounting information quality and stock future return in accepted companies at Tehran’s stock exchange. H₁: There is a significant relationship between accounting information quality and stock future return in accepted companies at Tehran’s stock exchange. H₀: p = 0 claim contradictory H₁: p ≠0 claim

The results obtained from this study have been shown in table 2.

Table 2: The results of model estimation for second hypothesis by using GLS method

<table>
<thead>
<tr>
<th>Variable topic</th>
<th>Symbol</th>
<th>Estimated coefficient</th>
<th>Standard error</th>
<th>T statistic</th>
<th>P-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Width of origin</td>
<td>A</td>
<td>10.607</td>
<td>0.493</td>
<td>21.502</td>
<td>0.000</td>
</tr>
<tr>
<td>Accounting information quality</td>
<td>QA</td>
<td>0.445</td>
<td>0.128</td>
<td>3.481</td>
<td>0.000</td>
</tr>
<tr>
<td>Institutional stockholders</td>
<td>INSOWN</td>
<td>-0.001</td>
<td>0.001</td>
<td>-0.648</td>
<td>0.493</td>
</tr>
<tr>
<td>Transactions turnover</td>
<td>TURN</td>
<td>-0.468</td>
<td>0.182</td>
<td>-2.596</td>
<td>0.010</td>
</tr>
<tr>
<td>Transaction days</td>
<td>TRADAY</td>
<td>3.56E-05</td>
<td>0.000</td>
<td>0.078</td>
<td>0.937</td>
</tr>
<tr>
<td>Company size</td>
<td>SIZE</td>
<td>0.099</td>
<td>0.033</td>
<td>2.942</td>
<td>0.003</td>
</tr>
</tbody>
</table>
| Determination coefficient: 0.347|           | Balanced determination coefficient: 0.254

Reference: research’s findings
Following making sure regarding establishing classic hypotheses, Generalized Squares Least Regression Method and combined data method were used. Table number 2 shows the results of model estimation for first hypothesis in brief. According to inserted results in this table, P-value of F statistic is less than 5%. It can be said that model is meaningful at the 95% level of confidence for first hypothesis and it enjoy high credibility due to high level of determination coefficient that is equal to 0.347. Respecting this fact that P-value is equal to 0.000 for B1 coefficient, research second hypothesis is not rejected at the 0.5% level of confidence and there is a significant relationship between accounting information quality and stock future return. With respect to its estimated positive coefficient that is equal to 0.445, this relationship is positive. According to table number 2, monitoring variable estimated coefficient INSOWN (institutional stockholders) indicates existence of significant relationship between ratio of institutional stockholders and stock future return at the error level of 0.05%. Since this computed amount of p-value for coefficient of this monitoring variable has obtained more than 0.05% (0.493), so it can be said that there is a significant relationship between ratio of institutional stockholders and stock future return at the 95% level of confidence.

According to table number 2, monitoring variable estimated coefficient Turn (transaction turnover) indicates existence of significant relationship between transaction turnover and stock future return at the error level of 0.05%. Since this computed amount of p-value for coefficient of this monitoring variable has obtained more than 0.05% (0.010 so it can be said that there is a significant relationship between transaction turnover and stock future return at the 95% level of confidence. According to table number 2, monitoring variable estimated coefficient TRADAY (transaction days) indicates lack of significant relationship between transaction days and stock future return at the error level of 0.05%. Since this computed amount of p-value for coefficient of this monitoring variable has obtained less than 0.05% (0.937) so it can be said that there is not a significant relationship between transaction days and stock future return at the 95% level of confidence.

According to table number 2, monitoring variable estimated coefficient Size (company size) indicates existence of significant relationship between company size and stock future return at the error level of 0.05%. Since this computed amount of p-value for coefficient of this monitoring variable has obtained less than 0.05% (0.003), so it can be said that there is a significant relationship between company size and stock future return at the 95% level of confidence. Also respecting this fact that monitoring variable estimated coefficient (0.99) is positive, the relationship between company size and stock future return is positive (direct).

Concluding and Offering Suggestion

The Analysis of First Hypothesis’s Results

The relationship between accounting information quality and delay in stock price adjustment was studied. The findings showed that determination coefficient for model related to first hypothesis is credible and the level of dependent variable’s changeability are explained through applied variables in model (independent and monitoring). Research’s findings showed that obtained level of confidence for the first model of independent variable (accounting information quality) has a significant relationship with delay in stock price adjustment at the determined level of confidence. Also respecting positive coefficient of independent estimated variable (accounting information quality), the results indicates the positive relationship between accounting information quality and delay in stock price adjustment. Research’s findings imply positive and significant relationship between the quality of promissory articles and the amount of delay in stock price adjustment. The existence of a significant relationship between promissory articles and delay in stock price adjustment means that the companies which have weaker promissory articles quality, they have more delay in stock price adjustment. In fact, the results showed that the investors take action to predict by using a collection of accessible information and they receive to an estimation price. When new information and related to market are transferred, the previous estimation are updated and the new price of stock is determined. Also on-time application of accounting information improves the price adjustment speed and stock transaction price will be closed to its real price. The obtained results in relation with this hypothesis is similar to the obtained results from the researches of...

The Analysis of Second Hypothesis’s Results

The relationship between accounting information quality and stock future returns was studied. The findings showed that determination coefficient for model related to second hypothesis is credible and the level of dependent variable’s changeability are explained through applied variables in model (independent and monitoring).

Research’s findings showed that obtained level of confidence for the second model of independent variable (accounting information quality) has a significant relationship with stock future price at the determined level of confidence. Also respecting positive coefficient of independent estimated variable (accounting information quality), the results indicates the positive relationship between accounting information quality and. Research’s findings imply positive and significant relationship between the quality of promissory articles and stock future returns. The existence of a significant relationship between promissory articles and stock future returns means that the companies which have weaker promissory articles quality, they have more stock future returns. In fact, the results showed that the investors take action to predict by using a collection of accessible information and they have better prediction in future returns. The obtained results of this research are similar to the results of the researches of some authors including Mirzayi in 2001, Taqafi et al., in 2003, Rahmani et al., in 2004, Hadrik in 1992 and Kallen et al., in 2013. At last, some suggestions are offered:

1- Respecting hypotheses results (the existence of relationship between accounting information quality and stock future return and delay in stock price adjustment, it is suggested to investors that they pay especial attention to accounting information quality especially to changes in promissory articles in fundamental analyses at the companies level and also respecting the importance of accounting information in adapted decisions by investors, the companies’ managers are suggested that offer the qualified accounting information.

2- More evidences are required for achieving a more clear interpretation of these research findings. This research has been done by using the data related to a sample of present companies in Tehran’s stock exchange without attention to industry in the interval of years 2008-2014, so it is suggested to all the participants to act carefully in generalizing this research results to time periods and non-exchange companies.

3- Respecting research’s findings, it is suggested to stock exchange institution to provide some obligatory in order to companies offers qualified accounting information to decrease delay in price adjustment and stock’s transaction price be closer to real value.

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