Original Article

Explaining the relationship between stock price adjustment and accounting information quality in firms listed in Tehran Stock Exchange

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ABSTRACT

Nowadays, information is regarded as one of the most important and applicable sources for organizations and developing information is a necessity when it comes to improving the conditions of the organization and/or developing the organizations, using information that is supported by the management can be suitable strategy that can be adopted by the organizations. In an efficient market, the information that is presented in the market rapidly affects the prices. The present study has aimed to review the relationship between stock price adjustment and accounting information quality. The statistical population of this study consists of 98 firms listed in Tehran Stock Exchange between the years 2011 and 2016. To test the research hypotheses, the least squares regression has been used. The obtained results suggest that accruals quality, loss succession, earnings smoothing have a significant impact on the delay in the adjustment of stock price and unexpected earnings don't have a significant effect on the adjustment of stock price.

Keywords: Stock Price adjustment, accounting information quality, accruals quality.

Introduction

A large volume of studies has shown that accounting information is a part of the series of information that are used by investors for predicting future cash flows in order to calculate the estimated value of the stock. Although financial statements are presented periodically, but other relevant information including the information associated with the firm and the market are presented to the market between this date and the next date on which the new information will be published. At the time of transmitting the relevant information, the organizations make sure of the timeliness of the previously estimated cash flows and new estimated prices are formed. Therefore, timeliness is based on two sets of information: new information that have been published recently and information that already existed in the market and generally include the latest financial statements. Thus, the information presented in the latest financial statements (and the quality of this information) are regarded as relevant information which is because of the fact that the act as a basis for the estimation of cash flows [1].

According to the efficient market paradigm, timeliness of the estimated cash flows and adjustment of stock price occur immediately and completely because there is no friction in this market such as low-quality information. However, the dominant paradigm in Iran's capital market is not similar to this paradigm. Thus, in the trading process, the existing frictions in the market lead to delayed stock price adjustment as opposed to new information that are systematically different. Among numerous factors, trading expenses, level of institutional ownership, short selling, turnovers, ratio of analysts' coverage, presence of external investors, incomplete information and informational asymmetry, as the frictions in the market, have mutual performance mechanisms. These factors are regarded as tools for present information to the capital market and if their

Access this article online	
Website: www.japer.in	**E-ISSN:** 2249-3379

How to cite this article: Mehrdad Ghanbari, Malek Esfandiari, Abdul Reza Esfandiari. Explaining the relationship between stock price adjustment and accounting information quality in firms listed in Tehran Stock Exchange. J Adv Pharm Edu Res 2018;8(S2):171-178.
Source of Support: Nil, Conflict of Interest: None declared.

presentation is not proper, they will turn into frictions in the market and act as a barrier on the way of complete presentation of information and timely adjustment of stock price [2]. The findings of Barry and Brown (1984), Merton (1987), Eisley et al. (2007) and Ackins et al. (2012) suggest that the presented information are incomplete and there is informational asymmetry and deficit information. Potential incomplete information prevents timely discovering of prices and that is why stock price adjustment will be delayed [3]. Verchia (1980) presented a theoretical model and analyzed the speed of price adjustment to new information based on the quality of information recently published by various firms with the assumption of stability of previous information and concluded that the more relevant the new information is, the higher the speed of price adjustment will be. Collin et al. (2000) also argued that profitable prices can be the outcome of weak and incomplete information. There is a convergence between stock price and fundamental values when the returns on share are less disturbed. Convergence indicates that price adjustment occurs when the divergence between the opinions of investors reduces and investors start to learn from one another. However, when the divergence between fundamental values and stock price increases, the issue indicates that the quality of the existing set of information has been reduced and the disturbing agents have once again come to the market. Some theorists consider two different aspects of accounting information quality. The first aspect is the reflection of informational content, i.e. information associated with the prediction of expected earnings and future cash flows (relevance) and second aspect is the presentation of signals regarding earnings durability, which means that accounting information must be fair and they must present a complete image of the firm's performance, situation and risky situation the firm is faced with (reliability) [4]. Quality of accruals are among important indexes that have been used for measuring the quality of accounting information. What is meant by the quality of accruals is that there are uncertainties about the liquidity of accruals. Firms with high-quality accruals have low-quality accounting information. The quality of accruals criterion includes two factors that affect the quality of accounting information, which are estimation of errors in the financial reports and ambition of managers. Dwell et al. (2007) and Ashboogh et al. (2008) have shed light to evidence that weak internal control improves the quality of accruals [3]. Given the gap that exists in this field of research, the question that rises is this: is the quality of accounting information an indication of incomplete information and can it be related to the delayed adjustment of stock price?

Research literature

Nowadays, information is regarded as one of the most important and applicable sources for organizations and developing information is a necessity when it comes to improving the conditions of the organization and/or developing the organizations, using information that is supported by the management can be suitable strategy that can be adopted by the organizations [5]. In addition, it is quite important to pay attention to information management in the organizations and organizations need it to improve the quality of their information and also to improve the efficiency and effectiveness of their operations and they also use it with the purpose of increasing their profitability and productivity [6].

In today's business world, quality of information acts as a basis for decision makings; because it seems to be an essential component for any organization that wishes to what it is supposedly responsible for [7]. Quality of information refers to the extent to which data is applicable. Nowadays, there is strong evidence that the subjects and issues regarding quality of information have turned into a crucial concern of organizations; because organizations need high-quality information if they want to survive in the business world and satisfy their customers. Having access to high-quality information is the basis of the business requirements because it can improve the performance of organizations when it comes to establishing a cooperation between suppliers and consumers as the value supply chain of any business firm or organization. Lee argues that the strong communications in today's world have led to the growth of organizations' data storage and accordingly, organizations need to select high-quality data from the existing data sets so that they would be able to achieve their goals and to succeed in the business world. It is quite obvious that organizations need high-quality information if they want to survive in the global competitive world and at the international level of economy. Therefore, data management is regarded as an important issue in the organizations. Large companies have come to the realization that they need to consider high-quality accounting information systems in their processes in particular so that various sections of the organization would be supported and developed [8].

Additionally, making appropriate accounting and management-related decisions depends on the presence of proper accounting information systems in the organizations. Thus, organizations must attempt to process their systems by considering the efficiency of their accounting information systems. Paying attention to having high-quality information is factor that leads to the successful implementation of the accounting information systems in the organizations. Therefore, effectiveness and power of information have been combined and turned into a quality factor and quality factors have turned into a crucial, considerable and effective element for organizations that wish to execute their operational processes well [9]. On the other hand, accountants, managers and decision makers are always concerned with the appropriateness of the accounting information systems that are required for information communication and control and their basic argument and reasoning in this regard is this: they always seek to find a proper information backup system. In most cases, these systems do not have high-quality data to use and to make good decisions. Therefore, this defect might lead to lack of accurate knowledge and perspective in the organizations and the organization might therefore be faced with challenges in achieving their goals by using high-quality financial information systems. In addition,

there are currently a number of problems in association with the accurate application of accounting systems in proportion with the business requirements [10].

All of these are crucial needs of a company for organizing and managing the establishment of different processes in all sectors. Furthermore, it is quite important to pay attention to the organizational structure as well, which in turn will lead to adoption of good accounting information systems; because proper designing of accounting information systems will increase the productivity resulting from the accounting information associated with responsibilities and improve organizational performance. The findings obtained from using specific applicable software, accounting information systems and process management suggest that companies must obtained their required information, which includes management and accounting information, from outside of the firms' organizational resource planning system and do not use it in the current systems; because in practice, the previously mentioned information systems cannot respond to the demands of management and are not able to present the required accounting and financial information [11].

A hypothesis has risen about the efficiency of capital markets in the field of financial affairs. Many researches have been conducted to test this hypothesis: can the securities market act logically when it comes to achieving and processing the incoming information? Are the processed information presented in the stock prices immediately and unbiased? Logically, investors use all of the information associated with valuation and pricing of securities in order to maximize the desirableness of the presented information [12].

However, the costs of information processing and transactions must also be taken into account in determining the securities price. In 1970, the concept of securities market efficiency was officially introduced to the world by Fama. There is a close and strong relationship between the presence of sufficient information in the market and the timely and rapid reflection of these information in the price of securities [2].

In an efficient market, the information that is presented rapidly affects the prices. In such market, the stock price comes close to its natural and essential value. In other words, one of the most important characteristics of the securities in an efficient market is that the price that is determined for them in the market is a proper index of the actual value of the securities. Fama believes that an efficient market is a market in which the securities price (such as ordinary shares) is reflective of all of the information that exists in a market. From the perspective of the efficient market hypothesis, the reason for the existence of accounting is informational asymmetry. What is meant by informational asymmetry is that one party of the trade has more information that the other one. An efficient market should be sensitive to new information and react to them. Fama has proposed the following characteristics for an efficient market:

1. The atmosphere of the market should be competitive.
2. Information should be accessible to every party involved rapidly and at the minimum cost.
3. It must be reassured that the prices of the exchanged securities and stocks are fair.
4. The costs of trades and transactions in the market must not be high and they must be as close to minimum as possible.
5. Traders should be unable to influence and penetrate the market.
6. In an efficient market, anybody should be able to trade at the rates that are common in the financial market.
7. In an efficient market, prices should be rapidly adjusted.
8. Competitiveness is a necessity when it comes to the efficiency of the market.
9. At any given time, there must be buyers and sellers in an efficient market.

An efficient capital market is a complicated market with complicated financial tools. As it can be observed, rapid adjustment of prices is one of the most prominent features of an efficient market and market behavior is a random step function. What is evident here is that the speed of adjustment and compliance of prices with the new information is the center of gravity of empirical tests [1].

In 1959, Harry Roberts was the first scholar proposed the idea to randomly extract some numbers and to draw a graph for them as if they are securities prices. He also stated that if we were to compute the variations in the stock prices and develop a graph for them, the two developed graphs would be quite similar. He believed that more researchers should focus on this issue so that his own conclusions regarding the randomness of the variations of the stock prices would be examined. Also in 1959, a physician called Osborn who was quite interested in the stock market conducted another study. He studied numbers associated with stock prices and found out that the changes in the prices are not dependent in one another. Although there are some differences between these two perspectives, but the results are similar [13]. Following the examinations of Roberts and Osborn, examinations of Moor (1962), Fama (1965), Granjer and Morgen (1963) also confirmed the results obtained by these two. Moor studied the time correlation between the successive changes of the price of each stock. He randomly selected 29 stocks and reviewed their weekly prices over a period of 8 years from 1951 to 1958 and came to a 6% correlation coefficient. This low rate indicated that it is not useful to study the weekly changes of stock prices with the purpose of predicting future prices [14]. Fama studied the daily changes in the stock prices over a five-year period (1958-1962) and calculated a +3% correlation coefficient. In fact, even the lagged variations of prices were not strongly correlated. To summarize, all of the findings of empirical examinations support the random step hypothesis which indicates that the variations of stock prices are to a large extent independent from one another [3].

Ball and Brown carried out a different kind of examination and reviewed the ordinary return rates of 261 firms over a 15-year

period (1946-1960) so that the effect of annual announcement of profits and earnings would be cleared. They divided the selected firms into two groups. The profitability of the firms in the first was higher than the ordinary rate of market. On the other hand, the second group was composed of firms whose profitability was lower than the market rate. The results obtained from their study showed that the average return rates of firms with higher profitability has increased but it was a different case for the firms with lower profitability. In other words, the market was able to predict the information associated with profits (Ma'adi et al. 2016). There are numerous studies that have reviewed the speed of stock price adjustment after the profit announcements. For instance, scholars such as Pateel (1984), Taller (1985), Bandet (1987), Francis (1992) and Brooks (2003) have concluded that in association with profit announcement, price adjustment is not immediate.

However, Grin and Wats (1996), Kave (2007), and Biyass (1999) have obtained quite different results. Also, Luicci Vill (2004) has stated that stock prices rapidly and immediately react to profit announcements [13].

Research Method

The present study is a causal research in terms of research and nature of the study and in terms of objective, it is an applied research. The field of study focuses on the quality of accounting information in terms of subject. In this study, the theoretical framework of the research, literature and research background have been developed by studying library sources. To test the research hypotheses, the least squares regression has been used. The statistical population of this study consists of 98 firms listed in Tehran Stock Exchange over a 6-year period from 2011 to 2016. There are a few reasons for selecting these firms such as accessibility of daily stock prices for these firms, the fact that it is obligatory for these firms to present the profit estimated for each share annually, to record the recommended price for buying and selling the shares of the listed firms, etc. Given the period under study, care must be taken when it comes to sampling and only those firms that have been active throughout this time span. Therefore, the following design has been for selecting the research samples.

1. Firms that have announced their estimated profit during the period under study.
2. Firms that are active in the stock market or those that have been active on the given days. That is why the times before and after the announcement are the basis of this study in order to reassure of the activity of these firms.
3. To the extent possible, the selected samples should vary in terms of the industry they are active in.
4. There must be no official publication of news about capital increase and presentation of cash earnings and other information associated with the announcement of predicted earnings.
5. There shall be no capital increase in the given time interval.
6. The trades associated with the preferred stocks shall not be considered in the calculations.

By taking into account the items presented above, 98 of the firms in the population were qualified to be selected as the research sample.

Testing the research hypothesis and analysis of the research model

In order to test the hypotheses of the study, the relationships between the variables have been examined in two steps: before and after entrance of the control variables using models (1) and (2) in order to analyze the relationships between variables indicating accounting information quality and the lag factor in stock price adjustment.

Model (1), before the control variables:

$$D_{it} = \beta_0 + \beta_1 AQ_{i,t} + \beta_2 LOSS_{i,t} + \beta_3 ES_{i,t} + \beta_4 EA - sm_{i,t} + e_{i,t}$$

Model (2), after the control variables:

$$D_{it} = \beta_0 + \beta_1 AQ_{i,t} + \beta_2 LOSS_{i,t} + \beta_3 ES_{i,t} + \beta_4 EA - sm_{i,t} + \beta_5 Instown_{i,t} + \beta_6 Turn_{i,t} + \beta_7 Traday_{i,t} + \beta_8 Size_{i,t} + e_{i,t}$$

Research variables

Dependent variable: lagged stock price adjustment

Based on the model proposed by Ho and Masokewitz (2005), the average lag in price adjustment related to the information published for each firm was computed using the following regression:

Equation (3) unrestricted regression:

$$rjt = \alpha j + \beta j Rmt + \Sigma\, \delta jn\, Rm, -n$$

Equation (4) restricted regression:

$$rjt = \alpha j + \beta j Rmt + \varepsilon jt$$

If the stock price does react to the published information with a time lag, some of the estimated δjns in the equation (3) will have a significant difference with zero. Therefore, lagged returns increase regression's explanation ability. However, if we assume that all of the δjns are equal to zero, equation (5) would be estimated. Then, lagged pricing can be computed as follows based on the calculated determination coefficient using weekly return on the basis of the aforementioned equations:

Equation (5):

$$D_{i,t} = 1 - \frac{R^2 \text{restirected}}{R^2 \text{unrestirected}}$$

Using lower return succession, such as monthly return, cannot be much useful because usually, stock price's reaction to the information lasts about one month. On the other hand, using daily returns cannot perfectly reflect the published information given the scope of daily fluctuations. Therefore, weekly returns have been selected for the computations.

Independent variable: indicators of accounting information quality

1) **Accruals quality (AQ):** it refers to estimation of non-cash earnings that are created due to the difference in the timing of production or consumption of goods or services and receiving or paying cash for the goods and services. In order to measure the quality of accruals, the model proposed by Francis et al. (2005) has been used which follows:

$$CAcc_t = \gamma_{1t} + \gamma_{2t}DFO_{t-1} + \gamma_{3t}DFO_t + \gamma_{4t}DFO_{t+1} + \gamma_{5t}\Delta rev_t + \gamma_{2t}PPE_t + e_t$$

2) **Loss succession (LOSS):** it is representative of extraordinary economic occurrences and the relative loss successive of the firm over the cyclical 6-year period (in a 3-year cyclical period, the number years with losses has been divided into 6).
3) **Unexpected earnings:** it is the absolute value of the annual unexpected earnings which is calculated using the difference between the first predicted earnings with actual earnings and then it is divided into the standard deviation of the unexpected earnings of the past year.
4) **Earnings smoothing (EA-sm):** it is indicative of the relative earnings volatilities. This variable has been calculated based on the standard deviation of asset-based standardized net profit on the standard deviation of asset-based standardized operational cash flows (DeChow et al. 2011).

Control variables:

Ho and Masokewitz (2005) have found and documented relationships between the indexes investors are interested in (institutional ownership, number of analysts, number of shareholders, number of employees and advertising costs and expenses), stock liquidity indexes (volume of transactions, number of trading days, stock turnover), characteristics of the firm (firm size, ratio of book value to market value) and the time lag in stock adjustment. Therefore, in order to control the effect of the aforementioned variables while studying the effects of accounting information quality on the time lag in price adjustment, some of the previously mentioned variables were selected as control variables. In the following section, the control variables have been introduced and some explanations have been provided about how to calculate them:

1- Institutional ownership (I ns t own): logarithm of number one plus percentage of institutional ownership (total stocks of banks, insurance companies, holdings, investment companies, retirement and pension funds, capital supply companies and investment funds, public organizations and institutions and public firms to all of the stocks published for the company) for each firm in the variable year under study is developed.
2- Turnover (Turn): turnover is calculated through average number of traded stocks per year divided by all of the published stocked in that given year and then the logarithm of this variable is considered in the study.
3- Trading days (Tra day): number of days when the firm stocks are traded throughout a given year.
4- Firm size (Si ze): it is the logarithm of firm assets at the end of each financial year.

Research Findings

Before testing the research hypotheses, the researcher attempted to recognize the number of type of the data used in the examination. In order to review the data, two groups of data describing indexes were used: central indexes (mean) and dispersion indexes (kurtosis and skewness). 588 observations have been done on the research sample. Table 1 displays the descriptive statistics about the dependent and independent variables of the research. In the following sections, the presented statistics will be explained:

Table 1: analysis and descriptive statistics

Variables under study		Number of observations	Mean	Standard deviation	Skewedness	Kurtosis
Delayed adjustment of stock price	D	588	0.726	0.629	0.146	0.073
Accruals quality	AQ	588	0.08	0.491	0.491	0.119
Loss succession	LOSS	588	0.04	0.719	0.657	0.223
Unexpected earnings	ES	588	1.172	0.209	1.629	0.585
Earnings smoothing	EA-sm	588	0.555	0.315	1.847	0.639
Institutional ownership	Instown	588	0.25	0.719	0.758	0.860
Turnover	Turn	588	-4.4	0.967	-1.15	0.153
Trading days	Traday	588	137	3.164	-0.29	-0.970
Firm size	Size	588	5.32	0.465	0.613	0.383

Source: research findings

Logically, the delayed adjustment of stock price criterion indicates that this criterion tends to be an indication of more delay in price adjustment and the mean of the delayed adjustment of stock price is 0.726. This value can contribute to having an understanding of the long delay in price adjustment. The mean of the accruals quality variable is 0.08 which indicates that a high percentage of the accruals has not been explained. The loss succession variable represents the years in which the firm has successively suffered from lost and the value 1 indicates

that among the firms under study as the research sample, there are few firms that have had this problem and the value zero indicates that there have been no such firms in the research sample. Thus, given the mean obtained for this variable, it can be argued that loss succession has been quite low among the firms under study.

Reviewing the classical regression assumptions

Before testing the research hypotheses using least squares regression, the classical assumptions of this regression must be reviewed. firstly, the normality of the distribution of the dependent variable must be examined, for which the Kolmogorov-Smirnov statistic has been used. Then, in order to review the heterogeneity of variances, the Breusch-Pagan test has been used. In the following stage, the Chaw and Hausman tests have been used for selecting the proper pattern.

• Testing normality of the dependent variable

One of the presumptions of the fitting of the regression model and conduction of the parametric tests corresponding to it is the confirmation of the normality of the empirical distribution of the values of the dependent variable. In the present study, this has been reviewed using the Kolmogorov-Smirnov statistic.

Table 2 : results of testing the normality of the dependent variable of the study

Variable	Test statistic	Variable
Delayed adjustment of stock price	0.981	0.2911

Given the fact that the significance level of the test statistic for the delayed adjustment of stock price variable is higher than 5%, thus, H_0 which is indicative of the normality of distribution of this variable is accepted at a 95% confidence level.

• Augmented Dicky-Fuller test

The results obtained from the stagnation test for the research variables have been presented in table (3). Given the information presented in this table, the significance level (p-value) in unit root and augmented dicky-fuller test is lower than 0.05, therefore H_0 is rejected which suggests that the variables are stagnant. Thus, the firms under study haven't undergone any structural changes and using these variables in this model does not lead to creation of a false regression.

H_0: variables are not stagnant.

H_1: variables are stagnant.

Table 3: augmented Dicky-Fuller stagnation test

Research variables	Test statistics	Probability value (P-value)
Delayed adjustment stock price	355.917	0.0001
Accruals quality	592.121	0.0000
Loss succession	675.593	0.0000
Unexpected earnings	610.845	0.0000
Earnings smoothing	528.483	0.0000
Institutional ownership	819.535	0.0000
Turnover	391.126	0.0000
Trading days	425.316	0.0000
Firm size	399.315	0.0000

• Analyzing the heterogeneity of variance

In this test, the hypotheses are defined as follows:

H_0: heterogeneity of variance

H_1: lack of heterogeneity of variance

In order to review the heterogeneity of variance in this research, the Breusch-Pagan test has been used. In this test, by using the F-fisher statistic, it can be decided whether or not the variances are heterogeneous. If the probability of the F-value is higher than the error level (alpha), the H_0 will be accepted and thus, the homogeneity of variance will be accepted. If the case is the opposite and the model is not heterogeneous, efforts must be made in the respect of solving this problem. The results of this test have been presented in the table below:

Table 4: the results of the Breusch-Pagan variance heterogeneity test

Research hypotheses	Explanations	Value	p-value
First model	F-statistic	0.38662	0.7125
	Obs*R squared	0.58187	0.4533
Second model	F-statistic	0.58762	0.4874
	Obs*R squared	0.743287	0.3779

Given the information presented in table (4), since the Breusch-Pagan test statistics is not significant at 5%, therefore, the variance heterogeneity hypothesis is accepted and the opposite of it is rejected. Therefore, the ordinary least squares regression can be used.

• Collinearity test

One of the assumptions of the multivariate linear regression model is the presence of a considerable collinearity between the independent variables. Presence of collinearity between the independent variables make the results of the fitting of the regression model unreliable. Variance inflammation factor (VIF) is useful criteria for testing the collinearity between independent variables. If VIF is higher than 10, it will be indicative of the probability of collinearity between the independent variables and if it is higher than 20, it will be indicative of a serious problem regarding the application of regression in this condition. The results of the collinearity test using the VIF index have been displayed in table 5.

Table 5: testing the collinearity between the independent variables

Research variabls		VIF
Accruals quality	AQ	1.0339
Loss succession	LOSS	2.0586
Unexpected earnings	ES	2.2098
Earnings smoothing	EA-sm	1.4495
Institutional ownership	Instown	1.0995

Turnover	Turn	1.0318
Trading days	Traday	1.1391
Firm size	Size	1.1244

Since none of these numbers associated with the VIF index are not higher than 10, it can be concluded that the independent variables of the research do not have a considerable collinearity.

- Testing the selection of type of data

Given that the data in this research is a combination of time series and cross-sectional data, thus, in order to select the type of data out of the two methods of panel data and pool data, the Chow test and the Hausman test must be used. The results of these tests have been presented in tables (6) and (7).

H_0: pool data

H_1: panel data

Table 6: the results of Chow test

Explanation	Statistics	Value	P-Value	Test result
Model 1	**Cross-section Chi-square**	18.721	0.0000	Panel data
Model 2	**Cross-section Chi-square**	16.453	0.0000	Panel data

According to table (6), the significance level of the Chow test statistics is lower than the error level (0.05) in all of the research models, thus the type of data selected for all of these model is panel data. Now, it must be specified that whether or not panel data (fixed effect or random effects) is proper in this research. In order to specify this, the Hausman test is used. The results of the Hausman test have been presented in table 7.

H_0: random effects method

H_1: fixed effects method

Table 7: Hausman test

Explanation	Statistics	Value	P-Value	Test result
Model 1	**Cross-section Random**	5.4533	0.0231	Fixed effect method
Model 2	**Cross-section random**	6.3523	0.0162	Fixed effect method

Given the findings of the Hausman test, which has been presented in table (7), the significance level of the test statistics is lower than 0.05 for both of these models. Therefore, with a 95% confidence, H_1 is confirmed. Thus, using the fixed effect method for estimating the models is confirmed.

Testing the hypotheses

In the regression models, the decisions regarding the rejection and confirmation of the H_0 are made by taking these values into consideration. If the significance level (p-value) is lower than 5%, H_0 is rejected and otherwise, H_0 is accepted. The results of the fitting of the regression models 1 and 2 are as follows:

Table 8: the results of testing the first research hypothesis

	Model 1			Model 2		
Variables	Coefficients	t-statistics	P-value	Coefficients	t-statistics	P-value
Constant	0.621	12.086	0.000	0.319	10.391	0.000
AQ	0.319	10.119	0.000	0.364	11.619	0.000
LOSS	0.059	4.146	0.000	0.048	3.79	0.000
ES	0.047	0.619	0.491	0.029	0.469	0.629
EA-sm	0.163	5.614	0.000	0.116	4.611	0.000
Instown				0.039	0.863	0.615
Turn				-0.031	-0.391	0.744
Traday				-0.106	-0.612	0.913
Size				-0.131	-3.261	0.002
f-value	441.216			226.615		
Significance level of f-value	0.0000			0.000		
Correlation	0.394			0.429		
Durbin-Watson statistic	2.351			1.97		

The results obtained from the fitting of model 1, which has been presented in table (7), the significance level of the test statistics is lower than 0.05 for both of these models. Therefore, with a 95% confidence, the overall statistical significance of the regression model above is confirmed. The value of the Durbin-Watson statistics is equal to 2.351 which is between 1.5 and 2.5 and it is indicative of lack of correlation between the remaining components. The correlation coefficient is equal to 0.39 which indicates that the control independent variables explains 39% of the variations of the dependent variable (delayed adjustment of stock price).

The significance level of the variables accruals quality, loss succession, and earnings smoothing has been lower than the error level in both models which indicates that these variables have significant effects on the delayed adjustment of stock price. The significance level of the unexpected earnings is higher than the error level which suggests that this variable does not significantly affect delayed adjustment of stock price. Among the control variables, only the firm size has a negative and significant impact on delayed adjustment of stock price.

Conclusion

Investors use a set of available information to predict the future cash flows so that they would come to an estimated. When new and relevant information is transmitted to the market, the previous estimations and new share price will be determined. If the quality of the information presented to the market is low, the investors will be obligated to renew their stock price estimations. The renewal mechanisms of the primary estimations is based on the newly obtained information, improvement of recognition and education through assessing the estimations of other investors and it gradually leads to the homogeneity of the estimated price and the natural share value.

Timeliness of the estimation of the previous cash flow through using low-quality financial statements will probably take longer due to ambiguity and lack of confidence. The existing evidence suggests that there is a positive and significant relationship between accruals quality and delayed adjustment of stock price. The significance of the relationship between accruals quality and delayed adjustment of stock price means that in firms with low-quality accruals, the adjustment of stock price will be more delayed. Among the quality indicator variables, loss succession has a positive and significant relationship with the delayed adjustment of stock price. This relationship indicates that adjustment of the price of stocks of firms that have not been profitable in numerous years is more delayed. The positive and significant relationship between earnings smoothing and delayed pricing suggests that in firms with more earnings volatility, price adjustment is more delayed than in other firms. To put it another way, the smoother the flow of the reported earnings is, the quicker the reaction of the market to the published information will be and the lesser the delay in price adjustment will be.

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