

The Relationship Between Information Disclosure Quality and Value of Trading Value in Listed Companies in Tehran Stock Exchange

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Abstract: The purpose of this study is to investigate the relationship between the quality of information disclosure and trading value that have taken place in six statistical models. In this study, multivariate regression analysis by mixed data with fixed effects was used to test the hypothesis. Results of the study (1390-1392) shows that there is no significant relationship between the quality of information disclosure and turnover, the Trading value, the trading value of salind, the trading value of salins, the trading value of buyind and the trading value of buyins. While there is a significant relationship between the size of the company and the trading value, the trading value of salind and buyins and also there is a significant relationship between the earnings per share and the trading value of salind.

Key words: Information disclosure, turnover, trading value, values, return

INTRODUCTION

The core of agency theory is based on the hypothesis that managers as representatives, shareholders may act or make decisions that are not necessarily in order to maximize shareholder wealth. According to this theory, control or oversight mechanism should be created to protect investors from conflicts of interest. Transparency of financial statements and quality of information disclosure presented in it is taken into consideration as a practical solution. It is often argued transparency and high quality of information result in decreasing information asymmetry. Information asymmetry is a situation under which managers' awareness of the company's activities to shareholders and potential investors is more than other stakeholders. Such information asymmetry causes problems such as moral hazard and adverse selection. So, in order to protect the interests of shareholders and other stakeholders, the public disclosure of quality information is essential. Transparent and comparable financial information is also a fundamental pillar of accountability and informed economic decisions and the unique requirements of economic development (International Accounting Standards Committee) and achieve an efficient capital market. Increase disclosure of information is useful for users who are not able to determine the future prospects of the company. This benefit is by reducing the probability of false allocation of their risk. It is also one of

the basic conditions to attract investor's and creditors confidence in order to carry out economic activities, existence of enough information to decide whether to buy, hold or sell stock and assess the performance of managers and companies.

In this study, the model proposed, adapted to measure the level of information disclosure in companies listed on the Tehran Stock Exchange and its effect was measured on the value of transactions and trading volume of legal and real investors.

In this model of the quality of information disclosure as the independent variable, turnover, value of transactions (transactions of buying and selling real value-value of transactions of purchase and sale of rights) as dependent variables and factors including firm size, financial leverage, the ratio of market value to book value, return on assets and the ratio of price to earnings per share have been considered as control variables (Li, 2008). Based on the theoretical framework of Financial Accounting Standards Board Financial reporting should provide information, be useful for Creditors, potential investors and other users. These reports should be useful for people who have rational understanding of commercial and economic activities and are going to study in this field. Disclosure must go through legal reports include financial statements that contain important, relevant and timely information. In addition, the financial statements help the investors to understand the financial position, changes in position, results of operations.

Quality disclosure: Disclosure, includes management strength indicator providing essential information on the correct form, clear, timely and accessible, in particular, the audited information to the public reports and disclosure is disseminated in mass media or other methods. Thus, we can conclude that disclosure and transparency are two interrelated factors. Users of financial information, constantly seeking high quality information because disclosure of such information, reduce information asymmetry between managers and investors.

Factors affecting the quality of disclosure

Firm size: Due to the following reasons, it is expected that larger companies disclose a better quality of information:

- Big companies have sufficient resources to collecting, analyzing and presenting large volumes of data with minimal costs. In addition, in large firms, detailed information is collected for internal reporting to senior managers. Therefore, disclosure of such information is not very expensive
- Large companies, due to the need for additional financing sources, could expose information with better quality. Theoretical and empirical evidence show there is significant negative relationship between disclosure quality and cost of capital resulting from the financing
- Small companies, most of them feel that full disclosure could jeopardize its competitive position. So, it discloses less quality of information
- Large corporations are more sensitive to the political costs. Zimmerman's empirical findings confirm that claim. Large corporations, disclose more and better quality information to reduce public criticism or government interference in their activities
- Large companies are more likely to use a strong internal control systems and auditing. Therefore, better quality financial statements provide and independent auditors have less time spent on compliance and content tests. As a result, the delay in the audit report is minimized and the company can notify on time (Wallace and Naser, 1996)

Financial leverage: Financing through borrowings, at least in two following ways, as a mechanism to reduce agency costs will help to solve agency problems. By issuing new shares, managers ownership percentage decreased. Therefore, financing through borrowing in comparison to issuing new shares, preventing the reduction of the percentage of ownership and increased

alignment of the interests of managers and owners. Increases debt by reducing the cash flows under control of management, reduces agency cost of free cash flow. The relationship between managers and creditors is different from their relationship with shareholders. This means that the amount and timing of payment of principal and interest of debt, is committed by managers, if they are not committed to distribute a determined amount of profit in determined times. Borrowing by withdrawing cash on a regular and predetermined basis leads to a decrease in free cash flows and decreases the possibility of such investment in projects with negative smaller NPV (Noravesh and Hoseini, 2009). Moreover, the fact that transparency and disclosure quality of the information presented in its financial statements as a practical solution to reduce agency costs is considered. It is expected that leverage companies with lower agency costs have less commitment towards the disclosure of high quality information and thus disclose lower quality information or less information. In other words, a reverse relationship between financial leverage and disclosure levels is expected.

Turnover-price: Various relationships between the volume-price while depend on rate information flow to the market, the method of dissemination of information, awareness prices and short-term pressures. They can be predicted by the models in this area. The empirical relationship between the volume-price could shed light on the differences between different hypotheses about the structure of the market. Second, the study of events that use the combination of price and volume data to draw their own conclusions, can also benefit from the results of the relationship between volume and price, because the "content" shows information content of an event, the same or different interpretations of investors of information and use the effects of the volume and price in pressure and price hypothesis. If volume and price changes are determined simultaneously, considering relationship between volume-price increases power of these tests.

For example, Richardson examined turnover and price changes simultaneously to study impact of profit on shares price directly. In other tests, price changes as market assessment of new information is interpreted. The volume is used to show investors differences in the interpretation of data. Test structure and reliability of the results depend on the interconnected distribution of price-volume changes. The results of the study of volume data depends on theoretical relation between volume and information too.

Hypothesis of relationship between volume-prices also provide empirical implications which are not attainable by other methods. Thirdly, relationship between volume- prices is very important to study experimental distribution of speculative prices. When rates of return on the fixed calendar intervals (e.g., daily) are sampled, the price distribution are elongated compared to the normal distribution.

Fourth, the relationship between the volume-price has important implications for futures markets researches. Price volatility impacts on turnover in futures contracts. This factor is very important whether speculation is factors create stability or instability in the futures prices. Futures contract delivery time impacts significantly on turnover. Through the impact, may affect the variability of prices. The relationship between volume and price shows private information in determine investment demand too. In this area there are two important perspectives on Wall Street stock exchange: the volume of transactions that could create price changes. The transaction volume in prosperous markets is relatively and in not-prosperous markets is relatively light. Studies in this area are well able to examine these two views. Many of these studies have confirmed the positive correlation between trading volume and price changes.

The first research on the relationship between stock price and trading volume was done by Osborn. He tried to design a model for changing price as a process of number of transactions and concluded there is a significant relationship between turnover and absolute change in price. Other researchers investigated in this field too (Noravesh and Hoseini, 2009). The study Russian shows that the combined movements in stock prices and trading volumes in the stock market behavior can be better than many of each to be studied alone. There are many studies that support a positive association between price (yield and volatility). In addition, some researches offer models based on them, trading volume have been a significant factor in the stock price changes. Experimental study of the relationship between volume-prices, using weekly data analysis was conducted from 1939-1961. They could not find evidences for relationship between composite index of price and total volume on the New York Stock Exchange. Two special share data showed no relationship. In the next article Godfrey, expanded their previous reviews about the price and volume. They presented new evidence of several data series including daily transaction data of some special shares but once again could not find relationship between trading volume and price or the absolute value of the price difference (Ajinkya *et al.*, 2005).

Failure of Godfrey to reveal the relationship between the volume-price led Ying and Crouch carry out empirical tests. According to Ying, reducing price is usually followed by more price reduce and vice a vers.

These findings are interesting, especially in view point of last studies about stock prices who believed shares price follow random walk model. Random Walk essentially claims that the prices previous values or price changes have no impact on future values of price. However, if we accept Jung's views should deny random walk model at least in its uncorrected form.

Epps designed a model that predicts changes of behavior of Securities and trading volume. According to Epps investors were classified into two groups: active and passive. Difference between them is that active investors are more optimistic about assets value at the end of trading course and are affected by positive information about the value of assets. Passive and pessimistic investors are only affected by negative information. Trading demand curve in the market is only includes prices of request of active investors. supply curve includes supply curves of passive investors.

According to Epps, the relative optimism of active people signifies the more of the slope of the demand curve, than supply curve slope. For this reason, ratio of volume to positive change in price (when active investing demand increases) is greater than the absolute value of the change to volume price (when demand of passive investors decreases). He concluded that volume is larger in increasing price changes than decreasing price changes. Morgan noted that the volume depends on systematic risk and stock returns. Findings of Epps implies on the positive relationship between volume and price change. The U shape of the volume and efficiency during a trading day is of interpretations assessed relationship between price changes and trading volume and stock returns.

MATERIALS AND METHODS

This is applied descriptive research. History data was used. Population of study includes companies accepted in Tehran Stock Exchange. The time span from the beginning of 2009 until the end of 2013 for 1 year and the beginning of 2011 until the end of 2013 is quarterly (3 months). Sample was chosen by the elimination method and by taking the realms of time and location. The following conditions were for the selected Companies listed on the stock exchange (Hanifi *et al.*, 2014) (Table 1-3).

Table 1: Six models were used to test hypotheses of research for 2011-2013 as follows

Number	Dependent variables	Regression equation
1	Turnover	$vol_i = \alpha + \beta_1 disc_{it} + \beta_2 PE_{it} + \beta_3 leverage_{it} + \beta_4 size_{it} + \epsilon_{it}$
2	The value of transactions	$val_i = \alpha + \beta_1 disc_{it} + \beta_2 PE_{it} + \beta_3 leverage_{it} + \beta_4 size_{it} + \epsilon_{it}$
2-1	The value of transactions of the legal sale	$salins_i = \alpha + \beta_1 disc_{it} + \beta_2 PE_{it} + \beta_3 leverage_{it} + \beta_4 size_{it} + \epsilon_{it}$
2-2	The value of transactions of the real sale	$salind_i = \alpha + \beta_1 disc_{it} + \beta_2 PE_{it} + \beta_3 leverage_{it} + \beta_4 size_{it} + \epsilon_{it}$
2-3	The value of real transactions	$buyind_i = \alpha + \beta_1 disc_{it} + \beta_2 PE_{it} + \beta_3 leverage_{it} + \beta_4 size_{it} + \epsilon_{it}$
2-4	The value of legal transactions	$buyins_i = \alpha + \beta_1 disc_{it} + \beta_2 PE_{it} + \beta_3 leverage_{it} + \beta_4 size_{it} + \epsilon_{it}$

Table 2: Six models were used to test hypotheses of research for 2009-2013 as follows

Number	Dependent variables	Regression equation
1	Turnover	$vol_i = \alpha + \beta_1 disc_{it} + \beta_2 lev_{it} + \beta_3 MB_{it} + \beta_4 PE_{it} + \beta_5 ROA_{it} + \beta_6 size_{it} + \epsilon_{it}$
2	The value of transactions	$val_i = \alpha + \beta_1 disc_{it} + \beta_2 lev_{it} + \beta_3 MB_{it} + \beta_4 PE_{it} + \beta_5 ROA_{it} + \beta_6 size_{it} + \epsilon_{it}$
2-1	The value of transactions of the legal sale	$salins_i = \alpha + \beta_1 disc_{it} + \beta_2 lev_{it} + \beta_3 MB_{it} + \beta_4 PE_{it} + \beta_5 ROA_{it} + \beta_6 size_{it} + \epsilon_{it}$
2-2	The value of transactions of the real sale	$salind_i = \alpha + \beta_1 disc_{it} + \beta_2 lev_{it} + \beta_3 MB_{it} + \beta_4 PE_{it} + \beta_5 ROA_{it} + \beta_6 size_{it} + \epsilon_{it}$
2-3	The value of real transactions	$buyind_i = \alpha + \beta_1 disc_{it} + \beta_2 lev_{it} + \beta_3 MB_{it} + \beta_4 PE_{it} + \beta_5 ROA_{it} + \beta_6 size_{it} + \epsilon_{it}$
2-4	The value of legal transactions	$buyins_i = \alpha + \beta_1 disc_{it} + \beta_2 lev_{it} + \beta_3 MB_{it} + \beta_4 PE_{it} + \beta_5 ROA_{it} + \beta_6 size_{it} + \epsilon_{it}$

Table 3: Variables of research

Variable types	Variable name	Variable symbol	Calculation method
Control variable	Company size	Size	$Size_{i,t} = \ln(TA_{i,t})$ Where: Size = Size of company i in period t Ln = Natural logarithm (Log on Napier) $TA_{i,t}$ = Total assets of company i in period t
	Financial everage The ratio of price to earnings per share	Leverage	$P/E_{it} = \frac{Price_{it}}{Earn_{it}}$ Where: P/E = The ratio of price to earnings per share Price _{it} = The price per share of company i at time t Earn _{it} = Earnings per share i at time t
	Assets return	ROA	$ROA_{it} = \frac{EBIT_{it}}{TotalAssets_{it}}$ Where: ROA _{it} = Returns of assets of company i in period t EBIT _{it} = Operational profit TotalAssets _{it} = Totalm assets
Independent variable	Market value to book value	MB	MB = Market value per share/book value per share
	Disclosure rating	Disclosure	Disclosure rating published by stock exchange for each company
	Dependent variable	Sales volume	Vol
	Turnover	Val	The natural logarithm of the average value of transactions performed by each company per year

- The end of the fiscal year ending in January
- The fiscal year change has not participated in the investigation period
- An annual rating of the quality of financial information disclosed by the company from 2009-2013 is available on an annual basis
- Season score (3 months) of financial information and company's disclosure quality is available seasonally from 2010-2013
- Research is done for non-financial companies

Therefore, all banks and investment companies, leasing and financial institutions were removed from the study. Initially 200 companies were selected for 2009-2013. Finally, after sampling restrictions, the overall sample decreased to 167 companies for 2011-2013 and 210 companies were selected. The overall sample was

decreased to 177 companies. Information on the financial statements and their market in models to test hypotheses has been used.

Hypothesis of research: Study on relationship between disclosure quality and value of trading of companies is aim of this research. Hence, the following hypothesis are presented:

H₁: There is significant relationship between information disclosure quality and transaction volume.

H₂: There is significant relationship between information disclosure quality and transaction value.

H_{2.1}: There is significant relationship between information disclosure quality and real transaction value.

H_{2,2}: There is significant relationship between information disclosure quality and legal transaction value.

H_{2,3}: There is significant relationship between information disclosure quality and real purchase transactions value.

H_{2,3}: There is significant relationship between information disclosure quality and legal purchase transactions value.

Models of research: Table 2 six models were used to test hypotheses of research for 2009-2013 as follows.

RESULTS AND DISCUSSION

Analysis and hypothesis testing: Data was collected by Excel Software. Then, E-views was used to analysis data. Multivariate regression techniques combined data was used in this investigation. Jarkubra statistics for data normalization and Watson camera statistic for the lack of correlation of the error terms were used. In order to estimate multivariate regression analysis, combined data was used. F Limer statistics was used to check the suitability of combination or compilation pattern of regression model. χ^2 -test was used to examine fixed or random effects. Fisher test was used to determine significance of regression model. T-student test was used to study significance of independent variables. Results of this investigation are presented in two main sections.

Chow and Hausman tests were used to determine suitable model of regression fitness in initial running of model. It was studied by classic hypothesis of regression including normality of distribution of variables, independence error distribution, errors distribution normality, heterogeneity of variances and independence of the independent variables. Final model was extracted according to total significance of the model and significance of all coefficients.

Section 1 of results: Since start of 2011 upto end of 2013 seasonal (3 months).

H₁: F-value represents total significance of regression model. As it is significant with 95% probability, calim of researcher is rejected. Hence, there is no relationship between disclosure quality and turnover. According to results of panel regression, none of control variables has significant impact on turnover in 95% confirnce level.

According to the adjusted coefficient of determination, it can be said that information

disclosure quality variable and control variables together explain 70% of trading volume changes.

H₂: F-value represents significance of regression model. according to significant level for information disclosure quality variable, calim of researcher was rejected 95% probability. Hence, there is not relationship between disclosure Quality and value of transactions. Panel regression results show that among the control variables, firm size at 95% had a significant positive effect on the value of transactions.

The remaining 95% confidence level control variables have no significant effect on the value of transactions. According to the adjusted coefficient of determination, it can be said that information disclosure quality variable and control variables altogether explain 67.3% of the changes of transaction value (Table 4-10).

H_{1,2}: F-value represents significance of regression model. Hence there is no relationship between disclosure quality and real sell. According to results of panel regression, there is significant relationship between company size and price ratio to share on real selling. Other control variables have no impact on real selling in 95% confidence level. according to adjusted coefficient, it is claimed that information disclosure quality variable and control variables explain 55.5% of real selling changes.

H_{2,2}: F statistic is indicative of a significant amount of regression. According to significant level for information disclosure quality variable, there is no relationship between disclosure quality and legal selling. According to results of paner regression, none of control variables have significant impact on legal selling in 95% confidence level. According to adjusted determination coefficient, it is claimed that information disclosure quality variable and control variables explain totally 70.4% of legal selling changes.

H_{2,3}: F-value represents significance of regression model. Given the significant level of disclosure quality data variable, with the possibility 95% researcher's claim that "there is a significant relationship between disclosure quality and buy true" was rejected. Panel regression results show that of the control variables, none of them had significant effect on the actual purchase. According to the adjusted coefficient of determination, it can be said information disclosure quality variable and control variables altogether explaining 68.9% of changes in real purchasing.

Table 4: Hypothesis 1

Variables description	Beta	t-student test	p-values	Result
C (Constant factor)	13.1270	10.685	0.0000	Significant relationship confirmed
Dis (Disclosure quality)	-0.0016	-0.362	0.7170	Rejected
P/E (Price/profit)	0.0041	0.982	0.3260	Rejected
Leverage (financial average)	0.0090	0.275	0.7830	Rejected
Ln (size) (company size)	0.1590	1.862	0.0628	Rejected
The first order autocorrelation (AR(1))	0.4240	11.332	0.0000	Significant relationship confirmed

F-value, 23.567; p-value significant relationship confirmed, 0.00; the coefficient of determination, 0.731; adjusted coefficient of determination, 0.700

Table 5: Result of hypothesis 2

Variables description	Beta	t-student test	p-values	Result
C (constant factor)	21.1490	15.709	0.0000	Confirmed
Dis (disclosure quality)	-0.0020	-0.444	0.6560	Rejected
P/E (price/profit)	0.0045	0.963	0.3350	Rejected
Leverage (financial leverage)	0.0030	0.963	0.3350	Rejected
Ln (size) (company size)	0.1840	1.971	0.0489	Confirmed
The first order autocorrelation (AR(1))	0.4870	13.828	0.0000	Confirmed

F-value, 20.909; p-value significant, 0.00; coefficient, 0.707; the coefficient of determination adjusted, 0.673

Table 6: Result of hypothesis 1-2

Variables description	Beta	t-student test	p-values	Result
C (Constant coefficient)	17.9050	10.083	0.0000	Significant
Dis (Disclosure quality)	-0.0035	-0.622	0.5340	Rejected
P/E (Price/Profit)	0.0186	3.378	0.0010	Confirmed
Leverage (financial leverage)	-0.0060	-0.597	0.5500	Rejected
Ln (size) (company size)	0.3430	2.816	0.0049	Confirmed
The first order autocorrelation (AR(1))	0.2180	5.819	0.0000	Confirmed

F-value, 10.704; p-value significant, 0.00; the coefficient of determination, 0.613; the adjusted coefficient of determination, 0.555

Table 7: Result of hypothesis 2-2

Variables description	Beta	t-student test	p-values	Result
C (Constant factor)	21.729	17.790	0.000	Significant
Dis (Disclosure quality)	0.002	0.430	0.667	Rejected
P/E (Price/Earnings)	0.003	0.605	0.544	Rejected
Leverage (financial leverage)	0.002	0.689	0.490	Rejected
Ln (size) (company size)	0.108	1.307	0.191	Rejected
The first order autocorrelation (AR(1))	0.590	18.212	0.000	Confirmed

F-value, 24.062; p-value significant, 0.00; coefficient, 0.734; adjusted coefficient, 0.704

Table 8: Result of hypothesis 2-3

Variables description	Beta	t-student variables	p-values	Result
C (Constant factor)	21.0820	16.4470	0.0000	Significant
Dis (Disclosure quality)	-0.0003	-0.0608	0.9510	Rejected
P/E (Price/Earnings)	-0.0040	0.8260	0.4080	Rejected
Leverage (financial leverage)	0.0010	0.4130	0.9670	Rejected
Ln (size) (company size)	0.1630	1.8520	0.0642	Rejected
The first order autocorrelation (AR(1))	0.5920	19.1480	0.0000	Confirmed

F-value, 22.487; p-value significant, 0.00; the coefficient of determination, 0.721; adjusted coefficient of determination, 0.689

Table 9: Result of hypothesis 2-4

Variables description	Beta	t-student variables	p-values	Result
C (Constant factor)	17.2810	10.053	0.000	Significant
Dis (Disclosure quality)	0.0107	1.840	0.066	Rejected
P/E (Price/Earnings)	0.0090	1.216	0.224	Rejected
Leverage (financial leverage)	0.0040	0.567	0.570	Rejected
Ln (size) (company size)	0.3140	2.701	0.007	Confirmed
The first order autocorrelation (AR(1))	0.2550	6.684	0.000	Confirmed

F-value, 12.304; p-value significant, 0.00; the coefficient of determination, 0.640; adjusted coefficient of determination, 0.588

H_{2,4}: F statistic is indicative of a significant amount of regression model. Given the significant level of disclosure data quality variable with the possibility 95% researcher's claim that "there is a significant relationship between the quality of information disclosure and buy the rights" was rejected.

If we decrease ensurance level upto 90%, it is confirmed there is significant relationship between information disclosure quality and legal purchase. In addition, among the control variables, firm size in ensurance level of 95% impacts significantly on legar purchase and remains had no significant impact on legal

Table 10: Results of testing hypothesis of the first section (seasonal information since 2011-2013)

Hypothesis	Approve or reject at 95% confidence level	Effective control variables
There is a significant relationship between disclosure quality and turnover	Reject	-
There is a significant relationship between disclosure quality and value of transactions	Reject	Company size
There is a significant relationship between disclosure quality and legal sales transactions value	Reject	-
There is a significant relationship between data disclosure quality and the value of legal sales transactions	Reject	Firm size and the ratio of stock price
There is a significant relationship between data disclosure quality and value of actual sales transactions	Reject	-
There is a significant relationship between data disclosure quality and the value of legal sales transactions	Reject	Company size

Section 11 of results (since start of 2009 up to end of 2013 annully)

purchase in 95% ensurance level. According to the coefficient of adjusted determination, it can be said information disclosure quality variable and control variables altogether explain 58.8% of changes of legal purchasing.

H₁: F-value represents total significance of regression model. Due to the significance level for the quality of information disclosure, with the possibility 95% researcher’s claim that “there is a significant relationship between data disclosure quality and volume of transactions” is rejected. Panel regression results show that among the control variables, firm size variable at 95% effects significantly on trading volume, but the other control variables in 95% confidence level have no effect on trading volume. According to the adjusted coefficient of determination, it can be said information disclosure quality variable and control variables together explain 68% of trading volume changes.

H₂: F-value represents total significance of regression model. Given the significant level of disclosure quality variable data with the possibility 95% researcher’s claim that “there is a significant relationship between data disclosure quality and value of transactions” is rejected. Panel regression results show that in the control variables, firm size, return on assets and the book value effect on market value at 95% have a significant positive on the value of transactions. Other control variables had no significant impact on transactions value in confidence level of 95%. According to the adjusted coefficient of determination, it can be said information disclosure quality variable and control variables together explain 50% of the transactions value changes.

According to the adjusted coefficient of determination, it can be said information disclosure quality variable and control variables together explain 50% of the transaction value changes.

H_{1,2}: F value represents significance of regression model. Given the significant level of data disclosure quality variable with the possibility 95% researcher’s claim that “there is a significant relationship between the quality of

information disclosure and selling real” was rejected. Other control variables had no significant impact on actual selling in 95% confidence level. According to the adjusted coefficient of determination, it can be said that information disclosure quality variable and control variables altogether explain 65% of the actual sales changes.

H_{2,2}: F-value represents total significance of regression model. Given the significant level of data disclosure quality variable with the possibility 95% researcher’s claim that “there is a significant relationship between the quality of information disclosure and sale of rights” was rejected.

Panel regression results show that among the control variables, firm size and return on assets had a significant positive effect at 95% on the legal sales. Other control variables in 95% confidence level had no impact on legal sales. According to adjusted coefficient of determination, can be said that information disclosure quality variable and control variables altogether explain 64.4% of the legal sales changes.

H_{2,3}: F-value represents total significance of regression model. Given the significant level of data disclosure quality variable with the possibility 95% confidence level researcher’s claim that “there is a significant relationship between disclosure quality and buy true” was rejected.

Panel regression results show that among the control variables, firm size, market value to book value and return on assets at 95% had a significant positive effect on the real purchase. Other control variables in 95% confidence level had no significant effect on real purchase. According to adjusted coefficient of determination, it is said information disclosure quality variable and control variables altogether explain 63.2% of actual purchase changes (Table 11-17).

H_{4,4}: F-value represents total significance of regression model. As significant level of information disclosure variable with 95% confidence level, researcher claims there is significant relationship between information

Table 11: Result of testing hypothesis 1

Description of variables	Beta	t-test values	p-values	Result
C (Constant factor)	-3.4230	-1.6980	0.0899	Reject
Dis (Data disclosure quality)	0.0021	0.9120	0.3620	Reject
Leverage (financial leverage)	-0.9570	-1.2820	0.2001	Reject
MB (Market value to Book value)	0.0182	1.6220	0.1050	Reject
P/E (Price/Earning)	-0.0005	-0.1699	0.8650	Reject
ROA (assets return)	0.0119	1.3030	0.1930	Reject
Ln (size) (firm size)	1.4610	10.1950	0.0000	Confirmed

F-value, 10.834; p-value significant, 0.00; the coefficient of determination, 0.749; adjusted coefficient of determination, 0.680

Table 12: Results of testing hypotheses 2

Description of variables	Beta	t-test values	p-values	Result
C (Constant factor)	1.1550	0.477	0.6330	Rejected
Dis (data disclosure quality)	-0.0003	-0.752	0.9400	Rejected
Leverage (financial leverage)	-0.5460	-0.432	0.6650	rejected
MB (Market value to Book value)	0.0672	2.838	0.0047	Confirmed
P/E (Price/Earning)	0.0010	0.189	0.8500	Rejected
ROA (assets return)	0.0283	2.230	0.0200	Confirmed
Ln (Size) (firm size)	1.6750	7.403	0.0000	Confirmed
AR(1) (the first order autocorrelation)	-0.1820	-2.897	0.0042	Confirmed

F-value, 4.682; p-value significant, 0.0; the coefficient of determination, 0.636; adjusted coefficient of determination, 0.500

Table 13: Results of testing hypotheses 2-1

Description of variables	Beta	t-test values	p-values	Result
C (Constant factor)	-4.0050	-1.3690	0.1710	Reject
Dis (data disclosure quality)	0.0037	0.9570	0.3390	Reject
Leverage (financial leverage)	-1.7060	-1.7360	0.0830	Reject
MB (Market value to Book value)	0.0293	2.5540	0.0109	Confirmed
P/E (Price/Earning)	-0.0010	-0.1850	0.8520	Reject
ROA (assets return)	0.0260	2.0579	0.0400	Confirmed
Ln (size) (firm size)	2.0040	9.4590	0.0000	Confirmed

F-value, 9.486; p-value significant, 0.00; the coefficient of determination, 0.732; adjusted coefficient of determination, 0.655

Table 14: Results of testing hypothesis 2-2

Description of variables	Beta	t-test values	p-values	Result
C (Constant factor)	-7.8070	-3.271	0.0011	Significant
Dis (data disclosure quality)	0.0040	1.408	0.1590	Reject
Leverage (financial Leverage)	-0.9650	-1.069	0.2850	Reject
MB (Market value to Book value)	0.0183	1.537	0.1240	Reject
P/E (Price/Earning)	0.0020	0.647	0.5170	Reject
ROA (assets return)	0.0322	3.097	0.0020	Confirmed
Ln (size) (firm size)	2.3080	13.498	0.0000	Confirmed

F-value, 9.323; p-value significant, 0.00; the coefficient of determination, 0.721; adjusted coefficient of determination, 0.644

Table 15: Results of testing of hypothesis 2-3

Description of variables	Beta	t-test values	p-values	Result
C (Constant factor)	-7.7230	-3.338	0.0009	Significant
Dis (data disclosure quality)	0.0050	1.707	0.0883	Reject
Leverage (financial leverage)	-1.3450	-1.408	0.1594	Reject
MB (Market value to Book value)	0.0275	2.446	0.0147	Confirmed
P/E (Price/Earning)	0.0004	0.009	0.9920	Reject
ROA (assets return)	0.0298	2.826	0.0040	Confirmed
Ln (size) (firm size)	2.3160	13.741	0.0000	Confirmed

F-value, 8.916; p-value significant, 0.00; the coefficient of determination, 0.712; adjusted coefficient of determination, p-0.632

Table 16: Results of testing of hypothesis 2-4

Description of variables	Beta	t-test values	p-values	Result
C (Constant factor)	2.9270	2.559	0.0170	Significant
Dis (data disclosure quality)	0.0070	1.808	0.0710	Rejected
Leverage (financial leverage)	-1.1400	-1.686	0.0921	Rejected
MB (Market value to Book value)	0.0297	1.967	0.0490	Confirmed
P/E (Price/Earning)	-0.0050	-1.067	0.2860	Rejected
ROA (assets return)	0.0400	3.813	0.0010	Confirmed
Ln (size) (firm size)	1.4340	20.041	0.0000	Confirmed

F-value, 70.01; p-value significant, 0.00; the coefficient of determination, 0.358; adjusted coefficient of determination, 0.353

Table 17: Results of test of hypotheses second section (annual information since 2009-2013)

Hypothesis	Reject or confirm in 95% level	Effective control variables
There is a significant relationship between information disclosure quality and turnover	Reject	-
There is a significant relationship between information disclosure quality and value of real sales transactions	Reject	Company size, return on assets and quality and value of transactions the book value
There is a significant relationship between information disclosure quality and value of legal sales transactions	Reject	Firm size, market value to book value and return on assets
There is a significant relationship between information disclosure quality and value of real sales transactions	Reject	Company size and return on assets
Information disclosure quality and value of real sales transactions	Reject	Firm size, market value to book value and return on assets

disclosure quality and legal buy was rejected. If we decrease confidence level upto 90%, this claim is confirmed there is significant relationship between information disclosure quality and legal purchase. Among control variables, firm size, assets return and book value to market value has had positive and significant impact on legal purchase in confidence level 95%. The others had no impact on legal purchase in 95% confidence level. According to the of adjusted coefficient determination, it can be said information disclosure quality variable and control variables altogether explain 35.2% of legal purchasing.

CONCLUSION

Results of the study (1388-1392) shows that there is no significant relationship between the quality of information disclosure and turnover, the trading value, the trading value of salind, the trading value of salins, the trading value of buyind and the trading value of buyins. While there is a significant relationship between the size of company and the turnover and also between the size of company, the return on assets and the market value to book value with the trading value, the trading value of salind, buyind and buyins. Also, there is a significant relationship between the size of company and the return on assets with the trading value of salins.

SUGGESTIONS

According to the results the following notes are suggested to improve the quality of information disclosure. Given there are institutions in the stock of industrialized countries that ranked disclosure items in terms of importance level for investors, Tehran Stock Exchange can also help them with ratings disclosure items in view of investors.

Given the importance of control variable of firm size in most of hypotheses, it is suggested investors consider firm size before investing in Tehran Stock Exchange.

Also, considering impact of control variables of market value to firm value and assets return on transaction value, it is suggested to investors to consider these two variables in Tehran Stock Exchange to understand the value of transactions of purchase and natural and legal sale. It is suggested one of subsidiary companies of Tehran Stock Exchange at the end of the first half and second half or end of each year, collect researches and investigations related to organization and industry by multi-criteria decision-making methods.

According to high quality financial and accounting information, it is suggested to investors in companies with correct published information in Tehran Stock Exchange. This increases success of their investment and encourages the company to more accurate information disclosure.

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