



Examining the Relationship between Liquidity, Disclosure Quality, and Corporate Value

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Abstract: Stock Exchange is one of the economic institutions of society, and its operation is one of the important indicators reflecting the social and economic conditions. Therefore, it is necessary to further our studies to raise awareness of the investors. Since disclosure, liquidity and corporate value are of interest to investors, this study examines the effect of liquidity on disclosure quality on the one hand, and the effect of disclosure quality on the corporate value on the other hand to promote knowledge and awareness of stock exchange activities in their decisions. For this purpose, the financial information of companies listed in Tehran Stock Exchange was studied during 2008-2010. The multivariate regression analysis using panel data is applied to test research hypotheses. The results of examining relationship between liquidity and disclosure quality supports multi-dimensionality of liquidity, and examining relationship between disclosure quality and corporate value shows a significant positive correlation between these two variables.

Keywords: Liquidity, Disclosure Quality, Corporate Value.

INTRODUCTION

Due to the undeniable role of information in the capital market, it is said that information is the most valuable asset in the stock exchange. Providing regular information keeps a stock symbol open, and the transparency created increases liquidity of the shares. Therefore, liquidity of a share can be considered as an indirect condition of desirable information provision. Liquidity is one of the concerns of those who attempt to trade stocks or manage trading infrastructure. In addition, the managers looking to increase their liquidity of their company's securities, convert their company into a joint stock company, disclose their information voluntarily, and distribute shares among more shareholders. More information disclosure can reduce information asymmetry that may build trust among outsiders. Thus, the rate of return expected by investors decreases, and demand for shares increases that leads to increased corporate value. Due to the possible impacts of disclosure and stock liquidity on corporate value as well as the undeniable role of information and shares liquidity in decisions of managers and investors, this paper examines the relationship between liquidity, disclosure, and corporate value asking whether shares liquidity of a company improves the

disclosure quality. And whether higher disclosure quality leads to higher valuation of the company?

Theoretical Framework and Literature Review

One of the main functions of financial markets is to facilitate and accelerate the process of converting financial assets into cash and vice versa, conversion of cash into financial assets. This feature, referred to as liquidity, is a vital artery of the financial markets. Fernandez argues that liquidity cannot be measured by an absolute standard. Yet, it should be evaluated on a scale to include key elements such as volume, time, and transaction costs. However, selecting criteria to measure liquidity is a challenging issue in financial literature. So, liquidity is known as a complex concept. If there are many potential buyers and sellers for a specified property, that property enjoys liquidity. It should be noted that the number of potential buyers and sellers of shares of a company, is strongly influenced by free floats of the company. To calculate the free floats, the composition of shareholders should be evaluated and strategic shareholders should be identified. Strategic shareholders are shareholders reluctant to sell their shares in short-term and usually want to keep them to apply their management. Wallace and Nasser also believe that when the corporate ownership is distributed, more individuals need information, and disclosing more details is requested. And it is noted that the quality of financial reporting (disclosure integrity) is increased ¹.

Holmstrom and Tirole studies in 1993 indicates that concentration of ownership essentially reduces market liquidity, that leads to reduced benefits of non-strategic shareholders' continuous monitoring of the market and that has a negative impact on effective corporate governance. A result of effective corporate governance is higher disclosure quality and transparency of information².

Hossein et al. believe that disclosure in companies with large owners is higher than companies with limited owners ³. Voluntary disclosure of information reduces information asymmetry between the company and the market, resulting in trading a greater number of shares. Thus, share liquidity is increased that will attract attention of major investment institutions. As a result, the company can sell a large number of its shares without reducing prices. Therefore, increased demand increases the company's stock price as well as company's market value⁴.

In contrast, some argue that increased disclosure quality reduces corporate value. They believe that further disclosure may place the company in an unfavorable competition, assuming that the information is relevant to the rival companies. On the other hand, a company may enjoy from a deep-seated desire for secrecy in its culture. In this case, further disclosure of information may cause confusion in the future prospects of the company and therefore decrease the corporate value ⁵.

Hemmatfar and Ghodsi examined the relationship between disclosure quality and corporate value of companies listed in Tehran Stock Exchange in 2007-2011. They argue since the publication of information in the market

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increases the volume of trade securities, investors can achieve an optimal investment portfolio, which, in turn increases their wealth and economic welfare. Having tested their hypothesis, they concluded that there was no significant relationship between disclosure and corporate value adjusted for inflation⁶.

Etemadi et al., in research a to determine how disclosure affects corporate value, concluded that more timely and reliable disclosure directly affect corporate value⁷.

Lang et al. argued in their study that more disclosure reduces uncertainties associated with estimates of stock returns. As a result, if other factors were constant, in order to maintain the company's shares, rate of return for investors declines, company's cost of equity reduces, and corporate value increases⁸.

Miton examined a sample of 398 Korean, Malaysian, Indonesian, and Filipino and Thai companies in 2001 and concluded that companies with improved disclosure quality, more concentrated external ownership, and more concentrated organizational structure benefit from higher corporate values⁹.

Research Hypotheses

Our research hypotheses of this study include:

1. There is a direct relationship between shares liquidity of a company and improved disclosure quality.

1-1. there is a direct relationship between average daily volume of share transactions and improved disclosure quality.

1-2. there is a direct relationship between Amihud liquidity measure and improved disclosure quality.

1-3. there is a direct relationship between zero return standard and improved disclosure quality.

2. There is a direct relationship between improved disclosure quality and corporate value.

MATEREALS AND METHODS

This research is a descriptive study and an implied on in terms of objectives, since it can be useful in information application. In terms of method, it is a correlational research. To analyze the data inferential statistics are used. In summary, the present study is correlational research based on regression equations.

Statistical Universe

The study universe consists of all companies listed in Tehran Stock Exchange for the period 2008-2009 to 2011-2012 in which following conditions are met:

- 1.** Company has not changed the fiscal year during the period under study.
- 2.** The required information about the company is available.
- 3.** The fiscal year of the company has ended on March 20.
- 4.** It should not be a bank, Investment Company, leasing or holding company.

5. The company's stock symbol should not be closed more than 3 months.

Given the above limitations 76 were selected as research samples using systematic elimination method.

6. Data Collection Tools

Data of the literature review were collected through library resources such as journals, Persian books and dissertations, and data relating to the companies listed in Tehran Stock Exchange were collected from library resources of the Persian books and dissertations, and data relating to the companies listed in Tehran Stock, and reports on rankings of companies in terms of disclosure quality, information sharing, and financial statements of companies listed in Codal website.

Research Model and Methods of Variables Measurement

The present study, first examines the relationship between stock liquidity and disclosure quality using three liquidity criteria as independent variables: zero return, Amihud illiquidity, average daily volume of share transactions in IRR. Firm size and leverage ratios are also considered as control variables. Next, the relationship between disclosure quality and corporate value is examined, where disclosure quality is the independent variable and sales revenue and profitability are control variables. Accordingly, the regression equations and models presented in this study are as follows:

$$LN(TD)_{it} = a + \beta \ln(\text{Volume})_{it} + \beta \ln(\text{Total Assets})_{it} + \beta(\text{leverage})_{it} + uit$$

$$LN(TD)_{it} = a + \beta(\text{Ilq})_{it} + \beta \ln(\text{Total Assets})_{it} + \beta(\text{leverage})_{it} + uit$$

$$LN(TD)_{it} = a + \beta(\text{Pzr})_{it} + \beta \ln(\text{Total Assets})_{it} + \beta(\text{leverage})_{it} + uit$$

$$Q = a + \beta \ln(TD)_{it} + \beta \ln(\text{SALES})_{it} + \beta \ln(\text{Profitability})_{it}$$

Research Variables:

TD: Disclosed quality scores and information sharing of a company' derived from TSE reports.

Tobin's Q: Criteria for determining the corporate value:

Tobin's Q = Book value of total assets / market value of assets
 Market value of assets = (number of shares x price of shares) + value of debt

Volume: average daily volume of share transactions in IRR during the fiscal year calculated from average volume of share transactions in IRR during the whole fiscal year divided by trading days during the year.

Ilq: Amihud illiquidity

$$ILLIQ_{iy} = 1 / \text{Diy} * (\sum | \text{Riyd} | / \text{VOLDIY}_{iy})$$

Where:

Diy: number of trading days of stock i in fiscal year y.

Riyd |: absolute return on equity i on day d in fiscal year y. Return on equity of one trading day is the difference between the price of a share at the end of that trading day and price of the same share at the end of a trading day before.

VOLDIY_{iy}: is trading volume of stock i on day d in fiscal year.

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Pzr: zero return standard which is equal to:

$$ZERO_{i,y} = zeroreturn_{i,y} / tradingday_{i,y}$$

Where, "zeroreturn_{i,y}" is number of days with zero return for stock i in fiscal year y, and "tradingday_{i,y}" is number of trading days of stock i in fiscal year y.

Total asset: a measure to determine the firm size, which is equal to the book value of total assets at the end of the fiscal year.

Leverage: Leverage that is the ratio of total debt to total equity at the end of the fiscal year.

Sale: Proceeds from the sale of the company during the fiscal year.

Profitability: Profitability that is the ratio of net profit to book value of equity.

Data Analysis Method

First, Excel was used to classify data and then Eviews is used to estimate the models and analyze data.

RESULTS

1. There is a direct relationship between average daily volume of share transactions in IRR and improved disclosure quality.

Table 1. Direct relationship between average daily volume of share transactions in IRR and improved disclosure quality

Dependent Variable: Disclosure quality						
Method: Panel Least Squares with fixed effects						
Year: 2008-2009 to 2011-2012			Number of observations: 304			
relationship	prob	test t	SD	coefficient	variable	
Positive and significant	0.000	13.36	0.391	5.22	Constant coefficient	
Positive and significant	0.042	2.00	0.016	0.034	Ln Volume	
Negative and significant	0.010	-2.58	0.017	-0.044	Ln Total Assets	
Insignificant	0.320	-0.99	0.009	-0.009	Lev	
0.135	Determination coefficient (R^2)					
0.126	Modified determination coefficient					
8.14	test F				Durbin-Watson	
0.001					1.76	

The results of hypothesis test indicate a significant positive correlation between average daily volume of share transactions in IRR and improved disclosure quality. And indicate that by keeping other factors constant, for every 1% increase in the volume of transactions in IRR, disclosure scores increase 3.4%, and shows that companies with a higher volume of transactions (more liquid) tend to have higher levels of disclosure quality.

2. There is a direct relationship between Amihud liquidity measure and improved disclosure quality.

Table 2. Direct relationship between Amihud liquidity measure and improved disclosure quality

Dependent Variable: Disclosure quality		Method: Panel Least Squares with fixed effects				
Year: 2008-2009 to 2011-2012		Number of observations: 304				
relationship	prob	test t	SD	coefficient	variable	
Positive and significant	0.000	17.01	0.325	5.53	Constant coefficient	
Positive and significant	0.000	14.50	0.062	0.0902	ilq	
Negative and significant	0.000	-4.11	0.011	-0.047	Ln Total Assets	
Negative and significant	0.006	-2.72	0.006	-0.016	Lev	
0.228	Determination coefficient) R^2 (
0.212	Modified determination coefficient					
14.66	test F			Durbin-Watson		
0.000				1.75		

The results of hypothesis test indicate a significant positive correlation between Amihud illiquidity and improved disclosure quality. And indicate that by increasing illiquidity, disclosure scores increase, and shows that companies with a lower liquidity tend to have higher levels of disclosure quality.

3. There is a direct relationship between zero return standard and improved disclosure quality.

Table 3. Direct relationship between zero return standard and improved disclosure quality.

Dependent Variable: Disclosure quality		Method: Panel Least Squares with fixed effects				
Year: 2008-2009 to 2011-2012		Number of observations: 304				
relationship	prob	test t	SD	coefficient	variable	
Positive and significant	0.000	16.84	0.330	5.55	Constant coefficient	
Negative and significant	0.008	-3.69	0.013	-0.038	pzr	
Negative and significant	0.000	-4.12	0.011	-0.048	LnTotal Assets	
Negative and significant	0.006	-2.75	0.006	-0.017	Lev	
0.222	Determination coefficient(R^2)					
0.206	Modified determination coefficient					
14.17	test F			Durbin-Watson		
0.000				1.78		

The results of hypothesis test indicate a significant negative correlation between zero return standard and improved disclosure quality. In other terms,

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lower illiquidity leads to lower disclosure scores, and higher percentage of days with zero return results in lower disclosure scores.

According to the results of testing first hypothesis, we can generally say that the hypothesis results confirm multidimensionality of liquidity and show that this concept can be studied from different aspects of transactions behaviors. This study does not discuss the best indicator of liquidity.

Another notable result of this hypothesis is the relationship between leverage and disclosure quality, in examining the first measure of hypothesis, the correlation is negative but insignificant, and in results of other two measures, the correlation is negative and significant. It can be said that higher volume of corporate debts will reduce the disclosure quality. According to the findings of Talebnia et al. in 2011, it can be explained by the fact that in such companies, the management is more cautious and conservative in providing the information.

Furthermore, the results of all three variables showed a negative and significant correlation between firm size and disclosure quality. In other words, smaller companies are more successful in providing data than larger companies.

4. There is a direct relationship between improved disclosure quality and corporate value.

Table 4. Direct relationship between improved disclosure quality and corporate value.

Dependent Variable: Tobin's Q		Method: Panel Least Squares with random effects			
Year: 2008-2009 to 2011-2012		Number of observations: 304			
relationship	prob	test t	SD	coefficient	variable
Positive and significant	0.007	2.53	0.485	1.23	Constant coefficient
Negative and significant	0.003	-2.12	0.017	-0.036	Ln salse
Positive and significant	0.005	2.82	0.307	0.868	<i>lnProfitability</i>
Positive and significant	0.000	18.39	0.028	0.052	Ln TD
0.261	Determination coefficient) R^2				
0.246	Modified determination coefficient				
17.49	test F			Durbin-Watson	
0.000				1.84	

The results of hypothesis test indicate a significant positive correlation between improved disclosure quality and higher corporate value. Furthermore, a direct relationship between profitability and corporate value can be found. This means that, as expected, corporate value has a direct correlation with profitability, since Investors in Iran pay lots of attention to profit figures, and companies that report higher levels of revenue, can be seen as companies with

higher corporate value, since investors expect higher levels of revenue to lead to higher dividends in the future.

On the other hand, a significant inverse relationship between sales and the corporate value does not confirm our expectations that said

Most companies that companies with higher sale have higher growth potential and higher corporate value.

1-1. Recommendations Based on the Research Findings

- Higher disclosure decreases information asymmetry between the company and the market, and attracts the attention of institutional investors and can increase volume of transactions and reduce the cost of capital, leading to increased corporate value. Therefore, managers should pay more attention to disclosure and its benefits. Disclosing further details required by capital market, managers will benefit from its economic advantages.

- One characteristic of an ideal and efficient market is absence of transaction costs and thus higher liquidity. Therefore, shares liquidity can be used as a measure of market performance, especially in terms of the information presented. On the other hand, the high potential of liquidity in the stock market reflects its success in information transparency and prices of securities closed to their intrinsic value. Hence, the importance of liquidity is evident, and the authorities should to pay more attention to this issue and amending the necessary infrastructures such as a minimum float of companies in the TSE, transaction costs, concentrated ownership and etc.

1-2. Recommendations for Future Research

- Since the liquidity has different dimensions, the future studies are recommended to apply different measures to assess liquidity, such as the difference between the offered price for buying and selling.

- According to studies, it seems that the ownership structure, liquidity and corporate value are interconnected. Therefore, it is recommended to replace the disclosure quality with ownership structure, and test new hypotheses.

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