

Research Article

THE RELATIONSHIP BETWEEN INFORMATION ASYMMETRY AND LIQUIDITY RISK OF LISTED COMPANIES IN TEHRAN STOCK EXCHANGE

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ABSTRACT

The purpose of this study was to examine the relationship between information asymmetry and liquidity risk in the listed companies in Tehran Stock Exchange. A total of 60 companies were selected during the period 2009-2012. In this study, the relationship between information asymmetry and market liquidity risk and the company were evaluated. Using the method of multiple linear regression analysis, the software Eviews7 The results obtained in this study indicate that the positive relationship between liquidity risk and market liquidity and significant inverse relationship between a company and a company's liquidity risk and market liquidity by asymmetry of information.

Keywords: *Information Asymmetry, Liquidity Risk, Liquidity*

INTRODUCTION

Information asymmetry important and popular topic among academics and research in this field has been done by many information asymmetry can affect the trading liquidity of the shares of a company (Lien *et al.*, 2012).

Information asymmetry is an important factor in the decision. If the information required to be distributed unevenly among users, this action could have produced different results compared to the same thing. Therefore, before the information to the users of, the quality of the distribution of information that needs accurately assess the information asymmetry in the market makes investors demand higher returns to compensate for the risk of investing the difference between the price of buying and selling shares is created and the more the difference of the information asymmetry company desired will be further uncertainty caused investors to get good returns from investments will confidence of investors, should be accurate and scientific evaluation of the performance of companies and ultimately determine the value of them responsible face All financial information on the Company with a greater awareness of the users of financial statements, potentially trying to portray a favorable image of the business unit capital assets and business units may be greater than the actual amount reported. The overall result of this operation would be such a better picture of the actual situation seems and people outside the organization, the business unit increased incentive to invest. The gap between domestic and foreign intelligence comes in so-called information asymmetry (Khaleghi, 2010).

Research Theoretical Bases

One of the negative phenomena that typically occur in the securities markets, lack of information asymmetry that poor economic decisions by investors leads. There is asymmetric information necessary for presenting the information economy does not. Since in reality the people in a particular market is expected to have the same information, so people with information asymmetry faced by from the area, optimal portfolio could easily be possible departure.

According to the theory of information asymmetry, corporate executives are the advantages inherent information of the Company. Directors are responsible for preparing the financial statements with the full knowledge of the company's financial condition and with a greater awareness of the users of the financial statements, the potential to that image of the business unit desirable portray. It may be more than the actual amount of the entity's capital assets is reported. The overall result of this operation will be such that

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the image of the real situation seems better business units and motivated investors outside of the business unit to be increased. The gap between domestic and foreign intelligence comes in so-called information asymmetry (Khaleghi, 2010). Some users, including people within the organization, such as managers, analysts and institutions that receive the information they have access to confidential news. The most confidential information, the scope of the proposed price difference between buying and selling shares to investors, thereby increasing the efficiency of investors who do not have access to such information, reduced. This results in a lot of research coordinator Ghaemi and Vatanparast (2005), Referring to the detailed history of the world have demonstrated in Tehran Stock Exchange increased information asymmetry between traders, buying and selling stocks a wide range of different price than that. Information asymmetry can have a negative impact on turnover and also reduces the liquidity of the shares (the Lien *et al.*, 2012). One of the fundamental prerequisites to ensure that investors and creditors in productive economic activities, preparation and presentation of information in the financial and economic decisions are made is actually beneficial. Because financial decisions should be made based on the risk and return of a certain level of risk and return are important. One of the factors affecting risk is liquidity stocks, because the liquidity of the shares on the decisions of investors in the form of portfolio investment is effective. In other words, rational investors for shares which are less liquidity, higher risk premium demanded that. One of the factors affecting the liquidity of the shares is information asymmetry. Thus, the relationship between information asymmetry and liquidity of stocks over and over and can be felt assist investors in making optimal decisions.

Research Background

The impact on the quality of information disclosed symmetry, found that the quality of the disclosure can be used as an efficient program, how investors can effect that the disclosure of the company, according to analysts the company, attracting institutional investors, improve understanding, reduce costs, and increase reporting finally lead to the disclosure standards. The results show that the price gap negatively related information. In other words, the information asymmetry between supply and demand determine the price gap by increasing the quality of disclosure, is reduced. Measurement model is previous researchers, Bush & Miller (2007), respectively.

Kazemi and Mohammadnezhad (2011) examine the impact of information asymmetry Sakhtarmalkyt institutional financial performance began. Research findings indicate that the lack of an institutional shareholder information asymmetry is a significant negative relationship. So that the level of institutional ownership increases, managers provide information to the relevant person's research relationships with institutional shareholders ownership and return on equity were approved by the financial performance of the relationship between positive.

Ghorbani and Adili (2012) examined the relationship between cash holdings and value of the company in the information asymmetry is discussed. The results indicate that the situation of information asymmetry is a significant negative relationship between cash holdings and firm value. The free cash flow theory is corroborated.

Rahimian *et al.*, (2012) the relationship between earnings quality and lack of information asymmetry were Rabrrsy. The results show that there is a significant relationship between earnings quality and lack of information asymmetry leads to increased profits and reduced quality of the information asymmetry.

The information asymmetry during profit before to post higher profits

Research Variables and how to Measure them

Dependent Variable

- Information Asymmetry

To calculate the Tehran Stock Exchange information asymmetry is used in the model. This model is used by Chiang and in 1986 to determine the scope of his bid to buy and sell used Grft.ps other people in their investigation of the model using is described as follows:

$$BAS = \frac{\text{ask} - \text{bid}}{\text{ask} + \text{bid} \div 2} * 100\%$$

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In the above equation, we have:

BAS: the difference between the buy and sell price

Ask: best daily sales price of shares on the Moon

Bid: daily best price offer to buy the shares in May

t: time period studied

i: The sample

Independent Variables

1. hjm transactions (Volume $V_{i,t}$) Of all shares during the month divided among shareholders.

Bajzr number of transactions to be measured in months. TRADE $_{i,t}$ 2.tdad transactions (The following equation is obtained:: (LiRisk $_{i,t}$) liquidity risk of individual companies. 3 LiRisk $_{i,t} = (V_{i,t} - m(V_{i,t})) / s(V_{i,t})$. In this formula $V_{i,t}$ Represents the average of the bids to buy and sell shares daily during the study period and $s(V_{i,t})$ And the $m(V_{i,t})$ The mean and standard deviation $V_{i,t}$ Are.

4.nqdyngy market ((Liqui, 2002) introduced a measure to calculate liquidity through the use of daily data on the efficiency and value of the transaction, the evaluation criterion is the ratio of the absolute value of daily returns of the stock deal of the day.

$$ILLIQ_t^i = \frac{1}{Days_t^i} \sum_{d=1}^{Days} \frac{|R_{td}^i|}{V_{td}^i}$$

In the standard R and V respectively and trading volume per day d of month t is equal to the number of days of trading days i in month t.

5. Liquidity of Company (Liqui $_{i,t}$): the difference between the purchase price and the sale of shares to be measured.

6. Risk market liquidity (LiRisk $_{i,t}$): is equal to:

LiRisk $_{i,t} = (Liqui_{i,t} - M(Liqui_{i,t})) / s(Liqui_{i,t})$ (Lin et al, 2012)

Liqui $_{i,t}$ represents the liquidity Bazarbvdh and $m(Liqui_{i,t})$ and $s(Liqui_{i,t})$, respectively, the mean and standard deviation Liqui $_{i,t}$ during the study.

Control Variables R

The natural stock price at the end of the month. PRICE $_{i,t}$ stock price (.

andaz·h company (SIZE $_{i,t}$): SIZE $_{i,t} = \ln(MV_{i,t}) - md(\ln(MV_{i,t}))$; the $MV_{i,t}$ natural logarithm value of the company at the end of (($md(\ln(MV_{i,t}))$ represents the median value of the company).

The type of industry, the industrial group of companies in which the Group classified according to function.

Research Hypotheses

It aims to study designed to test the following hypotheses will be:

The main hypothesis: information asymmetry a company's liquidity as well as market liquidity risk is a significant relationship.

The first sub-hypothesis: the information asymmetry is significantly associated with market liquidity.

The second sub-hypothesis: the information asymmetry is significantly associated with the company's liquidity.

Method of Study Population and Sample

This is the objective and the nature of the correlation type.

Since almost all of the research that has been done in the Tehran Stock Exchange and in this study to quantify the asymmetry of information between the proposed price of the purchase and sale of shares, as the representative of information asymmetry, is used.

Based on the background research was conducted to test the hypothesis that the regression model is presented as follows:

In the above model:

BAS $_{i,t}$: the difference between the purchase price and sell company

: Volume $_{i,t}$ trading volume

TRADES $_{i,t}$: number of stock

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LiRisk_{i,t}: Liquidity Risk Company

Liqui_{i,t}: cash now

LiRisk_t: market liquidity risk

Liqui_t: market liquidity

SIZE_{i,t}: company size

PRICE_{i,t}: stock price

D_j: Industry Index

The present research study is involving companies in Tehran Stock Exchange during the years 2009-2012. The study targeted for sampling (systematic elimination) is used for this purpose all the companies by the following criteria have been selected:

1. Tehran Stock Exchange between 2009 and 2012 at present
2. The details of the selected variables in this study are available.
3. The number of companies that are not part of the investment companies and banks.
4. They stock over a period of more than one month in Tehran Stock Exchange has not stopped.
5. In order to have comparable data, the end of the fiscal year is 29 Esfand.

According to the above conditions and limitations, killed in Tehran Stock Exchange listed companies, 60 companies were selected as the research studies.

Research findings:

Statistic

When a mass of quantitative data collected for the study, the first to organize and summarize them in a way that is understandable and meaningful communication is essential. Descriptive statistics are used for this purpose. Often the most useful, yet the first step in organizing data, sort the data based on a logical basis for central and dispersion parameters are then extracted. Concluded that the use of descriptive statistics can be expressed exactly" features a bunch of information. Descriptive statistics were used to determine and describe the characteristics of the survey information will always be used.

In order to analyze the data, descriptive statistics of the data is computed.

Table 1: Provides descriptive variables

	BAS	LIQUIIT	LIQUIT	LIRISKIT	LIRISKT
Average	0.0603	-34,773.7	0.1572	-0.0055	-0.0189
Middle	0.048871	68160.42	0.051505	-0.326819	-0.357630
Maximum	0.568660	4440631.	1.819695	4.899630	6.084172
Minimum	-0.374812	-8,571,030.	0.000000	-0.573714	-0.746409
Standard deviation	0.182058	1182337.	0.269213	0.971732	0.972000
Skewness	0.152413	-1.728713	3.110890	3.443706	3.119883
Elongation	3.504421	16.03103	14.38803	14.75885	14.69644
Views	240	240	240	240	240

Table 2: Descriptive variables evaluated

	PRICEIT	SIZE	TRADEIT	VOLUMEIT	DI
Average	3.5458	11.753	20.6631	9100728.	5.40
Middle	3.569003	11.73839	15.12129	1475442.	5.0
Maximum	4.322591	13.98606	129.5023	3.41E + 08	14.
Minimum	2.772811	10.35587	2.516611	27157.17	1.0
Standard deviation	0.351294	0.641188	20.09526	35211948	4.0
Skewness	0.014388	0.869273	2.869333	6.813580	0.3
Elongation	2.108932	4.883770	12.28790	53.55400	1.7
Views	240	240	240	240	24

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The purpose of this table, the achievement of individual descriptive statistics of the variables that were statistically what the variables are.

tjzyh and Analysis and Test the Hypothesis

Test the Main Hypothesis

According to this hypothesis, we expect the liquidity risk, market liquidity Vnyzrysk individual company wants information asymmetry exists a significant relationship.

The main hypothesis of the study is formulated as follows:

H0: Between a company's liquidity risk and market liquidity Vnyzrysk there is no significant relationship between information asymmetry.

H1: between a company's liquidity risk Vnyzrysk market liquidity is significantly related to information asymmetry.

Table 3: Results of the hypothesis

Variables	Estimated coefficient	SE	The test statistic t	Test probability t
	0.269132	0.241495	1.114442	0.2663
	4.80E-10	5.71E-10	0.839428	0.4021
	-0.002326	0.001525	-1.525275	0.1286
	0.160440	0.049468	3.243289	0.0014
	-0.685589	0.178427	-3.842399	0.0002
	-0.004061	0.023038	-0.176265	0.8602
	2.55E-04	9.87E-05	2.586657	0.0103
	-0.018225	0.020958	-0.869606	0.3854
	0.039656	0.046148	0.859318	0.3911
	0.003743	0.003368	1.111236	0.2676
Coefficient of determination	0.134142	Statistics F	3.959168	Watson camera
The adjusted coefficient of determination	0.100261	Possibility F	0.000104	1.812182

The results show that the probability of t-test for the coefficients of the variables of market liquidity risk, market liquidity and liquidity of individual company information asymmetry smaller than 5%. Therefore, the estimated coefficient variables, liquidity risk and market liquidity individual company information asymmetry positive and market liquidity and asymmetry coefficient estimate, but since the t-statistic variables trading volume, number of stock trading, liquidity risk of individual companies, company size, industry, the company's stock price and index information asymmetry is more than 5%; Therefore, the relationship is not statistically significant. Thus, 95% of the hypotheses for these variables are rejected. Coefficient of determination indicates that the explanatory power of the independent variables to explain the variability in the amount of 13%. Probability of F statistics indicate that the overall model is statistically analyzed and according to the hypothesis, variables such as market liquidity risk, market liquidity and liquidity of individual company information asymmetry in the model remain the assumption of liquidity risk individual company H0 rejected market liquidity is significantly related to information asymmetry.

8-2 first sub-hypothesis-testing

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H0: There is no significant relationship between market liquidity and information asymmetry.
 H1: There is a significant relationship between market liquidity and information asymmetry.

Table 4: Results of the first sub-hypothesis

Variables	Estimated coefficient	SE	The test statistic t	Test probability t
	0.340143	0.224720	1.513626	0.1315
	4.26E-10	5.57E-10	0.765202	0.4449
	-0.001960	0.001048	-1.870455	0.0627
	0.188881	0.048395	3.902936	0.0001
	-0.795705	0.173736	-4.579975	0.0000
	-0.015795	0.019917	-0.793036	0.4286
	0.020071	0.036126	0.555567	0.5790
	0.002930	0.003504	0.836137	0.4039
Coefficient of determination	0.105584	Statistics F	4.584218	Watson camera
The adjusted coefficient of determination	0.082552	Possibility F	0.000203	1.817536

The results estimates show that the probability of t-test for the coefficients of the variables of market liquidity risk, liquidity, market information asymmetry smaller than 5%. Therefore, the estimated coefficient variable liquidity risk of market information asymmetry positively is the estimated coefficient of liquidity, market information asymmetry is negative and significant, but because the t-statistic variables trading volume, number of transactions of shares, company size, industry, the company's stock price and index information asymmetry is more than 5%, so the relationship is not statistically significant. Thus, 95% of the hypotheses for these variables are rejected. Coefficient of determination indicates that the explanatory power of the independent variables is able to explain 11% of the dependent variable. Probability of F statistics indicate that the overall model is significant and based on the assumption of variable factors such as market liquidity risk and market liquidity remains a model of information asymmetry in the market liquidity hypothesis H0 is rejected information asymmetry on There is a significant relationship.

Second Sub-hypothesis Test

H0: Between a company's liquidity is significantly associated with information asymmetry.
 H1: between a company's liquidity is significantly associated with information asymmetry.

Table 5: Results of the second sub-hypothesis

Variables	Estimated coefficient	SE	The test statistic t	Test probability t
	0.005223	0.236469	0.022086	0.9824
	2.11E-10	5.78E-10	0.365589	0.7150
	-0.001097	0.001522	-0.720522	0.4719
	-0.017492	0.023601	-0.741164	0.4593
	3.42E-04	9.95E-05	3.436197	0.0007
	-0.009714	0.021569	-0.450350	0.6529
	0.047083	0.046492	1.012717	0.3123
	0.004480	0.003459	1.295210	0.1965
Coefficient of determination	0.300123	Statistics F	2.365985	Watson camera
The adjusted coefficient of determination	0.038674	Possibility F	0.023622	1.820427

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Estimations results show that the likelihood of a company's liquidity variables and t tests for the coefficients of information asymmetry is smaller than 5%. Therefore, the estimated coefficient individual company information asymmetry is positive and significant, but because the t-statistic variables trading volume The number of stock trading, liquidity risk of individual companies, company size, industry stock price index to the information asymmetry is more than 5%, so the relationship is not statistically significant. Thus, 95% of the hypotheses for these variables are rejected. Determination coefficient indicates that the explanatory power of the independent variables is able to explain 30% of the variation in the dependent variable. Probability of F statistics indicate that the overall model is significant and based on the assumption of a company's liquidity as variables in the model remain the information asymmetry hypothesis H0 liquidity to rejection of the information asymmetry significant relationship individual company.

Discussion and Conclusion

This study sought to examine the relationship between information asymmetry and liquidity risk and liquidity. The results of the test research hypotheses to examine the relationship as follows:

The main research hypothesis that the relationship between information asymmetry and liquidity risk, market liquidity risk as well as individual company confirmed Accordingly direct relationship between information asymmetry and market liquidity risk and liquidity risk of individual companies with the dependent variable a negative relationship between During the study period there were significant, with an increase or decrease in market liquidity risk information asymmetry increases or decreases with increase or decrease the liquidity risk of individual companies, as well as information asymmetry increases or decreases. The results of the first hypothesis test findings Lin *et al.*, (2012) are inconsistent.

Secondary research hypotheses suggest an inverse relationship between information asymmetry and market liquidity and liquidity Mandy exists between a company and the information asymmetry companies in the sample is significant positive correlation.

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