Explaining the Effects of Institutional Ownership on Liquidity of the Time Increased Capital Stock: Evidences of Iran's Capital Market

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ABSTRACT

According to this research, the effects of capital increasing on liquidity and then the effects percentages of institutional ownership on this relationship have been studied. Active companies in Iran's capital markets are considered as the statistical society during the period of 2003-2007 which is divided to capital increasing of cash receivable - demands and of the reserves. The results demonstrate that liquidity (stock turnover) is not affected by any type of capital raising methods, so after capital increasing no change is detected on this variable. Study of effects of different percentage of institutional ownership on the relationship between these variables, the conclusion obtained that the institutional ownership between 50 to 100 percents through the capital increasing of the cash receipts - demands make a positive effect on the relationship between these two variables.
Keywords: Increased Capital Stock; Liquidity; Institutional Ownership; Stock Turnover.

1. INTRODUCTION

According to expansion of capital markets and the needs of companies to financial resources for further developments and also movement forward and expand their activities and sometimes lack of liquidity, some companies prefer to raise their capital in order to meet their goals.

The companies which encounter running into a debt in the short term, should have high level of liquidity. This ratio for output creditors (banks and credit institutions) is an important factor for granting the credits and facilities which appoint the creditors in safety margin as well.

In fact, with increasing of this ratio, the company's ability to repay the debts will be increased accordingly. Also the liquidity is an important factor for activity continuation and is one of main ratios of financial statements which creditors consider.

The target of the present research is to study the effects of capital increasing on liquidity and also the examining effects of different percentages of institutional ownership the relationship between these variables. This article reviews the previous researches background, assumptions, methodology, data analysis and finally it deals with the conclusions and study limitations. The structure of the paper is as follows; Section 2 relates our work to the framework research; Section 3 presents research hypothesis Section 4 presents the methodology; Section 4 contains the Findings and data analysis; Section 5 conclusion.

2- FRAMEWORK RESEARCH

(i): Research background

Financing is one of the most important decisions that the managers of business units make for continuation of their activities. Company executives believe that the cheapest solution to finance is capital increasing.

According to Hajyvnd and Noravsh research, it depicted that Iranian companies use capital increasing as the main source of financing and the numbers and percentage of their capital increasing have been raised every year. He states that the supplying of new shares, in the Iranian capital market as good news and contains new information to investors and companies the future is favorable (Hajivnd & Noravsh, 1997). For increasing the capital in Iran, one of following points is possible to happen:
1. Stock increasing with accepting new shareholders; issuing new shares with priority rights, increasing the nominal value each share according to approval of all shareholders (the share of cash payments)
2. Issuing of new shares with the agreement of creditors or bondholders (to convert the demands of new shares)
3. Transferring undivided profit, bonus stock or profit share to company's capital (converting profit sharing (reserve) into added value income value of the company's capital)

Miller and Rock argued that in the situation of asymmetry of information between managers and investors, the issuing of new shares by a company may warn that the funds generated inside the company is lower than expected, and finally the profit and cash flow will be weak(Miller & Rock, 1985).

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One of the main specifications of efficient markets is to not existing of transaction costs and thus making the ability of improved liquidity as well. In addition to theoretical aspects, from the real view of point such as buying and selling queuing lines, consideration to realization and solving this problem is essential. Increasing the realization can cause more motivation of financial risks by handling and reducing the costs through portfolio investors in trading making decision, so when increases the transaction costs will come down dramatically. Also, it plays an important role in price discovery process. Considering the role of improved liquidity, identification of its risk factors is too important. If the role of owners of institutional participation can be described in solving the improved liquidity problems, can help to solve the problem by enactment in reception and guiding the companies to investors. With major mediators such as institutional investors can settle down the problems because of the relationship between institutional ownership and realizability.

Who are called the Institutional investors? According to definition of Bushee, institutional investors, large investors such as banks, insurance companies, investment companies, and pension organizations (Bushee, 1998). According to Velury and Jenkins research, institutional investors because of significant ownership stock in companies, have essential influences and can affect their practices and performance as well. The main reason is supervising activities of these investors (Velury & Jenkins, 2006). Glosten and Milgrom believe that the institutions with information advantage can cause cost for investors which are unaware and consequently liquidity will be decreased (Glosten & Milgrom, 1985). Mendelson and Tunca claimed that the institutions can reduce the uncertainty about the real price of assets, reduction in losses caused by transactions, increasing the willingness of investors and finally increasing the improved liquidity through the market. Another team believe that the institutional owners which invest in long-term situation, causes a reduction in Improved liquidity by decreasing in the number of available floating shares (Mendelson and Tunca, 2004). Islami Bidgoli and Sarnj combined the improved liquidity measure, in other words the ratio of shares issued in the Markuies model, so it assisted to forming of optimal portfolio. They found that liquidity is one of the considerable interests for investors (Islami Bidgoli & Sarnj, 2008). Gompers and Metric in their study stated that there is a positive relationship between the level of institutional ownership and working capital (Gompers & Metric, 1997). The research results of Rubin (2007), Chung and others (2008) and Rahmani and others (2010), demonstrated that the liquidity is related to the ownership of institutional shareholders considerably, which increases by increasing the ownership level and decreases by increasing the concentration of ownership. Cueto examined the relationship between ownership structure and improved liquidity of market in Brazil and Chile. The research illustrated that the holders of large blocks of shares cause the reduction of availability of floating stocks in the market and thus reducing the improved liquidity accordingly (Cueto, 2009). Dennis and Strickland in their research found that the companies which have had the lower institutional ownership before the splitting of shares, the ratio of improve liquidity in their shares has been greater than in comparing with other companies (Dennis & Strickland, 1998). Agarwal has examined the relationship between institutional ownership and improved liquidity through two channels: of adverse selection and information efficiency. He discovered a non-linear relationship between institutional ownership and improved liquidity and stated that adverse theory is prevailing hypothesis in lower levels, where as with increasing the level of institutional ownership, improved liquidity (Agarwal, 2008). Zaree asthriji showed that Improved liquidity of stocks firstly has a close relationship with turnover and secondly with involved value as well (Zaree asthriji, 2007). Muscarella and Vetsuypens in their study showed that the turnover of capital stock improved after the announcement of splitting and goes up from its previous level (Muscarella & Vetsupens ,1996). But copeland achieved the reverse results (Copeland, 1979). Patrick studied the relationship between liquidity and stock splitting; the results suggest that share splitting in small companies can improve the liquidity (Patrick, 2003).

3. Research Hypothesis

Hypothesis 1: there is difference between the average liquidity (stock turnover) after increasing capital than before that.

Hypothesis 2: there is a relationship between percentage of institutional ownership and liquidity (stock turnover) on companies that have increased their capital.

This hypothesis will be tested in form of the following sub-hypotheses:

2-1: there is a relationship between the institutional ownership of below 50 percent and liquidity (stock turnover) on companies that have increased their capital of the reserve.

2-2: there is a relationship between institutional ownership of below 50 percent and liquidity (stock turnover) on companies that have increased their capital of the Cash receipts - demands.

2-3: there is a relationship between the institutional ownership of 50 to 100 percent and liquidity (stock turnover) on companies that have increased their capital of the reserve.

2-4: there is a relationship between the institutional ownership of 50 to 100 percent and liquidity (stock turnover) on companies that have increased their capital of cash receipts-demands.

4 - METHODOLOGY

This research is categorized as applied research and in terms of the method is considered as correlation analysis. The goals of this study are investigation of the effects of increased capital on liquidity (stock turnover) in companies which are accepted in Tehran Stock Exchange as well as of the relationship between the different percentages of institutional ownership (the two categories below 50 percent and between 50 to 100 percent divided) on the stock turnover in the companies to raise current capital, this is a study in the period of 12 months before announcing increasing and 12 months later. They are considered through the cash receipts-demands and reserves separately. Linear regression model was used to examine the relationship between variables. The research hypotheses were examined in the 95% confidence level. It should be noted that test was conducted to study the nonlinear relationship between research variables and in regard to the value of F statistics and Significant level, it was clear that linear regression had presented the best variables offers. To examine the validation of the normal distribution of data and remainders hypothesis the Kolmogorov-Smirnov test has been used and to examine the validation of errors lack of autocorrelation hypothesis the Durbin-Watson method has been utilized. Correlation coefficient is a criterion to determining the strength of relationship and the type of relationship (direct or reverse). Determination coefficient shows that what percentage of the changes of the dependent variable is explained by the independent variable. Significance test of the regression equation using the F statistic, and significance test of regression coefficients using the T statistics have been taken as well. In the multiple regressions, the lack of multi co-linearity between independent variables has been made sure.

4-1. Data collection and sample selection

In this study, librarian method & archives were used to collect the required data. Research tool include Financial Statements, accompanying notes and financial reports of the above mentioned companies, which they are collected through Novin Rahavard software and Tehran Stock Exchange official website and then it was calculated the variables in the classification and ultimately data analysis by SPSS software.

The statistical society included all accepted companies in the Tehran Stock Exchange during 2003 to 2007 and the sample is selected in regard to the following features:
1. They should have been accepted in Tehran Stock Exchange before the financial year 2003and on the basis of reserves and the cash receipts - demands have increased Capital.
2. Companies that in each year are at least 70 trading days.
3. Companies which have not stop for a long time after increasing capital meeting and the end of their financial year should coincide with the end of March.
4- They should present the Financial Information from 2003 to 2007 required in this research and should not change their financial year during the period in question.

4-2. Research model and measurement method of variables

At first average compared test examined the effects of capital increasing on abnormal returns has been calculated. The following model is estimated to test the second and the third hypothesis;

$$\Delta Liquidity(\text{stock turnover}) = \alpha + \beta_1 (\text{Institutional}) + \beta_2 (\text{Size}) + \varepsilon_{it} \qquad (1)$$

In this research, to normalize the distribution of variable dependent on intellectual capital and its components, the conversions of square root, square, and Ln are used. The variables used in the study were defined and calculated as follows.

[*]**Δ Stock Turnover:** Stock Turnover percentage change is defined as the change in stock turnover between the post announcement and pre-announcement period increased capital divided by pre-announcement period stock turnover.

Stock turnover: This is the dependent variable in this study. Turnover where monthly and is defined as monthly stock turnover volume divided by shares outstanding. Stock turnover is defined as the 12 month prior and 12month after announcement increased capital.

[*]**Institutional Ownership percentage:** This percentage is the firm's outstanding shares held by institutions at the shareholder annual assembly.

[*]**Size (control Variable):** This variable is measured as the Log of total assets and entered in the book value of total assets at the shareholder annual assembly.

5- Results of hypotheses testing

(i): The first main hypothesis

To explain the effects of capital increasing on liquidity (stock turnover), the average compared test (paired) was used. The first main hypothesis test results are shown in the table below:

Table1. average Comparison test between the stock turnover and capital increasing

The Effects of capital stock increase on stock turnover	Mean	95%confidence Interval of the difference		df	t	Sig	Confirmed Hypothesis
		Lower	Upper				
The Effects of capital stock increase of reserves	0.001	-0.003	0.006	84	0.640	0.524	H_0
The Effects of capital stock increase of Cash receipts-demands	0.005	-0.001	0.010	97	1.727	0.087	H_0

In accordance with Table 1, the capital increasing through cash receipts-demands and reserves, considering to the statistical significance level t in both which is 0.524 and 0.087 respectively, it can be stated with 95 percent confident that there is no difference between the average liquidity (stock turnover) before and after the capital increasing.

(ii): The second main hypotheses

To test this hypothesis, we first test the following sub-hypotheses:

The first sub - hypothesis. Test results of this hypothesis are presented in the Table 2 as below:

Table 2.The regression test results the institutional ownership of below 50 percent and stock turnover in the increased capital of the reserve

Variables	Constant	Institutional	Size	R	R^2	Adj R^2	D-W	F-Value	Sig	Result
Regression coefficients	7.771	-0.017	-0.111							
t-test	1.958	-0.721	-1.914							
sig	0.062	0.478	0.068	0.460	0.212	0.143	2.354	3.087	0.065	H_0
Pearson Correlation		-0.293	-0.440							
Collinearity Statistics	Tolerance	0.850	0.850							
	VIF	1.176	1.176							

In according to table 2, the significant level for F statistics is 0.065 and greater than 0.05, so that we can say with 95 percent confidence level between institutional ownership the below 50 percent on companies that have increased their capital of the reserve there is not any relationship on stock turnover.

The second sub -hypothesis. Test results of this hypothesis are shown in the Table 3 as below.

Table 3.The regression test results the institutional ownership of below 50 percent and stock turnover in the increased capital of the cash receipts - demands

Variables	Constant	Institutional	Size	R	R^2	Adj R^2	D-W	F-Value	Sig	Result
Regression coefficients	-1.382	-0.062	0.002							
t-test	-0.316	-1.628	0.029							
sig	0.759	0.138	0.977	0.492	0.242	0.074	2.281	1.439	0.287	H_0
Pearson Correlation		-0.492	-0.138							
Collinearity Statistics	Tolerance	0.912	0.912							
	VIF	1.097	1.097							

According to table 3, the significant level for F statistics is 0.287 and greater than 0.05, so that we can say with 95 percent confidence level between institutional ownership the below 50 percent on companies that have increased their capital of the cash receipts - demands there is not any relationship on stock turnover.

The third sub - hypothesis. Test results of this hypothesis are shown in the Table 4 as below.

Table 4. The regression test results between the institutional ownership of 50 to 100 percent and stock turnover in the increased capital of the reserve

Variables		Constant	Institutional	Size	R	R^2	Adj R^2	D-W	F-Value	Sig	Result
Regression coefficients		1.395	-0.010	-0.006							
t-test		0.919	-0.626	-0.517							
sig		0.362	0.534	0.607	0.113	0.013	-0.025	1.858	0.335	0.717	H$_0$
Pearson Correlation			-0.087	-0.073							
Collinearity Statistics	Tolerance		1.000	1.000							
	VIF		1.000	1.000							

According to Table 4, the significant level for F statistics is 0.717 and greater than 0.05, so that we can say with 95 percent confidence level between institutional ownership the below 50 percent on companies that have increased their capital of the reserve there is not any relationship on stock turnover.

The four sub - hypothesis. Test results of this hypothesis are shown in the Table 5 as below.

Table 4. The regression test results between the institutional ownership of 50 to 100 percent and stock turnover in the increased capital of the cash receipts - demands

Variables		Constant	Institutional	Size	R	R^2	Adj R^2	D-W	F-Value	Sig	Result
Regression coefficients		0.576	0.051	-0.442							
t-test		0.165	2.199	-1.333							
sig		0.869	0.031	0.186	0.276	0.076	0.053	1.957	3.337	0.041	H$_0$
Pearson Correlation			0.236	-0.145							
Collinearity Statistics	Tolerance		1.000	1.000							
	VIF		1.000	1.000							

According to table 5 can be seen, the F statistics value and significance level are respectively, 3.337 and 0.041 that is, the error level of 0.05 the model is significant. D-Watson statistic equal to 1.957 calculated and shows the remaining sovereignty. Statistic t-test, Sig and the Pearson correlation for the independent variable of institutional ownership of 50 to 100 percent, respectively equal 2.199, 0.031 and 0.236, beta coefficient of 0.004, positive relationship and significant between the institutional ownership upper100 percent through cash receipts -demands and stock turnover approved. Also, the coefficient of determination (0.076) means that multiple regression models explain 7.6 percent from the total changes in stock turnover and 92.4 percent of the changes is influence of other factors. It should be noted that all of control variable in model are not Significant.

Finally, the relationship between institutional ownership of 50 to 100 percent of cash receipts -demands and are accepted and regression model is presented as following:

ΔStock turnover = 0.051 ownership Institutional

5- CONCLUSION

Capital increasing is always considered by managers as a means of financing. Financial decisions can be considered as crucial strategic decisions in each company. The company's ability to identify the potential funding sources (both internal and external) for financing the necessary investments and proper financial planning is considered as the main factor of growth and progress of company.

In this research the effects of institutional ownership on liquidity through capital increasing by the reserve and the cash receipts - demands evaluated is studied individually.

On studying the effects of capital increasing on liquidity (stock turnover) as a dependent variable, we reached the conclusion that the capital increasing through cash receipts- demands and reserves on liquidity (stock turnover) is not changed a after increasing in comparing before. Therefore, company executives should take note that capital increasing cannot spend liquidity (number of traded shares of company) necessarily, in other words, the investment must be economically justified. Although the capital increasing is always mentioned as one of the methods of financing, however, due to the direct reflection of capital increasing on capital structure, always should be supervised by experts. Capital increasing should be performed based on accomplishing supervising of company's development projects, in addition to the projects should be justified economically. Through the studying of effects of institutional ownership on liquidity in the capital increasing, it reached that none of different percentages of institutional ownership in the capital increasing through the reserve can affect the cash (stock turnover) procedure. But in reviewing the capital increasing through cash receipts -

demands, according to research results of Agarwal (2008), we reached the conclusion that, at lower levels the institutional ownership has not any relation with liquidity, but the institutional ownership has affected liquidity (stock turnover) positively 50 to 100 percent, it means that with increasing the level of ownership, liquidity increases accordingly. This result disagrees with the results of Dennis and Strickland (1998) at the time of stock splitting and Cueto (2009) and also agrees with the results of Rubin (2007), Chung and others (2008), Rahmani and others (2010).

According to the research findings the suggestions can be offered as below:

1- Considering the obtained results, it is more practical to use the other methods of financing except of capital increasing through cash receipts - demands and reserves, such as bank loans. Because the costs this method of financing is high and can not affect the liquidity (stock turnover) of companies as well.

2- Banks and credit institutions should provide the proper backgrounds to give appointed credits to companies; otherwise, the companies inevitably should extensively increase their investments and internal financing and accordingly it makes many negative consequences for capital markets and the future of country's economic as well.

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