



Research Paper

Investigating the Institutional Investment And its Effect on Stock Price Falling Risk in Accepted Companies of Tehran Stock Exchange

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ABSTRACT: This research aims to investigate the relationship between institutional investors and stock price falling risk. From the perspective of relationship between variables this research is scientific, and an applied one according to the objective. To test the research hypotheses panel data method has been implemented in order to estimate the model and population; regarding the implemented counting, data of 107 companies during 2007 to 2013 was used. Descriptive data analysis has been implemented for the obtained data of this research and it has been conducted applying post-event approach (through past data). On the descriptive level, general features of the population have been dealt with using statistical characteristics and on the inferential level regression analysis test, significance t-test, and significance F test have been applied in order to respond research hypotheses and to find special relationships between population variables. Also, hypotheses test has been implemented using Eviews 9 statistical software. Results indicated that there is a significant relationship between temporary institutional owners, proprietary institutional owners, institutional owners' fluctuations, and stock price falling risk.

Keywords: temporary institutional owners, proprietary institutional owners, institutional owners' fluctuations, stock falling risk.

I. INTRODUCTION

Financial market is one of the vital and effective markets of any nation economy. Stock exchange is the basic part of any country's economy; accordingly, anything occurs in this market and anything affects it would be important and essential. Active investors in this market are looking for profitable projects. Decision making to identify such projects always requires using reliable and relevant data in order to be used in decision making models.

Typically, because of having a remarkable percent of companies stocks and also being professional in investment, institutional owners have the essential capability and motivation to supervise the companies. Generally, it is imagined that the presence of institutional owners may result in companies' behavior and performance changing. This comes from regulatory activities implemented by these investors (Velury, 2006).

Increasing phenomenon of stock price falling results in investors' pessimism about investing on stock exchange which can finally cause withdrawal of investors' resources. Thus, knowing this phenomenon reasons, strategies prevent from this phenomenon in investment market, and also models to predict it are very important for investment market administrators that are always looking for this market booming through attracting stagnant capital.

Stock securities price is a suitable estimation of its intrinsic value, and these prices are suitable signals to estimate resources allocation. If a company performs well, its stock price rises naturally and in case of any need it is able to increase capital. Such companies have more access to capital market and financial resources are simply flooded towards them. On the other hand, if stocks are sold for the price of the day rate, shareholders do not bear any losses. Accordingly, stock price is a good criterion to allocate resources.

A lot of researchers such as Chen et al (2001) believe that stock price changing of a company is resulted from its internal information management. On the condition that information is randomly entered into the market and information dissemination process is implemented systematically, no matter it is good or bad, it

can be said that this disseminated information is symmetric. However, managers are always motivated to hide negative information and news and accumulate them inside the company.

II. Literature

In the second half of the twentieth century, having not an influential role, institutional investors; however, had a remarkable effect on capital market combination. Nevertheless, activities volume related to investing institutions in economies emphasizing governance distribution and also in economies which pay special attention to shareholders controlling is different.

Nowadays, different systems are observed with contradictory approaches and functions in countries of advanced economies which are called internal and external systems. Notable point about institutional investors is their increasing growth. The cause of this growth can be found in reasons rooted in existed supply and demand for these institutions' services. For example, their higher efficiency in service provision, compared to direct shareholder, investment in this way can be facilitated for families. Institutions' capability in diversification, power of high liquidity, suitable organizational supervision, and power of technology advancements exploitation are among the effective factors of service supply. On the side of demand, factors such as population changing, minor shareholders higher awareness of and familiarity with financial markets as well as wealth level growth of society have provided the situation for institutions activities increasing.

The rate of institutional ownership in a company is the ratio of ordinary shares available to institutional investors to the whole shares of the company. The more this ratio, it indicates the less ownership concentration in a few institutional owners and its little value indicates the lack of institutional concentration. To calculate the percentage of institutional ownership in any company the number of institutional ownership is divided by ordinary shares of company in the beginning of period (Nourvash&EbrahimiKordlor, 2005, p.104).

Different combination of shareholders in companies can have different effects on companies' performance and also the way of companies' information reflection in the market and information symmetry. Regarding the type of ownership, the way of supervising of companies' performance management can also be different, such that in companies with a lot of shareholders in form of real persons shareholders mainly rely on available information to public in order to monitor managers' performance and evaluate the business perspective of the company; whereas, opposite to this point, institutional shareholders have a relative advantage in data collection and access to valuable internal information about the perspective of the company.

In an overview, corporate governance includes legal, cultural, and institutional arrangements determining the movement and performance of companies. Elements in this field include shareholders and their ownership structure, board members and their combination, company's management directed by chief executive officer, and other beneficiaries may affect the movement of the company. A lot of groups affect corporate governance, among them shareholders; especially institutional investors play an important role. From the theoretical perspective, the status of institutional investors in corporate governance is so complicated. Thus, institutional investors represent another powerful corporate governance mechanism that can supervise management of the company, because they can both influence on company's management remarkably and can bring the benefits of shareholders group to one direction.

III. REVIEW OF THE LITERATURE

Hutton (2009) investigated the relationship between information transparency and sudden stock price falling. Results of this study show that there is a positive relationship between lack of information transparency and the probability of sudden stock price falling.

In a research, Callen and Fang (2011) investigated the relationship between institutional investors and falling of stock price. Their research tests two opposite views about institutional investors: regulatory view (monitoring) against expropriation. Results indicate that there is strong evidence about the inverse relationship between institutional owners and stock price falling in the future.

Nourvash and EbrahimiKordlor (2005) investigated the relationship between shareholders combination and information symmetry and usefulness of performance accounting criteria. Findings of this study showed that in companies with higher institutional ownership, compared to those with less institutional ownership, stock prices involve more future earnings information. This is consistent with relative advantage of institutional shareholders in data collection and processing.

In another research, HassasYeganeh et al. (2008) investigated and discussed the relationship between institutional investors and corporate value. Different attitudes (efficient monitoring & interest convergence hypotheses) were tested on institutional investors. Generally, strong evidence is provided on the relationship about the positive effect of institutional investors on corporate value which confirms efficient monitoring and indicates that institutional investors have incentives for performance improvement and also are able to punish those managers not moving in the line with their company benefits.

MoradzadehFard et al. (2009) studied the relationship between earnings management and institutional ownership. Results of their study show that there is a negative relationship between the level of institutional ownership and its concentration on earnings management.

IV. STATISTICAL POPULATION

Statistical population includes all elements and people in an office specified geographical scale (global, regional, local, & spatial) having one or several common features (Hafez Nia, 2010). Statistical population of this study includes all accepted companies in Tehran stock exchange during 2007 to 2013.

Hypotheses

First hypothesis: there is a positive relationship between temporary institutional owners and stock falling risk. Second hypothesis: there is a significant negative relationship between proprietary institutional owners and stock price falling risk. Third hypothesis: there is a significant positive relationship between institutional owners' fluctuations and stock falling risk.

Instruments and data collection method

Type of problem determines where researcher has obtained required data. Since this study deals with real data of the companies and uses financial statements of the same companies to provide data of accepted companies in Tehran stock exchange, the method of data collection is in form of field survey method. Accordingly, data collection and required data were implemented in two stages. In the first stage, to study the theoretical foundations the library method (referring to theses, journals, Persian & Latin articles through relevant websites) was applied. In the second stage, data collection out of presented financial statements to stock exchange, and other data resources such as TadbirPardaz Database was used.

V. RESEARCH MODEL

$$CRisk_{it} = \alpha_0 + \alpha_1 Stdi_{it} + \alpha_2 DED_{it} + \alpha_3 TRA_{it} + \alpha_4 KUR_T + \alpha_5 RET_T + \alpha_6 MB_T + \alpha_7 LEV_T + \alpha_8 ROE_T + \alpha_9 LNSIZE_T + \varepsilon_{it}$$

Dependent variable

Stock price falling risk has been used as dependent variable in this research. CRisk_{it}: indicates stock price falling risk through three criteria of (1) skew coefficient of company specific daily returns, (2) company specific daily returns fluctuations range from minimum to maximum, (3) difference between company specific returns days, both negative and positive.

Independent variable

Stdi_{it}: this variable shows the rate of fluctuations and stability of institutional owners obtained from the mean of standard deviation to institutional owners' ownership among all investors of the company,

$$Stdi_{it} = \sum_{j=1}^{J_i} Std(P_{i,t}^j) / J_i$$

DED_{it}: indicates the proprietary institutional and permanent owners of the company obtained from dividing the amount of institutional shareholder shares by whole issued shares (company's institutional proprietary owners refers to those shareholders that their ownership percentage and permanence during the intended time period is stable and increasing). TRA_{it}: indicates temporary institutional owners and it is obtained from dividing the amount of shares possessed by temporary institutional owners by whole issued shares (temporary institutional owners refers to those shareholders that their ownership percentage during the testing period has a lot of fluctuations and decreasing or getting out of company ownership).

Control variables

KURT: daily returns kurtosis in year T

RETT: accumulated daily returns in year T

MBT: ratio of stock market value to stock office value in year T

LEV_T: financial leverage of company in year T

ROE_T: return on equity in year T

LNSIZET: market value logarithm of return on equity in year T

Data analysis

Multivariable regression models between independent and dependent variables in form of combined data analysis were used to test research hypotheses. Applying combined data requires selecting one of the

numerous models of this method including fixed effect, random effect or integrated data models. To determine the applied model in combined data tests such as Chaw Test, Hussmann Test, and LM are used.

Results of Chaw test are presented in table 1:

Table 1: F-Limer Test results for research models

statistics	Error level	Accepted method
5.1421	0.0000	Fixed effects model

As it is seen in table 1, F is significant at the error level of 0.05. Thus, Chaw test has strongly rejected intercept similarity in all periods. Accordingly, fixed effects method is accepted in this test. In the next stage, fixed effects method is tested against random effects method. To this aim, Hussmann Test has been used. If calculation statistics is significant at the error level of 0.05, random effects hypothesis is rejected and fixed effects model is accepted. Results of Hussmann test are presented in table 2 to investigate estimation method selection:

Table 2: Hussmann test results

Statistics	Error level	Accepted method
70.4561	0.0000	Fixed effects method

Regarding table 2, calculation statistics of Hussmann test at the error level of 0.05 is not significant. Thus, lack of relationship between individual effects and explanatory variables has not been rejected. Accordingly, fixed effect method is used to estimate model 1.

VI. RESULTS OF RESEARCH HYPOTHESES TEST

Table 3 shows results of model 1 parameters estimation. Durbin-Watson statistics is 1.5649 for this model and at the error level of 0.05 self-correlation disturbing statement is rejected. The amount of probability relevant to F statistics is less than 0.05 for specification. Accordingly, null hypothesis indicating model error specification is rejected. As a result, at the certainty level of 0.95 the model significance is accepted. Model corrected determining coefficient is 0.6563, and it shows that about 0.65 of dependent variable can be described by means of independent variables. With respect to this matter that model statistics are not rejected research hypotheses are investigated.

Table 3: results of model 1 estimation

Variable	coefficient	T statistics	Error level
Intercept	-0.2517	-2.7126	0.0069
institutional ownership fluctuations	0.1263	4.3417	0.0000
Proprietary institutional ownership	-0.0534	-2.5341	0.0115
Temporary institutional ownership	-0.0587	-4.7763	0.0000
Kurtosis	-0.0084	-1.8498	0.0648
Financial leverage	-0.1570	-15.0666	0.0000
Market to office value	0.0126	6.9787	0.0000
Capital returns	0.0157	2.0000	0.0459
Stock returns	0.2552	7.4311	0.0000
Company size	0.0234	1.7657	0.0779
Determining coefficient	0.7094		
Modified determining coefficient	0.6563		
Durbin-Watson	1.5649		
F	13.3735		
F probability	0.0000		

Regarding the presented results in table 3, probability error relevant to null hypothesis indicating no significant relationship between temporary institutional owners and stock falling risk is 0.0000 less than 0.05; accordingly, null hypothesis is rejected. As a result, there is a significant relationship between temporary institutional owners and stock falling risk.

Error level relevant to null hypothesis indicating no significant relationship between proprietary institutional owners ad stock price falling risk is 0.0115 which is less than 0.05; accordingly, null hypothesis is rejected. As a result, there is a significant relationship between proprietary institutional owners and stock price falling risk. Probability error level relevant to null hypothesis indicating no significant relationship between institutional owners' fluctuations and stock falling risk is 0.0000 which is less than 0.05; accordingly, null hypothesis is rejected and there is a significant relationship between institutional owners' fluctuations and stock falling risk.

VII. RESULTS OF HYPOTHESES TESTING

First hypothesis

Results obtained from research model shows that according to estimated coefficient for temporary institutional owners and stock falling risk, there is a positive relationship between temporary institutional owners and stock falling risk. On the other hand, looking at significance level of this variable, there is a significant relationship between these two variables and this hypothesis is confirmed.

Second hypothesis

Testing this hypothesis shows that estimated coefficient for proprietary institutional owners and stock price falling risk indicates a positive relationship between proprietary institutional owners and stock price falling risk. On the other hand, it is observed, looking at significance level, there is a significant relationship between these two variables to confirm this hypothesis.

Third hypothesis

Estimated coefficient in this hypothesis between institutional owners' fluctuations and stock falling risk shows a positive relationship between these two ones, and looking at significance level it is clear that there is a significant relationship between them which confirms this hypothesis.

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