

The effect of stock market on the company's investment in Iran (price informativeness perspective)

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Abstract

This study investigates the effect of stock market on the company's investment in Iran from the price informativeness perspective. The objective of this study is to explain the effect of the stock market performance, including corporate governance and informative roles, on the company's investment in Iran using the price informativeness criterion; also to explain the effect of basic principles of the company on investment. This study is conducted using multivariate regression level model. The price informativeness is estimated using price synchronization combined with the transparency of information. The population in this study is companies listed in Tehran Stock Exchange during 2004 to 2011. Systematic elimination method is used to determine the samples, and finally, 77 companies are studied. The results of regression analysis are using analyzed different statistical tests, including t and f tests. The results indicate that the stock market performance has no effect on investment from the price informativeness perspective.

Keywords: company's investment changes, price informativeness, market returns

Introduction

In economic sector, the most important factor involving in increasing the investment and consequently the economic development and growth is having strong and efficient financial markets in addition to appropriate financial institutions in these markets. Attracting the capital, managers provide resources needed to finance projects with positive net present value for the company; but many factors can influence a firm's investment decisions. Affect-

ing the selection of investment projects, the factors can affect the capital cost, profit, profit anticipated by shareholder, and the future value of the company's stocks (Majluf & Myers, 1984).

An important element of the securities market is the price that reflects the available information. Studies conducted on corporate finance literature discuss that administrators can use information behind the company's stock price. The stock price may contain some information that managers do not know. As a result, this information can help managers in decision-making, such as making decisions on investment (Chen *et al*, 2007)

Background of the study

Investment means converting funds into one or more types of properties that is preserved for some time in the future. The term "investment" includes a wide range of activities. It may include investments in bonds, common stock, stocks options, convertible bonds, and tangible assets such as gold, jewelry, land and, etc. Investment can also be defined as follows: buying a real or financial asset item with the return proportional to the expected risks.

In economic sector, the most important factor involving in increasing the investment and consequently the economic development and growth is having strong and efficient financial markets in addition to appropriate financial institutions in these markets. Attracting the capital, managers provide resources needed to finance projects with positive net present value for the company; but many factors can influence a firm's investment decisions. Affecting the selection of investment projects, the factors can affect the capital cost, profit, profit anticipated by shareholder, and the future value of the company's stocks (Majluf & Myers, 1984).

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Purpose of the study

Purpose of this study was to investigate the Effect of Stock Market on The Company's Investment in Iran (Price Informativeness Perspective).

Literature Review

Ahmadpour and Peikar Negar Gh. R. (2012), in a study entitled "Investigating the Information Asymmetry and Price Synchronization in Tehran Stock Exchange", conclude that there is no significant relationship between information asymmetry and price synchronization in companies listed in the Tehran Stock Exchange. They also found that in the information leakage is possible in Tehran Stock Exchange and this is done by providing confidential information by inner parties. Besides, the reveal that in the period prior to the profit announcement, more and more effort to obtain confidential information is possible which would lead to increased information asymmetry.

Shourvarzi and Azadvar (2010), in a study entitled "Analysis of Investment Opportunities and Companies' Performance", evaluate the relation between the investment opportunities and the performance of companies listed in the stock market. For this, 85 companies listed in Tehran Stock Exchange was reviewed for a six-year period (from 2003 to 2008). Finally regression models were used to test the hypotheses. Results of the study show that there is a significant and positive relation between the investment opportunities and the companies' performance.

Lee and Liu (2006), in a study entitled "Whether Information on Stock Price Will Lead to More or Less Volatilities in Idiosyncratic Return", discovered that there is a U-shaped relation between price asynchronous and informativeness. They also realized that for companies with low informativeness, which usually are non-transparent in providing information for outsiders, there is a negative relation between stock price informativeness and idiosyncratic volatility. However, for companies with strong informativeness, which are usually called transparent companies, this relation is positive.

Hagardet *al.* (2008) found that companies with higher disclosure quality grades have higher price synchronization. This research directly supports the idea of price synchronization as a measure for the relative amount of firm-specific information reflected in the price.

Meyr and Jin(2006) investigate the relationship between the transparency of the company and the return synchronization. They argue that in a more transparent environment, more specific information about the company is provided for outside investors. They also found that extensive information about the company explains a small proportion of the variation in total return, and as a result, the return synchronization is low.

Zarawin *et al* (2003), using asynchronous price, conclude that asynchronous stock price is strongly correlated with the ability of stock prices in predicting the futures earnings of stock, and consequently the assumption that states the asynchronous price reflects higher private information is supported.

Chen *et al* (2007), in a study entitled "Price Informativeness and Investment Sensitivity to Price", used firm-level information and reached the conclusion that stock market contains valuable information for the investment of the firms.

The Research Hypotheses

1. Considering the information role, the performance of the stock market has a significant effect on the investment level of the company.
2. Considering the corporate governance role, the performance of the stock market has a significant effect on the investment level of the company.
3. Changes in cash flow have a significant effect on changes in investments.
4. Changes in the sales have a significant effect on investments.

Research Population

The survey of all listed companies on Tehran Stock Exchange (Capital Market) Iran other than investment companies, insurance companies and banks are examined. The study period is from 2004 to 2011 for eight years.

Methodology

The quasi-experimental study of the category of casual study based on real data and stock market Financial statements of listed companies in Tehran stock exchange was performed and also to gather information and data from a library and field methods have been used Using data from 77 financial statements of companies listed in Tehran Stock Exchange during the period 2004 to 2011 and the method of multiple linear regression analysis, using the software views results.

Testing Hypotheses 1 and 2

To test the hypothesis described above, the mentioned regression model is used. Table 1

shows the results obtained by Model 1 for two groups of companies with high and low transparency.

$$\Delta I_{i,t} = \beta_0 + \beta_1 \Delta CF + \beta_2 \Delta S + \beta_3 R_{i,t} + \beta_4 R_{i,t-1} G_{i,t-1} + \beta_5 R_{i,t-1} In_{i,t-1} + \beta_6 C_{i,t} + \varepsilon_{i,t} \quad (1)$$

Table 1. Results obtained by Model 1 for two groups of companies with high and low transparency

Significance level	T-statistic	Coefficients		Dependent variables: investment level variables
0.0571	-1.92	-0.06	transparent	β_0
0.000	-3.91	-0.09	non-transparent	
0.0116	2.57	0.046	transparent	CF
0.000	9.69	0.38	non-transparent	
0.000	5.809	0.064	transparent	S
0.000	3.28	0.141	non-transparent	
0.6589	-0.44	-0.0057	transparent	(M)
0.3386	-0.958	-0.0103	non-transparent	
0.3651	0.909	0.007	transparent	M*G
0.46	-0.72	-0.004	non-transparent	
0.1279	1.53	0.022	transparent	(M*In)
0.8522	-0.186	-0.002	non-transparent	
0.000	-12.26	-64.89	transparent	$C_{i,t}$
0.000	-7.36	-3.34	non-transparent	
0.3207	0.998	0.0331	transparent	(Lev)
0.0874	1.618	0.146	non-transparent	
	0.7265		transparent	R^2
	0.4523		non-transparent	
	0.7072		transparent	$adjR^2$
	0.43		non-transparent	
	1.79		transparent	Durbin-Watson
	1.98		non-transparent	
	37.58		transparent	F - statistic
	31.85		non-transparent	
	0.000		transparent	Pr ob(F - statistic)
	0.000		non-transparent	

As shown in Table 1, the F statistic and its significance level indicate that the null hypothesis which means the whole model is insignificant (all coefficients are zero) is rejected and the estimated regression model is significant. Also, the determination coefficient (R^2) of companies with high transparency is equal to 0.726, i.e. 72.6% of the changes in dependent variables are explained by the independent variables. This coef-

ficient is 0.452 for non-transparent companies. With regard to the range of 1.5 to 2.5 for the F statistic, the results obtained by autocorrelation of error terms using Durbin-Watson statistic indicate that there is no autocorrelation between the errors in two models.

T-test significance level for all variables, except for financial leverage (Lev) and market returns (R) in corporate governance (corporate governance performance

of the stock market), and the variable of market returns in informativeness (informative performance of the stock market) is less than 0.05; therefore, the hypothesis H_0 is rejected and with 0.95 confidence, it can be said that there is a significant relation between the independent and dependent variables. As observed, the significant level of market performance variable (M) and market return in corporate governance and market return in informativeness is more than 0.05; therefore, the null hypothesis that states there is no significant relation between market performance and the investment level of the company is approved. This is valid for both companies with and without financial transparency.

According to the results obtained in this study, it can be said that the performance of corporate governance and information of the stock market, in both transparent and non-transparent companies, has no significant effect on the investment level of the company. As a result, we can say that both hypotheses are rejected.

Testing Hypotheses 3 and 4

To test hypotheses 3 and 4, regression model 2 is used and the results are given in Table 2.

$$\Delta I_{i,t} = \beta_0 + \beta_1 \Delta CF + \beta_2 \Delta S + \beta_3 R_{i,t} + \beta_4 C_{i,t} + \varepsilon_{i,t} \quad (2)$$

Table 2. Results of regression model

Significance level	T-statistic	Coefficients	independent variable: Changes investment variables
0.1892	-1.315	-0.029	
0.000	5.08	0.162	DCF
0.000	6.27	0.065	ΔS
0.0885	-1.707	-0.0304	
0.000	-9.48	-14.39	
	0.355		R^2
	0.348		adj R^2
	1.915		Durbin – Watson
	52.37		F – statistic
	0.000		Prob(F – statistic)

The results show that significance level of changes in the level of sales is less than 0.05; therefore, with a 0.95 confidence, it can be said that there is a significant relation between these two variables and

the relation is positive. That is, as changes in sales is increased (increased sales), the rate of changes in investment is also increased. The research hypothesis is therefore approved.

For the significant relation between changes in cash flow and changes in investments, results in Table 2 indicate that the significance level for changes in cash flow is less than 0.05; therefore, with a 0.95 confidence, it can be said that there is a significant relation between these two variables. The results also show that the relation is positive and significant; i.e. as changes in the cash flow increases (increased cash flow), the rate of changes in investment is also increased. The research hypothesis is thus confirmed.

Conclusions

It is recommended that considering an effective control and supervision on decisions and authorities of managers, the decentralization in the control of companies be increased; the power of managers in pursuing their own interest be reduced; and the corporate performance be improved. Also, through effective monitoring the performance of companies via timely and clearly dissemination of information, the stock market can increase the information transparency of corporates. As a result, the inter-organizational information is decreased, and problems arising from asymmetric information are minimized.

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