Investigating the Relationship between Financial Restrictions and Stock Returns and Risk in Corporations of Accepted in Tehran Stock Exchange

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A R T I C L E   I N F O

A B S T R A C T

Objective: The financial restrictions are restrictions that prevented provide all the funds needed for favorable investment in the company. Return on equity is an important role in enabling managers to invest in the future. The main purpose of this study is investigating the Relationship between Financial Restrictions with Stock Returns and Risk (volatility returns), in Corporations of Accepted in Tehran Stock Exchange. **Methodology**: Statistical Population is consisted of 322 year – company in during of time 2009 – 2015. **Results**: By Using multivariate regression techniques with panel data and hypotheses were analyzed with the Eviews 8 software, the results indicate a significant and negative relationship between financial constraints and risk (volatility returns), and the absence of a significant relationship between financial and stock returns is limited. **Conclusion**: Other results showed that there is a positive and significant relationship between the company size and financial leverage and risk (returns volatility).

1. Introduction

World's valid exchanges have shown that supply and raise capital has succeeded and the confidence of investors to capital markets and market efficiency, so that they know are not wasted capital and bring reasonable profits. Research on various issues affecting the stock market can help to shareholders in correct decisions making and the efficient allocation of economic resources were more favorable manner, and make better investment result. Volatility of stock returns as a key factor in the stock market is important. When the stock price change is also influenced by the expected return on stocks and ultimately increases or decreases the risk of companies' dividend policies when desired impact on investors and the new shares have the expected efficiency increases and reduce the company's risk management and profitability and risk investment companies. In addition, poor liquidity management also leads to excess investment in current assets and a decrease in company's profitability and increase risk. Volatility of return rate and stock price and developments originating from investments increased productivity (Easley & O'hara, 2004). Despite the financial constraints in the long term may be affect the profitability, growth and thus the company's financial situation and what areas may fall behind in the competition and even elimination from the market to provide. It is expected that in the event of fluctuations in operating cash flows, cash reserves at companies with financial constraints affected (Kolasinski et al., 2013).

1.1 Research Problem
Managers interested report their stock returns of financial statements and other evidence by the company, projections and estimates and their capabilities in the exhibition investors. As the possibility of higher stock liquidity reduced the amount of ambiguity in determining the dependent variables and operations planning will be better with numbers. It is hoped the total investment realized, increase the value of assets could be better and have less debt

and the use of investment opportunities will be provided with high efficiency (Dechow et al., 2001). The main variable efficiency in the decision used to invest. To compare the real benefit of operating efficiency that is created by the investment returns to offset investment risk is necessary. Policy makers in capital markets can use this measure as a means to measure the vulnerability of the stock market (Fakhari Hossein Zaheri, 2010). One of the modern diagnostic criteria of financial constraints, cash reserves (available cash and its equivalents) in the company. It is expected that companies with "financial constraints" for insuring themselves against future investment needs, Cash apply to storage. Companies must present and future investment opportunities, establish a balance. For storage in the cash flows, the investment entity now is reduced. For a company that has no restrictions on financing, maintenance of "cash reserves" will not have any particular advantage. How decisions in the face of financial constraints, the most fundamental questions in financial literature (Almeida & Campello, 2007).

1.2 Research Questions:

1-Is there significant relationship between Financial Restrictions and Stock Return?
2-Is there significant relationship between Financial Restrictions and Risk (volatility returns)?

1.3 Research Background

Geenlinger and Saddour (2008) using data from French companies showed that the quality of corporate governance on the level of cash held by the company, by the existence of financial constraints and agency problems, explained. According to the authors argue, that family-controlled companies, compared to other companies, more suffer than financial constraints.

Wei & Zhang (2008) using the difference between cash flow rights and control rights of the largest shareholders, as a proxy for information asymmetry and expropriation (property) rights of minority shareholders, the head lock (1998) were completed. They observed that the sensitivity of investment to cash flow by increasing the cash flow rights of the largest shareholders is reduced, but increases as the difference between control rights and cash flow rights. Andres (2011) showed that family firms compared to other companies, with the same size and dividends have more financial stability. In this case, analysis of the sensitivity of investment to cash flow, cash flow showed a lower responsiveness to availability. In addition, since family firms have fewer financial constraints, their decisions for new investment opportunities, will be faster and more agile. Chen et al. (2009) in their study, using financial constraints index of the surveyed companies were divided into two groups. The results of their study showed that family and state companies, they make decisions that they are not based on maximizing the company's value and small companies which have high leverage, in high probability; they were osculated with financial constraints. Aldrighi et al. (2011) in their study directly study the impact of corporate governance on financial constraints. They used data from 532 public companies in Brazil between 1997 and 2002, concluded that the concentration of ownership and higher control, it is caused more financial constraints. Francis et al. (2013) also of the relevant corporate governance and investor sensitivity of cash flows, the impact of corporate governance on financial constraints were examined. They conducted a study using data from 14 countries and concluded that better corporate governance; internal cash flow will reduce the company's dependence and reduce financial constraints. Gerace et al. (2014) have done research on the Hong Kong stock exchange, shows that the lack of liquidity due to sales restrictions affect the stock price. Heidarpoor & Zare Rafi (2014) in their article titled "The Effect of dividend and growth opportunities on the relationship between quality of financial reporting and stock return volatility" that the method for calculating the standard deviation of stock return volatility has used. It showed that growth opportunities direct effect on the relationship between stock return volatility and increased quality of financial reporting and the relationship between the qualities of financial reporting exacerbates the volatility of stock returns. However, the findings of this study indicate that dividend policies influence the quality of financial reporting volatility of stock returns are not significantly affected.

Mousavi (2014) in his research entitled "Designing an appropriate model to predict the liquidity management of financial institutions within the banking system using neural networks" researchers from a variety of scientific approaches predict the liquidity of financial institutions. It includes the resources and expenditures approach, approach and structure of funds approach, liquidity indicators, approach, resources and costs as a conceptual model is chosen. The operating model is designed to research by visiting the rules and procedures for banking system liquidity and sources and uses of cash all items have been identified and modeled. In the next step, to forecast cash component of the learning algorithm of back-propagation neural network techniques is used. Sadeghi et al. (2012) in their study examine investments capital assets and their internal and external financial constraints in Corporations of Accepted in Tehran Stock Exchange. The population consisted of 148 manufacturing firms in the period from 2006 to 2011. In this study, the ratio of operating cash flows to equity as financial constraints of internal and external financial limitation is the size of the company.

Data analysis and test hypotheses using error correction model indicate a significant and positive relationship between firm size and sensitivity of investment to cash flows and so with increased external financial constraints, investment sensitivity to cash flows is also increased. Other research results show there is a significant negative relationship between the sensitivity of investment and operating cash flows and cash flows. So, by reducing the internal financial constraints and sensitivity of investment in compare to cash flows will be increased.

Mehrani et al. (2011) in their study, the effect of corporate governance monitoring tools focused on reducing the intensity of earnings management. They have deduced that the independent variables studied, aggressive behavior cannot restrict earnings management.

1.4 Research Hypotheses:

1-There is significant relationship between Financial Restrictions and Stock Return
2- There is significant relationship between Financial Restrictions and Risk

2. Materials and methods

This current research, according to the purpose is an applied research and also according to type of method is descriptive – Correlational Research. In terms of information gathering, investigations after the event in order to analyze the data, descriptive statistics, inferential, multivariate regression analysis was used. The research hypothesis test is based on panel data.

3. Discussion and results

3.1 Results of research hypothesis tests

Table 1. The results of the first hypothesis

$RET_{i,t} = a_i + \beta_1 AMI - CON_{i,t} + \beta_2 LEV_{i,t} + \varepsilon_{i,t}$			
Significance level	T statistics	Variable coefficient	Variable
0.399	-0.84	-5.75	Financial constraints
0.03	-2.12	-38.04	Leverage
0.000	6.85	82.07	Intercept
0.966	F Limer test (0.694)		
	0.42		**R2**
	0.41		**R2** Adjusted
	32.88		**F**
	0.00		**Prob**
	1.96		Durbin-Watson statistic

According to Table 1, the coefficient of firm size as a control variable was not significant and was excluded from the model. Independent variable rate financial constraints 5.75 are due to the significance level of 0.399, but not significant at the 95% level. In the first hypothesis predicted that financial constraints do not have a significant effect on stock returns. The F-statistic show the overall significance of regression coefficients, Durbin-Watson statistic with its lack of correlation between the number represents 1.96 disturbing elements. Since the Prob in f Limer test calculated is more than 0.05, therefore, the null hypothesis of polling model verification and regression model panel will not be accepted.

Table 2. The results of the second hypothesis

$RET_{i,t} = a_i + \beta_1 AMI - CON_{i,t} + \beta_2 LEV_{i,t} + \varepsilon_{i,t}$			
Significance level	T statistics	Variable coefficient	Variable
0.047	-1.99	-3.81	Financial constraints
0.00	18.60	44.59	Company Size
0.013	2.47	24.39	Leverage
0.000	-15.48	-540.88	Intercept
0.000	F Limer test (3.64)		
0.000	Hausman test (70.92)		
	0.81		**R2**
	0.75		**R2** Adjusted
	14.09		**F**
	0.00		**Prob**
	1.63		Durbin-Watson statistic

According to Table 2, the coefficient of financial constraints is -3.81, but, according to the significant level of 0.047 in level of 95% is significant. The Company size and leverage variables were used as a control variable in this hypothesis. In the second hypothesis predicted that financial constraints have a significant effect on risk (returns volatility). And the negative coefficient can be estimated that the opposite effect. Also, the F-statistic show the overall significance of regression and model coefficients, Durbin-Watson statistic with its lack of correlation between the numbers represents 1.63 disturbing elements. Based on the results Limer test, the nature of the data panel approved and since Prob Hausman test less than 0.5 and fixed effects model selected to estimate second hypothesis.

4. Conclusion

The main purpose of this study is investigating the Relationship between Financial Restrictions with Stock Returns and Risk (volatility returns), in Corporations of Accepted in Tehran Stock Exchange, that for achieving to this purpose, statistical population of this study has been considered

Corporations of Accepted in Tehran Stock Exchange. In this study, considering all the limitations of population, financial data 322 year - company from 2009 to 2014 collected. The results show that there is not significant relationship between Financial Restrictions and Stock Return, but there is significant relationship between Financial Restrictions and Risk (volatility return). The results of the second test showed an unexpected hypothesis those firms with less risk of financial constraints suffered by less volatility. This is probably due to the market reaction to financial constraints because of financial limitations investment firms have targeted and please try to create a balance between benefits and costs. The research studies were found with similar assumptions but the following research objectives with the goals of the present study is somewhat similar to:

Hope et al. (2011) concluded that companies with a variety of forms of ownership, such as family ownership, according severely impact on asymmetric information and agency problems suffer most financial constraints.

Geenlinger and Saddour (2008) showed that the companies which were controlled by family, compared to other companies more suffer than the financial constraints. Chen et al. (2009) showed that family and state companies, they make decisions that they are not based on maximizing the company's value and small companies which have high leverage, in high probability; they were osculated with financial constraints. Aldrighi et al. (2011) concluded that the concentration of ownership and higher control, it is caused more financial constraints. Francis et al. (2013) concluded that better corporate governance; the company's dependence to internal cash flow will reduce and reduce financial constraints. Guariglia (2008) showed that by reducing the internal financial constraints, sensitivity of investment in compare to cash flows will be increased.

Aggarwal & Zong (2006) showed that changes in cash flow in companies with financial constraints than companies without financial constraints have higher the excess return.

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