

TO STUDY THE RELATIONSHIP BETWEEN FINANCIAL FLEXIBILITY WITH INVESTMENT AND AUDITOR TENURE

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Abstract

Financial flexibility is very important for managers, since in this way they can evaluate investment projects, determine capital budgeting and make needed investment in proper conditions. According to the importance of this topic, the research tries to study the relationship between financial flexibility and investment level in the companies listed on Tehran Stock Exchange. 125 companies were investigated among the companies listed on Tehran Stock Exchange from 2009 to 2014. The result of the hypotheses states that the financial flexibility and investment and there is a significant relationship between tenure.

Keywords: Financial flexibility, investment, surplus cash, auditor tenure

1. Introduction

Financial flexibility is one of the main topics in financial management and investment which leads to improve managers' performance using growth opportunities and provides needed grounds to investment markets. Financial flexibility is a criterion to evaluate liquidity power of companies. This criterion determines the ability of business unit for paying its obligations such as salary and benefits to employees, suppliers of goods and services, financial expenditure, investment, repayment of received facilities and the profit distribution among shareholders. Generally, financial flexibility in companies includes losing some interests against gaining some benefits. For example, maintaining the assets which are traded easily in market indicates financial flexibility. But this practice may suffice to a certain return rate which is relatively lesser than the return could be obtained from investing in properties with less liquidity. It should be noted that financial flexibility causes to reduce risks of financial operations such as alleviating bankruptcy risk when net reduction of cash flows of operating activities. Generally, any business unit has more financial flexibility; totally it is faced with fewer threats (Chua, 2012). It should be noted that logical investors endeavor to maximize their return in an acceptable level of risk (Ghaemi & Alavi, 2012: 67-78). Investors and creditors tend to invest in the companies which have high surplus cash, because one of the evaluation tools for debt repayment power and financial flexibility of companies is surplus cash. The studies conducted about surplus cash flow indicate that surplus cash, as internal financing of company, is affected by two variables of investment and size. Since there is not more investment projects in these companies to use surplus cash (Harati, 2011).

The most main factor that any investor focuses in its decisions is return rate. It means that investors follow the most productive opportunities to invest their surplus resources in capital market (Dastgir & Sharifi Mobarake, 2011: 1-5). Main benefit in relation with holding cash consists of reducing probable financial turbulence based on desirable investment policies, even when financial limitations are achieved and its role is minimized. In fact, holding cash is a cost which provides opportunity cost for investing in current assets and gain potential profit via keeping residual of surplus cash (Yahya Zadeh Far et al, 2013: 132 - 133).

On the other side, evaluating capital cost is very important for managers since they can assess investment projects and determine their capital budgeting. Because of this, investors tend to evaluate total risks and their expected profit and finally evaluate company's activities. The concept of capital cost is based on this assumption that the goal of company consists of maximizing shareholders' wealth. Indeed, there is a relationship between financial decisions of company and investment decisions. Then, with respect to the importance of capital cost, it will be important to determine the factors affecting on it.

Increasing earnings resulting from investment and quantitating capital are two solutions which above two goals are achieved. Accordingly, informing capital cost always plays significant role in company decisions. Achieving to proper cost rate is very important to be determined optimal composition of financial structure of companies, especially about gaining the best results of operations in form of profitability and increased share price. Then, simply speaking, rate of capital cost is minimum return rate that has not any effect on company value. As representatives of shareholders, managers should try to adjust capital structure in such way that capital cost of company is maximized and consequently company value and shareholders' wealth are maximized. Capital cost play significant role in financial and managerial decision in most of the times (Namazi & ShirZadeh, 2005, 75 – 95). Hence, the research tries to answer the question that if there is a correlational relationship between financial flexibility, as dependent variable and company's properties, such as investment level, rate of capital cost and surplus cash, as independent variable or not?

2. Theoretical Framework and Research Background

2.1 Financial Flexibility

Volberda (1998: 94-96) defines financial flexibility as the ability to run profitable activities following made changes in business environment and also the ability to adjust with the changes of predictions which influence on it. According to him, financial flexibility consists of two landscapes as follows:

- Internal financial flexibility: such as company's capacity for adjusting with environment's requirements
- External financial flexibility: such as company's capacity for influencing on environment and finally reducing vulnerability.

According to Volberda, main components of internal financial flexibility consist of debt capacity and cash hold in company. It is very important to be determined the relationship among elements of internal financial flexibility. Since with identifying it, managers can maintain internal financial flexibility via desirable controlling and managing of these elements and manage sudden problems and crises in the best possible and enjoy desirable investment opportunities which consequently it will leads to increase company value.

It is very important to build external and internal flexibility and make optimal balance between two those in company. Recent studies indicate that external flexibility refers to access easiness

level and liquidity of financial leverage in stock and bond markets. As a result, it can be said that this type of flexibility focuses on capacity of foreign capital market and funding constraints. Bond market, trading securities and also stock available in company's market are considered to determine foreign financial flexibility which both factors are equally important to measure and determine foreign financial flexibility (Chua, 2012). On the other side, according to the results of researches done by Lins, Servaes and Tufano (2010), managing domestic financial flexibility depends directly on how to be used cash, credit facilities and also practical considerations and their mutual effect when faced with crisis and foreign shocks.

2-2- Auditor tenure

For many years the independent auditor on the work of a client is Based on the approval of its general assembly companies attempt to pick auditing And expanding cooperation among independent auditor and legal inspector on the basis of mutual engagement As some of which can be seen in different years in different companies and industries, the continuation of cooperation is different. Of the number of years audited by a CPA firm issued a report for each company can determine the number of years an audit firm. Respect and value the role of the audit, depends largely on the nature of the auditor's testimony. Argued that the relationship between the auditor and auditee may cause long-term neglect and failure to perform the role of the auditor in the testimony of its own. Lack of auditor independence is also an important issue that has many concerns. A proposed solution to address this concern, mandatory rotation of auditors. For this reason, mandatory rotation of auditors recently in legal circles has attracted a lot of attention.

Research Background

Chua (2012) studied the mutual relationship of domestic financial flexibility elements in Malaysian companies from 1990 to 2008. The findings indicated that debt capacity is determinant factor to predict cash hold level and also cash plays significant role to predict debt capacity. Al-Qadasi, Adel (2010) In a paper examines the factors influencing their decision to change auditors in Yemen. They examined through behavioral factors - economic and other factors affecting change their auditor. Their results showed that economic factors primarily auditor of the key drivers of change in Yemen and behavioral forces, are of secondary importance. The results also showed that there is a significant relationship between the auditor and company size. In particular, the large and medium-sized companies is likely to change because of dissatisfaction with the auditor to audit quality and the need to achieve a wider range of services. They expressed dissatisfaction with the quality of the audit, the audit staff audit partners and staff inexperienced and poor working Communications Company is considered as the most important concern.

Piri and Sedegiani (2016) considered the relationship between the elements of domestic financial flexibility. Present paper studies the relationship of domestic financial flexibility elements in 69 companies listed on Tehran Stock Exchange from 2003 to 2012. For doing it, extracted data was analyzed using descriptive statistics and panel data. According to the data, debt capacity has not any effect on predicting cash hold level, but cash holding can be introduced as one of the determinant factor to determine debt capacity.

Sheri Anaghiz et al (2015) considered financial flexibility and adjustment speed of capital structure. In this research, 108 companies were analyzed as sample from 2003 to 2013. The findings indicated that the companies have higher leverage; financial flexibility is not regarded

as a determinant factor for leverage adjustment speed of these companies. But the companies are under optimal leverage, there is a positive significant relationship between financial flexibility and leverage adjustment speed.

3. Research Method

3.1 Research Hypotheses

Financial flexibility represents the capability of company to supply financial resources for responding timely against unexpected events in future and to maximize company value. It should be mentioned that flexibility plays significant role to empower managers about investment in future. The problems of capital market have required maintaining flexibility for using profitable opportunities. Myers (1977) indicated that how the threats resulting from debt might prevent using profitable opportunities, even when managers and shareholders are interested in using these opportunities. Optimal gain of resources will lead success companies in market and companies can follow successfully market's chances and enjoy benefits operating in market. According to above explanations: the research hypotheses will be developed as follows:

1. There is a significant relationship between financial flexibility and investment level of the companies listed on Tehran Stock Exchange.
2. There is a significant relationship between financial flexibility and capital cost rate of the companies listed on Tehran Stock Exchange.

3.2 Research Variables

3.2.1 Independent Variable

3.2.1.1 Financial Flexibility

Financial flexibility consists of the ability of company to supply financial resources for responding timely against unpredicted events and to maximize company value (Byoun, 2008). On the other words, financial flexibility represents the ability of company to supply financial resources to respond timely against unexpected events in future and to maximize company value. It should be mentioned that the companies have financial flexibility, can resist versus financial pressures and when profitable opportunities arise, they can provide the necessary funds to invest at minimal cost (Gamba & Triantis, 2008: 263- 296). In the research, Marchica and Mura's model was used to determine financial flexibility and inflexibility of companies and leverage prediction. At first, company leverage is calculated for a given period and then predicted leverage is compared with real amount of leverage. If actual deviation from predicted amount is negative for three consecutive years, the company will be a flexible company (Marchica and Mura, 2010: 1368-1339).

$$Lev_{it} = \alpha_0 Lev_{it-1} + \alpha_1 Mtbv_{it} + \alpha_2 Size_{it} + \alpha_3 Profitability_{it} + \alpha_4 Cash_{it} + \alpha_5 Debt\ Maturity_{it} + \alpha_6 Dividendes_{it} + \alpha_7 Tax_{it} + \alpha_8 Ndts_{it} + \varepsilon_{it}$$

Where:

Lev_{it} : rate of total debt to total asset

$Mtbv_{it}$: book value of total assets minus book value of equity plus market value of equity divided by book value of total assets

$Size_{it}$: natural log of total asset

$Collateral_{it}$: rate of total fixed assets to total assets

$Profitability_{it}$: profit rate before interest, tax and depreciation to total assets

$Cash_{it}$: rate of total cash and equivalent items to total assets

Debt Maturity_{it}: rate of total payable loans after one year to total debt

Dividends_{it}: common dividend rate to total assets

Tax_{it}: total paid tax to total assets

Ndts_{it}: depreciation cost proportionate with total assets

3.2.2 Dependent Variable

3.2.2.1 Investment

Investment consists of allocating current amounts to assets and or the capital is belonged to company to receive return during a given time. There are different types of investment such as share, debts, bonds, resources and so on. In most cases, investment is regarded as investment in stock. Investment includes different types of underlying items for purchasing securities, fixed assets to achieve some benefits including profit or reduce in profit for tax purposes. Following formula was used to determine investment level in the research:

$$Investment_{it} = \beta_0 + \beta_1 FF_{it} + \beta_2 Lev_{it} + \beta_3 (Lev_{it} \times FF_{it}) + \beta_4 Size_{it} + \beta_5 Profitability_{it} + \beta_6 Cash_{it} + \beta_7 Q_{it} + \varepsilon_{it}$$

Where

FF_{it}: a dummy variable to measure flexible companies that if deviation between actual amount and predicted amount is negative for three consecutive years, the variable is 1, otherwise 0.

Investment_{it}: investment level of companies at year t

Q_{it}: book value of total assets minus book value of equity plus market value of equity to capital stock

Lev_{it}: total debt to total assets

Size_{it}: natural log of total assets

Cash_{it}: rate of total cash and equivalent items to total assets

Profitability_{it}: profit rate before interest, tax and depreciation to total assets

2-2-2-3- auditor tenure

This variable is used to determine the valid data. In other words, the number of years that the company will continue to audit the audit firm A number that can not be more than three years and less than the time allocated to the number zero.

4. Empirical Results

4.1 Testing Hypotheses

4.1.1 Testing First Hypothesis: there is a significant relationship between financial flexibility and investment level in company.

Following formula has been used to test first hypothesis

$$Investment_{it} = \beta_0 + \beta_1 FF_{it} + \beta_2 Lev_{it} + \beta_3 (Lev_{it} \times FF_{it}) + \beta_4 Size_{it} + \beta_5 Profitability_{it} + \beta_6 Cash_{it} + \beta_7 Q_{it} + \varepsilon_{it}$$

• Assumption of Independence of Errors from Each Other

As can be seen in table 1, Watson – Durbin is 1.784 and between 1.5 and 2.5, then hypothesis of error independence is supported and residual distribution is normal.

Table (1) summary of model					
model	Correlation coefficient	Determination coefficient	Adjusted determination coefficient	Error estimation criterion	Watson – Durbin
1	0.181a	0.33	0.020	3.52201	1.784

As can be seen in table 1, calculated correlation coefficient is 0.181 that indicates there is a weak correlation between independent and dependent variables. Standard determination coefficient is 0.033, so almost 3 percent of changes in dependent variable are explainable by changes in independent variable.

- Testing the Existence of Linear Relation between Dependent and Independent Variables**

Table ANOVA and F – test were used to consider the existence of a linear relation between independent and dependent variables. As can be seen in table 2, significance level of F-test is 0.012 and since it is lower than 5%, hence, according to the table, the assumption of the existence of a linear relation between independent and dependent variables and the existence of linear relation in model 2 are supported.

As can be seen in table 2, significance level of F-test is lower than 1 percent (0.012), hence, according to the table, the assumption of the existence of linear relation between independent and dependent variables and the existence of linear in model 1 are supported.

Table 2: variance analysis						
model		Total squares	Freedom degree	Average of squares	F	Significance level
2	Regression	224.794	7	32.113	2.589	0.12a
	Residual	6673.645	538	12.405		
	Total	6898.440	545			

- Testing Significance level of Estimated Coefficients of Research Model**

As can be seen in table 3, estimated coefficient for leverage variable (IKt-1) is – 0.048. According to significance column, estimated coefficient at 95% confidence level is not significant (error level of this coefficient is 0.955 and more than 5%). Hence there is not a significant relationship between leverage variable and investment level at 95% confidence level.

Table (3) coefficients of the variables								
$Investment_{it} = \beta_0 + \beta_1 FF_{it} + \beta_2 Lev_{it} + \beta_3 (Lev_{it} \times FF_{it}) + \beta_4 Size_{it} + \beta_5 Profitability_{it} + \beta_6 Cash_{it} + \beta_7 Q_{it} + \varepsilon_{it}$								
Model		Non-standard coefficients		Standard coefficient	T	Significance		
		coefficients	Error	β			Tolerance	Factor of variance inflation
1	Constant	5.479	2.071		2.646	0.008		
	FF	2.873	1.550	0.304	1.854	0.044	0.067	14.944
	Lev	-0.048	0.843	-0.003	-0.57	0.955	0.614	1.628

	Levit*FFit	-2.465	2.367	-0.171	-1.042	.298	.067	15.021
	Profitability	-8.77	1.139	-.042	-.770	.442	.618	1.617
	Size	-6.24	0.355	-.089	-1.760	.079	.697	1.434
	Cash	5.476E-6	0.000	.049	.976	.329	.700	1.429
	Q	0.25	0.013	.101	1.938	.053	.667	1.499

According table 3, FF equals with 0.044 and it can be concluded that there is a significant relationship between financial flexibility and investment. Based on significance column, it can be observed that estimated coefficient is significant at 95% confidence level. Since error amount is 0.044 and lower than 5%, hence there is a positive significant relationship between flexibility and investment level of companies, so first hypothesis is accepted.

Also, it can be seen that profitability coefficient in the model is -0.877. According to significance column, it can be concluded that the coefficient is not significant at 5% error level, hence there is not a significant relationship between profitability and investment level. Table 3 provides coefficients and significance of each of the variables.

4.1.2 Testing Second Hypothesis: there is a significant relationship between financial flexibility and rate of auditor tenure.

Following model has been used to test second hypothesis:

$$\text{auditor tenure}_{it} = \beta_0 + \beta_1 FF_{it} + \beta_2 Lev_{it} + \beta_3 (Lev_{it} \times FF_{it}) + \beta_4 Size_{it} + \beta_5 Profitability_{it} + \beta_6 Cash_{it} + \beta_7 Q_{it} + \varepsilon_{it}$$

- **Assumption of Independence of Errors from Each Other**

As can be seen in table 4, Watson – Durbin equals with 1.798 that is between 1.5 and 2.5. Hence hypothesis of error independence is supported and distribution of residual is normal.

Table (4) summary of model					
model	Correlation coefficient	Determination coefficient	Adjusted determination coefficient	Error estimation criterion	Watson – Durbin
1	.159 ^a	.025	.012	.91964	1.798

As can be seen in table 4, estimated correlation coefficient is 0.159 and indicates that there is a weak correlation between dependent and independent variables in model 3. Standard determination coefficient is 0.025, hence almost 2% changes of dependent variable is explainable by the changes of independent variables in the model.

- **Testing the Existence of Linear Relation between Dependent and Independent Variables**

F – test and ANOVA table were used to test the existence of linear relation between dependent and independent variables. As can be seen in table 5, as output of application, significance level of F-test is 0.045, since the coefficient is lower than 5%, hence there is a linear relation between

dependent and independent variables and the existence of linear relation is supported in the model.

Table 5: variance analysis						
model		Total squares	Freedom degree	Average of squares	F	Significance level
2	Regression	11.754	7	1.679	1.985	.045 ^a
	Residual	455.012	538	.846		
	Total	466.766	545			

• **Testing Significance level of Estimated Coefficients of Research Model**

According to table 6, FF amount equals with 0.477. it can be concluded that there is not a significant relationship between financial flexibility and capital cost.

According to significance column, it can be observed that estimated coefficient is not significant at 95% confident level. Since error level is more than 5%, hence second hypothesis is not supported and there is not a significant relationship between flexibility and capital cost.

Table (3) coefficients of the variables								
$Investment_{it} = \beta_0 + \beta_1 FF_{it} + \beta_2 Lev_{it} + \beta_3 (Lev_{it} \times FF_{it}) + \beta_4 Size_{it} + \beta_5 Profitability_{it} + \beta_6 Cash_{it} + \beta_7 Q_{it} + \varepsilon_{it}$								
Model		Non-standard coefficients		Standard coefficient	T	Significance		
		coefficients	Error	β			Tolerance	Factor of variance inflation
1	Constant	2.044	.541		3.781	.000		
	FF	.288	.405	.117	.712	.477	.067	14.944
	Lev	.040	.220	.010	.180	.857	.614	1.628
	Levit*FFit	-.076	.618	-.020	-.122	.903	.067	15.021
	Profitability	-.251	.298	-.046	-.844	.399	.618	1.617
	Size	-.077	.093	-.042	-.829	.407	.697	1.434
	Cash	2.431	.000	.096	1.884	.060	.700	1.429
	Q	.007	.003	.111	2.138	.033	.667	1.499

As can be seen the coefficient of profitability variable is -0.251 in the model. According to significance column, the coefficient is not significant at 5% error level. Hence there is not a significant relationship between profitability and capital cost.

5. Conclusion

The main goal of the research is to study the relationship between financial flexibility with investment and capital cost of the companies listed on Tehran Stock Exchange. According to it, the summary of the results will be developed as follows:

First Hypothesis: there is a significant relationship between financial flexibility and investment level in companies.

According to the findings in chapter 4, it was observed that there is a significant relationship between financial flexibility of companies and their investment level. It means that the

companies are more flexibility in terms of financial aspect; they have higher investment levels. Hence first hypothesis is supported. In analyzing of the hypothesis, it should be noted that financial flexibility refer to the ability of the company to supply financial resources for responding appropriately against unpredicted events and to maximize company value. According to the hypothesis, it should be noted that the companies have financial flexibility, it can resist in faced with financial pressures and when profitable opportunity arises, they can provide needed cashes to investment at minimal cost. In another words, this financial flexibility allows the company to invest at appropriate time and promote company value to higher limit. The result of the hypothesis is agreeable with the results of the research done by Clark (2010). He found that financial structure should be considered in the decisions related to capital structure. Also the results of the research is in agreement with the results of the research conducted by Marchica and Mura (2010), they concluded that financial flexibility allows the company to access better to financial resources in faced with positive shocks of market for investment opportunities and provide its needed requirements for financing investment chances.

Second Hypothesis: there is a significant relationship between financial flexibility and auditor tenure.

In analyzing this hypothesis should be expressed with increasing tenure auditor, Because the auditor is fully aware of the circumstances of the company Company financial statements and how financial performance is quite familiar This makes transparency and improve financial statement On the other hand, increases the flexibility of the financial statements. Because the power companies to provide financial resources for appropriate reaction to the events and the unforeseen, To maximize the company's value increases and this can be very important in advancing the goals of the company. The findings of the research are not agreeable with our expectations based on provided theoretical framework in previous chapters. The research also is not in agreement with the research done by Marchica and Mura (2010) and Haghighat and Bashiri (2012). Since above all researches concluded that there is a significant relationship between financial flexibility and capital cost.

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