

Study on The Impact of Capital Budgeting and Capital Cost on Leverage Volatility of The Firms Listed in Tehran Stock Exchange

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Abstract

This paper explores the impact of capital cost and capital budgeting on leverage volatility. In doing so, we investigated the financial information of 106 firms listed on Tehran Stock Exchange during 2008-2013. Then we analyzed the results using Spss 20, Eviews 7 and Minitab 16. Next, we determined the fit of model and obtained the results from classical regression assumptions for the models. The results indicated that a significant direct relationship existed between capital budgeting and capital structure, which confirmed the first hypothesis. Finally, we concluded that a significant inverse relationship existed between capital cost and capital structure, which confirmed the second hypothesis.

Keywords: Capital structure, capital cost, capital budgeting, panel data

Introduction:

Capital structure has been defined in various ways. For example, some define it as the balance between debts, assets, nature of assets and combination of borrowing (Berger, N.A., Udell, F.G., 1998, Ferson, W.E., Harvey, C.R., 1991)

Some define it as the general claim on firm assets. Others argue that capital structure include general securities issued (Beim, D.O., Calomiris, C.W., 2001), private investments (Graham, J.R., Harvey, C.R., 2001), bank debts (Hooke, J.C., 2001), commercial debts (Danielson, M.G., Scott, J.A., 2006), lease contracts (Bruner, R.F., Conroy, R.M., Li, W., O'Halloran, E.F., Palacios Lleras, M., 2003), tax debts (Sabal, J., 2002), long-term debts including bonds, pension debts, and other possible debts (Desai, M.A.,

Foley, C.F., Forbes, K.J., 2008). Capital structure policy offsets risk and returns (Chen, N., Roll, R., Ross, S.A., 1986). The use of bigger debt increases firm profitability risk on the one hand (Grandes, M., Panigo, D.T., Pasquini, R.A., 2010) and increases the expected returns rate on the other (La Porta, R., Lopez-de-Silanes, F., Shleifer, A., Vishny, R., 2000). An optimal capital structure is the one that optimally offsets the risk and returns whereby reducing capital cost and maximizing stock price and equity (Madhani, P.M., 2008). Capital structure decisions are influenced by several factors; the first is business risk, that is the risk of assets where no debt is used. The more the business risk, the less the debt ratio will be (Castanias, R., 1983). The second is tax situation of the company. The most important reason for the use of debt is that its interest cost is acceptable to the Ministry of Economy and Finance, which reduces the effective cost of debt [Braun, M., Larrain, B., 2009]. The third factor is capital budgeting (Maquieira, Carlos P. Preve, Lorenzo A. Sarria-Allende, Virginia, 2012). Capital budgeting plays an important role in the empowerment of managers for future investments. Capital budgeting means the ability of business unit to predict effective measures for changing the amount and time of cash flows so that the business unit can efficiently react to the unexpected events and opportunities (De la Torre, A., Schmukler, S.L., 2006). An appropriate and timely capital budgeting would enable business unit to schedule investment funds. Thus the business unit not only covers its ordinary investment needs but also takes the advantage of unexpected investment opportunities and survive during the periods in which operating cash flows are in low, and possibly negative, level due to, say, unexpected reduction of demands (Espinosa, C. and Maquieira C., 2010). Due to capital market problems, firms have to preserve capital budgeting in order to take profitable opportunities (Chong, A., López-de-Silanes, F., 2007). The results of empirical studies indicate that the threats of firm debt (in other words, their capital structure budgeting) may affect financial flexibility of the firms (Espinosa, C. and Maquieira C., 2010). This is particularly important in Iran capital market where most stock exchange firms have a high debt-to-capital ratio and low cash holdings (Mohammadi, Razieh 2005, Mohammadi, Razieh 2005). This paper investigates the relationship between capital budgeting and leverage and between capital cost and leverage in the firms listed on Tehran Stock Exchange.

Due to low cash holdings and high leverage of Iranian firms, particular attention must be paid to capital budgeting, capital cost, capital structure decisions, and the relationship between them. Also, given that researchers have proposed various views and theories about finance methods and there is no consensus among these theories, the present paper attempts to promote the previous theories and remove the ambiguities.

We investigated the impact of capital cost and capital budgeting on leverage volatility of the firms listed on Tehran Stock Exchange. In doing so, we used leverage as dependent variable and capital budgeting and capital cost as independent variables. In order to determine a proper relationship between dependent and independent variables, we used a combination of control variables such as profitability, cash flow sensitivity, current value of investment projects and internal returns rate, which indirectly affect the independent variables. Our main goal was to determine the impact of capital cost and capital budgeting on leverage volatility of the firms listed on Tehran Stock Exchange.

Related Works

Maquieira et al. (2013) conducted a research on capital budgeting, capital cost and capital structure. They found that firms with LATAM budgeting structure had used standard budgeting and capital techniques but there was no specific weight to explore liquidity and capital quota. Our study follows Maquieira et al. (2013) but a series of variables have been modified according to capital market of Iran due to varied economic conditions and stock markets in the two countries.

Umutlu M., (2009) investigated the impact of leverage on investment in emerging markets and found that managers preferred to enlarge the size of their businesses (and thus increase their power in business) even if this would threaten the interests of shareholders (and reduced value of the business due to accepting

poor projects). Long Chen, and Xinlei Zhao,(2006) explored the relationship between the ratio of market value to book value and three independent variables, expecting that the firms with high ratio of market value to book value would have less debt costs. In contrast, they found that such firms used more debt and the firms with low ratio of market value to book value tend to repay their debts.

Varouj A. Aivazian, Ying Ge, Jiaping Qiu, (2005) reviewed the relationship between leverage and investment. They found that a significant negative relationship existed in the firms with lower growth opportunity compared with those with higher growth opportunity. This indicates that leverage plays a controlling role in the firms with low growth opportunities. Sung C. Bae., (2009) studied the relationship between leverage and investment opportunities in Chinese industrial companies. In doing so, they categorized the firms into two groups of big firms and small firms and carried out separate tests for each group. They concluded that a positive relationship existed between debt-to-investment ratio and firm size. They also found that big firms tended to use more debt, but small ones tended to use their own funds for investment.

Wen, Y., Rwegasira, K. and Bilderbeek, J.(2002) explored the relationship between corporate governance and capital structure decisions in Chinese firms listed on stock exchange. They reported that bigger boards of directors tended to pursue the policy of higher debt levels in order to increase equity, especially when they were under control of legal authorities. Hasan, A. And Butt, S. (2009) investigated the impact of ownership structure and corporate governance on capital structure. They found that board size and managerial stockholding were significantly and negatively associated with leverage ratio, whereas the membership of managing director in the board of directors did not significantly affect capital structure. They also found that an insignificant positive relationship existed between institutional ownership and capital structure.

Jafari et al. (2007) studied capital structure of Iranian small entrepreneurial firms. They found that firm size, age, educational level, preferences and interests of managers and age of firm owners were significantly associated with capital structure, but firm lifetime and familiarity of managers with financial concepts were not significantly associated with capital structure.

Mohammadi, Razieh (2005) investigated the effective factors in capital structure of the firms listed of Tehran Stock Exchange. They found that the factors of competition, asset structure (ratio of fixed asset to total assets), profitability and liquidity were significantly associated with capital structure and two variables of profitability growth and sale growth were insignificantly associated with capital structure. Shirzadeh, Jalal (2005) studied the relationship between capital structure and profitability of the firms listed on Tehran Stock Exchange, with an emphasis on industrial sector. Their study, involving 108 firms, indicated that a positive relationship existed between capital structure and firm profitability, but the relationship was statistically weak. They concluded that the relationship between capital structure and profitability also depended on the industry where a firm works and optimal capital structure could vary in different industries.

Bagherzadeh, Saeid (2003) studied the capital structure pattern of the firms listed on Tehran Stock Exchange. While their findings did not confirm the theory of finance choices hierarchy and the second hypothesis of information symmetry, in practice the firms seemed to adopt finance choices hierarchy. Furthermore, the firms tended to prefer borrowing to stock issuance in extra-organizational financing. Therefore their findings confirmed the theory of stable balance of capital structure but rejected the theory of finance choices hierarchy. Abbasi, Ahmadreza (2003) explored the relationship between capital structure (leverage) and cash flow components in Iran. They reported that leverage variations increased cash flow from operating activities and financing, but there was no relationship between leverage and relational investment cash flow.

Pourheydari, Ahmad (1995) investigated the impact of variables of firm size, type of industry, profitability and security assets on financial structure. They found that the type of industry significantly affected financial structure, mentioning that financial structure varied from one industry to the other and

could not be generalized to other industries. Shirzadeh, Jalal (2005) explored some effective factors in financial structure of firms, including type of industry, firm size, assets structure, profitability, operating leverage, and expected growth. They concluded that the type of industry was significantly associated with financial structure, stating that financial structure varied from one industry to the other and could not be generalized to other industries.

Yazdani, Nahid (1994) investigated the effective factors in financial structure of the firms listed on Tehran Stock Exchange. Their study involved chemicals, pharmaceuticals, foodstuff, wood and paper products, machinery, cement and construction materials industries.

Figure 1 illustrates the hypotheses and model of the research.

- H 1: Capital budgeting affects capital structure.
- H 2: Capital cost affects capital structure.

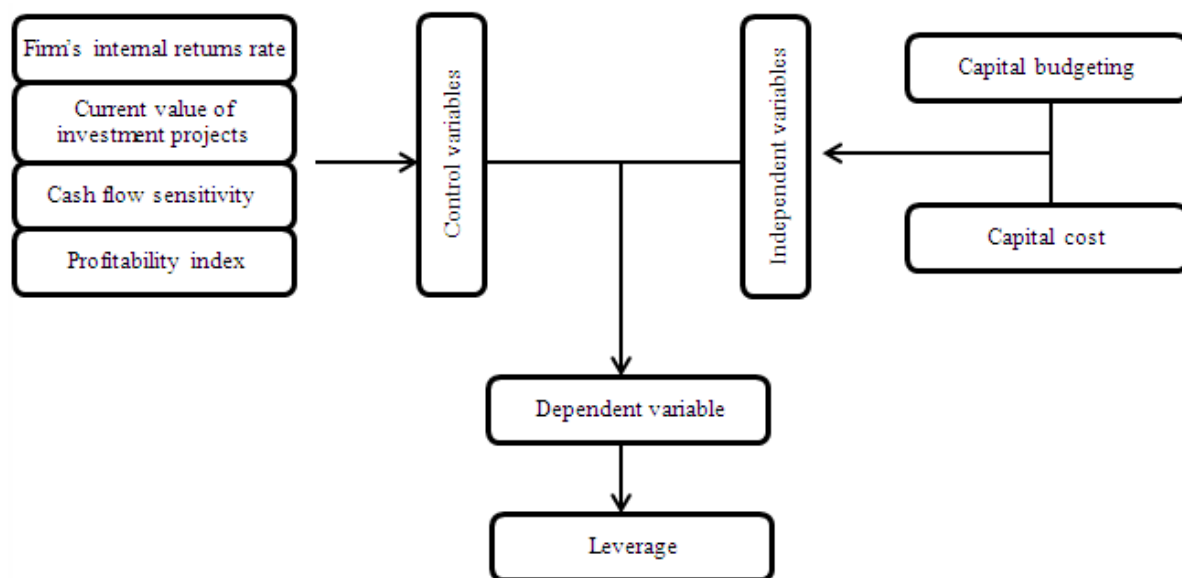


Figure 1. Conceptual model of the research

As you can see in the conceptual model, capital budgeting and capital cost (independent variables) which are under influence of control variables (profitability index, cash flow sensitivity, current value of invested projects, and internal returns rate), affect dependent variable of leverage.

Research Method

The statistical population consisted of the firms listed on Tehran Stock Exchange during a period of six years (2008-2013). We included only those firms which:

1. Had been listed on Tehran Stock Exchange by March 2008 and had not been removed until 2013.
2. Had no transaction suspension during the period in question.
3. had a fiscal year ending on 20th day of March and had not changed their fiscal year during the said period (to enhance comparability of the firms)
4. Were not financial broker, including investment, holding, leasing, bank and insurance companies (due to the distinct nature of their operation)

Based on the above requirements, 106 firms from 19 industries were included in the research. The required data were obtained from financial statements available in research management site, Islamic

development and studies site affiliated with Stock Exchange (www.rdis.ir), codal network (www.codal.ir), financial information processing center of Iran (www.fipiran.com), and CDs of Tehran Stock Exchange (which seems to be more authentic than other resources).

We tested the hypotheses 1 & 2 using models 1-2. In these models, if β_i coefficients (coefficients of independent variables) were significant with confidence level of 95%, hypotheses 1 and 2 would be confirmed. The research models, derived from the study of Kali (2011) and modified variables of Meporia et al. (2014), were estimated as equations 1 and 2:

Model 1:

$$LEV_{i,t} = \alpha_0 + \beta_1 LATAM_{i,t} + \beta_2 ProInd_{i,t} + \beta_3 SenCF_{i,t} + \beta_4 NPV_{i,t} + \beta_5 IRR_{i,t} + \varepsilon_{i,t} \quad (1)$$

Model 2:

$$LEV_{i,t} = \alpha_0 + \beta_1 COE * ERP_{i,t} + \beta_2 ProInd_{i,t} + \beta_3 SenCF_{i,t} + \beta_4 NPV_{i,t} + \beta_5 IRR_{i,t} + \varepsilon_{i,t} \quad (2)$$

Where:

i is firm, t is year and $\varepsilon_{i,t}$ is random error of firm i in year t

We analyzed the hypotheses using Spss 21, Eviews 7 and Minitab 16.

Data Analysis

Descriptive Statistics of the Variables

According to Table 1, the mean leverage of the firms included in the study was 0.0761, with minimum and maximum being 0.0000 and 0.3251 respectively. The values of skewness and kurtosis indicated that the variable did not have a normal distribution. According to descriptive statistics, represented in Table 1, the means of capital budgeting and capital cost of the firms during the time period in question were 0.0247 and 0.5390 respectively. The means of profitability index, cash flow sensitivity, current value of investment projects, and internal returns rate were 0.8025, 0.6296, 0.5227 and 0.8979.

Table 1. Descriptive statistics of the variables

Variable	Number of Observations	Mean	Standard Deviation	Minimum	Maximum	Skewness	Kurtosis
Leverage	636	0.0761	0.0602	0.0000	0.3251	0.769	0.521
Capital budgeting	636	0.0247	0.0280	0.0000	0.2241	2.267	8.066
Capital cost	636	0.5390	0.4260	0.0015	3.7868	1.587	5.776
Profitability index	636	0.8025	0.6118	0.0015	3.1917	1.156	1.409
Cash flow sensitivity	636	0.6296	0.2328	0.0964	2.7553	2.000	14.763
Current value of investment projects	636	0.5227	0.3634	0.0022	3.1136	1.904	9.753
Internal returns rate	636	0.8979	0.4676	0.1819	4.6483	1.903	7.646

Test of Normal Distribution of Dependent Variable

Since the significance level of K-S statistic for the dependent variable was smaller than 0.05, H0 (normal distribution of the variables) was rejected with confidence level of 95%. Therefore, the dependent variable did not have a normal distribution.

Table 2. Normal distribution test results for dependent variable

Variable	Number	K-S Statistic	Sig.
Leverage	636	2.607	0.043

We used Johnson Transformation Function for data normalization and Minitab 16 for data analysis. Table 3 represents the K-S test results after data normalization. Since the significance level of Kolmogorov-Smirnov Statistic for the dependent variable was bigger than 0.05 after data normalization (0.897), H0 was confirmed with confidence level of 95%, which indicated that the dependent variable had normal distribution after normalization process.

Table 3. Normality test results for dependent variable

Variable	Number	K-S Statistic	Sig.
Leverage	636	0.574	0.897

Correlation between Variables

According to Pearson Statistic results shown in Table 4, leverage is positively and significantly correlated with capital budgeting, capital cost and current value of investment projects. Capital budgeting is positively and significantly correlated with capital cost and current value of investment projects and negatively and significantly correlated with profitability index. Capital cost is positively and significantly correlated with current value of investment projects and negatively and significantly correlated with cash flow sensitivity. Cash flow sensitivity is positively and significantly correlated with internal returns rate. Current value of investment projects is positively and significantly correlated with internal returns rate.

Table 4. Pearson coefficient coefficients matrix between the variables

	Leverage	Capital Budgeting	Capital Cost	Profitability Index	Cash Flow Sensitivity	Current Value of Investment Projects	Internal Returns Rate
Leverage (P-Value)	1						
Capital budgeting (P-Value)	0.285 (0.000)	1					
Capital cost (P-Value)	0.583 (0.000)	0.325 (0.000)	1				
Profitability index (P-Value)	-0.076 (0.057)	-0.123 (0.002)	-0.045 (0.261)	1			
Cash flow sensitivity (P-Value)	-0.006 (0.882)	0.020 (0.609)	-0.122 (0.002)	0.124 (0.002)	1		

Current value of investment projects (P-Value)	0.513 (0.000)	0.257 (0.000)	0.550 (0.000)	-0.074 (0.061)	0.004 (0.919)	1	
Internal returns rate (P-Value)	0.016 (0.688)	0.033 (0.407)	-0.017 (0.666)	0.030 (0.454)	0.143 (0.000)	0.105 (0.008)	1

HYPOTHESIS RESULTS

First Hypothesis

We examined the first hypothesis to determine the relationship between capital budgeting and capital structure. This hypothesis is statistically represented as follows:

- H0: There is not a significant relationship between capital budgeting and capital structure.
- H1: There is a significant relationship between capital budgeting and capital structure.

This hypothesis was estimated using the first model as panel data. It would be confirmed if β_1 coefficient was significant with confidence level of 95%.

$$\begin{cases} H_0 : \beta_1 = 0 \\ H_1 : \beta_1 \neq 0 \end{cases}$$

Tables 5 and 6 represent the results obtained from the tests.

Based on the results of Chow test and the P-Value of 0.0295, H0 was rejected with confidence level of 95%, which indicated that panel data method could be used. According to Hausman test results and its P-Value which was smaller than 0.05 (0.0273), H0 was rejected with confidence level of 95% and H1 was confirmed. So it was necessary to estimate the model using fixed effects method.

The probability of Jarque-Bera test was bigger than 0.05 (0.2886), which indicated that the remainders obtained from estimation of the model had normal distribution with confidence level of 95%.

Pagan significance level was smaller than 0.05 (0.0365), which rejected H0 on homogeneity of variance. Therefore it could be said that the model had the problem of heterogeneity of variance. To remove this problem, we used generalized least squares method (GLS). We also used Durbin-Watson Test (D-W) to examine the lack of correlation between the remainders, which was one of the presumptions in regression analysis and was called autocorrelation. D-W Statistic was 2.18 (between 1.5-2.5), which indicated that the remainders were independent of each other. The significance level of Ramsey test (0.5984) was bigger than 0.05, which rejected H0 on the linearity of model and indicated that the model had no bias error.

Table 5. Chow & Hausman test results for the first model

Test	Number	Statistic	Statistic Value	Degree of Freedom	P-Value
Chow	636	F	1.9780	(105,525)	0.0295
Hausman	636	χ^2	8.6073	5	0.0273

Table 6. Statistical data test results for the first model

Ramsey	Durbin-Watson	Breusch-Pagan	Jarque-Bera
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<i>P-Value</i>	<i>F</i>	<i>D</i>	<i>P-Value</i>	<i>F</i>	<i>P-Value</i>	χ^2
0.5984	7.7659	2.18	0.0365	4.0950	0.2886	1.2942

Table 7 represents the estimation results. Equation (3) represents the results obtained from Eviews 7:

$$LEV_{i,t} = 0.0250 + 0.3097LATAM_{i,t} - 0.0017ProInd_{i,t} - 0.0002SenCF_{i,t} - 0.1030NPV_{i,t} + 0.0102IRR_{i,t} + \varepsilon_{i,t}$$

(3)

Table 7. Test results for the first hypothesis using fixed effects method

Dependent variable: leverage ratio					Number of observations: 636 year/firm		
Variable	Coefficient	T Statistic	P-Value	Standard Deviation			
Fixed component	0.0250	3.7997	0.0002	0.0065			
Capital budgeting	0.3097	1.0323	0.0462	0.0513			
Profitability index	-0.0017	-0.8670	0.3863	0.0020			
Cash flow sensitivity	-0.0002	-1.0339	0.0329	0.0073			
Current value of investment projects	-0.1030	-1.9224	0.0471	0.0046			
Internal returns rate	0.0102	1.5887	0.0299	0.0039			
Coefficient of Determination					0.6949		
Jarque-Bera		Breusch-Pagan		Durbin-Watson	Ramsey		F (P-Value) 10.8723 (0.0000)
χ^2	P-Value	F	P-Value	D	F	P-Value	
1.2942	0.2886	4.0950	0.0365	2.18	7.7659	0.5984	

In the investigation of significance of the entire model, F value was smaller than 0.05 (0.0000) which confirmed the significance with confidence level of 95%. The coefficient of determination indicated that 69.49% of leverage ratio was explained by the variables included in the model.

In the investigation of significance of the coefficients, according to the results contained in Table 7, t probability for capital budgeting variable was smaller than 0.05 (0.0462) which confirmed the existence of a significant relationship between capital budgeting and capital structure in confidence level of 95%. Thus the first hypothesis was confirmed, which meant that there was a significant relationship between capital budgeting and capital structure with confidence level of 95%. The positive coefficient of this variable (0.3097) indicated a direct relationship between capital budgeting and capital structure. In other words, as capital budgeting increased by 1 unit, capital structure increased by 0.3097 unit. Based on the analysis of the first hypothesis, therefore, we concluded that a significant direct relationship existed between capital budgeting and capital structure.

Test Results for the Second Hypothesis

We examined the second hypothesis to determine the relationship between capital cost and capital structure. This hypothesis is statistically represented as follows:

H0: There is not a significant relationship between capital cost and capital structure.

H1: There is a significant relationship between capital cost and capital structure.

This hypothesis was estimated using the second model as panel data. It would be confirmed if β_1 coefficient was significant in confidence level of 95%.

$$\begin{cases} H_0 : \beta_1 = 0 \\ H_1 : \beta_1 \neq 0 \end{cases}$$

Table 8 represents the results obtained from Chow Test (to determine the use of panel or combined data method) and Hausman Test (to determine the use of fixed or random impacts method in pane data method) for the second model:

Table 8. Chow & Hausman test results for the first model

Test	Statistic	Statistic Value	Degree of Freedom	P-Value
Chow	F	2.5426	(105,525)	0.0462
Hausman	χ^2	9.1635	5	0.0218

Based on the results of Chow test and P-Value of 0.0295, H0 was rejected in confidence level of 95%, which indicated that panel data method could be used. According to the results of Hausman test and P-Value of 0.0218, which was smaller than 0.05, H0 was rejected with confidence level of 95% and H1 was confirmed. So it was necessary to estimate the model using fixed effects method.

In the investigation of classical regression assumptions, Jarque-Berra test was bigger than 0.05 which indicated that the remainders obtained from model estimation had normal distribution in confidence level of 95%. Breusch-Pagan significance level was smaller than 0.05 (0.0398), which rejected H0 on the homogeneity of variance. So it could be said that the model had the problem of heterogeneity of variance. To remove this problem, we used generalized least squares method (GLS). In autocorrelation test, Durbin-Watson Test Statistic (D-W) was 2.13 (between 1.5-2.5), which indicated that the remainders were independent of each other. The significance level of Ramsey test was bigger than 0.05 (0.7413), which confirmed H0 on the linearity of model and indicated that the model had no bias error. Table 9 represents the summary of test results.

Table 9. Statistical data test results for the second model

Ramsey		Durbin-Watson		Breusch-Pagan		Jarque-Bera	
P-Value	F	D		P-Value	F	P-Value	χ^2
0.7413	9.2396	2.13		0.0398	4.2473	0.2495	1/2537

Based on Chow and Hausman tests and classical regression assumptions test, the second model was estimated using panel data method and fixed effects model. Table 10 represents the estimation results:

Table 10. Test results for the second hypothesis using fixed effects method

Dependent variable: leverage ratio		Number of observations: 636 year/firm		
Variable	Coefficient	T	P-Value	Standard Deviation
Fixed component	0.0156	3.2369	0.0013	0.0048

Capital budgeting	-0.0928	-1.3774	0.0465	0.0043				
Profitability index	-0.0035	-2.2700	0.2236	0.0015				
Cash flow sensitivity	0.0006	1.1317	0.0362	0.0049				
Current value of investment projects	-0.0322	-1.5389	0.0419	0.0049				
Internal returns rate	-0.0034	-1.2257	0.2208	0.0028				
Coefficient of Determination				0.8369				
Jarque-Bera		Brusch-Pagan		Durbin-Watson	Ramsey		F (P-Value)	24.4956 (0.0000)
χ^2	P-Value	F	P-Value	D	F	P-Value		
1.2537	0.2495	4.2473	0.0398	2.13	9.2396	0.7413		

Equation (4) represents the results obtained by Eviews 7:

$$LEV_{i,t} = 0.0156 - 0.0928COE \times ERP_{i,t} - 0.0035 ProInd_{i,t} + 0.0006SenCF_{i,t} - 0.0322NPV_{i,t} - 0.0034IRR_{i,t} + \varepsilon_{i,t}$$

(4)

In the investigation of significance of the entire model, F value was smaller than 0.05 (0.0000) which confirmed the significance in confidence level of 95%. The coefficient of determination indicated that 83.69% of leverage ratio was explained by the variables included in the model.

In the investigation of significance of the coefficients, according to the results contained in Table 7, t probability for capital budgeting variable was smaller than 0.05 (0.0465) which confirmed the existence of a significant relationship between capital cost and capital structure in confidence level of 95%. The negative coefficient of this variable (-0.0928) indicated an inverse relationship between capital cost and capital structure. Based on the analysis of the second hypothesis, therefore, we concluded that a significant inverse relationship existed between capital cost and capital structure.

Conclusion

This paper explored the impact of capital cost and capital budgeting on leverage volatility of the firms listed on Tehran Stock Exchange. We aimed to determine whether capital cost and capital budgeting affect leverage volatility. We did so by examining the research hypotheses. The statistical population consisted of the firms listed on Tehran Stock Exchange during a period of six years (2008-2013). After applying the requirements, 106 firms were included in the research.

- Hypothesis 1: Capital budgeting affects capital structure.

In the investigation of significance of the coefficients, t probability for capital budgeting variable was smaller than 0.05 (0.0462) which confirmed the significant relationship between capital budgeting and capital structure with confidence level of 95%. Thus the first hypothesis was confirmed, which meant that there was a significant relationship between capital budgeting and capital structure with confidence level of 95%. The positive coefficient of this variable (0.3097) indicated a direct relationship between capital budgeting and capital structure. In other words, as capital budgeting increased by 1 unit, capital structure increased by 0.3097 unit. Based on the analysis of the first hypothesis, therefore, we concluded that a significant direct relationship existed between capital budgeting and capital structure.

- Hypothesis 2: Capital cost affects capital structure.

In the investigation of significance of the coefficients, *t* probability for capital budgeting variable was smaller than 0.05 (0.0465) which confirmed the existence of a significant relationship between capital cost and capital structure in confidence level of 95%. The negative coefficient of this variable (-0.0928) indicated an inverse relationship between capital cost and capital structure. In other words, as capital cost increased by 1 unit, capital structure decreased by 0.0928 unit. Based on the analysis of the second hypothesis, therefore, we concluded that a significant inverse relationship existed between capital cost and capital structure.

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