

Internal Factors which Influence Capital Structure Choice of Albanian Firms

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Abstract

This paper attempts to study the influence of firm's internal factors on capital structure decision for a sample of 69 non-listed firms, which operate in Albania, over the period 2008-2011. In this paper are used short-term debt to total assets (SDTA) and long-term debt to total assets (LDTA) as dependent variables and eight independent variables: return on asset (ROA), return on equity (ROE), tangibility (TANG), liquidity (LIQ), size (SIZE), business risk (RISK), flexibility (FLEX) and non-debt tax shields (NDTSH). The investigation uses cross-sectional time series data which are collected from the Balance Sheet Annual Reports, the official document delivered to the State Tax Office. This study found that ROA (net income to total assets), ROE (net income to equity), tangibility (the ratio of fixed assets to total assets) and liquidity (the ratio of current assets to current liabilities) have a significant impact on both SDTA and LDTA. While size, risk, flexibility and non-debt tax shields resulted statistically significant in determining only LDTA.

Keywords: Albania, Capital structure, Firm's internal factors

1. Introduction

Many studies are focused on researches about the determinants of debt choice (Titman and Wessels, 1988; Harris and Raviv, 1991; Rajan and Zingales, 1995), finding different evidence in their results. This differences are of two types (1) the signs of the regression coefficients estimated from the authors are different, (2) the statistical significance of the regression coefficient vary from one study to another. Titman and Wessels (1988) study in USA found that asset tangibility, non-debt tax shields, financial distress (volatility) and growth do not affect leverage and leverage (short-term measure) is negatively related to firm size. Harris and Raviv (1991) study concluded that leverage increases with fixed assets tangibility, non-debt tax shields, firm size and growth opportunities and decreases with financial distress (volatility) and profitability. According to DeAngelo and Masulis (1980), non-debt tax shields can serve as an alternative to debt tax shield. Non debt tax shields are created by depreciation expenses, which are tax deductible but do not require any cash outlay. As existence of high non-debt tax shields has already reduced tax burden, a firm will require less amount of debt to reduce its total tax liability and the relation between leverage and non-debt tax shield is negative.

1.1 Research Objective

The study generally aims to fill the gap in the literature by empirically examining the relationship between the use of debt and different factors, which may influence the capital structure decision of firms. In a specific way this study aims to achieve the following objective: To examine the factors affecting the capital structure decision of non-listed firms in Albania. For this purpose, firm-specific factors or determinants, including profitability, asset tangibility, liquidity, firm size, risk, flexibility and non-debt tax shield are tested to see their relationship with different measurements of capital structure.

As we know, large listed firms can easily have access to national and international financial markets, and the results taken from this studies can't generalize the financial behavior of all firms, especially for the Albanian firms which are not listed and don't have the same access to financial markets.

1.2 Significance of the Study

The main contribution of this study is to provide knowledge of the capital structure determinants of Albanian firms and as we know Albania is considered a developing country.

- 1- Many studies of capital structure are done in developed countries such as United States and Europe (Titman and Wessels, 1988; Rajan and Zingales, 1995; Frank and Goyal, 2009) and fewer are done in developing countries like Albania.
- 2- The majority of the studies are conducted on public listed firms (Drobotz and Fix, 2003; Agca and Mozumdar, 2004; Frank and Goyal, 2009) and very few are conducted on non-listed companies (Sogorb and Lopez, 2003; Degryse et al., 2009). Degryse et al. (2009) study was focused on identifying the SMEs factors which affect their capital structure.

The rest of this paper is organized as follows: the next section is literature review on the issue discussed; the third section describes the data, variable definition and regression model; the fourth section is hypothesis development of this study; the fifth section summarizes descriptive statistics and the regression

results. The last section presents the conclusion of the study.

2. Literature Review

Studies done by different authors, have observed different determinants which affect the capital structure of firms.

Profitability is one of the most discussed variables of the financing decision of firms. Also the theories of capital structure give different interpretation on the effect of profitability on capital structure. The static trade-off theory arguments that the relation between the two variables should be positive, because higher expected profitability corresponds to higher benefits of debt and lower costs of financial distress. But at the other side the pecking order theory argues that the more profitable firms will become less levered over time (Frank and Goyal, 2009). The two opposite arguments on profitability create difficulties in explaining the capital structure of firms. The negative relations of profitability with capital structure were evidenced by Titman and Wessels (1988), Rajan and Zingales (1995), Pandey (2001), Antoniou et al. (2002), Huang and Song (2004) and Frank and Goyal (2009). On the other hand, positive relationship between profitability and capital structure were proved by Jensen (1986), Roden and Lewellen (1995), Hovakimian et al. (2001) and Xu (2012). The studies mentioned above are conducted in developed and developing countries and the opposite results are evidenced from both types of countries.

Based on the literature review, asset tangibility effects capital structure choice, results show that asset structure is in most cases positively related to capital structure decision. Studies done in the developed countries proved a positive relationship between tangibility and capital structure (Myers, 1977; Drobetz and Fix, 2003). The study of Daskalakis and Psillaki (2006) on two sets of data for Greece and France, found a negative correlation of tangibility with capital structure. In the developing countries, different authors have found mixed results. So Pandey (2002) study in Malaysia and Huang and Song (2004) study in China found asset tangibility to be negatively related to capital structure choice.

Also the theories of capital structure arguments the predicted relationship of asset structure and capital structure. So the static trade-off theory arguments the positive relationship of asset tangibility with capital structure choice, but the agency cost theory supports the negative relationship between the two variables. The last theory is based on the fact that firms with more fixed assets will have less information asymmetry, having more capacity to issue equity than debt.

Liquidity is a more recent variable which is taken in consideration as an important factor effecting capital structure and it was widely studied especially in the developed countries (Opler et al., 1999; Anderson, 2002; Antoniou et al., 2002). Anderson (2002) study of U.S firms, found a positive association between liquidity and capital structure, but another study with U.S data done by Opler et al. (1999) found a negative relationship between liquidity and capital structure. Other studies have proved the negative relationship between liquidity and capital structure for example Antoniou et al. (2002) study of French, German and UK firms and Shahjahanpour et al. (2010) study of Iranian firms.

Firm size is another variable studied in this book among the other specific factors mentioned above. The effect of firm size remains unpredicted although past literature on this issue noted a positive relation with capital structure choice (Titman and Wessels, 1988; Rajan and Zingales, 1995; Frank and Goyal, 2003; Daskalakis and Psillaki, 2006; Drobetz et al., 2007; Frank and Goyal, 2009). The positive relation is argued by the static trade-off theory (Frank and Goyal, 2009), which has an opposite interpretation from the pecking order theory. According to the later theory, there should be an inverse relation between leverage and firm size. Some studies have evidenced negative association between firm's size and capital structure (Rajan and Zingales; 1995; Frank and Goyal; 2003) and a few scholars argued that firm size is not a factor determining capital structure choice of firms (Titman and Wessels, 1988; Mehran, 1992). Better conclusions will be given once the effect of firm size is tested on Albanian firms.

Risk and flexibility are other factors not much studied by researchers. Titman and Wassels (1988), Dincergok and Yalciner (2011) and Paydar and Bardai (2012) found that risk has different impact on the capital structure of firms and we are interested to find its effect on the leverage of Albanian firms.

The existence of non-debt expenses, offers an alternative way to reduce firms taxation, which is proved by DeAngelo and Masulis (1980) study. They argue that the marginal corporate savings from an additional unit of debt decreases with increasing non-debt tax shields.

3. Methodology

In this section, we describe our sample, variables and the model used in determining the impact of the independent variables on firm's capital structure.

The sample used is of 69 non-traded firms covering the period 2008-2011. All firms can be classified as SME and based on Strategic Plan for the Development of SME-s 2007-2013 (Ministry of Energy, Transport and Economy of Albania, 2007), these firms contributes with about 60 percent of the employment in the private

sector. All the data are collected from the Balance Sheet Annual Reports, the official document delivered to the State Tax Office.

By analyzing the use of debt of the sample over the period 2008-2011, we arrive at the result that the firms included in the study have used more short-term debt in 2008 (45.01 percent), more long-term debt during 2009 (22.15 percent) and more total debt in 2008 (66.92 percent).

The independent variables used in the analysis are:

ROA (Return on asset) = Earnings after taxes/Total asset.

ROE = Return on equity) = Earnings after taxes/Total equity.

TANG (Tangibility) = Net fixed assets/Total assets.

SIZE = Natural logarithm of total assets.

LIQ (Liquidity) = Current assets/Current liabilities.

RISK = Standard deviation of EBIT/Average value of EBIT.

FLEX = Monetary assets/Current assets.

NDTSH (Non-debt tax shields) =Amortization /Total assets.

And the dependent variables are:

SDTA =Short-term debt/Total assets.

LDTA = Long-term debt/Total assets.

We use a simple multiple regression analysis to test Y_{lev} as the dependent variable against the above mentioned independent variables. The model used in our study is as follows:

$$Y_{lev} = \alpha + \alpha_1 * ROA + \alpha_2 * ROE + \alpha_3 * TANG + \alpha_4 * LIQ + \alpha_5 * SIZE + \alpha_6 * RISK + \alpha_7 * FLEX + \alpha_8 * NDTSH + \varepsilon$$

Where Y_{lev} indicates firm's leverage which will be measured through short-term debt ratio and long-term debt for the firms in sample and ε is the error term. Using data as described earlier we will estimate all coefficients (alphas) of the equation.

4. Hypotheses

In order to identify the effect the selected determinants on the firm's capital structure decision and the effect of industry the study used eight hypotheses which are presented below:

H 1: ROA is negatively related to capital structure decision.

H 2: ROE is negatively related to capital structure decision.

Also we want to identify if the firm's profitability (ROA and ROE) influences into the short-term debt of the firms. Short-term debt financing provides liquidity to the business to conduct its operations but at the same time it exposes firms to the risk of refinancing. We are not sure about the results that we will have. Even the recent studies show different results. According to Abu-Rub (2012) short-term debt is negatively related with ROE and ROA, but Zeitun and Tian (2007) found that SDTA has a negative and significant effect only on ROA and not on ROE.

We expect that firm's profitability will have an important effect on the long term debt, because of the credit policy of the banking sector. Many times SMEs find difficulties to have additional financing because of: the lack of information between them and the financial institutions; the fluctuations of the earnings of SMEs and the possibilities of bankrupts are greater than those of the larger firms; SMEs often can't offer collateral because they don't have many long-term investments; many proprietors of SMEs don't go to banks because of non-utilized productive capacities and because of the uncertainty of the country development making individuals and businesses reluctant to further investments (Bank of Albania, 2012). For all this reasons mention above the financial institutions raise the rate of interest of crediting and we expect a negative relationship between ROA, ROE and LDTA.

H 3: Tangibility is positively related to capital structure decision.

The lower expected costs of distress and fewer debt-related agency problems predict a positive relation between tangibility and leverage (Frank and Goyal, 2009). The pecking order theory makes opposite predictions. Low information asymmetry associated with tangible assets makes equity issuances less costly. Thus, leverage ratios should be lower for firms with higher tangibility (Frank and Goyal, 2009).

H 4: Liquidity is negatively related to capital structure decision.

The relationship between cash holdings (liquidity) and leverage is not clearly determined under the trade-off model (Saddour, 2006). According to pecking order theory liquidity has a negative relation with leverage. If amount of money needed for investment are higher than retained earnings, firms should issue new debt. "Thus, leverage increases whereas cash holdings fall. However, when investment needs are less than retained earnings, firms repay their debt and accumulate cash" (Saddour, 2006).

H 5: The size of the company is positively related to capital structure decision.

Large, more diversified, firms face lower default risk. Thus, the trade-off theory predicts larger, more mature

firms to have relatively more debt (Frank and Goyal, 2009). Large firms have had an opportunity to retain earnings (Frank and Goyal, 2009). This means that they should decrease firm's debt.

H 6: Risk is negatively related to capital structure decision.

The cost of financial distress can be increased by risk, while the tax shield can be reduced. According to the trade-off theory, when the volatility of earnings is high, firms should use less debt. A higher operating risk combined with higher financing risks will result in higher probability of bankruptcy (Myers, 1984). A complicated version of the pecking order theory states that if a firm does not want to pass up profitable projects in the future, then it should use less debt at present. Therefore, a negative relationship between leverage and the firm risk is expected.

H 7: Financial flexibility of the firm is negatively related to capital structure decision.

Financial flexibility shows the ratio of cash to total current assets of the firm. And we expect that, if the flexibility of firms' increases, the need for external funding is reduced.

H 8: Non-debt tax shields are negatively related to capital structure decision.

Firms can use non-debt tax shields such as depreciation to reduce corporate tax. Thus, a higher non-debt tax shield reduces the potential tax benefit of debt and hence it should be inversely related to leverage. But such relation can change if the marginal tax rate expected from the interest tax shield is higher (Dincergok and Yalciner, 2011).

Table 1. Summary of references and theoretical evidence

Factors	Theoretical reference	Empirical evidence (positive)	Empirical evidence (negative)
Return on asset	Rajan and Zingales (1995); Myers (1984)	Antoniou et al. (2002); Frank and Goyal (2003); Xu (2012)	Titman and Wessels (1988); Daskalakis and Psillaki (2006); Paydar and Bardai (2012)
Return on equity			
Tangibility	Myers (1977)	Pandey (2002); Dobrex and Fix (2003); Paydar and Bardai (2012)	Daskalakis and Psillaki (2006); Paydar and Bardai (2012)
Liquidity	Saddour (2006)	Anderson (2002)	Opler et al. (1999)
Size	Frank and Goyal (2005)	Daskalakis and Psillaki (2006)	Titman and Wessels (1988)
Risk	Bradley et al. (1984)	Huang and Song (2004); Dincergok and Yalciner (2011)	Titman and Wessels (1988)
Flexibility	Hsia (1981)	Hsia (1981)	Chen and Jiang (2001)
Non debt-tax shields	DeAngelo and Masulis (1980)	Bradley et al. (1984)	Gurcharan (2010)

Table 1 presents the theoretical references on which this paper is based and some of the results of previous empirical studies.

5. Empirical Results

5.1. Descriptive Statistics

The following tables show the correlation coefficients between independent variables and capital structure (SDTA and LDTA) for the entire sample. This analysis is carried out to identify whether the relationship between the variables is positive or negative. The linear correlation coefficient (r), measures the strength and direction of a linear relationship between the variables. If "r" is greater than 0.8, it indicates a strong relationship between the variables. If "r" is less than 0.5, it indicates a weak relationship between the variables.

Table 2. Correlation coefficients, using the observations 1:1 - 69:4, 5% critical value (two-tailed) = 0.1181 for n = 276

SDTA	ROA	ROE	TANG	LIQ	SIZE	RISK	FLEX	NDTSH	
1.0000	-0.1829	0.1513	-0.2002	-0.3038	0.0178	0.0975	-0.0633	0.0356	SDTA
	1.0000	0.2702	-0.2336	-0.0632	-0.1318	0.1510	0.2751	0.0314	ROA
		1.0000	-0.0792	-0.0540	-0.0697	0.0890	0.1082	0.0077	ROE
			1.0000	0.1256	0.1153	0.0177	-0.0306	0.2795	TANG
				1.0000	-0.0534	-0.2405	-0.1139	-0.0313	LIQ
					1.0000	0.1294	-0.2261	0.0735	SIZE
						1.0000	0.0217	0.0864	RISK
							1.0000	0.0842	FLEX
								1.0000	NDTSH

Table 2 shows the correlation between the explanatory variables specifically with respect to SDTA. As we can notice SDTA is positively correlated with ROE, SIZE and NDTSH. Also it is demonstrated that SDTA is negatively correlated with ROA, TANG, LIQ and FLEX.

Table 3. Correlation coefficients [LDTA], using the observations 1:1 - 69:4, 5% critical value (two-tailed) = 0.1181 for n = 276

LDTA	ROA	ROE	TANG	LIQ	SIZE	RISK	FLEX	NDTSH	
1.0000	-0.2632	0.0081	0.3828	0.2568	0.2322	0.0800	-0.2082	-0.0026	LDTA
	1.0000	0.2702	-0.2336	-0.0632	-0.1318	0.1510	0.2751	0.0314	ROA
		1.0000	-0.0792	-0.0540	-0.0697	0.0890	0.1082	0.0077	ROE
			1.0000	0.1256	0.1153	0.0177	-0.0306	0.2795	TANG
				1.0000	-0.0534	-0.2405	-0.1139	-0.0313	LIQ
					1.0000	0.1294	-0.2261	0.0735	SIZE
						1.0000	0.0217	0.0864	RISK
							1.0000	0.0842	FLEX
								1.0000	NDTSH

Table 3 shows the correlation between the explanatory variables specifically with respect to LDTA. As we can notice LDTA is positively correlated with ROE, TANG, LIQ, SIZE and RISK. Also it is demonstrated that LDTA is negatively correlated with ROA, FLEX and NDTSH.

Table 4. Summary statistics, using the observations 1:1 - 69:4

Variable	Mean	Median	Minimum	Maximum	Std. Dev.	C.V.
SDTA	0.4056	0.4000	0.0006	1.3209	0.2976	0.7337
LDTA	0.2122	0.0282	0.0000	1.3279	0.3032	1.4289
ROA	0.0677	0.0519	-0.2247	0.6913	0.0985	1.4544
ROE	0.2186	0.1852	-1.8212	3.3657	0.3744	1.7126
TANG	0.2668	0.1691	0.0000	0.9979	0.2768	1.0374
LIQ	16.9332	1.7490	0.0829	583.188	68.2277	4.0292
SIZE	17.5362	17.4169	14.5250	20.9756	1.3780	0.0786
RISK	-1.1107	0.4009	-70.6467	2.9900	9.0255	8.1259
FLEX	0.2122	0.0664	0.0000	1.0000	0.2750	1.2963
NDTSH	0.0189	0.0050	0.0000	0.3952	0.0396	2.0990

Table 4 reports summary statistics for the variables used in our study. It shows that the average short-term debt to total asset ratio (SDTA) for the sample as a whole is 40.56 percent and of long-term debt to total assets (LDTA) is 21.22 percent.

5.3 Results

Employing panel data (cross pooled sectional data) analysis (Gujarati, 2004) and using Gretl (2012) statistical package we obtain the following output of regressions:

Table 5. Summary of models

Variables	Model 1(WLS)	Model 2 (WLS)
Independent	Ysdt	Yldta
Constant	0.4378(**)	-0.3307(**)
ROA	-1.0542(***)	-0.3052(**)
ROE	0.2083(***)	0.0521(*)
TANG	-0.3381(***)	0.4343(***)
LIQ	-0.0011(***)	0.0011(***)
SIZE	0.0064	0.0256(***)
RISK	0.0020	0.0033(*)
FLEX	-0.0791	-0.0996(**)
NDTSH	0.4363	-1.2972(***)
R-square	0.3495	0.4393
Adjusted R-square	0.3300	0.4225
F (8, 267)	17.9285	26.1525
P-value (F)	2.18e-21	1.02e-29

Note. ***Significant at 1% level, ** Significant at 5% level and *Significant at 10% level.

Table 5 presents the regression results of determinants of short-term debt and long term debt ratio of the companies between 2008 and 2011. Coefficient of determination-R² is the measure of proportion of the

variance of dependent variables about its mean that is explained by the independents or predictor variables. R-square is 0.3495 (Model 1) which indicates that about 34.95 percent of the variability of short-term debt ratio is explained by the firm specific factors. Remaining 65.05 (100 percent minus 34.95 percent) variance in the short-term debt is attributed to other variables. The F-statistic of 17.9285 and P-value (F) less than 0.005 suggests that the model fits the data significantly.

The regressions coefficients of ROA, ROE, TANG and LIQ appear significant in determine the short-term debt ratio. Therefore, the first main null hypothesis is rejected which indicates that there is a relationship between the selected factors and short-term debt ratio of the firms in the sample.

So the coefficients factors of ROA, TANG and LIQ which are respectively -1.0542, -0.3381 and -0.0011 indicates that among these variables (return on assets, tangibility and liquidity) and short-term debt there is a significant negative correlation. Especially impact of ROA on short-term debt ratio is too strong such that 1 percent decrease in ROA and TANG, while keeping other variables unchanged, would lead to increased tendency of firms to short-term debt by approximately 1.0542 times respectively and 33.81 percent.

The positive coefficient of ROE indicates that 1 percent increase in return on equity will increase the ratio of short-term debt by approximately 20.83 percent.

Model 2 presents the regression results of the determinants of long-term debt ratio of the companies. R-squared is 0.4396 which indicates that about 43.96 percent of the variability of long-term debt ratio is explained by the firm specific factors. The F-statistic of 26.1525 and P-value (F) less than 0.005 suggests that the model fits the data significantly and all the selected factors appear significant.

6. Conclusions

Capital structure has been subject of debate of many studies, starting from Modigliani and Miller's article (1958) and followed by other authors. Firm's financial leverage and the decision of selecting their funding sources is analyzed in different countries and using various methods and techniques. This study examines mostly firm specific, which affect capital structure decision of unlisted firms in Albania. Among the factors examined include company-specific factors: return on assets, return on equity, asset tangibility, liquidity, firm size, firm risk, and financial flexibility and non-debt tax shields. The first hypothesis examines whether the firm specific factors determine the capital structure decision of the selected sample. For this purpose, two dependent variables are used to measure capital structure: the ratio of short-term debt and long-term debt ratio. From t-tests regressions, can be seen if examined factors significantly affect the decision of capital structure of firms. Further, the regression coefficients showed the direction of the impact of these factors on capital structure decision.

In general, the survey results of the Albanian firms are consistent with the predictions of theoretical studies and empirical previous results. The factors that influence the capital structure of small and medium firms are the same factors that influence the decision of capital structure of firms included in the study, the same as those in developed countries. What remains to be discussed is whether there are specific elements of Albania, which affect firm's financial leverage. We recall that in Albania there are no capital markets and the opportunities to find external funding are focused into the financial institutions (banks or microfinance companies).

Firms do not have an optimal capital structure, but we note that over the period 2008-2011 they have had an average of 40.56 percent (respectively 45.01, 39.45, 39.90 and 37.87 percent) short-term debt and 21.22 percent (respectively 21.91, 22.15, 20.80, 01.20 percent) long-term debt. So firms in the sample have small fluctuations in debt levels especially of the long-term debt.

Firms in the study follow the principles of the theory of the order of selection (pecking order), financing primarily with equity and debt later. On average they finance their assets with debt to the extent of 61.78 percent (40.56 percent short-term debt and 21.22 percent long-term debt) and with equity to the extent of 38.22 percent. These figures indicate that more firms rely on loans from suppliers than from banks. This happens because of restrictive procedures applied by the banks and due to high interest rates on loans during the study period.

Trade-off theory which argues that firms increase the level of debt to take benefit from the deduction of debt interest before tax is not applicable in Albania.

In the sample is observed that 40.56 percent of assets are financed with short-term debt, which shows the collection of debts from suppliers and for liquidity problems by the firms. From the regression analysis is proved that:

First the regression coefficients of ROA, ROE, tangibility of assets and liquidity are statistically significant in determining short-term debt ratio (SDTA). Also factors affecting positively this report were ROE, size, risk and non-debt tax shields. While the factors that affect negatively SDTA are ROA, the tangibility of assets, liquidity and financial flexibility.

Second the regression coefficients of ROA, ROE, and tangibility of assets, liquidity, size, risk, financial flexibility and non-debt tax shields are statistically significant in determining the long-term debt ratio

(LDTA). Also factors affecting positively this report were ROE, tangibility of assets, liquidity, size and risk. While the factors that affect negatively to LDTA is ROA, financial flexibility and non-debt tax shields.

6.1 Recommendations

Even the earlier researchers concluded that optimal capital structure does not exist. Depending on the actual conditions of Albania, which is considered a country in transition and with a rapid evolution of the economic and financial environment, it would be appropriate for firms to determine their optimum capital structure. It is suggested not a fixed structure but a fluctuating one depending on the size of firm's investments or macroeconomic conditions or environment.

Banks should facilitate lending procedures and should apply reduced rates of interest to businesses that have ability to repay the obligations of debt. Banks should train their employees to better estimate businesses based on the industry in which the firm operates.

In order to begin to operate under the trade-off theory, should be started the normal functioning of the Tirana Trade Exchange, so that they can diversify ways of financing through the issuance of shares and bonds. Only in this way firms can choose the form of funding and not rely solely on bank loans.

Firms should try to have a more careful management and reduce their short-term obligations, as this can lead to their bankruptcy.

Based on the results firms should be careful especially on ROA and TANG with correlation coefficients respectively: -1.0542 and -0.3381 (Table 5, Model 1) as return on assets and the tangibility have negative impacts on short-term debt.

Based on the results firms should be careful especially to ROA, TANG, SIZE and NDTSH with correlation coefficients respectively: -0.3052, 0.4343, 0.0256 and -1.2973 (Table 5, Model 2) as return on assets and tax benefit from non-debt costs have a negative impact on long-term debt, while the tangibility of assets and size have a positive impact on long-term debt.

6.2 Limits of the study

1. This study is limited to data collection of only 69 Albanian businesses, which may not be sufficient to represent the entire population of firms.
2. In the absence of active capital markets in Albania, this study uses only accounting data and non-market data of firms to measure their capital structure.
3. In the absence of data, this study does not use "dummy" variables for the industry sectors, to identify whether the capital structure of these sectors varies significantly from each other.
4. The period of study may be short, since it starts from 2008 and ends in 2011.
5. This study takes into account only the secondary data obtained from financial statements to determine the decision of capital structure of firms. It would be of interest the use of primary data through interviews run to firm's financial managers to better identify the selection by their capital structure.

References

- Abu-Rub, N. (2012). Capital structure and firm performance: Evidence from Palestine Stock Exchange. *Journal of Money, Investment and Banking*, 23, 109-117
- Agca, S., Mozumdar, A., (2004): Firm Size, Debt Capacity, and Corporate Financing Choices, W P, 2004:1-55.
- Anderson, R.W. (2002). Capital structure, firm liquidity and growth. NBB working paper, no.27
- Antoniou, A., Guney, Y., & Paudyal, K. (2002). Determinants of corporate capital structure: Evidence from European countries. University of Durham, working paper
- Antoniou, A., Guney, Y., & Paudyal, K. (2002). Determinants of corporate capital structure: Evidence from European countries. *University of Durham, UK*, W P, 2002: 1-8.
- Bank of Albania, (2012). Raporti Statistikor Mujor-Shtator 2012. [Online]: www.bqk-kos.org/repository/.../2012/BMS%20nr%20130%20shqip.pdf.
- Chen, L. H., & Jiang. G. (2001). The Determinants of Dutch capital structure choice. *Faculty of Business and Economics*, University of Groningen, W P, 2001
- Daskalakis, N., & Psillaki, M. (2006). The determinants of capital structure of the SME's: Evidence from the Greek and the French firms, unpublished
- DeAngelo, H., & Masulis, R.W. (1980). Optimal capital structure under corporate and personal taxation. *Journal of Financial Economics*, 8, 3-29
- Degryse, H., Goeij, P., & Kappert, P. (2009). The impact of firm and industry characteristics on small firms' capital structure: Evidence from Dutch panel data. *European Banking Center Discussion*, W P (No) 2009-03. [Online]: arno.uvt.nl/show.cgi?fid=94982
- Dincergok, B., & Yalciner, K. (2011). Capital structure decisions of manufacturing firms' in developing countries. *Middle Eastern Finance and Economics*, 12, 86-100

- Drobetz, W., & Fix, R. (2003). What are the Determinants of the Capital Structure ? Some Evidence for Switzerland. *University of Basel, Department of Finance*, W P, No (4/03), 2003.[Online]: citeseerx.ist.psu.edu/viewdoc/download
- Frank, M.Z., & Goyal, V.K. (2009). Capital structure decisions: Which factors are reliably important? *Financial Management*, 38, 1-37
- Frank, Z., & Goyal, V. (2003). Testing the pecking order theory of capital structure. *Journal of Financial Economics*, 67, 217-248
- Gujarati, N. (2004). *Basic Econometrics*. New York: McGraw Hill Companies
- Gurcharan, S. (2010). A Review of optimal capital structure determinant of selected ASEAN countries. *International Research Journal of Finance and Economic*, 47, 30-41
- Harris, M., & Raviv, A. (1991). The theory of capital structure. *Journal of Finance*, 46, 297-356
- Hsia, C. (1981). Coherence of the modern theories of finance. *Financial Review*, Winter, 27-42
- Huang, S.H., & Song, F. M. (2004). The determinants of capital structure: Evidence from China. *School of Economics and Finance and Centre for China Financial Research*, University of Hong Kong, China, W P, 2004
- Mehran, H. (1992). Executive incentive plans, corporate control and capital structure. *Journal of Financial and Quantitative Analysis*, 27, 59 -71
- Modigliani, F., & Miller, M. (1958). The cost of capital, corporate finance and the theory of investment. *American Economic Review*, 48, 261-297
- Myers, S. (1984). The capital structure puzzle. *Journal of Finance*, 39, 575-92
- Myers, S. (1977). Determinants of corporate borrowing. *Journal of Financial Economics*, 5, 147-175
- Opler, T., Pinkowitz, L., Stulz, R., & Williamson, R. (1999). The determinants and implications of corporate cash holdings. *Journal of Financial Economics*, 52, 3-46
- Pandey, I. (2002). Capital structure and market power interaction: Evidence from Malaysia. *Indian Institute of Management*, working paper
- Paydar, M., & Bardai, B. (2012). Leverage behavior of Malaysian manufacturing companies a case observation of the industrial sector's companies in bursa Malaysia. *International Research Journal of Finance and Economics*, 90, 54-65
- Rajan, G., & Zingales, L. (1995). What do we know about capital structure? Some evidence from international data. *Journal of Finance*, 50, 1421-1460
- Republic of Albania, Ministry of Energy, Transport and Economy (2007). Programi strategjik per zhvillimin e SME-ve per periudhen 2007-2009
- Saddour, K. (2006). The Determinants and the value of cash holdings: Evidence from French firms. *Centre de la Recherches sur la Gestion*, Universite Dauphine, Paris, No.2006-6, 2006. [Online]: http://www.cereg.dauphine.fr/cahiers_rech/cereg200606.pdf
- Shahjahanpour, A., Ghalambor, H., & Aflatooni A. (2010). The determinants of capital structure choice in the Iranian companies. *International Research Journal of Finance and Economics*, 56, 167-178
- Sogorb-Mira, F., & Lopez-Gracia, J. (2003). Pecking Order versus Trade-off: An Empirical Approach to the Small and Medium Enterprise Capital Structure. *Instituto Valenciano De Investigaciones Económicas*, S.A., WP-EC 2003-09. [Online]: www.ivie.es/downloads/docs/wpasec/wpasec-2003-09.pdf
- Titman, S., & Wessels, R. (1988). The determinants of capital structure choice. *Journal of Finance*, 43, 1-19
- Titman, S., & Wessels, R. (1988): The Determinants of Capital Structure Choice. *Journal of Finance*, 1988, Vol (43): 1-19.
- Xu, J. (2012). Profitability and capital structure: Evidence from import penetration. *Journal of Financial Economics*, 106, 427-446
- Zeitun, R., & Tian, G. (2007): Capital structure and corporate performance: Evidence from Jordan. *Australasian Accounting Business and Finance Journal*, 1(4): 40-61

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