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IMPACT OF CAPITAL STRUCTURE DECISIONS ON COMPANY'S PROFITABILITY: EVIDENCE FROM UKRAINES COMPANIES

Iuliia Shkurko¹, Natalja Lace², Rima Tamošiuniene³

^{1,2}*Department of Corporate Finance and Economics, Riga Technical University, Latvia,*

³*Vilnius Gediminas Technical University, 11 Sauletekio al., 10223, Vilnius*

E-mails: ¹shkurkoyulia@mail.ru; ²natalja.lace@rtu.lv,

³rima.tamosiuniene@vgtu.lt

Abstract. The choice of financing and search for an optimal capital structure mix has been an area of significant interest during last fifty years, and it becomes especially topical in today's fast changing environment and highly competitive market conditions. This paper seeks to analyze the impact of capital structure decisions on profitability by examining the current financing decisions and the effect of capital structure composition on profitability of the Ukrainian manufacturing firms. A sample of 274 public listed companies in Ukraine for a period of 8 years (from 2007 till 2014) was selected. The correlation and regression analyses were applied to estimate the impact of leverage, measured by Debt to equity, Total debt, Short-term debt to total assets and Long-term debt to total assets ratios, on profitability, measured by ROA, ROE and EBIT margin. The results of the research reveal an inverse relationship between the debt level in capital structure and firms' profitability, confirming the Agency cost and Pecking order theories.

Keywords: capital structure, debt, equity, leverage, financial performance, profitability.

1. Introduction

In today's fast changing environment and competitive market conditions companies have to expand their activities in order to survive. Correspondingly, they need financial resources, or investment, to be allocated in order to finance current operations and development. Many options are available to attract necessary funds constituting the capital structure, which is generally defined as a mix of debt and equity through which company finances its assets.

The capital structure decision is one of the most crucial corporate finance issues along with capital budgeting and working capital management decisions. It is vital for firm performance, as profitability is directly affected by such choice, and therefore proper care and attention need to be given by managers while determining capital structure.

Since the choice of capital structure is one of the most important strategic decisions in corporate finance, it naturally has become the subject to considerable debate and investigation. The Modigliani-Miller (1958) pioneering work, asserting

that the value of firm is independent of its capital structure, laid the foundation of the modern thinking on capital structure and gave rise to active academic discussions on the issue. Starting with their irrelevance proposition, over the last fifty years many theoretical and empirical studies has been devoted and contributed to the literature on capital structure. As a result, few influential theories of capital structure emerged, including trade-off theory (Modigliani & Miller, 1963; Kraus and Litzenberger, 1973; Myers, 1984), pecking order theory (Myers & Majluf, 1984; Myers, 1984), agency problem theory (Jensen and Meckling, 1976), and the most recently introduced market timing theory (Baker and Wurgler, 2002).

These theories seek to explain the financing behavior of companies and to identify whether an optimal capital structure exists, however all they offer quite conflicting views on the relationship between leverage and firm profitability and none of them offers a complete explanation of the financing decisions. Moreover, in spite of the continuing active debate on capital structure there is little empirical evidence on how Ukrainian companies actually select between financing options. Only few researches are presently dedicated to the issue of capital structure impact on firm performance that reinforces the importance and relevance of this topic in Ukraine.

Therefore, the current paper is aimed to investigate the impact of capital structure decisions on firm profitability in the context of Ukrainian companies. Correspondingly, the two research questions are set on (1) How do Ukrainian companies finance their activities with debt and equity? and (2) What is the relationship between capital structure and profitability in Ukraine?

The following hypotheses were formulated:

H1: *Capital structure composition has significant impact on firm profitability.*

H2: *Companies with lower leverage demonstrate higher profitability in Ukraine.*

The research is based on the following quantitative methods: correlation analysis, regression model estimation and assessing the descriptive statistics.

2. Literature Review

2.1. Theoretical framework

According to Myers (2001) there is no universal theory of optimal capital structure, which can provide general explanation of a financing strategy. However, there are several influential studies (Modigliani and Miller, Trade-off theory, Pecking order theory, Agency theory and Market timing theory), which attempt to explain the debt-to-equity combination selected by firms to finance their activities and growth. They differ in their relative emphasize on several key factors – taxes, differences in information and agency costs. The trade-off theory emphasizes taxes, the pecking order theory emphasizes information asymmetry, and the agency costs theory emphasizes agency problems (Myers, 2001).

Besides the difference in the focus on particular factor, these studies also differ in terms of their view on the existence of optimal capital structure. Furthermore, these theories provide contradictory points of view regarding the kind of dependence (direct or inverse) and cause-and-effect relationship between debt and performance. Please see the most prominent capital structure theories, summarized with regard to recognition of the optimal capital structure and interpretation of debt-performance relationship, in the Table 1 below.

Table 1. Summary of capital structure theories

Theory	Author/s	Optimal capital structure	Debt-performance relationship	Causality
MM irrelevance proposition (1958)	Modigliani and Miller, 1958	No	No	No
MM (1963)	Modigliani and Miller, 1963	Yes	Positive	Performance affects debt
Trade-off theory	Kraus and Litzenberger, 1973	Yes	Positive	Debt affects performance
Pecking order theory	Myers and Majluf, 1984	No	Negative	Performance affects debt
Agency cost theory	Jensen and Meckling, 1976	Yes	Negative	Debt affects performance
Free cash flow theory	Jensen, 1986	Yes	Positive	Debt affects performance
Market timing theory	Baker and Wurgler, 2002	No	Negative	Performance affects debt

Obviously, existing capital structure theories provide quite conflicting views on the relationship between leverage and firm performance. Moreover, each of them is developed and works out under own assumptions, and thus does not offer a complete explanation of the financing decisions.

2.2. Empirical evidence

The lack of consensus among the theories has led to many empirical studies, seeking to explain capital structure decisions and find out the impact of capital structure on firm’s profitability. Table 2 summarizes the recent publications and their findings regarding relationship between firm performance and capital structure that cover different regions, time periods, samples and industries. They apply a wide set of measures primarily focused on profitability indicators as dependent variables. Different leverage ratios were used among the independent variables affecting organizational performance, and the influence of other firm characteristics was also controlled by some authors. Regarding the research methodology, correlation and regression analyses are two methods most commonly applied for data analysis. Eventually, empirical results demonstrate the mixed findings on the relationship (positive, negative, not significant) between profitability and capital structure.

Table 2. Summary of empirical studies on the relationship between capital structure and firm performance

Author/s, year	Country, period	Sample	Measures	Methodology	Findings
Bistrova et al. (2011)	Baltic countries, 2007-2010	35 companies, Baltic Stock Exchange	Dependent variables: ROE, ROA, stock returns Independent variables: DR, NDA, D/E, NDE, SE	Correlation analysis Regression analysis	NEGATIVE
Nawaz et al. (2011)	Pakistan, 2000-2009	173 companies, Karachi Stock Exchange	Dependent variables: ROE, ROA Independent variables: D/E	Regression analysis	POSITIVE
Pratheepkath (2011)	Sri Lanka, 2005-2009	30 companies, Colombo Stock Exchange	Dependent variables: ROA, ROI, NPM, GPM Independent variables: DR, D/E	Correlation analysis Regression analysis	NEGATIVE
Saeedi and Mahmoodi (2011)	Iran, 2002-2009	320 companies, Tehran Stock exchange	Dependent variables: ROE, ROA, Tobin's Q, EPS Independent variables: STD, LTD, TD	Regression analysis	NEGATIVE
Abu-Rub (2012)	Palestine, 2006-2010	28 companies, Palestinian Stock Exchange	Dependent variables: ROE, ROA, EPS, M/B, Tobin's Q Independent variables: STD, LTD, DR, D/E	Correlation analysis Regression analysis	POSITIVE
Salim and Yardar (2012)	Malaysia, 1995-2011	237 companies, Bursa Malaysia Stock exchange	Dependent variables: ROE, ROA, Tobin's Q, EPS Independent variables: STD, LTD, DR Control variables: size, growth	Regression analysis	NEGATIVE

Simonovsk a et al. (2012)	Macedonia, 2006-2010	26 companies	Dependent variables: ROA Independent variables: DR, D/E Control variables: sales growth, time	Regression analysis	NEGATIVE
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Umar et al. (2012)	Pakistan, 2006-2009	100 companies, Karachi Stock Exchange	Dependent variables: EBIT, ROE, ROA, EPS, P/E, NPM Independent variables: STD, LTD, DR Control variables: size	Regression analysis	NEGATIVE
Berzkalne (2013)	Baltic countries, 2004-2011	75 companies, Baltic Stock Exchange	Dependent variables: ROA, ROS, ROE Independent variables: STD, LTD, DR Control variables: size, sales growth	Correlation analysis Regression analysis	NEGATIVE
Chandrapala and Knapkova (2013)	Czech Republic, 2005-2008	974 companies	Dependent variables: ROA Independent variables: size, age, DR, quick ratio, inventory, sales growth, physical capital intensity, capital turnover ratio	Regression analysis	NEGATIVE
Kebewar (2013)	France, 1999-2006	2240 companies	Dependent variables: ROA, EBIT/TA Independent variables: DR Control variables: tangibility, growth, tax	Correlation analysis Regression analysis	NO EFFECT
Nirajini and Priya (2013)	Sri Lanka, 2006-2010	11 trading companies, Colombo Stock Exchange	Dependent variables: GPM, NPM, ROCE, ROA, ROE Independent variables: D/E, DR, LTD	Correlation analysis Regression analysis	POSITIVE

Mujahid and Akhtar (2014)	Pakistan, 2006-2011	155 companies	Dependent variables: ROA, ROE, EPS, stock price Independent variables: D/E	Regression analysis	POSITIVE
Quang and Xin (2014)	Vietnam, 2009-2012	134 companies, Ho Chi Minh Stock Exchange	Dependent variables: ROE, ROA Independent variables: STD, LTD, DR, managerial ownership, state ownership, size, tangibility, growth	Regression analysis	NEGATIVE
Milos L.R. and Milos M.C. (2015)	Romania, 2003-2014	50 companies, Bucharest Stock Exchange	Dependent variables: ROA Independent variables: STD, LTD Control variables: size, growth, liquidity, tangibility of assets	Regression analysis	NEGATIVE

Notes: *Performance measures*: ROA – return on assets, ROE – return on equity, ROS – return on sales, ROCE – return on capital employed, ROI – return on investment, EPS – earnings per share, P/E – price to earnings ratio, EBIT/TA – earnings before interest and taxes to total assets, GPM – gross profit margin, NPM – net profit margin, M/B – market value of equity to book value of equity ratio. *Capital structure measures*: STD – short-term debt to total assets, LTD – long-term debt to total assets, DR – debt ratio or total debt to total assets, D/E – debt to equity ratio, NDA – net debt to total assets ratio, NDE – net debt to equity ratio, SE – sufficient equity.

3. Research Methodology

3.1. Model specification

In order to identify the relationship between capital structure and profitability among Ukrainian listed companies, several models were regressed using the set of performance and capital structure measures. Consistent with previous literature, three indicators of firm profitability were applied for this study – Return on assets, Return on equity and EBIT margin. Capital structure was measured by leverage indicators including Debt to equity ratio, Debt ratio, Long-term debt to total assets ratio and Short-term debt to total assets ratio.

In addition, the concept of sufficient equity level was applied, using the sufficient equity index, in order to analyze the impact of capital sufficiency on company

financial performance. The sufficient value of equity was calculated according to the methodology developed by Lace and Sundukova (2010) by the following formula: Sufficient value of owner equity = Long-term assets + Inventories – Provisions – Long-term liabilities (1)

Two additional factors of influence – size and growth, are included into analysis as control variables. The entire set of variables used in the multiple regression analysis is presented in the Table 3.

Table 3. Specification of the variables used in the model

Variable names	Abbreviations	Measurement	Expected sign
Dependent variables			
Return on Assets	ROA	Net profit/Total assets	
Return on Equity	ROE	Net profit/Shareholders' equity	
EBIT margin	EBIT	EBIT/ Sales	
Independent variables			
Debt to equity ratio	DE	Total liabilities/ Shareholders' equity	–
Debt ratio	DR	Total liabilities/Total assets	–
Long-term debt ratio	LTD	Non-current liabilities/Total assets	–
Short-term debt ratio	STD	Current liabilities/Total assets	–
Sufficient equity index	SUFEQ	Shareholders' equity/ Sufficient value of equity	
Control variables			
Size	SZ	Natural log of Total assets	+
Growth	GR	Percentage change of Total assets	+

3.2. Data description

Performance of Ukrainian listed manufacturing companies for 2007-2014 years was studied. The secondary data for the research was collected from the Amadeus database compiled by Bureau van Dijk and from the informational resource of the Stock Market Infrastructure Development Agency of Ukraine (SMIDA). Exclusively companies with available financial records for the analyzed period (2007-2014) were selected for this study. Additionally, observations with negative equity could distort the research results, as any relative measures using it (both debt and profitability ratios) are meaningless for the financial analysis (Hoque, 2006), and that is why they were excluded from the sample. As a result, the sample consists of 2192 firm-year observations, and the total number of companies included into the sample is 274.

Further, in order to avoid the bias and unjustified influence of extreme values, the outliers were also removed from the regression analysis.

4. Analysis And Results

4.1. Descriptive statistics

In order identify how Ukrainian companies finance their activities with debt and equity, statistical characteristics of debt ratios were analyzed. Table 4 summarizes the descriptive statistics of all dependent, independent and control variables included into regression models in this study.

Table 4. Descriptive statistics of variables used in the study

	Firm-year observations		Minimum	Maximum	Mean	Median	Std. Deviation
	N Valid	Missing					
ROA	2192	0	-2.35	0.92	0.0086	0.0031	0.1217
ROE	2192	0	-310.00	0.93	-0.1978	0.0065	6.7341
EBIT	2166	26	-17710.00	3248.00	-7.1584	0.0220	387.0080
LTD	2192	0	0.00	0.90	0.0880	0.0159	0.1494
STD	2192	0	0.00	1.00	0.3077	0.2624	0.2267
DR	2192	0	0.00	1.00	0.3957	0.3770	0.2640
DE	2192	0	0.00	3126.67	4.9344	0.6052	131.2201
SUFEQ	2192	0	-13.03	83.17	1.2316	0.9719	3.3926
SZ	2192	0	5.39	18.17	11.1929	10.9447	2.1953
GR	2192	0	-0.85	12.12	0.1749	0.0342	0.6932

As seen from the table above, average debt ratio for this sample is about 40% (across all 2007-2014 years' observations), meaning that Ukrainian companies are conservative in financing decisions and rely mostly on equity in their capital structures.

4.2. Correlation analysis results

In order to investigate the interrelation between capital structure and company performance the correlation analysis between the described above indicators was carried out. Table 5 offers the results of the Pearson correlation analysis among the variables used in this study.

Table 5. Pearson Correlation analysis

	ROA	ROE	EBIT	LTD	STD	DR	DE	SZ	GR
ROA	1								
ROE	0.055* 0.011	1							
EBIT	0.057** 0.008	0.001 0.979	1						
LTD	-0.083** 0.000	-0.008 0.710	0.006 0.768	1					
STD	-0.102** 0.000	- 0.079** 0.000	0.027 0.213	- 0.059** 0.005	1				

DR	-0.135** 0.000	- 0.072** 0.001	0.027 0.216	0.515** 0.000	0.825** 0.000	1			
DE	-0.016 0.466	- 0.991** 0.000	0.001 0.975	0.003 0.878	0.085** 0.000	0.075** 0.000	1		
SZ	0.167** 0.000	0.017 0.438	- 0.003 0.894	0.279** 0.000	0.234** 0.000	0.359** 0.000	-0.004 0.864	1	
GR	0.187** 0.000	-0.008 0.708	0.012 0.583	0.052* 0.015	0.067** 0.002	0.087** 0.000	0.006 0.773	0.117** 0.000	1

** Correlation is significant at the 0.01 level (2-tailed)

* Correlation is significant at the 0.05 level (2-tailed)

As apparent from the correlation matrix above, the significant correlations between performance measures and explanatory variables are as follows. ROA correlates negatively to debt ratio as well as to short-term and long-term debt ratios. It has positive correlation with sufficient equity ratio at the 0.05 significance level. At the same time, ROE has negative correlation with debt ratio, debt to equity ratio and short-term component of debt. So ROA and ROE display relatively similar correlation patterns, whereas EBIT does not correlate significantly to any leverage ratio.

Analyzing the interconnection with control variables, it is found that all types of debt ratios (total debt, long-term and short-term debt ratios) positively correlate with size and growth, meaning that companies become more leveraged with increasing size and higher growth. The profitability, measured by ROA, is also positively correlated with size and growth.

Thus, based on the correlation analysis results it can be generally concluded, that company performance has a negative correlation with leverage in this sample.

4.3. Regression analysis results

In order to identify the relationship between capital structure and performance of Ukrainian listed companies multiple regression models were used. The impact of every single independent variable on each performance measure was analyzed, taking into account the influence of controlling factors. Results of the regression analysis are summarized in the Tables 6÷8. All constructed models are statistically significant (Model Sig. < 0.005) with no serial correlation in residuals ($1.5 < DW < 2.5$) and no multicollinearity ($VIF < 5$).

Table 6. Regression analysis results (Dependent variable: ROA)

	ROA-1							
	B	β	t-stat.	Sig.	VIF	R square	Model Sig.	DW
LTD	- 0.117	- 0.157	-7.368	0.000	1.085	0.079	0.000	1.880

SZ	0.009	0.185	8.612	0.000	1.096	Interpretation		
GR	0.029	0.180	8.705	0.000	1.014	LTD => ROA: negative, significant		
ROA-2								
	B	β	t-stat.	Sig.	VIF	R square	Model Sig.	DW
STD	-0.085	-0.174	-8.289	0.000	1.060	0.085	0.000	1.877
SZ	0.009	0.181	8.583	0.000	1.069	Interpretation		
GR	0.029	0.184	8.912	0.000	1.015	STD => ROA: negative, significant		
ROA-3								
	B	β	t-stat.	Sig.	VIF	R square	Model Sig.	DW
DR	-0.108	-0.257	-11.914	0.000	1.150	0.113	0.000	1.887
SZ	0.012	0.232	10.732	0.000	1.157	Interpretation		
GR	0.030	0.188	9.285	0.000	1.016	DR => ROA: negative, significant		
ROA-4								
	B	β	t-stat.	Sig.	VIF	R square	Model Sig.	DW
DE	-0.000	-0.018	-0.868	0.386	1.000	0.056	0.000	1.866
SZ	0.007	0.141	6.765	0.000	1.014	Interpretation		
GR	0.028	0.177	8.459	0.000	1.014	DE => ROA: negative, not significant		
ROA-5								
	B	β	t-stat.	Sig.	VIF	R square	Model Sig.	DW
SUFEQ	0.002	0.047	2.255	0.024	1.004	0.058	0.000	1.857
SZ	0.007	0.143	6.845	0.000	1.015	Interpretation		
GR	0.028	0.174	8.307	0.000	1.017	SUFEQ => ROA: positive, significant		

Note: B – unstandardized coefficients, β – standardized coefficients, t-stat. – T-test statistics, Sig. – significance (p-value, 2-tailed), VIF – variance inflation factor, DW – Durbin-Watson statistics, R square – adjusted R square.

Regression 1: $ROA_{it} = \beta_0 + \beta_1LTD_{it} + \beta_2SZ_{it} + \beta_3GR_{it}$; Regression 2: $ROA_{it} = \beta_0 + \beta_1STD_{it} + \beta_2SZ_{it} + \beta_3GR_{it}$; Regression 3: $ROA_{it} = \beta_0 + \beta_1DR_{it} + \beta_2SZ_{it} + \beta_3GR_{it}$; Regression 4: $ROA_{it} = \beta_0 + \beta_1DE_{it} + \beta_2SZ_{it} + \beta_3GR_{it}$; Regression 5: $ROA_{it} = \beta_0 + \beta_1SUFEQ_{it} + \beta_2SZ_{it} + \beta_3GR_{it}$

As apparent from the table above, LTD, STD and DR are statistically significant and have negative relationship with ROA; SUFEQ is statistically significant and have positive relationship with ROA. Both control variables (SZ and GR) have positive effect on ROA and are statistically significant.

Table 7. Regression analysis results (Dependent variable: ROE)

ROE-1								
	B	β	t-stat.	Sig.	VIF	R square	Model Sig.	DW
LTD	-0.235	-0.150	-6.889	0.000	1.084	0.051	0.000	1.929
SZ	0.015	0.144	6.601	0.000	1.096	Interpretation:		
GR	0.045	0.136	6.479	0.000	1.014	LTD => ROE: negative, significant		
ROE-2								
	B	β	t-stat.	Sig.	VIF	R square	Model Sig.	DW

STD	-0.176	-0.172	-8.040	0.000	1.058	0.058	0.000	1.923
SZ	0.015	0.142	6.604	0.000	1.068	Interpretation		
GR	0.046	0.140	6.668	0.000	1.015	STD => ROE: negative, significant		
ROE-3								
	B	β	t-stat.	Sig.	VIF	R square	Model Sig.	DW
DR	-0.219	-0.249	11.346	0.000	1.146	0.085	0.000	1.935
SZ	0.020	0.190	8.628	0.000	1.154	Interpretation		
GR	0.048	0.144	6.967	0.000	1.016	DR => ROE: negative, significant		
ROE-4								
	B	β	t-stat.	Sig.	VIF	R square	Model Sig.	DW
DE	-0.003	-0.097	-4.533	0.000	1.032	0.039	0.000	1.936
SZ	0.013	0.120	5.568	0.000	1.044	Interpretation		
GR	0.045	0.136	6.438	0.000	1.015	DE => ROE: negative, significant		
ROE-5								
	B	β	t-stat.	Sig.	VIF	R square	Model Sig.	DW
SUFEQ	0.003	0.048	2.259	0.024	1.004	0.033	0.000	1.910
SZ	0.011	0.105	4.918	0.000	1.015	Interpretation		
GR	0.043	0.130	6.128	0.000	1.018	SUFEQ => ROE: positive, significant		

Note: B – unstandardized coefficients, β – standardized coefficients, t-stat. – T-test statistics, Sig. – significance (p-value, 2-tailed), VIF – variance inflation factor, DW – Durbin-Watson statistics, R square – adjusted R square.

Regression 1: $ROE_{it} = \beta_0 + \beta_1LTD_{it} + \beta_2SZ_{it} + \beta_3GR_{it}$; Regression 2: $ROE_{it} = \beta_0 + \beta_1STD_{it} + \beta_2SZ_{it} + \beta_3GR_{it}$; Regression 3: $ROE_{it} = \beta_0 + \beta_1DR_{it} + \beta_2SZ_{it} + \beta_3GR_{it}$; Regression 4: $ROE_{it} = \beta_0 + \beta_1DE_{it} + \beta_2SZ_{it} + \beta_3GR_{it}$; Regression 5: $ROE_{it} = \beta_0 + \beta_1SUFEQ_{it} + \beta_2SZ_{it} + \beta_3GR_{it}$

As apparent from the table above, LTD, STD, DR and DE are statistically significant and have negative relationship with ROE; SUFEQ is statistically significant and have positive relationship with ROE. Both control variables (SZ and GR) have positive effect on ROE and are statistically significant.

Table 8. Regression analysis results (Dependent variable: EBIT)

EBIT-1								
	B	β	t-stat.	Sig.	VIF	R square	Model Sig.	DW
LTD	0.004	0.002	0.092	0.927	1.078	0.030	0.000	1.964
SZ	0.018	0.149	6.652	0.000	1.089	Interpretation		
GR	0.030	0.077	3.579	0.000	1.014	LTD => EBIT: positive, not significant		
EBIT-2								
	B	β	t-stat.	Sig.	VIF	R square	Model Sig.	DW
STD	-0.027	-0.023	-1.046	0.295	1.052	0.030	0.000	1.964
SZ	0.018	0.155	6.988	0.000	1.060	Interpretation		
GR	0.031	0.079	3.634	0.000	1.016	STD => EBIT: negative, not significant		

EBIT-3								
	B	β	t-stat.	Sig.	VIF	R square	Model Sig.	DW
DR	0.020	0.020	-0.884	0.377	1.135	0.030	0.000	1.964
SZ	0.019	0.156	6.822	0.000	1.139	Interpretation DR => EBIT: negative, not significant		
GR	0.031	0.079	3.632	0.000	1.017			

EBIT-4								
	B	β	t-stat.	Sig.	VIF	R square	Model Sig.	DW
DE	0.000	0.013	-0.605	0.545	1.000	0.030	0.000	1.964
SZ	0.018	0.150	6.917	0.000	1.013	Interpretation DE => EBIT: negative, not significant		
GR	0.030	0.078	3.587	0.000	1.013			
EBIT -5								
	B	β	t-stat.	Sig.	VIF	R square	Model Sig.	DW
SUFEQ	0.001	0.018	0.856	0.856	1.005	0.030	0.000	1.963
SZ	0.018	0.150	6.946	0.000	1.014	Interpretation SUFEQ => EBIT: positive, not significant		
GR	0.030	0.076	3.519	0.000	1.018			

Note: B – unstandardized coefficients, β – standardized coefficients, t-stat. – T-test statistics, Sig. – significance (p-value, 2-tailed), VIF – variance inflation factor, DW – Durbin-Watson statistics, R square – adjusted R square.

Regression 1: $EBIT_{it} = \beta_0 + \beta_1LTD_{it} + \beta_2SZ_{it} + \beta_3GR_{it}$; Regression 2: $EBIT_{it} = \beta_0 + \beta_1STD_{it} + \beta_2SZ_{it} + \beta_3GR_{it}$; Regression 3: $EBIT_{it} = \beta_0 + \beta_1DR_{it} + \beta_2SZ_{it} + \beta_3GR_{it}$; Regression 4: $EBIT_{it} = \beta_0 + \beta_1DE_{it} + \beta_2SZ_{it} + \beta_3GR_{it}$; Regression 5: $EBIT_{it} = \beta_0 + \beta_1SUFEQ_{it} + \beta_2SZ_{it} + \beta_3GR_{it}$

As apparent from the table above, all independent variables are statistically insignificant in their impact on EBIT. In these models only control variables (SZ and GR) are statistically significant and have positive effect on EBIT.

5. CONCLUSIONS AND RECOMMENDATIONS

Literature content analysis found that the existing capital structure theories provide quite conflicting views on the relationship between capital structure and firm profitability. Empirical researches also demonstrate the mixed findings on the nature of this relationship (positive, negative, not significant) for different contexts, i.e. countries, industries and time periods.

Current study offers useful insight for company owners, managers as well as investors in Ukraine based on the empirical evidence regarding the capital structure decisions and their influence on profitability of domestic enterprises.

Concluding the empirical research findings, Ukrainian companies prefer equity financing over debt in capital structure composition, as their balance sheets are low leveraged. These results are in line with the previous research findings that companies in developing economies tend to have more conservative balance sheets compared to developed countries.

Additionally, the regression analysis revealed that firm's financial performance measured by ROA and ROE is significantly dependent on leverage. These findings support the advanced hypotheses and prove that the level of debt, both long-term and short-term, in the capital structure has a negative impact on profitability in the context of Ukrainian listed companies: the more firm is leveraged the lower profitability is anticipated. Thus, there is an inverse relationship between the debt level in capital structure and firms' profitability, confirming the Agency cost and Pecking order theories.

However, this research has its limitations, since it covers only manufacturing companies, so wider sample of companies can be further investigated. Besides, the regression models do not fully describe the variance in profitability measures as indicated by low coefficients of determination (R-square), therefore to increase the quality of models it is necessary for future studies to include more control variables. Additionally, concept of equity capital sufficiency and its impact on company market performance can be further researched.

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