EMPIRICAL EVIDENCE ON THE INFLUENCE OF STAKEHOLDER THEORY UPON THE CAPITAL STRUCTURE OF ROMANIAN COMPANIES

Carmen Corduneanu[1]
Laura Raisa Miloş[2]

ABSTRACT: *The stakeholder theory is a new approach linked with the capital structure of the company. According to this theory, the companies must assume their financial decisions not only in front of the equity holders, but also in front of the other stakeholders (suppliers, customers, competition, managers and employees being only a part of them), that support the company in developing its activities. This paper aims at bringing an empirical support at the research made so far at the international level in this respect. Having in consideration 35 Romanian non-financial listed companies from 4 sectors of activity (energetical, quemical, equipments and materials), the authors analyse, through a set of econometrical models, the influence of stakeholder theory upon the capital structure of the considered sample.*

Key-words: *capital structure, stakeholder theory, Romanian listed companies*

JEL codes: G30, G32

Introduction

Grinblat şi Titman (2003) realized a first theoretical proposal about the influence that stakeholders might have, through a sintesis of the empirical work submitted in the last 20 years about this subject. This theory was analysed by three research directions, each one of them beginning in 1980. On one hand, Titman (1984) begun to study the relationship between leverage and the relationship of the company with the suppliers and customers; on the other hand, Brender şi Lewis (1986) begun their research in the field of how the leverage affects upon the relationship with the customers; and finally, the third line of investigation was marked by Stulz (1988), who tried to emphasize upon the influence of the management of the company upon its leverage. Despite the fact that this line of research is as antique as the pecking order theory, the paper of Myers and Majluf (1984) being published in the same year with the paper of Titman (1984), the influence of stakeholder theory upon the capital structure is not so well investigated, both theoretically and empirically speaking. As far as concerns the Romanian companies, we can state that there hardly you can find any empirical analysis in this respect. This is the main reason why, on some theoretical approaches made so far in the international literature, we will try to cuantify the influence of stakeholders upon the financing decision of Romanian companies. The pillar on which this theory is based on is represented by the measure in which the stakeholders can influence or can condition the financing decisions of a company. The choice between different sources of finance may result in an increased bankruptcy risk for the company, risk that the stakeholders will not easily assume. This is the reason why they will influence the financing decision.

[1] Professor Phd, West University of Timisoara, Faculty of Economics and Business Administration, carmen.corduneanu@yahoo.com
[2] Assistant Phd, Eftimie Murgu University Resita, Faculty of Economics and Administrative Sciences, miloslaura@yahoo.com

Theoretical framework

Once with clarifying the main aspect on which the stakeholder theory is based on, there will be forward presented the theoretical fundaments and the main empirical papers that have explained along the time in which way different stakeholders may influence or can be influenced by the capital structure of a company.

1 The influence of customers and suppliers upon the capital structure of a company

As far as concerns the customers group, they will be less willing to aquire the products of those companies that have an increased leverage, given the fact that these companies are most likely to get to bankruptcy. In case this risk would become a reality, the customers would fiind themselves in the situation of not benefiting from after-sale service, of the access at the maintanance service. These ideas were present in the papers of Titman (1984), Titman and Wessels (1988), Balakrishnan and Fox (1993). As Menendes (2001) state in his paper, if the companies would like to transmit confidence and safety in their long term relationship with the customers, they would have to limit their leverage at a certain level. Nevertheless there are some categories of customers that are more interested in the capital structure of the companies to whom they relate. These are customers that aquire: products of long-term usage, where after sale service has an increased importance when taking the buying decision; products for which the quality factor is a critical factor when choosing the supplier; products for which the replacement of the supplier implies substantial costs for the customer; unique products or very specialized ones.

2 Influence of employees upon the capital structure of the entreprise

Grinblatt şi Titman (2003) emphasize upon the necessity of taking into account the group of employees at the moment of establishing the right capital structure for the company, arguing that companies with a high leverage are more willing to make reduction of personnel when it appears a decrease in the level of demand on the market. On the contrary, the companies with a limited leverage will keep constant the number of employees during the crisis periods, thus reducing the potential costs with the hiring and training of new employees in the period following the crisis.

In the empirical study realized in this paper, there wil be taken into consideration the group of employees from two different perspectives, presented so far in the literature. More precisely, there will be analysed the way the dynamics of *the number of the employees* influences upon the capital structure of the company, as well as the influence of the *salaries* upon the leverage of the company. As far as concerns the first variable (*the number of the employees*), some relevant papers that have considered this aspect were those of Sharpe (1994) and Hanka (1998). As far as concerns the second variable, (*salaries*), Hanka, although expected a positive relationship between this variable and leverage, given the necessity of compensation through salaries the higher risk of dismissal that is experienced by the more leveraged company, finds in his empirical study a negative correlation. The negative relationship can be explained, according to Michelaci şi Quadrini (2005) to the need of the companies with financial insolvability problems due to high leverage to channel their resources towards investment projects, reducing therefore the level of salaries.

3 Influence of competition upon the capital structure of the company

Influence of competition upon the capital structure of the company has been approached from two perspectives in the economic literature. On one side, it has been studied the manner in which the capital structure of the company affects its competitivity on the market, and on the other hand, it has been studied the manner in which the leverage affects its market share. The first approach finds its roots in the signal theory. According to this theory, the capital structure of a company can become a useful tool for transmiting informational signals to the market. These signals can be seen as vulnerabilities or strengths. According to the papers of Brander şi Lewis (1986), the companies may take advantage of their high leverages to transmit to their competion informational signals releated to their agressive policy. In the same time, a high leverage may be perceived by the competition as a signal of the high solvability of that company, taking into account the fact that, when a company decides to increase its level of leverage, this thing will lead automatically to an increase of the risk of bankruptcy, this meaning that the company will only do this if all the future project prove to be succesful. The second approach that must be considered is related with the influence of capital structure upon the market share. Papers like the ones of Asgharuab (2003), Opler and Titman (1994) prove empirically that high leveraged companies will register a decrease of their market share.

Methodology

1 Description of the variables

For realizing the econometrical model, we had in consideration as dependent variable the leverage rate (*G_ÎND*), computed as ratio between total debts of the company and its liabilities. In accordance with the theoretical and empirical work, mentioned so far in the previous paragraphs and with the available information, the independent variables of the econometrical model can be grouped in around three stakeholder gropus: the employees, the competition and the suppliers.

For analysing the influence of the employees of the company upon the capital structure we have chosen the following variables: the dynamics of the number of the employees (*dinmunc)* and the salaries (*sal)*. These variables permit the analysis of the relationship between the leverage and employees from the two perspectives mentioned in the previous paragraphs.

The last explanatory variable has been taken into consideration to underline the connection between leverage and the group of customers and suppliers. In the current literature there are suggested some indicators like the ratio between total fixed assets and total assets, research and development expenditures and publicity expenditures of the company, as well as the ratio between the market value and the book value of the company. In the realized empirical study we have considered as explanatory variable the ratio between fixed assets and total assets (*acttang*). In consonance with several papers (Titman and Wessels, 1988; Bevan and Danbolt (2004)), there should exist a positive connection between the tangible assets and the leverage of the company.

2 Data

For realizing this empirical analysis, there have been used the information available on the following sites (ktd.ro and bvb.ro,), as well as the financial reports of the companies available on vanguard.ro, considering 35 nonfinancial companies listed on the Romanian capital market, on the first and second tier, in the period 2001-2007, grouped on activity sector : energy, chemistry, equipments and materials.[3]

3 Description of the econometrical methodology and the used method

As stated in the previous paragraph, the data is available for 35 nonfinancial companies, for the period 2001-2007, at a sectorial level. The analysis method is Eviews 5.0. This data structure permits the processing the data in a „pool data" system, that implies a mixture between time series and cross-sectional data. The used model, given the variables mentioned above and the general model of a pool data regression is the following one:

$$G\_\hat{I}ND_i = \beta_1 sal_i + \beta_2 din\_munc_i + \beta_3 mkshare_i + \beta_4 act\tan g_i + \gamma_i + \varepsilon_{it} \qquad (1)$$

where:

$G\_\hat{I}ND$ -dependent variable, the leverage rate

β - independent variables coefficients

sal – independent variable, the salaries

[3] See Apendix 1 for the companies taken into consideration in the econometrical analysis

din_munc -independent variable, the dynamics of number of employees
mkshare- independent variable, the dynamics of turnover
act tang – independent variable, the tangibility of assets
γ_i - fixed effects
ε_{it} - stochastic variable
i,t - the number of “section” used to run the regression, respectively time period

4 Results

For each sector (energetical, quemical, equipments and materials), after the processing of the dates by the E-views 5.0 software, the authors have checked all the factors with a non-significant importance, if it was the case. In this way, there have been left only the factors which were significant. Afterwards, all the generated results were commented and it was also made a statistical analysis of the results (of the model coefficients, Durbin-Watson statistics, of the coefficient of determination R^2, of the adjusted coefficient of determination, of the F test for validation of the model and not at least of the stationarity of the model. Thus, on sectors the results were the following:

ENERGETIC SECTOR				
Dependent Variable: G_IND				
Method: Pooled EGLS (Period weights)				
Total pool (balanced) observations: 35				
Period weights (PCSE) standard errors & covariance (d.f. corrected)				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.512420	0.002117	242.1018	0.0000
_SNP--SAL_SNP	-0.009566	3.31E-05	-289.2919	0.0000
_ENP--SAL_ENP	-0.012909	1.45E-05	-892.6189	0.0000
_OIL--SAL_OIL	0.004347	0.000130	33.48659	0.0000
_PEI--SAL_PEI	0.000221	9.63E-07	228.9991	0.0000
_PTR--SAL_PTR	-0.011501	7.21E-05	-159.4406	0.0000
_SNP—DIN_MUNC_SNP	-0.375671	0.004983	-75.38674	0.0000
_ENP—DIN_MUNC_ENP	-0.035762	0.001158	-30.88950	0.0000
_OIL—DIN_MUNC_OIL	0.791480	0.005477	144.5034	0.0000
_PEI—DIN_MUNC_PEI	-0.549475	0.002587	-212.4086	0.0000
_PTR—DIN_MUNC_PTR	0.569077	0.003047	186.7947	0.0000
_SNP--MKS_SNP	0.151150	0.003590	42.09765	0.0000
_ENP--MKS_ENP	-0.082754	0.000664	-124.6482	0.0000
_OIL--MKS_OIL	-0.063440	0.003753	-16.90416	0.0000
_PEI--MKS_PEI	0.009112	0.000250	36.42612	0.0000
_PTR--MKS_PTR	0.259547	0.004918	52.77923	0.0000
_SNP--ACTT_SNP	1.900600	0.012283	154.7325	0.0000
_ENP--ACTT_ENP	-1.696293	0.001877	-903.5016	0.0000
_OIL--ACTT_OIL	-0.236708	0.015535	-15.23718	0.0000
_PEI--ACTT_PEI	-1.162677	0.001650	-704.8436	0.0000
_PTR--ACTT_PTR	-0.955622	0.004190	-228.0707	0.0000
	Weighted Statistics			
R-squared	0.998465	Durbin-Watson stat		3.184221

According to the obtained results, there can be stated the following conclusions:

a) The obtained results for level of significance of the coefficients of the independent variable ***sal (personnel costs/number of employees)*** state the fact that for all the 5 companies that compose the sector, the estimated coefficicients are relevant from a statistical point of view. The standard error values of the coefficients of the independent variable are small in comparison with the values of coeffcients, fact that confirms once more the truthfulness of their estimation.

More precisely, for the majority of the companies the obtained results emphasize a negative connection between the independent and the dependent variable, in other words an increase with a unit of the salaries will lead tot o a decrease of the leverage with a maximum of 0,012 percent (in the case of ENP) and a minimum of 0,009 percent (in the case of SNP). For the other companies, the results outline a direct connection, a growth by a unit of the salaries bringing a growth of the leverage of the company.

b) The obtained results for level of significance of the coefficients of the independent variable ***din_munc (dynamics of employees)*** state the fact that for all the 5 companies that compose the sector, the estimated coefficicients are relevant from a statistical point of view. The standard error values of the coefficients of the independent variable are small in comparison with the values of coeffcients, fact that confirms once more the truthfulness of their estimation.

More precisely, for 3 of the 5 considered companies, the obtained results emphasize a negative, but pretty weak connection between the independent and the dependent variable, in other words an increase with a unit of the number of employees will lead tot o a decrease of the leverage with a maximum of 0,054 percent (in the case of PEI). For the other companies, the results outline a direct connection, pretty weak as well, a growth by a unit of the number of employees bringing a growth with a maximum of 0,79 percent in the case of OIL.

c) The obtained results for level of significance of the coefficients of the independent variable ***mks (dynamics of turnover)*** state the fact that for all the 5 companies that compose the sector, the estimated coefficicients are relevant from a statistical point of view. The standard error values of the coefficients of the independent variable are small in comparison with the values of coeffcients, fact that confirms once more the truthfulness of their estimation.

For the majority of the considered companies, the obtained results emphasize a positive, but pretty weak connection between the independent and the dependent variable, with a coeffcient that varies between 0,25 (for PTR) and 0,009 (for PEI). For the other companies, the results outline a negative connection, but a very weak one, with coefficients that get to a maximum of 0,08 units (in the case of ENP).

d) The obtained results for the level of significance of the coefficients of the independent variable ***act_tang (tangibility of the assets)*** state the fact that for all the companies that compose the sector, the estimated coefficicients are relevant from a statistical point of view. The standard error values of the coefficients of the independent variable are small in comparison with the values of coeffcients, fact that confirms once more the truthfulness of their estimation.

More precisely, for the majority of the considered companies, the obtained results emphasize a negative connection between the independent and the dependent variable, connection that is very strong in the case of ENP (with a coeffcient of 1,69). Just in the case on only one company (SNP) the results outline a positive connection, a growth by a percent of the tangibility of the assets leading to a growth with 1,90 percent of the leverage of the company.

The coefficient of determination (R^2) of the model has a very high value (0,998), which proves once again the veracity of the considered model. The adjusted coeffcient of determination is lower than the coefficient of determination, thus confirms the analysis of the coefficient of determination. The Durbin-Watson statistics indicates the presence of some „right” pretty significant autocorellations in what regards the residuals. On the whole, however, the quality of the model can be considered satisfactory.

QUEMICAL SECTOR				
Dependent Variable: G_IND				
Method: Pooled EGLS (Period weights)				
Total pool (balanced) observations: 63				
Period weights (PCSE) standard errors & covariance (d.f. corrected)				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.569549	0.021232	26.82478	0.0000
_CBC--SAL_CBC	-0.022925	0.000598	-38.34828	0.0000
_OLT--SAL_OLT	0.011249	0.000724	15.54672	0.0000
_PCL--SAL_PCL	0.006779	0.000291	23.28106	0.0000
_PPL--SAL_PPL	-0.022164	0.000602	-36.83891	0.0000
_STZ--SAL_STZ	-0.007011	0.000460	-15.24256	0.0000
_ATB--SAL_ATB	-0.006464	0.000878	-7.359665	0.0000
_SCD--SAL_SCD	-0.002317	0.000347	-6.676609	0.0000
_AMO--SAL_AMO	-0.012509	0.000987	-12.66969	0.0000
_AZO--SAL_AZO	-0.006569	0.001679	-3.912484	0.0010
_CBC—DIN_MUNC_CBC	-12.95566	0.176027	-73.60038	0.0000
_OLT—DIN_MUNC_OLT	1.933816	0.066485	29.08648	0.0000
_PCL—DIN_MUNC_PCL	-0.664294	0.028363	-23.42153	0.0000
_PPL—DIN_MUNC_PPL	-1.822023	0.049629	-36.71302	0.0000
_STZ—DIN_MUNC_STZ	0.455903	0.062063	7.345771	0.0000
_ATB—DIN_MUNC_ATB	0.757647	0.119799	6.324314	0.0000
_SCD—DIN_MUNC_SCD	-0.515492	0.025972	-19.84810	0.0000
_AMO—DIN_MUNC_AMO	-1.189883	0.075350	-15.79132	0.0000
_AZO—DIN_MUNC_AZO	-0.981951	0.071923	-13.65279	0.0000
_CBC--MKS_CBC	0.214876	0.012844	16.72937	0.0000
_OLT--MKS_OLT	0.184957	0.010852	17.04383	0.0000
_PCL--MKS_PCL	-0.325148	0.053584	-6.067970	0.0000
_PPL--MKS_PPL	0.134083	0.062271	2.153207	0.0451
_STZ--MKS_STZ	-0.553881	0.065074	-8.511499	0.0000
_ATB--MKS_ATB	1.371233	0.118100	11.61074	0.0000
_SCD--MKS_SCD	0.309901	0.026119	11.86492	0.0000
_AMO--MKS_AMO	0.162652	0.020991	7.748671	0.0000
_AZO--MKS_AZO	0.148191	0.032573	4.549517	0.0002
_CBC--ACTT_CBC	1.287516	0.093936	13.70632	0.0000
_OLT--ACTT_OLT	-1.818234	0.135342	-13.43439	0.0000
_PCL--ACTT_PCL	-0.355198	0.035783	-9.926501	0.0000
_PPL--ACTT_PPL	-0.322915	0.023178	-13.93168	0.0000
_STZ--ACTT_STZ	-0.734746	0.028491	-25.78898	0.0000
_ATB--ACTT_ATB	-0.026654	0.266658	-0.099956	0.9215
_SCD--ACTT_SCD	-0.366117	0.039582	-9.249480	0.0000
_AMO--ACTT_AMO	-0.112050	0.057018	-1.965178	0.0650
_AZO--ACTT_AZO	0.414964	0.277800	1.493752	0.1526
	Weighted Statistics			
R-squared	0.965887	Durbin-Watson stat		2.851789

According to the obtained results, there can be stated the following conclusions:

a) The obtained results for level of significance of the coefficients of the independent variable ***sal (personnel costs/number of employees)*** state the fact that for all 9 companies that compose the sector, the estimated coefficicients are relevant from a statistical point of view. The standard error values of the coefficients of the independent variable are small in comparison with the values of coeffcients, fact that confirms once more the truthfulness of their estimation.

More precisely, for the majority of the companies the obtained results emphasize a negative connection between the independent and the dependent variable, in other words an increase with a unit of the salaries will lead tot o a decrease of the leverage with a maximum of 0,0229 percent (in the case of CBC) and a minimum of 0,002 percent (in the case of SCD). For the other companies, the results outline a direct connection, a growth by a unit of the salaries bringing a growth of the leverage of the company.

b) The obtained results for level of significance of the coefficients of the independent variable ***din_munc (dynamics of employees)*** state the fact that for all 9 companies that compose the sector, the estimated coefficicients are relevant from a statistical point of view. The standard error values of the coefficients of the independent variable are small in comparison with the values of coeffcients, fact that confirms once more the truthfulness of their estimation.

More precisely, for 5 of the 9 considered companies, the obtained results emphasize a negative connection between the independent and the dependent variable, in other words an increase with a unit of the number of employees will lead tot o a decrease of the leverage with a maximum of 12,95 percent (in the case of CBC). For the other companies, the results outline a direct connection, pretty weak as well, a growth by a unit of the number of employees bringing a growth with a maximum of 1,93 percent in the case of OLT.

c) The obtained results for level of significance of the coefficients of the independent variable ***mks (dynamics of turnover)*** state the fact that for all the companies that compose the sector, the estimated coefficicients are relevant from a statistical point of view. The standard error values of the coefficients of the independent variable are small in comparison with the values of coeffcients, fact that confirms once more the truthfulness of their estimation.

For the majority of the considered companies, the obtained results emphasize a positive, but pretty weak connection between the independent and the dependent variable, with a coefficient that varies between 0,134 (for PPL) and 1,371 (for ATB). For the other companies, the results outline a negative connection, but a very weak one, with coefficients that get to a maximum of 0,55 units (in the case of STZ).

d) The obtained results for the level of significance of the coefficients of the independent variable ***act_tang (tangibility of the assets)*** state the fact that not for all the companies that compose the sector, the estimated coefficicients are relevant from a statistical point of view. ATB is the exception. The standard error values of the coefficients of the independent variable are small in comparison with the values of coeffcients, fact that confirms once more the truthfulness of their estimation.

More precisely, for the majority of the considered companies, the obtained results emphasize a negative connection between the independent and the dependent variable, connection that is very strong in the case of OLT (with a coefficient of 1,81).

The coefficient of determination (R^2) of the model has a very high value (0,965), which proves once again the veracity of the considered model. The adjusted coeffcient of determination is lower than the coefficient of determination, thus confirms the analysis of the coefficient of determination. The Durbin-Watson statistics indicates the presence of some „right" pretty significant autocorellations in what regards the residuals. On the whole, however, the quality of the model can be considered satisfactory.

EQUIPMENT SECTOR
Dependent variable: G_ÎND
Method: Pooled EGLS (Period weights)
Total pool (balanced) included: 77

Period weights (PCSE) standard errors & covariance (d.f. corrected)				
Variable	**Coefficient**	**Standard error**	**t-Statistic**	**Prob.**
C	0.605333	0.005025	120.4576	0.0000
_ARS--SAL_ARS	0.002939	0.000202	14.52811	0.0000
_ARM--SAL_ARM	0.002001	9.36E-05	21.38384	0.0000
_CMF--SAL_CMF	0.002708	0.000153	17.66605	0.0000
_CMP--SAL_CMP	0.010830	0.000141	76.71776	0.0000
_EPT--SAL_EPT	0.053474	0.000649	82.38778	0.0000
_IMP--SAL_IMP	-0.019390	0.000265	-73.13219	0.0000
_MEF--SAL_MEF	-0.013343	0.000663	-20.12139	0.0000
_SNO--SAL_SNO	-0.000850	8.53E-05	-9.967694	0.0000
_TBM--SAL_TBM	0.000944	5.96E-05	15.84827	0.0000
_UAM--SAL_UAM	0.003247	0.000404	8.041044	0.0000
_APC--SAL_APC	0.834397	0.109657	7.609146	0.0000
_ARS—DIN_MUNC_ARS	-0.476916	0.028729	-16.60070	0.0000
_ARM—DIN_MUNC_ARM	0.536868	0.016875	31.81412	0.0000
_CMF—DIN_MUNC_CMF	-0.062946	0.024909	-2.526985	0.0192
_CMP—DIN_MUNC_CMP	-0.842375	0.026672	-31.58248	0.0000
_EPT—DIN_MUNC_EPT	1.413060	0.042440	33.29583	0.0000
_IMP—DIN_MUNC_IMP	-0.034940	0.001916	-18.23978	0.0000
_MEF—DIN_MUNC_MEF	-0.122760	0.014320	-8.572496	0.0000
_SNO—DIN_MUNC_SNO	-0.587908	0.030261	-19.42778	0.0000
_TBM—DIN_MUNC_TBM	-0.004387	0.005190	-0.845263	0.4071
_UAM—DIN_MUNC_UAM	-0.372386	0.042295	-8.804562	0.0000
_APC—DIN_MUNC_APC	-0.246243	0.017746	-13.87586	0.0000
_ARS--MKS_ARS	-0.098386	0.005606	-17.55162	0.0000
_ARM--MKS_ARM	0.315392	0.009559	32.99525	0.0000
_CMF--MKS_CMF	-0.067562	0.005538	-12.19955	0.0000
_CMP--MKS_CMP	0.121658	0.008139	14.94753	0.0000
_EPT--MKS_EPT	-0.106360	0.001881	-56.54067	0.0000
_IMP--MKS_IMP	0.113221	0.001853	61.09356	0.0000
_MEF--MKS_MEF	0.232504	0.009051	25.68932	0.0000
_SNO--MKS_SNO	-0.242582	0.005267	-46.05501	0.0000
_TBM--MKS_TBM	-0.184391	0.006812	-27.06691	0.0000
_UAM--MKS_UAM	0.051227	0.005522	9.276393	0.0000
_APC--MKS_APC	0.127251	0.006975	18.24329	0.0000
_ARS--ACTT_ARS	0.696677	0.081033	8.597430	0.0000
_ARM--ACTT_ARM	0.384479	0.008923	43.08926	0.0000
_CMF--ACTT_CMF	-0.737418	0.017064	-43.21495	0.0000
_CMP--ACTT_CMP	-0.568391	0.012412	-45.79309	0.0000
_EPT--ACTT_EPT	-2.575469	0.018052	-142.6699	0.0000
_IMP--ACTT_IMP	-1.773937	0.014351	-123.6077	0.0000
_MEF--ACTT_MEF	0.278655	0.044666	6.238627	0.0000
_SNO--ACTT_SNO	-0.691346	0.013065	-52.91617	0.0000
_TBM--ACTT_TBM	0.149137	0.020632	7.228396	0.0000
_UAM--ACTT_UAM	-0.730424	0.017902	-40.80012	0.0000
_APC--ACTT_APC	-0.592379	0.012995	-45.58345	0.0000

Weighted statistics			
R^2	0.958977	Durbin-Watson statistics	2.738019

According to the obtained results, there can be stated the following conclusions:

a) The obtained results for level of significance of the coefficients of the independent variable ***sal (personnel costs/number of employees)*** state the fact that for all 11 companies that compose the sector, the estimated coefficicients are relevant from a statistical point of view. The standard error values of the coefficients of the independent variable are small in comparison with the values of coeffcients, fact that confirms once more the truthfulness of their estimation.

More precisely, for the majority of the companies the obtained results emphasize a positive connection between the independent and the dependent variable, in other words an increase with a unit of the salaries will lead to an increase of the leverage with a maximum of 0,83 percent (in the case of APC) and a minimum of 0,001 percent (in the case of CMP). For the other companies, the results outline a negative connection, a growth by a unit of the salaries bringing a growth of the leverage of the company.

b) The obtained results for level of significance of the coefficients of the independent variable ***din_munc (dynamics of employees)*** state the fact that only for 10 companies of this sector, the estimated coefficicients are relevant from a statistical point of view (the exception is TBM). The standard error values of the coefficients of the independent variable are small in comparison with the values of coeffcients, fact that confirms once more the truthfulness of their estimation.

More precisely, for 9 of the 11 considered companies, the obtained results emphasize a negative connection between the independent and the dependent variable, in other words an increase with a unit of the number of employees will lead tot o a decrease of the leverage with a maximum of 0,84 percent (in the case of CMP). For the other companies, the results outline a direct connection, a growth by a unit of the number of employees bringing a growth with a maximum of 1,41 percent in the case of EPT.

c) The obtained results for level of significance of the coefficients of the independent variable ***mks (dynamics of turnover)*** state the fact that for all the 5 companies that compose the sector, the estimated coefficicients are relevant from a statistical point of view. The standard error values of the coefficients of the independent variable are small in comparison with the values of coeffcients, fact that confirms once more the truthfulness of their estimation.

For the majority of the considered companies, the obtained results emphasize a positive, but pretty weak connection between the independent and the dependent variable, with a coeffcient that varies between 0,05 (for UAM) and 0,31 (for ARM). For the other companies, the results outline a negative connection, but a very weak one, with coefficients that get to a maximum of 0,24 units (in the case of SNO).

d) The obtained results for the level of significance of the coefficients of the independent variable ***act_tang (tangibility of the assets)*** state the fact that for all the companies that compose the sector, the estimated coefficicients are relevant from a statistical point of view. The standard error values of the coefficients of the independent variable are small in comparison with the values of coeffcients, fact that confirms once more the truthfulness of their estimation.

More precisely, for the majority of the considered companies, the obtained results emphasize a negative connection between the independent and the dependent variable, connection that is very strong in the case of EPT (with a coefficient of 2,57). For the other companies the results outline a positive connection, a growth by a percent of the tangibility of the assets leading to a growth of a maximum of 0,69 percent of the leverage in the case of ARS.

The coefficient of determination (R^2) of the model has a pretty high value (0,958), which proves once again the veracity of the considered model. The adjusted coeffcient of determination is lower than the coefficient of determination, thus confirms the analysis of the coefficient of determination. The Durbin-Watson statistics indicates the presence of some „right” pretty significant autocorellations in what regards the residuals. On the whole, however, the quality of the model can be considered satisfactory.

MATERIALS SECTOR				
Dependent Variable: G_IND				
Method: Pooled EGLS (Period weights)				
Total pool (balanced) observations: 70				
Period weights (PCSE) standard errors & covariance (d.f. corrected)				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.708684	0.198318	3.573477	0.0019
_ALR--SAL_ALR	0.009566	0.002263	4.227226	0.0004
_COS--SAL_COS	0.001576	9.96E-05	15.81979	0.0000
_MJM--SAL_MJM	0.007821	0.000630	12.42394	0.0000
_ART--SAL_ART	0.030637	0.001949	15.71540	0.0000
_ZIM--SAL_ZIM	-0.026932	0.001188	-22.67744	0.0000
_BRM--SAL_BRM	-0.003054	0.004123	-0.740784	0.4674
_MPN--SAL_MPN	0.004714	0.000663	7.111310	0.0000
_ELJ--SAL_ELJ	0.004666	0.003034	1.537807	0.1398
_ECT--SAL_ECT	-0.020204	0.010006	-2.019200	0.0571
_SRT--SAL_SRT	-0.013874	0.003071	-4.517711	0.0002
_ALR—DIN_MUNC_ALR	0.085701	0.101953	0.840587	0.4105
_COS—DIN_MUNC_COS	6.349569	0.373069	17.01982	0.0000
_MJM—DIN_MUNC_MJM	0.323553	0.035136	9.208633	0.0000
_ART—DIN_MUNC_ART	-0.047953	0.026939	-1.780052	0.0903
_ZIM—DIN_MUNC_ZIM	-0.357967	0.038333	-9.338267	0.0000
_BRM— DIN_MUNC_BRM	0.080889	0.302425	0.267467	0.7918
_MPN—DIN_MUNC_MPN	0.089479	0.009544	9.375517	0.0000
_ELJ—DIN_MUNC_ELJ	0.449499	0.562679	0.798855	0.4338
_ECT—DIN_MUNC_ECT	0.122289	0.079838	1.531713	0.1413
_SRT—DIN_MUNC_SRT	0.083085	0.124273	0.668564	0.5114
_ALR--MKS_ALR	3.84E-05	1.21E-05	3.166341	0.0049
_COS--MKS_COS	0.521079	0.012209	42.68149	0.0000
_MJM--MKS_MJM	-0.800981	0.077164	-10.38030	0.0000
_ART--MKS_ART	0.290954	0.020650	14.09006	0.0000
_ZIM--MKS_ZIM	0.053748	0.020174	2.664139	0.0149
_BRM--MKS_BRM	0.374410	0.049275	7.598326	0.0000
_MPN--MKS_MPN	0.012909	0.012434	1.038239	0.3115
_ELJ--MKS_ELJ	0.355627	0.455026	0.781552	0.4436
_ECT--MKS_ECT	0.083843	0.028231	2.969891	0.0076
_SRT--MKS_SRT	-0.061998	0.128096	-0.483999	0.6336
_ALR--ACTT_ALR	-1.046274	0.215858	-4.847054	0.0001
_COS--ACTT_COS	-1.001359	0.097084	-10.31437	0.0000
_MJM--ACTT_MJM	-2.566036	0.177300	-14.47286	0.0000
_ART--ACTT_ART	0.795497	0.118790	6.696690	0.0000
_ZIM--ACTT_ZIM	-1.284911	0.098078	-13.10091	0.0000
_BRM--ACTT_BRM	0.475767	0.217762	2.184803	0.0410
_MPN--ACTT_MPN	-1.541333	0.047665	-32.33651	0.0000
_ELJ--ACTT_ELJ	0.653552	1.227056	0.532618	0.6002
_ECT--ACTT_ECT	-1.653087	2.920078	-0.566111	0.5776

_SRT--ACTT_SRT	0.108767	0.114083	0.953402	0.3518
R-squared	0.965739	Durbin-Watson stat		2.363396

According to the obtained results, there can be stated the following conclusions:

a) The obtained results for level of significance of the coefficients of the independent variable ***sal (personnel costs/number of employees)*** state the fact that only for 8 of the 10 companies that compose the sector, the estimated coefficicients are relevant from a statistical point of view. The standard error values of the coefficients of the independent variable are small in comparison with the values of coeffcients, fact that confirms once more the truthfulness of their estimation.

More precisely, for the majority of the companies the obtained results emphasize a positive connection, but a very weak one between the independent and the dependent variable, in other words an increase with a unit of the salaries will lead to an increase of the leverage with a maximum of 0,03 percent (in the case of ART). For the other companies, the results outline a negative connection, a growth by a unit of the salaries bringing a decrease of the leverage of the company.

b) The obtained results for level of significance of the coefficients of the independent variable ***din_munc (dynamics of employees)*** state the fact that only for 6 companies of this sector, the estimated coefficicients are relevant from a statistical point of view. The standard error values of the coefficients of the independent variable are small in comparison with the values of coeffcients, fact that confirms once more the truthfulness of their estimation.

More precisely, for 2 from the 6 companies remained in the study, the obtained results emphasize a negative connection between the independent and the dependent variable, in other words an increase with a unit of the number of employees will lead tot o a decrease of the leverage with a maximum of 0,35 percent (in the case of ZIM). For the other companies, the results outline a direct connection, a growth by a unit of the number of employees bringing a growth with a maximum of 6,34 percent in the case of COS.

c) The obtained results for level of significance of the coefficients of the independent variable ***mks (dynamics of turnover)*** state the fact that only for 7 from the 10 companies that compose the sector, the estimated coefficicients are relevant from a statistical point of view. The standard error values of the coefficients of the independent variable are small in comparison with the values of coeffcients, fact that confirms once more the truthfulness of their estimation.

For the majority of the considered companies, the obtained results emphasize a positive, but pretty weak connection between the independent and the dependent variable, with a coeffcient that varies between 0,05 (for ZIM) and 0,52 (for COS). For the other companies, the results outline a negative connection, but a very weak one, with coefficients that get to a maximum of 0,80 percent (in the case of MJM).

d) The obtained results for the level of significance of the coefficients of the independent variable ***act_tang (tangibility of the assets)*** state the fact that for 7 from the 10 companies that compose the sector, the estimated coefficicients are relevant from a statistical point of view. The standard error values of the coefficients of the independent variable are small in comparison with the values of coeffcients, fact that confirms once more the truthfulness of their estimation.

More precisely, for the majority of the considered companies, the obtained results emphasize a negative connection between the independent and the dependent variable, connection that is very strong in the case of MJM (with a coefficient of 2,56). For the other companies the results outline a positive connection, a growth by a percent of the tangibility of the assets leading to a growth of a maximum of 0,79 percent of the leverage in the case of ART.

The coefficient of determination (R^2) of the model has a pretty high value (0,965), which proves once again the veracity of the considered model. The adjusted coeffcient of determination is lower than the coefficient of determination, thus confirms the analysis of the coefficient of determination. The Durbin-Watson statistics indicates the presence of some „right" pretty significant autocorellations in what regards the residuals. On the whole, however, the quality of the model can be considered satisfactory.

5 Testing the veracity of results

For testing the veracity of the model, it is recommended realizing some „Unit Root" stationarity tests for ordinary residuals, for all the sectorial models taken into consideration:

Exogenous variables: Individual effects				
Newey-West bandwidth selection using Quadratic Spectral kernel				
Method	Statistic	Prob.**	Cross-section	Obs.
Null: Unit root (assumes common unit root process)				
Energetic sector				
Levin, Lin & Chu t*	-7.95348	0.0000	5	30
Breitung t-stat	-4.41466	0.0000	5	25
Quemical sector				
Levin, Lin & Chu t*	-8.69389	0.0000	9	52
Breitung t-stat	-3.71842	0.0001	9	43
Equipment sector				
Levin, Lin & Chu t*	-9.36035	0.0000	11	65
Breitung t-stat	-1.33224	0.0914	11	54
Materials sector				
Levin, Lin & Chu t*	-10.4725	0.0000	10	58
Breitung t-stat	-0.59562	0.2757	10	48
Null: Unit root (assumes individual unit root process)				
Energetic sector				
Im, Pesaran and Shin W-stat	-1.96487	0.0247	5	30
ADF - Fisher Chi-square	22.5452	0.0126	5	30
PP - Fisher Chi-square	41.8459	0.0000	5	30
Quemical sector				
Im, Pesaran and Shin W-stat	-1.84724	0.0324	9	52
ADF - Fisher Chi-square	33.9897	0.0126	9	52
PP - Fisher Chi-square	56.6458	0.0000	9	54
Equipment sector				
Im, Pesaran and Shin W-stat	-2.98152	0.0014	11	65
ADF - Fisher Chi-square	52.4706	0.0003	11	65
PP - Fisher Chi-square	132.312	0.0000	11	66
Materials sector				
Im, Pesaran and Shin W-stat	-3.28692	0.0005	10	58
ADF - Fisher Chi-square	53.0826	0.0001	10	58
PP - Fisher Chi-square	85.5947	0.0000	10	60
Null: No unit root (assumes common unit root process)				
Energetic sector				
Hadri Z-stat	24.5635	0.0000	5	35
Quemical sector				
Hadri Z-stat	3.68718	0.0001	9	63
Equipment sector				

Hadri Z-stat	11.2972	0.0000	11	77
Materials sector				
Hadri Z-stat	4.22767	0.0000	10	70
**Probabilities for Fisher tests are computed using an asympotic Chi -square distribution. All other tests assume asymptotic normality				

The results of stationarity tests suggest that at the level of the unit roots can be identified some processes of individual unit roots and consequently, there are some systematic deviations in the considerations made on the basis of these empirical models. This result is not surprising given the small volume of the used sample. The probability that the series is non-stationary is very small (this being showed also by the ADF Augmented Dickey –Fuller and PP- Phillips Perron tests), resulting therefore that the series is stationary. On the whole, the quality of the model can be considered satisfactory and permits drawing some conclusions on the basis of the estimated model.

Concluding remarks

This paper has brought an empirical support to the current research as far as concerns the influence of the stakeholders upon the capital structure of the Romanian companies taken into consideration in the study. The results of the econometrical studies at the sectorial level outline the ollowing aspects:

- as far as concerns the **influence of the employees** of a company, the obtained results suggest that the dynamics of the employees affects the leverage of the company in a negative way, for all considered sectors, with the exception of „materials"; if we take into consideration the connection between salaries and the leverage, we can observe a positive connection for the majority of companies from the sector „equipments" and „materials" and for the other sectors there is a negative connection.
- as far as concerns the influence of the **competition**, it has been concluded that the connection between the dynamics of the turnover and leverage is positive for all the sectors taken into consideration;

as far as concerns the potential influence of the **customers and suppliers**, the results have shown a negative connection for all the sectors taken into consideration.

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Appendix 1

sector of Activity	*Companies listed on the capital market taken into consideration from each sector*	*SYmbol*
I. ENERGETICAL	Petrom	SNP
	Energopetrol Campina	ENP
	Oil Terminal Constanta	OIL
	Petrolexportimport Bucuresti	PEI
	Rompetrol Well Services	PTR
II. QUEMICAL	Carbochim Cluj Napoca	CBC
	Oltchim Rm. Valcea	OLT
	Policolor Bucuresti	PLC
	Prodplast Bucuresti	PPL
	Sinteza Oradea	STZ
	Antibiotice Iasi	ATB
	Zentiva SA	SCD
	Amonil Slobozia	AMO
	Azomures Tg. Mures	AZO
III. EQUIPMENTS	Aerostar Bacau	ARS
	Armatura Cluj-Napoca	ARM
	Comelf Bistrita	CMF
	Compa S. A. Sibiu	CMP
	Electroputere Craiova	EPT
	Impact Developer & Contractor S.A.	IMP
	Mefin Sinaia	MEF
	Santierul Naval Orsova	SNO
	Turbomecanica Bucuresti	TBM
	Uamt Oradea	UAM
	Vae Apcarom Buzau	APC
IV. MATERIALS	Bermas Suceava	BRM
	TITAN S.A.	MPN
	Alro Slatina	ALR
	Mechel Târgovişte	
	MJ Maillis Romania	MJM
	TMK Artrom	ART
	Zimtub Zimnicea	ZIM
	Electroaparataj Bucuresti	ELJ
	Electrocontact Botosani	ECT
	Siretul Pascani	SRT