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The Impact of financial environment variables on the restructuring of sources of finance A Standard Study on Algerian Joint Stock Companies (2010-2015)

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ABSTRACT

This study aims to identify the factors affecting the financial structure of the Algerian joint-stock companies during the period (2015-2010). It also tries to see through the study the extent to which the corporate finance policies under consideration match the theoretical underpinnings of the financing priorities. In order to reach the objectives, the study tested a sample of 15 non-financial joint stock companies to examine their financial structure, the study used the self-regression techniques of Arellano and Bond (1991) on Bannel's dynamic data to test the study model, where the financial structure was considered representative of financial leverage as a dependent variable, profitability, liquidity, tax rate growth rate, and interest rate as independent variables. Theresults revealed that the Algerian companies depend mainly on debts to finance their needs, and there is a positive statistical correlation between profitability and financial structure on the other. The study also showed that there was no statistically significant correlation between liquidity and interest rates on one hand and the financial structure on the other.

KEYWORDS: Financial structure, shareholding companies, debt, retained earnings, Panel models. JEL codes: G32

I. PREFACE

The financing function of the organization is one of the most important and complex functions of financial management; it has to look for sources of finance where it is located and determine the funds needed, and the complexity of this function increases the variety of sources of finance; both are long-term and short-term, and internal (property rights) and external (debt) sources are also cost-effective and are closely related to the long-term relationship between return and risk, hence the importance of the financial structure of the company. This is known as the diverse mix of sources of finance in the financial architecture, where financial managers seek to find the optimal combination of financial architecture, which has gained considerable importance in modern financial management thinking, and was evident in the first study of MODIGLIN ET MILLER, which found that there was no difference between the use of internal and external financing sources, and that the optimal financial structure of the organization sought to maximize its potential benefits (lower than possible).

Study Problem: The choice of the optimal mix of financial architecture is one of the most difficult decisions taken by the company's finance officers, due to several factors that determine the financial architecture, from internal to external environments that are dynamic and unstable, and therefore the problem of studying how the financial architecture of Algerian companies is formulated by answering the following question: **How does the financial environment indicators affect the formulation of the financing structure in Algerian companies for the period from 2010 to 2015?** The following sub-problems include: Is there any relationship between the financial structure represented by the financial leverage and tax rate, interest rate, liquidity rate, profitability rate and growth rate?

Study hypotheses: To respond to the problem of the study, we test the following assumptions: There is a relationship between the financial structure represented by the financial leverage and each of the following variables: Tax rate, interest rate, liquidity rate, profitability rate and growth rate.

First: Theoretical framework and previous studies:

Conceptual framework: Factors affecting the financial architecture: The financial structure consists of a mix of debt usually represented by long-term loans and property funds represented by normal, excellent and retained earnings, and this capital combination - the ratio of each of the previous elements - is influenced by a set of financial variables belonging to the internal environment and another group belonging to the company's external environment, where the financial variables are volatile and unstable from the surroundings that belong to the company structure, and the effect of these variables on the structure.

Factors related to the internal ocean : These are the factors that arise from the company's core and manageable functions that influence the structure of sources of finance. The most important are:

Liquidity:"Liquidity is that cash is available when needed, i.e. the company's ability to save cash at an acceptable cost." ¹ "² The ability of a company to pay its short-term obligations is called solvency."

"Is the ability of the company to meet its short-term obligations and maintain its financial viability through its normal operating cycle." ³ Through previous definitions, a comprehensive definition of liquidity can be drawn up, the ability of a company to provide funds in the form of capital liquidity to meet short-term obligations at an acceptable cost. The company's liquidity is reduced as a result of poor asset management because of overinvestment in fixed assets or payment deadlines, and as a result of successive losses that create an imbalance in the company's budget so that the right side (assets) rises from the left side (liabilities), the company finds itself obliged to remedy the situation by raising its capital in one of the above ways, to overcome the negative consequences that may result from the decline in the company's liquidity

Profitability 1.1.2: Profitability is defined as "the effectiveness of management performance in running different activities,"⁴ and is defined as "the ability of the company to generate profits, and profitability is a measure of the efficiency of the company's investment, operational and funding management policies"⁵, also known as "an indication of the efficiency of capital investment for profit". ⁶

There is a positive impact between profitability and debt ratio as the company's profitability increases its borrowing capacity, but in fact the company's financial managers prefer to rely on internal finance and to use less external finance (debt) to reduce the risk of bankruptcy[•], as the company's profitability increases its ability to self-finance, thus increasing its dependence on retained earnings, and resorting to debt if it is based on internal financing sources of finance, as a reverse relationship exists between profitability and financial leverage.

Growth: "The extension of the company's products to other geographic locations or by increasing the products or services the company provides to existing markets"⁷. Growth is also defined as "a rise in the number of businesses (merchandise sales, sales of service sales), value added, number of workers⁸ and level of wages". In theory, there is a direct relationship between the company's growth and its financial structure represented by the lifting rate, because the growth situation imposes new funds on the company to finance the expansion of activity, so companies that achieve large growth rates, especially those whose financing depends on a large amount of property money, resort to borrowing as a source to finance the increasing needs.

Factors related to the contour: These are external elements of the company that have the ability to influence its financial structure, and cannot be controlled by the company management, the most important of which are the following.

Tax:"A mandatory duty free which the State shall determine its sovereignty and which shall be performed when its terms are applied free of charge to achieve the objectives⁹ of the economic and social society". It is defined as "a monetary surplus that the state takes from economic units according¹⁰ to its unremunerated and final ability to finance public expenditures and to achieve the goals of the state stemming from its political philosophy". The tax affects a company's decision to choose sources of finance for its financial needs, because the company prefers debt financing to internal finance in view of the tax, because the interest it pays as a financial expense on loans is deducted from taxable profits, thus contributing to reducing the tax burden, so direct taxes (a tax on corporate profits) are proportional to the financial structure represented by the rate of leverage, and taxes are

indirect taxes are borne by the company. **Interest rate:** There are several definitions of interest, but they are similar in their general meaning and do not exceed being a compensation for the amounts of cash surrendered over a given period of time. A set of these definitions are: "The cost of the temporarily waived money"¹¹. "It is a money-back pay where the borrower is obligated¹² to pay to the lender (usually the bank), in exchange for a temporary waiver of liquidity". There is an adverse relationship between interest rate and financial leverage; the higher interest rates the debt ratio in the company's financial structure, because it increases the cost of capital and consequently leads financial management to reduce reliance on debt, but the importance of interest rates lies in being a measure when funds are available in the market, the higher the cash deflation in commercial bank reserves, i.e. demand for money by lenders is greater than commercial banks and vice versa.

II. LITERATURE REVIEW:

Joseph.O Study (1999)¹³: This study was carried out on 83 real estate companies listed on the UK Securities Exchange to highlight various factors affecting debt volume in the capital structure. The study pointed out that asset structure, business orientation and participation in real estate development are the main determinants of borrowing policy in real estate companies, and that the financial managers of those companies take into account the financial position of the company (financial difficulty), the costs of financing when choosing debts in the finance structure, and that the tax burden and the company's performance have no impact on the decisions of the financial structure of the real estate companies in question.

Abdullah, Al Seddik (2003):¹⁴ This study examined the determinants of financing structure selection that were applied to industrial public shareholding companies in Saudi Arabia, and aimed at identifying the factors affecting the company's ability to obtain financing that would determine the debt ratio in the financial structure of those companies. The study used company size, profitability, liquidity, growth rate, size of guarantees offered as independent variables and debt ratio of financial structure as a dependent variable, and the results of the study showed a statistically significant correlation between debt ratio, company size and a statistically significant negative relation between debt ratio in the financial structure of the firms in question.

Frank Study, B Usha,M)2004:¹⁵The study surveyed 16 different European countries in terms of legal regulations and tested the determinants of the capital structure for 737 companies from these countries during 2001, noting that the capital structure is subject to many advantages and commercial practices that vary according to the legal regulations of those countries. The study showed that stock profitability and financial flexibility are the most important variables that explain the capital structure, and proved that financial managers take into account the ratio of debt coverage to raise the capital of their partners.

Mohamed Tawfik Study (2005)¹⁶: This study was conducted on 17 non-financial companies listed on the Palestine Securities Exchange for the period 1999-2004, and aimed at identifying the determinants of the capital structure, using multiple regression techniques and correlation coefficients to test their opportunities for variables related to the ratio of total liabilities to property rights and the ratio of total liabilities to total independent assets and variables represented by property rights and growth rate, company size, tax, paid assets and fixed risks. The study pointed out that there is a statistically significant inverse relationship between the structure of capital and the return on property rights that measures profitability and also the existence of a positive correlation between capital structure and company size, but the study found no relation between capital structure, growth rate, paid tax, fixed assets and systemic risks.

Gazi Falah, Ali Mahmoud (2011)¹⁷: This study examined the factors affecting the choice of company managers for the ratio of debt in the financial structure, and applied this study to 54 companies from the services sector listed on the Amman Stock Exchange between (1996-2007). The study aimed at the extent to which financial managers' decisions are based on the company factors of size and asset structure, the growth rate and market factors such as interest rate, tax rate and market value of shares in capital market determine the debt ratio of companies using the multiple regression equation given the independent factors and the ratio of debts represented by total debt to assets as a dependent variable. The study showed a positive impact on both the size of the company, the structure of assets and the rate of growth on the financial structure, while the rate of return on assets had a negative impact on the scale of the financial structure, and the study showed that there was no impact on the structure of capital and that these factors did not explain the changes in the financial structure.

Asmawi, N Farah, S) 2013)¹⁸: This study was conducted on 334 SMEs in Malaysia and used five-year accounting data from 2005 to 2009, to identify the specific variables for the capital structure of this type of enterprise. The study found that both liquidity and profitability were the main determinants of capital structure,

considering both long-term and short-term debt as a dependent variable, and the size of the company is variable but with a minimum degree, and found that company life and growth explain the financial structure by considering long-term debt variable as representative of the capital structure, while taxes are not an important determinant in financial structure decisions.

Second: Applied examination of factors affecting the financial architecture

an application study of factors affecting the financial architecture that includes a descriptive statistical study of the study variables is conducted, a standard study of its factors, and then the development of the results produced by this study.

1- Sample and variables of study

In this study, six variables are used, including one dependent variable: Financial leverage representing the financial structure and five independent variables, namely profit margin, liquidity ratio, interest rate, tax rate and growth rate for a sample of 15 non-financial contributors registered in the state of Ouargla during 2010-2015, as follows:

2- The study community and sample

The study included all joint-stock companies registered in the Ouargla region 2010-2015 with the following conditions to ensure that study variables are measured: The Company has continued from 2010 to 2015, not to have been merged during the study period, if the company has the necessary data during the study period. Financial companies have been excluded for their privacy in calculating indicators that reflect study variables

15 companies have met the necessary conditions that represent the study sample.

3- Study Variables

This study develops a mathematical model to test the impact of financial environment variables on restructuring the sources of finance for the shareholding companies, where the model is designed to consist of a set of independent variables that reflect the internal financial environment of the company, namely, growth rate, profitability, liquidity and others that reflect the company's external financial environment, namely interest rate and tax rate.

 $Y = a + b_1x_1 + b_2x_2 + b_3x_3 + b_4x_4 + b_5x_5 + nominations$

Gauge	Variable	Icon
Total debt/ property rights (private funds)	Financial	Y
Net income (profit)/net sales	architecture	X1
(Current assets - commodity stock) / traded liabilities	Profitability	X2
Business Number for the year n-1 Business Number n/ Business Number n-1	Liquidity	X3
Financial/total debt expenses	Growth rate	X4
Tax paid/net profit before tax	Interest rate	X5
	Tax rate	

Table 1 shows the measurement of study variables

4- Standard study of the determinants of financial architecture:

Panel models are a modern way of standard economics that fits the data of this study and that will be used to measure the impact of financial variables on the financial structure, as will be determined the optimal model that represents this relationship by conducting several tests.

These models identify statistical significance variables individually using an Estonian test and the explanatory power of the model through the Fischer and Rate Limiter test, based on the EVIEWS9 software and the STATA14 software.

Panel models

After collecting the financial reports (budget and result account table) of fifteen participating companies operating in the state of Ouargla-Algeria, calculated the financial ratios representing the study variables are calculated and then showed them in the EXCEL program user table as shown in Appendices (01 and 02) and then the data are cleared in the EVIEWS 9 program and the results were as follows:

a. -Profibusform

Table (2) shows the results of the aggregate form

Dependent Variable: Y Method: Panel Least Squares Date: 07/23/17 Time: 11:23 Sample: 2010 2015 Periods included: 6 Cross-sections included: 15 Total panel (balanced) observations: 90

Variable	Variable Coefficient		t-Statistic	Prob.
C	1.491391	0.345685	4.314305	0.0000
X1	0.502433	0.446102	1.126275	0.2633
X2	-0.456709	0.207705	-2.198833	0.0306
X3	-0.164894	0.255681	-0.644922	0.5207
X4	-0.315089	3.330057	-0.094620	0.9248
X5	1.861931	1.663887	1.119025	0.2663
R-squared Adjusted R-squared S.E. of regression Sum squared resid Log likelihood F-statistic Prob(F-statistic)	0.069907 0.014544 1.844779 285.8696 -179.7121 1.262703 0.287722	Mean depend S.D. depende Akaike info cr Schwarz crite Hannan-Quin Durbin-Watso	dent var ent var iterion rion n criter. on stat	1.191070 1.858342 4.126937 4.293591 4.194141 1.267919

Source: 9EVIEWS outputs based on Appendix01

From the above table the probability value of the estimated parameters of the model is noted (the probability value of the stodnet) is $_1\alpha = 0.2633$, $_3\alpha = 0.5207$, $_4\alpha = 0.9248$, $_5\alpha = 0.2663$ all greater than 0.05 except for the probability value $_2\alpha = 0.0306$ and from which variables concluded_{are 1}X, $_3X$, $_4X$, 5X, are not significant at 5%.

- Fischer's probabilistic value F= 0.28772 is greater than 0.05 and therefore there is no total significant significance of the model at the 5% indication level

The modulated selection factor (corrected) R= 1.45% is very weak, i.e. independent and static variables do not explain the dependent variable and therefore the aggregate model is not suitable for study.

b. -Randommodel

Table 3 shows the results of the random sample

Dependent Variable: Y Method: Panel EGLS (Cross-section random effects) Date: 07/23/17 Time: 11:27 Sample: 2010 2015 Periods included: 6 Cross-sections included: 15 Total panel (balanced) observations: 90 Swamy and Arora estimator of component variances

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C ×1 ×2 ×3 ×4 ×5	1.260711 0.404519 -0.306488 -0.144090 -0.746728 2.113864	0.413628 0.448808 0.226999 0.252145 3.261821 1.705732	3.047933 0.901318 -1.350176 -0.571457 -0.228930 1.239271	0.0031 0.3700 0.1806 0.5692 0.8195 0.2187
	Effects Spo	ecification	S.D.	Rho
Cross-section random Idiosyncratic random			0.809525 1.715247	0.1822 0.8178
	Weighted	Statistics		
R-squared Adjusted R-squared S.E. of regression F-statistic Prob(F-statistic)	0.046464 -0.010294 1.702020 0.818641 0.539782	6464 Mean dependent var 0294 S.D. dependent var 2020 Sum squared resid 3641 Durbin-Watson stat 2782		
	Unweighted	d Statistics		
R-squared Sum squared resid	0.060451 288.7760	Mean dependent var Durbin-Watson stat		1.191070 1.219373

Source: EVIEWS9 output based on Appendix 01

From the previous table, it is clear that the probability value of the estimated parameters (the probability value of the stodnet) is $_1\alpha = 0.3700$, $_2\alpha = 0.1806$, $_3\alpha = 0.5692$, $_4\alpha = 0.8195$, $_5\alpha = 0.2187$ all greater than 0.05 which means that the variables $_{are 1}X$, $_2X$, $_3X$, $_4X$, $_5X$, $_5X$, $_5X$, do not have a statistical significance at 5%

- Fischer's probabilistic value F= 0.539782 is greater than 0.05 and therefore there is no total significant significance of the model at the 5% indication level

- The parameter R=4.06% is very weak, i.e. independent and static variables explain the dependent variable only 4%. The random form is therefore inappropriate for study.

Fixed model Table (4) shows the results of the static model Dependent Variable: Y Method: Panel Least Squares Date: 07/23/17 Time: 11:25 Sample: 2010 2015 Periods included: 6 Cross-sections included: 15 Total panel (balanced) observations: 90

Variable	Coefficient	Std. Error	t-Statistic	Prob.
С	0.903223	0.404635	2.232193	0.0288
X1	0.287663	0.483957	0.594398	0.5542
X2	-0.061141	0.271816	-0.224936	0.8227
X3	-0.118271	0.265867	-0.444849	0.6578
X4	-1.480674	3.429292	-0.431773	0.6672
X5	2.379458	1.877591	1.267293	0.2093

Effects Specification

Cross-section fixed (dummy variables)

Beguered	0.220045	Maan danandantyor	1 101070
R-Squared	0.329945	Mean dependent var	1.191070
Adjusted R-squared	0.148074	S.D. dependent var	1.858342
S.E. of regression	1.715247	Akaike info criterion	4.110122
Sum squared resid	205.9452	Schwarz criterion	4.665635
Log likelihood	-164.9555	Hannan-Quinn criter.	4.334137
F-statistic	1.814164	Durbin-Watson stat	1.687435
Prob(F-statistic)	0.037974		

Source: EVIEWS9 outputs based on Appendix 01

From the above table the probability value of estimated parameters is noted (the probability value of Stodnet) is $_{1}\alpha = 0.5542$, $_{2}\alpha = 0.8227$, $_{3}\alpha = 0.6578$, $_{4}\alpha = 0.6672$, $_{5}\alpha = 0.8227$ is greater than 0.05 and this means that the variables $_{are 1}X$, $_{2}X$, $_{3}X$, $_{4}X$, $_{5}X$ are not significant at 5%

Possibility value F= 0.037974 is less than 0.05 and therefore the model has a statistical indication at an indication level of 5%

The R=14.80% limiting factor is relatively weak, i.e. independent and static variables do not explain the dependent variable at 14.8%

Although the model has statistical significance, it is not considered the appropriate model for this study. Dynamic Panel models

The preceding part shows Panel models as inappropriate and this is because the data for this study is based on a short-term time series (06 years) only and also a few cross-sectional data (15 shareholding companies) where Panel models have meaning when time series and time series are short but the data are endless.

In order to overcome these forms, this study relies on dynamic Panel models.

-The study sample consists of a variety of shareholding companies that differ in terms of financial indicators that represent study variables, which requires the use of dynamic panel models that take into account the individual data heterogeneity and are based on the autonomic regression model of Arellano and bond 1991 because a linear correlation between the variables in the previous part of the study is remarked between the dependent variable X1 and the independent variable X1 as well as milk of the independent variable X1X5.

The autonomic regression model (Arellano and Beyond 1991) is based on the use of dependent variables as their previous value as explanatory variables i.e. slowingdown or delaying dependent variable so that the effect of the past value of the variable explained can be assessed on their present value by the following model:⁷

. xtdpdsys y :	x1 x2 x3 x4 x3	5, lags(1) m	axldep(2)	maxlags	(2) twostep	artests(2)
System dynami Group variable	c panel-data (e: id	Number (Number (of obs of groups	= 75 = 15		
lime variable	: year			Obs per	group:	
				ODD pc1	min	= 5
					avg	= 5
					max	= 5
Number of ins	truments =	17		Wald ch:	i2(6)	= 11663.86
Two-step resul	lts			FIOD > 0	51112	- 0.0000
Two-step resul	lts					
У	Coef.	Std. Err.	z	P> z	[95% Con	f. Interval]
v						
L1.	.4580967	.0105279	43.51	0.000	.4374624	.478731
x1	1.289789	.1858396	6.94	0.000	.9255498	1.654028
x2	0570881	.1001168	-0.57	0.569	2533134	.1391372
x3	1295642	.0616587	-2.10	0.036	2504129	0087154
x 4	-12.35828	4.919931	-2.51	0.012	-22.00117	-2.715394
x5	.2083513	.7488111	0.28	0.781	-1.259292	1.675994
_cons	.8442371	.0673602	12.53	0.000	.7122135	.9762607
Warning: gmm 1	two-step stand	lard errors	are biase	d; robust	t standard	
Tratrumenta f	rs difference	anueu.				
instruments IC	or arrierenced	equation				
GMM-t	уре: L(2/3).У	D	D			
Standa	ara: U.X1 D.X2	2 D.X3 D.X4	D.X5			
Instruments fo	or level equat	lon				
GMM-ty	ype: LD.y					

Table (5) shows the analysis of the Dynamic Panel model

Source: STAATA 14 output based on Appendix 01

Standard: _cons

In light of the results shown in the above table, this study finds:

In the case of the variable X1which represents the rate of profitability it has significant statistical significance at a level of 5%, because the corresponding probability value equals 0,5 which is less than the moral value of 0.05 and its coefficient equals 1.28 by a positive amount. In the case of the X2variant, which represents a liquidity ratio, it has no statistical significance at 5%, because the corresponding probability valueequals 0.569, which is greater than the moral level of 0.05 and its coefficient equals 50.0 A negative amount. In the case of the X3variable, which has a statistical significant growth rate of 5%, this is because the corresponding probability value is 0.036, which is lower than the moral level of 0.05 and its treatment is equal to 0.129, a negative amount. In the case of the variable X4that represents the rate of interest, it has a statistical significance of 5%, because the corresponding probability value is 0.012, which is less than the moral level of 0.05 and its treatment is 12.36. For the variable X₅which represents the tax rate, it has no statistical significance at the level of 5%, because the corresponding probability value equals 0.7881, which is greater than the moral value of 0.05 and its treatment is equal to 0.08, 2 by a positive amount. To achieve the optimal relationship between the financial environment variables and the capital structure, this study excludes variables that are not statistically significant at a significant level 5% are each variable X₂, which represents the liquidity rate, variable X₅ that represents the tax rate, then enter the data into the STAATA 14 program, and the results are shown in Table 6 as follows:

. xtdpdsys	y x1 x3 x4, 1	ags(1) maxlo	dep(2) max	(lags(2) t	wostep ar	tests	3(2)
System dyn	amic panel-dat	a estimation	n	Number	of obs	=	75
Group vari	able: id			Number	of group	s =	15
Time varia	ble: year						
				Obs pe	r group:		
					m.	in =	5
					a	vg =	5
					11.	a	5
Number of	instruments =	15		Wald c	:hi2(4)	=	65968.40
				Prob >	chi2	=	0.0000
Two-step r	esults						
У	Coef.	Std. Err.	z	₽> z	[95% C	onf.	Interval]
y							
L1.	.4526036	.0030611	147.85	0.000	.44660	38	.4586033
×1	1 591647	0213417	74 58	0 000	1 5498	18	1 633476
	2224125	.0210117	,1.00	0.000	1.0100	40	1.0004/07
x.3	2224125	.02/016/	-8.23	0.000	2/536	43	1694607
x 4	-4.437059	.0738695	-60.07	0.000	-4.5818	41	-4.292278
_cons	.7978972	.0230687	34.59	0.000	.75268	34	.843111

Table (6) shows analysis of the Dynamic Banel model after removing non -influential factors

```
Warning: gmm two-step standard errors are biased; robust standard
errors are recommended.
Instruments for differenced equation
GMM-type: L(2/3).y
Standard: D.x1 D.x3 D.x4
Instruments for level equation
GMM-type: LD.y
Standard: _cons
```

Source: STAATA 14 output based on Appendix 01

After removing the two variables X_2 and X_5 , its is noticed that the explanatory power of the model has improved as the probability value of the X3variable that represents the growth rate is about 0,036 and the probability value of the X4variable that represents the interest rate is even as much as 0.012.

From the above table, the optimal relation between variables is drawn, which is as follows: $Y = 0.4526Yt_{.1} + 1.59316X_1 - 0.22241X_3 - 4.43706X_4 + 0.7979$ $Y = B_1 Yt_{-1} + B_2X_1 + B_3 X_3 + B_4 X_4 + C$

Third: Analysis and interpretation of results: This study attempts to summarize and analyze the most important findings of the Standard Study as follows:

- 1. **Changing Margin**: Given the explanatory power of the company study variables, the higher the profit margin ratio in a single unit, the higher the financial leverage by 1.53 and the trend between the margin ratio and the financial leverage is positive, then this study accepts proposition Ho that there is a statistical effect and significance between the company's profitability and its financial structure, and this positive effect can be explained by the fact that companies with lower profit rates face more difficulties in obtaining loans than financial institutions .
- 2. Variable liquidity: The results have shown that there is no impact between corporate liquidity and financial structure, i.e. liquidity does not explain the changes in the financial structure, because the financial managers of companies do not take liquidity into account when choosing the financial structure of the company.
- 3. **Changing Growth Rate**: Through the model that represents the relationship between study variables, it is noted that the higher the growth rate in one unitthe financial leverage changes by 0.22 in the opposite direction, so accept the proposition Ho that there is a statistically significant relationship between the growth rate and the financial structure of the company, and the negative impact can be explained by the fact that firms with larger growth rates depend on their internal sources (retained earnings) for their needs.

- 4. **Variable tax rate**: Through the findings, we notice an adverse effect between the tax rate and the financial structure of the company, whereby whenever the tax rate increases by one unit, the financial leverage rate decreases in the opposite direction by 4.437. Therefore, the hypothesis H is accepted, which states that there is a significant relationship. A statistic between the tax rate and the financial structure, and the negative impact of this relationship can be explained by the fact that companies that pay a higher amount of tax resort to internal sources of financing (withholding profits) to finance their needs in order to reduce costs (financial expenses) because they incur greater costs through paying taxes.
- 5. Variable Interest Rate: The results showed that there was no effect between the interest rate and the financial structure of the company, i.e. that the interest rate on borrowing funds does not explain the changes in the financial structure, thus accepting the H_1 hypothesisthat there is no statistically significant relationship between interest rate and financial structure, because financial managers do not take interest rate into account when choosing the financial structure, due to the rate of borrowing in Algeria during the 8% study years.

III. CONCLUSION

The study found that there is a difference between the factors of the financial environment of the companies under study, depending on their different size and the quality of their activity. There is a statistically significant correlation between profitability, financial structure (leverage), which is consistent with all previous studies but in the opposite direction, and this is due to the government's economic policy of encouraging investment to facilitate companies' access to funds by debt and for a few costs, which does not exist in other former selffinancing studies in the case of profit realization. There is no statistically significant relationship between the rate of liquidity and the structure of this is consistent with that of Abdullaim (FSM2003). There is a statistically significant negative correlation between growth rate and financial structure, which is consistent with all previous studies except that of Mohamed Tawfik (2005). There is a negative statistical correlation between tax rate and financial structure, as this result differs with the study of Muhammad Tawfiq (2005) and Ghazi Falah Al-Momani (2011) and Joseph's study. (1999) is consistent with other previous studies. There is no statistically significant relationship between interest rate and financial structure and this result agrees with the Frank, B study. Busha,M (2004), while it differed with Ghazi Falah al-Momani's study (2011), but other studies did not address the tax rate as an independent variable affecting the financial architecture. Finally, it is recommended that companies should consider all factors that the study found to have an impact on the decisions of the financial structure in order to achieve the appropriate financial leverage. The firms under consideration should work to develop new mechanisms and strategies to achieve an optimal financial structure that would make the cost of financing minimal.

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rippenaix of changing the study variables											
Y	X5	X4	X3	X2	X1	Number	Year	Company			
2,9921	0.2056	0,0072	0001	0.9805	0,0917	1	2010	CSSI-SPA Algérie			
3,0012	0.1915	0,0076	0.6062-	1,0689	0,0814	1	All rights reserved	CSSI-SPA Algérie			
1,9014	0001	0001	0001	1,2296	0001	1	2012	CSSI-SPA Algérie			
2,0238	0001	0001	0001	1,185	0001	1	2013	CSSI-SPA Algérie			
2,1024	0.0236	0,0022	0001	1,240	0,0615	1	2014	CSSI-SPA Algérie			
2.2292	0.2595	0.0220	9773-	1,1369	0.0345	1	2015	CSSI-SPA Algérie			
0001	0001	0001	0001	0001	0001	2	2010	ENSP			
0.2592	0.2072	0.0115	0001	1,792,134	0,0855	2	All rights reserved	ENSP			
0.2941	0.2247	0,0004	0.3285-	3,4452	0.1597	2	2012	ENSP			
0.2850	0.2402	0,0004	0.1407-	3,4928	0.1983	2	2013	ENSP			
0.2881	0.2516	0001	0.1128-	3,2645	0.1895	2	2014	ENSP			
0001	0001	0001	1.0000	0001	0001	2	2015	ENSP			
0001	0001	0001	0001	0001	0001	3	2010	SPA BAYAT CATRING			
0,0000	0.0550	0.5420	0001	1007	0,0721	3	All rights reserved	SPA BAYAT CATRING			
1,8730	0.2500	0.0000	0,0765-	0.8901	0.0284	3	2012	SPA BAYAT CATRING			

Appendix 01: Clarifying the study variables

0001	0001	0001	1 0000	0001	0001	3	2013	SPA BAYAT CATRING
3,2973	0.2300	0001	0001	0001	0.0310	3	2013	SPA BAYAT CATRING
2,4559	0.2600	0001	0,0549	1,154	0.0272	3	2015	SPA BAYAT CATRING
0.9047	0.1416	0.0334	0001	3,0730	0.0127	4	2010	ENAFOR
0 4919	0 2498	0.0388	0.0010	3 8858	0.0929	4	All rights	ENAFOR
0.1712	0.2190	0.0300	0,0010	4.0050	0,0929	4	reserved	
0.4/13	0.2674	0.0314	0973-	4.8264	0,0809	4	2012	ENAFOR
0.4430	0.2376	0.0159	0978-	2.2707	0.1284	4	2013	ENAFOR
0,3323	0.2075	0.0173	0.1000-	2.3038	0.2023	4	2014	ENAFOR
0.7995	0.2030	0.0224	0.1055-	2,0485	0.1887	5	2013	ENAFOR ENGEO
0001	0001	0001	0001	0001	0001	5	All rights	E,N,OEO
0.1924	0.3559	0.0111	0001	3,9274	0.1123	5	reserved	E,N,GEO
0.1662	0.3931	0.0219	0.0238-	4,249	0,0673	5	2012	E,N,GEO
0,4198	0.2251	0,0045	1,5951-	5243	0.1674	5	2013	E,N,GEO
0.3840	0.2406	0,0015	0.1733-	1,9938	0.2304	5	2014	E,N,GEO
0.2471	0.1470	0001	0.0190	2,5661	0.1865	5	2015	E,N,GEO
0001	0001	0001	0001	0001	0001	6	2010	S P A TASSILI
3,7090	0001	0,0008	0001	0,9422	0,0899	6	All rights	S P A TASSILI
3 2052	0001	0.0007	1 3312-	0.8842	0.0917	6	2012	
2 7324	0001	0,0007	0.0394	0.8085	0,0717	6	2012	
1 9888	0.1900	2000	0.8345	0.8641	0.1152	6	2013	S P A TASSILI
1,9937	0.0725	2000	6.0793-	0.7586	0.0885	6	2015	S P A TASSILI
0.2776	0.2417	0001	0001	1.6375	0.1631	7	2010	SPA HESP Halliburton
0.2095	0.01(7	0.0112	0.0241	0141	0.1702	7	All rights	CDA LIECD Hallibertan
0.2085	0.2167	0.0112	0.0241-	9141	0.1723	/	reserved	SPA HESP Halliburton
0.3798	0.2638	0,0078	0.2118-	1,792,134	0.1928	7	2012	SPA HESP Halliburton
0.1931	0.3067	0,0041	0.3011	1,183.67	0.0318	7	2013	SPA HESP Halliburton
0.1778	0001	0.0107	0.1776	2,4233	0.0208-	7	2014	SPA HESP Halliburton
0.1764	0.4098	0.0266	0.3017-	2,3582	0.0125	7	2015	SPA HESP Halliburton
1,0574	0.2058	0,0533	0001	1,3803	0,0530	8	2010	RED MED SPA
0,7279	0.2271	0,0509	0.1062	2.1831	0,0536	8	All rights	RED MED SPA
0.7624	0.3685	0.0325	0.1154	1.0747	0.0132	Q	2012	PED MED SPA
0.7024	0.001	0.0323	0.0900	0.8199	0.0132	8	2012	RED MED SI A
0.8848	0.2162	0.0204	0.0500	0 7854	0.0249	8	2013	RED MED SFA
0.9169	0.3015	0.0172	094-0943	0.8918	0.0845	8	2015	RED MED SPA
1.3088	0.2863	0001	0001	1.6153	0.0198	9	2010	SPA ALPHA COMPUTERS
0.6240	0.2792	2000	0.2967	2.1124	0.0292	0	All rights	SDA ALDHA COMDUTEDS
0,0249	0.2785	2000	0.3807	2,1124	0.0285	9	reserved	SFA ALFHA COMPUTERS
0.9228	0.3412	0.0225	0,0503	9718	0.0228	9	2012	SPA ALPHA COMPUTERS
0,8185	0.3964	0,0086	0.2328-	2,1150	0.0155	9	2013	SPA ALPHA COMPUTERS
0.7805	0.2588	0,0044	0.2049	1,/120	0.0163	9	2014	SPA ALPHA COMPUTERS
0.7270	0.2826	0,0645	0.3090-	2,0536	0.0211	9	2015	SPA ALPHA COMPUTERS
0,8185	0.2750	0.0140	0001	1,5510	0.1057	10	All rights	S.P.A DASP
0.4579	0.2801	0.0254	0.0182	1,8345	0,0813	10	reserved	S.P.A BASP
0.2358	0001	0.0345	0 5466	2 5726	0.1554-	10	2012	S P A BASP
0.5356	0001	0.0030	0.3305	1.2687	0.2746-	10	2012	S.P.A BASP
0.8117	0001	0.0524	0.6854-	1,1921	0.0654-	10	2014	S.P.A BASP
1,5915	0001	0,0877	0,7506-	0.9027	0,0451-	10	2015	S.P.A BASP
1,3832	0.1451	0,0010	0001	1,8815	3.1920	11	2010	SPA EUREST ALGERIE
1 5879	0 1521	0.0024	0.0153-	1 7925	2 1853	11	All rights	SPA FUREST AI GERIE
1,5077	0.1321	0,0024	0.0155	1,7923	2.1055	11	reserved	STREEKESTREGEKIE
3,3915	0001	0,0037	0,4211	1,7783	0,0417-	11	2012	SPA EUREST ALGERIE
6.5588	0001	0,0038	0.2828	0001	0,0697-	11	2013	SPA EUREST ALGERIE
2901-	0001	0,0623	0.8381	1,5976	0.7186-	11	2014	SPA EUREST ALGERIE
0001	0001	0001	1.0000	0001	0001	11	2015	SPA EUREST ALGERIE
0001	0001	0001	0001	0001	0001	12	All rights	
4.8786	0.2212	0,0063	0001	0.8346	0,0534	12	reserved	SPA BAYAT construction
5.1831	0.3352	0001	0.6605	0.5981	0,0407	12	2012	SPA BAYAT construction
5.1097	0.2042	0001	0.1529-	0.6059	0,0412	12	2013	SPA BAYAT construction
0001	0001	0001	0.2797	0,5188	1,1574-	12	2014	SPA BAYAT construction
0001	0001	0001	0,5175-	0.5332	0.6684-	12	2015	SPA BAYAT construction
1,1058	0.2512	0.0176	0001	0,9536	0.1764	13	2010	SPA WESP
1.4821	0.2570	0.0055	0.2436-	0.7632	0.0915	13	All rights	SPA WESP
1,1621	0.2575	0,0057	0.2101	0.0214	0,0510	10	reserved	
1,1010	0.2305	0,0257	0.5101-	0.9314	0.1418	15	2012	SPA WESP
0.0728	0.2809	0,0027	0,0312	1,2740	0.1708	13	2015	SPA WESP SDA WESD
0.3369	0001	0001	1 0000	0001	0,0020	13	2014	SPA WESP SPA WESP
0001	0001	0001	0001	0001	0001	13	2013	SPA STAR AVIATION
0.001	0.0001	0.0111	0001	0.001	0.0101	17	All rights	
2,8863	0.2837	0,0461	0001	0,9581	0,0436	14	reserved	SPA STAR AVIATION
2.1313	0.2671	0,0433	0,0518-	0,8177	0,0512	14	2012	SPA STAR AVIATION
1,7092	0,4214	0.0390	0.0223	0,8120	0.0109	14	2013	SPA STAR AVIATION
4.3042	0001	0,0451	0.0282	0.6067	0,0538-	14	2014	SPA STAR AVIATION
7,7337	0001	0,0641	0.3173-	0.6585	0,0590-	14	2015	SPA STAR AVIATION
0001	0001	0001	0001	0001	0001	15	2010	SPA SOS ALGERIA
1,6073	0.2836	0001	0001	1,3761	0,0710	15	All rights	SPA SOS ALGERIA
7 7745	0001	0.0002	0.2076	0.6200	0.2020	15	reserved	
1.1/05-	0001	0,0003	0.3076-	0.0088	0.3030-	15	2012	SPA SUS ALGERIA

2.2653-	0001	0001	0.4452-	0.3962	0.2982-	15	2013	SPA SOS ALGERIA
3,0556	0001	2000	0,7445-	0.4062	0.2442	15	2014	SPA SOS ALGERIA
3,0556	0,0679	0001	0,5296-	1,2472	0.0177	15	2015	SPA SOS ALGERIA

Appendix 02: Clarifying the calculation of Variables' Averages

Му	Mx5	Mx4	Mx3	Mx2	Mx1	Company	Number
2.2865	0,0438	0,0004	1,0894-	0,7246	0,0819	TASSILI	1
2.1052	0,0495	0.0122	2.1789-	1,1750	0,7579	EUREST ALGERIE	2
2.8524	0,0586	0001	0.3378-	0.6824	0,0537-	SOS ALGERIA	3
0,7418	0,0925	0.0363	0901-	5204	0,0593-	BASP	4
2,3750	0.1134	0,0065	0.2639-	1.1764	0,0448	CSSI Algérie	5
2,5286	0.1268	0,0011	0.0450	0.5151	0.2818-	BAYAT construction	6
0.1877	0.1539	0,0021	0,0697	2.3448	0.1055	ENSP	7
3.1274	0.1620	0.0396	0,0531-	0.6422	0,0012-	STAR AVIATION	8
0,8268	0.1733	0,0086	0.1328	0.9342	0,0981	WESP	9
0,8615	0.2198	0.0319	0,0003	12826	0.0262	RED MED	10
0.2349	0.2270	0,0065	0.2955-	2,4228	0.1273	E,N,GEO	11
0.6072	0.2279	0.0266	0,0767-	3.1023	0.1177	ENAFOR	12
0.2355	0.2398	0.0101	0,0098-	1,9969	0,0920	HESP Halliburton	13
0.8638	0.3073	0.0167	0.0167	1,79300	0.0206	ALPHA COMPUTERS	14
1,2710	0.1325	0,0903	0.1631	0,5177	0.0264	BAYAT CATRING	15
1,167,150	0.1568	0.0142	0.2951-	1,4540	0,0769	Average	
1,027059	0.078006	0.023745	0.6108756	0.79983	0.215299	Standard Deviation	