

An evaluation of liquidity and profitability of Non-Financial Entities in Algeria

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Abstract :	ملخص:
Profitability and liquidity are considered to be the most important issues in the corporate finance, in this study we investigate the effect of profitability, capital structure, and firm size on liquidity, and at the same time we test the impact of these variables on profitability, among a sample of 25 Algerian companies from 2013 to 2018, collected from the database of the National Center of the Trade Register (CNRC), via their online platform called "Sidjilkom". relying on the SPSS 21 with the application of the Multiple Linear Regression analysis. We have concluded that, on the one hand, profitability affects negatively liquidity. Whilst, leverage and firm size have a positive relationship with liquidity. On the other hand, we have concluded that liquidity positively impacts profitability. However, there is a negative influence of debt and firm size on the profitability. Keywords: liquidity; profitability; capital structure; company; Algeria.	تعتبر الربحية والسيولة من أهم القضايا في مالية الشركات، وفي هذه الدراسة نبحث تأثير الربحية وهيكل رأس المال وحجم الشركة على السيولة ، وفي نفس الوقت نقوم باختبار تأثير هذه المتغيرات على الربحية ، من بين عينة من 25 شركة جزائرية من 2013 إلى 2018 ، تم جمعها من قاعدة بيانات المركز الوطني للسجل التجاري (CNRC)، عبر منصتها على الإنترنت المسماة "سجلكم". الاعتماد على SPSS 21 مع تطبيق تحليل الانحدار الخطي المتعدد. لقد توصلنا إلى أن الربحية ، من ناحية ، تؤثر سلباً على السيولة. في حين أن الرافعة المالية وحجم الشركة لهما علاقة موجبة بالسيولة. من ناحية أخرى ، توصلنا إلى أن السيولة تؤثر بشكل إيجابي على الربحية. ومع وجود تأثير سلبي للديون وحجم الشركة على الربحية. الكلمات المفتاحية: سيولة؛ ربحية؛ هيكل رأس المال؛ شركة؛ الجزائر.
JEL Classifications	H32; G31; G32

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1. Introduction:

Our aim in this article is to study the effects of liquidity position, capital structure, and the firm size on the financial performance measured by the profitability. And at the same time study the effects of profitability, capital structure, and firm size on the liquidity position measured by the current assets over current liabilities of the Algerian companies.

Profitability and liquidity are the most important issues in the corporate finance (Ofoegbu et al, 2016, P.2), the concept of financial liquidity is not exceptionally straight, as it has different aspects, even though generally it deals to the current assets and current liabilities management (Krishnamoorthi & Venkatesh, 2017, P.102). Financial liquidity is mutually with profitability are the core participants of enterprise activities which, in order to function efficiently and effectively, the company should give regular important. The financial liquidity position will affect profitability of firm; static level in liquidity position will affect negatively profitability. Decision making on profitability and liquidity are depends on proper planning. The aspect of proper planning should be in the view of marketing, production, human resource and financial budgeting.

For profitability determinants, we investigate the liquidity position as a determinant of profitability for Algerian companies. Since Liquidity management is a vital one in every firms like a blood circulation in the human body here liquidity management means managing the firm's day to day operations and only recurrent activities are considered. (Vickneswaran, 2016, P.15) Every organization has to maintain their current ratio according to their business needs of the industry there may be a bench mark for the current ratio even though every firm should know how much probation between current assets and current liabilities better for their organization. The liquidity is a complex notion that influences the firm's cost of equity capital through at least two channels, level and risk (Amihud & Mendelson, 1986, P.240) Investors care about the level of liquidity because it enables them to trade large quantities at a low cost in a relatively short amount of time. (Amihud & Mendelson, 1986, P.232) were the first to link liquidity level and the firm's cost of equity by showing that expected returns increase in illiquidity costs.

Capital structure is considered also as an important determinant which can interpret the level of profitability, a review of the literature reveals the difficulty of the main theories of financing to explain the financial reality of companies because they only explain part of the financing policies of companies. Studies on this subject have clearly shown that the choice of a financing method, whether internal or external, debt or equity, long-term or short-term, is likely to have different effects on the financial performance of the company. The development of the financial sector and in the presence of a diversification in terms of financing means puts the company in the obligation to intervene in the financial markets (case of issuance of shares, bonds or financial securities). or a contract with banks or non-bank financial companies. With the sophistication of the financial sphere in recent decades, the means of financing available to companies are many and diverse. Indeed, a company can not only finance itself through its liabilities, namely conventional means such as equity, quasi equity and its various forms, but also through its assets by means of financial arrangements such as securitization, leasing are also very popular means lately. However, once aggregated, this is a trade-off between debt and equity to get the optimal capital structure.

Firm size and profitability have a positive relationship because larger firms are considered to be more successful and therefore maintain a profitable profile. Nevertheless, neither (Opler et al., 1999, P.23) nor (Ferreira & Vilela, 2004,

P.311) found evidence supporting this prediction. Firms that are large in size, presumably are expected to be more successful, and hence should have more cash, after controlling for investment (Opler et al., 1999, P.27). The similar positive relation is also suggested for the level of cash flows as, controlling for other variables, it is expected that firms with high cash flow will be more profitable and have high level of liquidity.

For liquidity determinants, we study the effects of profitability on liquid assets held by a company. Liquidity requires withdrawal of profitable funds for the need of liquidity balance to ensure stability. On the other hand, the liquidity might be easily secured by higher rates of profitability and substantial increase in invested working capital. Liquidity has always been a specific priority area for financial managers. The difficulty of managing liquidity is strengthened by the need to compensate all detracted sources from the operating cycle and the likely reduction of turnover and profitability. Liquidity-related risks can often lead to deterioration of the financial situation, profitability, and even bankruptcy.

For the effects of the capital structure on liquidity, crisis management places high importance on liquidity due to the lack of access to capital or higher cost of financing. In times of economic growth and stability, the excessive access to low cost capital sources facilitates the matching of cash inflows and outflows.

Academic literature on liquidity assets held by firms can be dated back to (Keynes, 1936, P.359), who indicates two main benefits from holding cash and liquid assets: lower transaction costs from not having to liquidate assets when facing a payment and a valuable buffer to meet unexpected contingencies. The literature about liquidity specifically applied to companies is generally traced back to (Miller & Orr, 1966, P.419), who develop a trade-off model for the determination of the optimal level of liquidity by balancing the costs of running out of cash and the costs of holding non-interest bearing cash. The trade-off model of liquid assets, (Miller & Orr, 1966, P.430) is typically opposed to the financing hierarchy theory, which does not assume an optimal level and expects higher levels of cash reserves in more profitable firms as a financial slack. Together with these two main views, there are several other hypothesis that contribute to the determinants of cash holdings. In fact, financially big size firms, firms with a lower access to external financing, should have a higher propensity to save liquidity out of cash flows (Almeida et al., 2004, P.1798), should prefer liquidity to lower debt for higher levels of hedging needs and to realise (Al-Najjar, 2013, P.81), and have a higher dollar value of liquid assets held (Bigelli & Sánchez-vidal, 2012, P.29).

Given the above, a problem deserves to be asked, keeping sufficient liquidity level concentrate on avail adequate funds in current assets, unavailable of raw material will affect the business process. Simultaneously, maintaining high level of liquidity has an influence on profitability of the company. Therefore, the firm should always try to preserve stability between liquidity and profitability. The firm's liquidity should be in very stable level, and not be too high or too low. In another viewpoint, insufficient liquidity position might damage the company's goodwill, depreciate company's credit standard and that might lead to enforced insolvency of company's assets. Thus, our study initiates to evaluate the liquidity and profitability of firms to avoid future financial bankruptcy.

2. Literature Review

2.1 Profitability

The profitability of the company can be measured by analysing its economic and financial performance. They are expressed by quantified indicators which aim to assess the effectiveness and efficiency of the company in the use of its resources, taking into account the nature of its activities and its expected objectives (Tari & Attari, 2018, P.260). Given the scope of the concept "Profitability", and the different points of view relating to its calculation, fed by the divergence in terms of "flow of profit" and/or "Stock of capital" to be taken into consideration in view of measuring profitability; in accordance with the objectives pursued by users to measure the performance of their business, we can distinguish in particular two (02) classic conceptions of profitability; Return On Assets (ROA) which is calculated by the Net profit over total assets, and Return On Equity (ROE), calculated net profit over total equity (Bouquin, 2011, P97). (Abuzar & Eljelly, 2004, P54) found the relationship between liquidity and profitability through current ratio and cash conversion cycle on selected joint stock companies in Saudi Arabia. According to the results of the study there was a significant negative relation between the firm's liquidity level and profitability, as measured by current ratio. Furthermore according to this study they noted that the cash conversion cycle is of most importance to measure the liquidity than current ratio. Same results have been conducted by (Rudin et al., 2016, P.302) who claim that liquidity and profitability have a negative relationship. From this analysis, we can formulate the following hypothesis:

H1.1: There is a negative relationship between profitability and liquidity.

(Rudin et al., 2016, P.303) claim that liquidity and capital structure simultaneously have significant effect on profitability of property and real estate industry in Indonesian stock exchange within the period of 2005-2010. Otherwise, if the company wants to maximize the profitability, it could also affect the company's liquidity and leverage level. The higher liquidity and leverage, the better position of company in creditor's view. In determining the management policy of liquidity and leverage, the companies are faced to trade-off between the liquidity and leverage that can affect profitability (Van Horne & Wachowicz, 1997, P.476). (Garcia-Teruel & Martinez-Solano, 2007, P.167) found that the capital structure of the listed non-financial has a significantly effect on the profitability of the selected firms. According to (Vickneswaran, 2016,, P.13) the selected manufacturing firms and other similar firms should consider their determinants of the profitability such as liquidity position, capital structure and firms' growth because those factors significantly impact on the firms' profitability.

The pecking order theory specifies that the more the company is profitable the less it will go into debt (Myers, 1977, P159) In fact, profitable companies reinvest their profits while less profitable companies borrow and thus increase their leverage, which generates a negative relationship between profitability and debt. Debt is more than useful for managing conflicts of interest (Jensen & Meckling, 1976, P.344) between managers and shareholders. Indeed, agency theory states that without debt incurred, executives could make decisions that served their own interests at the expense of those of shareholders. However, by raising debt, they are forced to optimize the investment decisions they make so that they can meet their commitments on time. Mitigating conflicts of interest between managers and shareholders therefore requires reducing the free cash flow through debt service, but also the manager's fears about his reputation, which will be tarnished in the event of bankruptcy. On the other hand, leverage allows core shareholders to increase their

economic power by minimizing the dilution of their equity stake and reducing the control and discipline imposed by the market. Based on this analysis, we can therefore formulate the following hypothesis:

H1.2: There is a negative relationship between debt and profitability.

Previous studies agree on the fact that the size of the firm is a very important criteria in the analysis of profitability, as an indicator of performance measurement, especially in an economic fabric made up as a whole of a very large number small, medium and large companies. (Mameche, 2015, P.29) have claimed that the level of economic profitability of Algerian companies vary according to their size. In addition, the results showed the existence of an average positive correlation between, on the one hand, profitability, and, on the other hand, the firm size and legal form of companies. The analyzes of variance (ANOVA), confirmed that the size and the legal form of Algerian companies have a significant effect on their economic profitability.

(Williamson, 1967, P.134) was one of the first to link firm size to profitability. The author demonstrates using a model that the loss of managerial efficiency in large hierarchical organizations has the effect of limiting the optimal size of enterprises. (Leung et al., 2008, P.11) believes that small businesses are more open to innovation and able to innovate and be more profitable, in part thanks to a more flexible organizational structure and the fact that their managers are more inclined to take risks. However, most of the empirical evidence suggests that various measures aimed at increasing efficiency, such as the use of information and communication technologies (ICT), workforce training, research and development (R&D) activities and innovation, are positively correlated with size.

(Degorre & Reynaud, 2013, P.32) carried out an empirical study which enabled them to identify the characteristics of companies which reduce the volume of employment of unskilled and qualified employees in 1996. These are large companies. Size, with relatively poor performance, and which tended to deteriorate between 1995 and 1996 (drop in turnover, low level of financial profitability), which confirms the link between the size of the company and its profitability. from what precedes we propose the following hypothesis:

H1.3: There is a negative relationship between the profitability of a company and its size.

2.2 Liquidity

What is the value of liquidity? According to (Brealey & Myers., 1996, P.542), determining the value of liquidity is one of the 10 unsolved problems in finance. (Debnath, 2015, P.77) defines Liquidity as the ability of a company to meet the short term obligations. It indicates how fast the company is in converting its assets into cash. Short term liabilities generally signify obligations which are supposed to mature within one accounting year. A company has to meet its short term liabilities in time. It must confirm that it has sufficient cash and cash equivalents to be able to meet its short term obligations.

Previous literature studies, attempted to examine the determinants of liquidity levels among publicly traded US restaurant firms from 1997 to 2008. (Kim et al., 2011, P.72) examined variables, such as profitability, firm size, capital structure, and investment opportunities, to determine if they exert a significant impact on the liquidity of firms. the findings reveal that the cash holdings of restaurant firms are negatively affected by profitability, firm size, and leverage. (Tran et al., 2018, P.564) claim that leverage, cash flow, exert influence on such cash holding behavior by firms' managers. (Tran et al., 2018, P.566) claim that profitability measured by the ROA ratio, firm size, leverage, and investment

opportunity exert influence on such cash holding behavior by firms' managers. This behavior can be explained by the trade-off theory, the pecking-order theory and free cash flow theory. (Yensu, 2014, P.22) shows that corporate cash holdings in the countries are significantly determined by firm size, leverage, profitability, and net working capital, therefore, firm specific factors are important determinants of cash holdings, implying that corporate cash holding is a firm's internal decision. Another regression analysis of the cash ratios of the pooled sample post-spin-off entities suggests that larger firms with higher net working capital ratios are allocated less cash, while firms with lack of rated debt, and higher research and investment expenditure are allocated more cash relative to their assets (D'Mello et al., 2008, P.1219). (Silva, 2018, P.13) have tried to look at the firm-specific factors that determine the level of corporate cash holdings. Firm specific factors were used for three motives of holdings cash. These include transactional, precautionary and financing motive. This study provides results for the determinants of corporate liquidity using firm specific factors. To examine whether the transactional motive is well explained, the coefficient of the firm size is negative, indicating that cash to asset ratio of the Algerian firms is negatively affected by firm size, that suggests that the higher fixed processing fee for obtaining external financing discourages smaller firms to go for external financing and hence prompting them to hold more liquid assets. The managers of these organizations are conservative. They are conscious about the risk factor, that's why they hold large amount of cash in their balance sheet.

The main objective of this section is to specify appropriate measures in terms of the determinants of liquidity, represented by profitability, capital structure, and firm size. In view of that, the following three hypotheses will be verified and considered:

H2.1: The relationship between liquidity and profitability for the selected Algerian companies is negative.

H2.2: The relationship between liquidity and capital structure is negative.

H2.3: The relationship between liquidity and firm size for the selected Algerian companies is negative.

3. Data and Discussion

We will try to answer the main question of our study while trying to take an overview of the sample of companies, by identifying the appropriate variables (dependent & independent), then highlighting the main ones tools to be used, and ultimately performing the appropriate tests, analyses and interpretations. Our final database consists of a random sample of 25 Algerian non-financial entities. It contains information relating to the certified financial statements, between the year 2013 and 2018, collected from the database of the National Centre of the Trade Register (CNRC), via their online platform called "Sidjilkom".

From the analysis of the literature e.g., (Pinkowitz et al., 2006), we exclude financial companies as banks and insurances. We also exclude observations that exhibit negative values in fixed assets, current assets, total assets, long-term liabilities, current liabilities, depreciation, equity, sales, and other additional variables.

In order to answer the main problem of our study, we will use quantitative methods to analyze the empirical results, basing on the appropriate statistical methods and relying on the software the Statistical Package for the Social Sciences "SPSS Statistics 21" to process the data. The main quantitative methods consist of: Descriptive statistics techniques: Mean median, variance and standard deviation, correlation matrix, Analysis of variance (ANOVA), multivariate results.

The Multiple Linear Regression analysis is used to examine the effects of independent indicators on dependent variables for the two models. Whilst, The choice of variables was inspired by the empirical work presented above. Thus, the variables retained, to meet the objectives of our study, can be presented as follows:

Table N° 1: Variables definition and predicted relationship

Variables	Label	Definition	Predicted impact
I. Dependent variable			
Profitability	ROA	Earnings after depreciation, interest, taxes divided by total assets	
Independent variables:			
Liquidity	LIQ	Current assets over current liabilities	Negative
Capital structure (Leverage)	LEV	Debt divided by total equity	Negative
Firm size	SIZE	Logarithm of total assets	Negative
II. Dependent variables:			
Liquidity	LIQ	Current assets over current liabilities	
Independent variables:			
Profitability	ROA	Earnings after depreciation, interest, taxes divided by total assets	Negative
Capital structure (Leverage)	LEV	Debt divided by total equity	Negative
Firm size	SIZE	Logarithm of total assets	Negative

Source: Output of SPSS version 21

3.1 The model

The analysis model approach used was Multiple Linear Regression analysis based on (Opler et al., 1999, P.18) (Sugiyono, 2007, P.57)) as follows.

Model I: Determinants of profitability, Liquidity as an explanatory variable on profitability

$$ROA_{it} = B_0 + B_1 LIQ_{it} + B_2 LEV_{it} + B_3 SIZE_{it} + \varepsilon_t \dots$$

Model II: Determinants of liquidity, profitability as an explanatory variable on liquidity

$$LIQ_{it} = B_0 + B_1 ROA_{it} + B_2 LEV_{it} + B_3 SIZE_{it} + \varepsilon_t \dots$$

Where:

ROA = Return On assets (Profitability);

LIQ = Liquidity of firms;

β = Beta coefficient;

LEV= Financial leverage (proxy of capital structure);

SIZE= The firm size;

ε = Error term.

Empirical results and Discussion

In this section we will present the research results.

Model I:

3.2 Descriptive Statistics

Table N° 2 : Summary statistics

	Mean	Std Dev	N
Return On Assets (ROA)	,0500292	,04946967	149
Liquidity position	4,0096801	12,08080517	149
Leverage (Capital structure)	2,6032344	10,78857045	149
Firm size	10,2279939	,88403725	149

Source: Output of SPSS version 21

While liquidity position manifests a mean of 4.009 as opposed to a mean of 2.603 for the leverage ratio, ROA - which represents the wealth created for all capital providers, i.e. it shows the return on capital invested by shareholders and creditors - is positive, it means that management has created wealth, on the other hand, if it would be negative in this case, there is destruction of wealth. ROA has a mean value of 0.05; firm size's mean is 10.227. The largest standard deviation is present in the liquidity position ratio, whereas the lowest standard deviation is visible on ROA. The arising in the standard deviation of leverage, indicate that different entities have dissimilar capital structures and investment patterns.

3.3 Correlation matrix

Before evaluating the degree of the impact of liquidity position, leverage, and firm size on profitability, we first perform the correlation test, to ensure the independence or dependence between the independent variable and profitability.

Table N° 3: Correlation analysis

		ROA	Liquidity	Leverage	Firm size
Correlation Pearson	Return On Assets	1,000	,118	-,104	-,153
	Liquidity position	,118	1,000	,021	,327
	Leverage (Capital structure)	-,104	,021	1,000	-,050
	Firm size	-,153	,327	-,050	1,000
Sig. (unilaterale)	Return On Assets		,075	,102	,031
	Liquidity position	,075		,398	,000
	Leverage (Capital structure)	,102	,398		,271
	Firm size	,031	,000	,271	
N	Return On Assets	149	149	149	149
	Liquidity position	149	149	149	149
	Leverage (Capital structure)	149	149	149	149

	Firm size	149	149	149	149
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Source: Output of SPSS version 21

Table 3 shows the correlation results of a statistically significant positive relationship between profitability on the one hand, and liquidity position, leverage, and firm size on the other hand, which is analyzed by Pearson correlation, and it shows no significant bivariate correlation between the variables.

3.4 Regression analysis

Table N° 4: Multiple Regression Analysis for model I

Model	R	R-deux	R-deux ajusté	Erreur standard
1	0,721	,519	,689	,4820813

Source: Output of SPSS version 21

Table 4 represents the multiple regression analysis of selected Algerian Companies, statistical significance of the model, the R2 value at 0.519 states that the independent variables consisted of liquidity position, leverage, and firm size have 51.9 percent influence on the dependent variable of Return On Assets ratio which is significant at 5 percent level.

3.5 Multivariate analysis

Table N° 5: Multivariate results for model I

Modèle		Coef non standardisés		Coef standardisés	t	Sig.
		A	Erreur standard	Bêta		
1	(Constante)	,176	,048		3,632	,000
	Liquidity position	,235	,000	,194	2,284	,024
	Leverage (Capital structure)	-,111	,000	-,120	-1,493	,014

Source: Output of SPSS version 21

From the above table 5 the null hypothesis is rejected in profitability ratio. Hence, there is a significant relationship between the dependent variable represented by the profitability ratio, and the independent variables consisting of liquidity position ratio, leverage ratio, and firm size ratio calculated as the normal logarithm of total assets.

We can write the model I as follows:

$$ROA_{it} = 0.176 + 0.235 LIQ_{it} - 0.111 LEV_{it} - 0.125 SIZE_{it} + \varepsilon_t \dots$$

This discussion section is focused only for the model selected model I: profitability through our study, we tried to measure the impact of each independent variable on performance measured by the Return On Assets (ROA), calculated by the net profit divided by total assets. Contrary to what the hypothesis 1.1 asserts, liquidity position calculated as current assets over current liabilities positively impacts the performance of the company. The liquidity position explains 23.5% of variation in profitability.

when it comes to the ratio of the impact of capital structure represented by the leverage, which is calculated by debt divided by total equity, as predicted by the hypothesis 1.2, there is a negative influence of debt on the financial performance of the company for the profitability indicator regarding self-financing. When the leverage value rises by 1%, results on a decrease of 0.111% in the profitability value.

Similarly to hypothesis 1.3, the firm size this has an effect negative on performance when it comes to an increase in the firm size - calculated by the normal logarithm of total assets -, by 1%, this affects the profitability value by a decrease of 0.125%.

3.6 Regression analysis for Model II

Table N° 6: Multiple Regression Analysis for model II

Modèle	R	R-deux	R-deux ajusté	Erreur standard
1	,946a	,895	,893	3,955506

Source: Output of SPSS version 21

From the outputs of the table above, we can confirm that the Return On Assets (ROA), which is net profit over total assets, the leverage (capital structure), which is debt divided by equity, and the firm size, which is the logarithm of total assets, have a significant effect on liquidity position of the company. The chosen model explains the company's liquidity position up to 89.5% ($R^2 = 0.895$).

3.7 Multivariate analysis

Table N° 7: Multivariate results for model II

Model		Coefficients non standardisés		Coefficients standardisés	t	Sig.
		A	Erreur standard	Bêta		
1	(Constante)	-0,103	3,775		-2,126	,035
	Return On Assets (ROA)	-0,733	1,140	-,373	-6,780	,000
	Leverage	,412	,038	,601	10,937	,000
	Firm size	,768	,368	,056	2,086	,039

Source: Output of SPSS version 21

We can write the model II as follows:

$$LIQ_{it} = -0.103 - 0.733 ROA_{it} + 0.412 LEV_{it} + 0.768 SIZE_{it} + \varepsilon_t \dots$$

Concerning the model II, the profitability has a negative effect on the liquidity position of the company (-0.733) with a statistical significance of 0.01. Which confirms our hypothesis 2.1, the more a firm is profitable, the less liquid assets held it needs since other current assets are cash substitutes and can be converted to cash. This result is consistent with some of the earlier studies such as (Marshall et al., 2017) and (Le et al., 2018), On the basis of these results we can say that Algerian firm's liquidity ratio is closely related to the profitability level, a negative effect. For the capital structure, leverage has a positive effect (0.412) with statistical significance for 1%. Consequently, hypothesis 2.2 is nullified for this variable on liquidity. Firm size has a negative effect on liquidity with a statistical significance at 0.01, unlike the affirmation of our hypothesis 2.3 where the impact is supposed to be negative.

4. Conclusion

In this article, we are interested in the determinants of liquidity and profitability, at the same time this paper seeks to assess the correlation between liquidity and profitability, through the use of audited annual report of 25 selected Algerian companies which operates in the different industry sectors during a period between 2013-2018. our study looks into the association between profitability, represented by the Return Of Assets (ROA) and liquidity measured by current assets to current liabilities. Previous studies review was performed to get basis for the test of hypotheses. Through the use of SPSS (Statistical Package for the Social Sciences) software, the dataset comprised of 149 observations generated descriptive statistics, and was tested for normality and variable correlation testing.

We have concluded in the model I, that we can explain the behaviour of a company in its management of liquidity and earnings, as well as to explain the impact of the liquidity position, capital structure, and the firm size on profitability and at the same time we tested the impact of the same variables on liquidity position. At the end of this work, we concluded that liquidity position calculated as current assets over current liabilities positively impacts the performance of the company in contrary with the hypothesis 1.1, there is a negative influence of debt and firm size on the performance similarly to hypotheses 1.2 and 1.3.

For the model I, which tested the determinants of liquidity position, since liquidity management is directly related to the capital structure of companies, every company has to control its liquidity relationship with debt. Indeed, Return on Assets affects negatively influence liquidity position, similarly to our affirmation in the hypothesis 2.1. However, leverage representing the effect of capital structure on liquidity, has a positive relationship with liquidity, the same results for the effect of firm size on liquidity position is observed, in contrary to our expectations on hypotheses 2.2 and 2.3.

Our work has certain limits, in particular the reduced number of data (6 years) and a number restricted of firms studied (25). For future research, it is recommended to enlarge the sample to other establishments and companies and to study the determinants of liquidity and profitability by sector industry.

The results of our study led to the fact that the level of economic profitability of Algerian companies varies according to their liquidity position, debt and their size. In addition, the results of the model showed that the profitability, debt, and firm size explain the levels of liquid assets detained by a company. This correlation can be qualified as significant as the value of P Sig was less than 5%.

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