FACTORS AFFECTING CAPITAL STRUCTURE OF THE BANKS LISTED ON IRAQI STOCK EXCHANGE (2009-2014)

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ABSTRACT

The current study aims to examine the factors affecting capital structure of (16) banks listed on the Iraqi Stock Exchange (ISX) during the period 2009 to 2014. Several factors could have an impact on capital structure. While, this study concentrates on four characteristics of Iraqi banks and attempts to identify their effect on financing decision of these banks. Growth, profitability, liquidity and size have been used as independent variables. However, the study depends on leverage as a dependent variable to measure the capital structure of banks. Using a multiple linear regression model by (SPSS) program different results have been revealed. The findings show that growth is not one of the determinants of capital structure and it has no effect on the leverage of these banks at all. While, there is a statistically negative relationship of capital structure choice with profitability and liquidity. On the other hand, the findings indicate that the size affects capital structure of the banks positively and significantly. The study could have a great contribution to financing decision of the banks listed on ISX for choosing the optimal capital structure.

KEYWORDS: Capital Structure, Growth, Profitability, Liquidity, Size, Leverage, Iraqi Stock Exchange.

1. INTRODUCTION

As it is known that every company has two main activities which are financing and investment. In the financing activity, the determination of the best capital structure is the main issue of the company (Lim, 2012). Capital structure, in the words of (Shibru, Kedar, Mekonnen, 2015), refers to a number of options that could be used by a company to obtain the necessary funds for its investment operations in a manner that is compatible with its priorities. This means that the company could raise the funds either by equity or debt or a combination of both. In other words, a company has three alternatives of financing: issuing stocks and bonds, borrowing debts or spending retained earnings instead of distributing them to shareholders as dividends. They also argued that choosing among these resources is the major financial decision for every company since it may have an impact on its value. That is why capital structure is considered one of the most controversial subjects and has been discussed in the literature as internal (such as size, profitability, liquidity, … etc.) and external (tax, economic growth, …. etc.) factors although academics are not in a full agreement about these factors as determinants of capital structure of a company (Akinyomi & Olagunju, 2013: Sangeetha & Sivathaasan, 2013). Therefore, the object of this paper is to identify the factors that affect the capital structure of the banks listed on the Iraqi Stock Exchange (ISX).

What distinguished this study from the previous, which have been carried out in Iraq is that; the current study concentrated on the banks listed on the ISX as a sample of the study while others used another countries or different sectors as a sample or they used different variables.

This paper is organized as follows: the next sections discuss the methodological issues of the paper. Section three, which is literature review; sheds light on the capital structure theories and the factors that have an impact on capital structure of a company. Section four is devoted to analysis of results and the final section summarizes key findings and provides conclusions.

2. RESEARCH METHODOLOGY

2.1. Statement of the Problem:

The choice of capital structure is one of the toughest challenges that organisations face. In the field of corporate finance, Gill, Biger, Pai, Bhutani (2009) state that determinants of capital structure are still one of the most significant unsettled issue and have been debated for many years. Over the years, many studies have been carried out on determinants of capital structure especially in developed countries, while a few studies have been conducted in developing countries (Huang, 2006). On the other hand, a very few studies have been conducted on determinants of capital structure in Iraq. Accordingly, by

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studying the determinants of capital structure in Iraq, it sets out to bridge this gap in the knowledge.

2.2. Research Questions:
In order to achieve the objectives of the research, the following questions have been raised as follows:
1- What is the influence of growth on capital structure of the bank?
2- What is the influence of profitability on capital structure of the bank?
3- What is the influence of liquidity on capital structure of the bank?
4- Does size is a factor that determine capital structure of the bank?

2.3. Significant of the Study:
Firstly, it is believed that the study of capital structure is very important as it has an effect on the firm’s decisions about production, investment and employment (Harris & Raviv, 1991). Secondly, this study will help the banks listed on ISX in terms of financing decision and determine the main factors that affect the capital structure. Last but not least, this study will contribute to enrich the subject of capital structure in developing countries such as Iraq.

2.4. Objective of the Study:
The main objective of this study is to determine the effect of internal factors on capital structure of the banks listed in ISX. The other specific objective of the research are as follows:
1- To explore the influence of growth on capital structure of the banks.
2- To investigate the influence of profitability on capital structure of the banks.
3- To examine the influence of liquidity on capital structure of the banks.
4- To determine influence of size on capital structure of the banks.

2.5. Hypothesis Testing:
To determine whether or not the relationship between dependent variable (Leverage) and the independent variables (growth, profitability, liquidity, size) is significant, the following hypothesis have been formulated.
1- H1: Growth is insignificant with capital structure of the banks listed on ISX.
2- H2: Profitability is insignificant with capital structure of the banks listed on ISX.
3- H3: Liquidity is insignificant with capital structure of the banks listed on ISX.
4- H4: Size is insignificant with capital structure of the banks listed on ISX.

2.6. Sampling Design and Procedure:
The samples contain Iraqi banks listed on the ISX in the period of 2009-2014. The selection process of the data was strict, only banks that meet the requirements are included in the analysis. Islamic banks were excluded due to the distinct regulatory of these banks. Furthermore, the bank observation is left out if it lacks an observation on a ratio in the period of the study. Hence, banks with missing information were rejected.

2.7. Source of Data:
Source of Data: Due to the nature of this study, we entirely relied on secondary data which are publicly available in the financial statements of the banks. The data were obtained from the Iraqi Stock Exchange website (http://www.isx-iq.net/)

2.8. Variables Measurement:
1. Leverage= Liabilities/ shareholders' equity.
2. Growth= (total assets current year- previous year / previous year) * 100.
3. Profitability= Profit before tax/ total assets.
4. Liquidity= Current assets/ current liabilities.
5. Size= Has been measured by natural logarithm of total assets.

2.9. Data Analysis Methods:
This study has adopted descriptive analysis, Pearson coefficient correlation and multiple linear regressions analysis in order to achieve the study objectives. Since, these analysis methods have been used in the majority of the study related to capital structure determinants

2.10. Conceptual Framework:

3. LITERATURE REVIEW

3.1. Theory of capital structure
Various theories have emerged since the work presented by Modigliani and miller (MM I) in 1958. Those theories came with the aim of maintaining an optimal capital structure that maximizes the value of firm and reduces the costs of obtaining such a capital structure. Here in this part of research some of capital structure theories will be discussed including MM proposition I, MM proposition II, trade-off, pecking order, and the market timing theories.

3.1.1 Modigliani and Miller Theory (proposition I):
Modigliani and Miller’s study (1958) is considered the keystone for the later studies’ contribution to present corporate finance generally and for research on capital structure determinants precisely. This theory was known as irrelevance (MM I) theory due to the suggestion of there is no effect on firm’s value under any capital structure the firm possesses. Thus, a firm generates its value form assets it maintains not from what capital structure it has even if it is fully financed by debt or fully financed by equity or a mixture of both debt and equity. This theorem has been based on several assumptions of a perfect capital market which deny the existence of transaction costs related to raising a firm’s capital, bankruptcy and taxes as well as all required information on market is available for management (Huang & Song, 2006). This theory has emerged after there was a thought that suggests a firm can maximize its value and minimize the cost of capital by the best choice of debt to equity ratio for forming its capital structure (Sangeetha & Sivathaasan, 2013). The former theory stated that the decision of choosing such a capital structure is relevant whereas what M&M I theory presented is completely different as mentioned above.

3.1.2. Modigliani and Miller Theory (proposition II):
In 1963, Modigliani and Miller presented a second theory on capital structure, which was an extension of their first theory in 1958. In last proposition, they relaxed one of the primary assumptions that their first work was built on. They excluded the assumption that states there is no tax in perfect market. Here this proposition encourages firms to finance their assets as much as possible by debt to obtain benefits of tax shield. The second proposition of M&M theory is considered as a correction version for the first one. Thus, a firm can easily obtain an optimal capital structure by having 100% debt financing because interest expenses incurred due to debt are tax deductible. Therefore, interest payments to lenders minimize the tax payable. In other words, the more levered is
a firm the more optimal capital structure it possesses. Although both propositions of Modigliani and Miller theorem were considered as a turning point on capital structure, a number of researchers felt that Modigliani and Miller did not succeed to discuss the practical applications of their article on individual firms and giving a thorough explanation to observed facts (Fisseha, 2010).

3.1.3. The Trade-off theory (TOT): The trade-off theory is an extension of Modigliani and Miller theorem (proposition II). The main idea behind this theory is making a trade-off between benefits and drawbacks of using debt for financing a business. The origin of trade-off theory goes back to a study conducted by Kraus and Litzenberger in 1973. They argue that firms determine their capital structures in best form through evaluating what they might earn from using debt against what might cost them in future. In other words, the theory ascents that there are advantages of financing with leverage such as benefits that generate from tax shield as well as agency benefit. In contrast, there are also disadvantages of debt financing such as costs of potential bankruptcy and agency costs. Consequently, firms that focus on maximizing their values will also concentrate on balancing between benefits and costs of debt financing when it comes to decide which debt-equity ratio to have for financing the business. Myers (1984) argues that while the managers making the right decision on funding their business among several available alternatives, they weigh the potential benefits and costs of their choice. He concluded in his study that firms will increase the level of debt financing as long as it brings them benefits from tax shields that supposed to increase firms’ value. In contrast, increasing a firm’s leverage also will increase financial costs and the risk of going into bankruptcy. Therefore, management always tries reaching the point at which the benefits outweigh the costs of leverage.

3.1.4. Pecking Order Theory (POT): Pecking order theory has been based on an idea that completely differentiates than earlier theories on corporate capital structure. The most complete definition for pecking order theory was given by Myers (1984); Myers & Majluf (1984). It simply means that companies prefer internal to external financing and also prefer debt to issuance of equity. What does internal financing mean as a first part of the definition of POT? And why does a company prefer debt to equity? Regarding the first question, it means that a company prefers first to use its retained earnings in financing investments as a safest funding source before resorting to any other external source (Frank & Goyal 2009). While to answer the second question, there is a controversial literature on interpreting companies’ preference of debt to issuing shares. Frank & Goyal, 2009 emphasize that companies will not resort to issuing stocks, as long as there is a possibility of obtaining debt. This is due to studying both advantages and disadvantages of those sources of finance. The suggested order in financing investments by the theory was justified by the existence of cheap sources, thus companies start from the cheapest to the most expensive sources for choosing finance to reduce potential financial costs and risks (Fama & French, 2001).

Myers & Majluf (1984) presented another interpretation for the pecking order theory from the context of asymmetric information. Corporate managers and insiders are supposed to be more parties know about the values, risks and prospects of their firms than investors that represent outside parties. Usually companies will issue shares when the stock price is fair or overvalued. Investors could understand it easily and consequently the stock price will fall after the management announced to issue stock. Therefore, when internal financing is insufficient a company resorts to an external financing and prefers debt to issuing an undervalued stock.

3.1.5. The market timing theory (MTT): A new theory has emerged on capital structure named the market timing theory. This theory has answered the conventional question about the capital structure puzzle that states what debt-equity proportion is better for firms’ capital structures. Baker & Wurgler (2002) suggest that managers decide to finance their investments whether with debt or equity under hypotheses at time of needing finance. In contrast to explanations presented by earlier theories, this theory illustrates that a firm does not care about financing decision whether it is increasing debt or issuing new shares. A firm care about any format of financing that shows overvalued stock price by financial markets at a point of time. Therefore, firms decide issuing new shares when the stock price is higher valued than its actual price for financing decision and repurchase their own shares when the price is under its actual price. Evidence was showed by Graham & Harvey (2001) on the perception that says managers are able to time the market. Baker & Wurgler (2002) showed a strong, positive influence of the market timing upon capital structure.

3.2. Determinants of Capital Structure

3.2.1. Profitability: A firm’s Profitability refers to its ability to generate a net income resulted from a comparison between the revenues earned and expenses incurred in a certain period of time. Profitability was strongly indicated as one of the main determinants of capital structure in the literature. Profitability ratio is considered the most widely used indicator in financial analysis. It can be seen in different ways for example, profit margin, return on assets, return on equity, operating margin among many other forms. Each of above-mentioned ratios can be calculated by different elements of financial statements (Forte, Denis, Barros, Lucas Ayres, & Nakamura, Wilson Toshiro, 2013).

According to literature, different predictions were suggested on showing the relationship between profitability and leverage. The trade-off and signalling theories indicated that profitability has an effect on leverage. In other words, the higher level of debt leads to better performance by levered firms. In this regard, Jenson (1986) find that the relationship is closer to be positive. Moreover, Frank & Goyal (2009) and Margaritis & Psillaki (2008) argue that profitable firms are less likely to fall into the bankruptcy trap and hence avoiding any financial risk and costs as consequences of financial distress. Their studies reflect that profitability and leverage can positively correlate. However, the pecking-order theory elucidates that profitable firms do not finance their investments by external funding as long as there is a possibility to be funded internally by retained earnings. With regard to this perception, a number of empirical studies have shown a negative correlation between both variables: leverage and profitability (Friend & Lang, 1988; Titman & Wessels, 1988; Rajan & Zingales, 1995; Booth et al. 2001; Tong & Green, 2005 and Huang & Song, 2006).

3.2.2. Liquidity: Liquidity in the field of business refers to the ability of assets conversion into cash without influencing the price of the assets (Hussain, Hamza & Miras, 2015). Businesses utilize liquidity ratios to measure their financial health. There are three main ratios of liquidity: current ratio, quick ratio and cash ratio.

As mentioned earlier, the trade-off theory (TOT) suggests that a company make a preference between benefits of tax shield and bankruptcy costs. The bankruptcy can be measured by the liquidity ratio of the company. In case of low liquidity ratio, the company faces difficulties to repay its obligations and therefore the risk of going into financial distress becomes more possible. From above interpretation, it can be said that TOT shows a positive relationship between the high rate of liquidity and debt ratio. Some empirical evidence confirmed that firm’s liquidity has a positive effect on leverage, one of these
evidence is a study conducted on 300 listed Malaysian companies by Ghasemi & Ab Razak (2016). Their results showed that both liquidity ratios used in the study have a significant and positive impact on all the leverage proxies utilized. In similar way, another study carried out by Silwal (2016) on assets liquidity in the Nepalese non-financial listed companies. This empirical study also showed that liquidity is positively correlated to debt ratio.

In contrast to the TOT, pecking order and agency cost theories suggest an inverse relation between leverage and liquidity. These theories state that firms with high liquidity ratios prefer to utilize their own internal sources than external ones to finance their businesses. Thus, the negative impact of liquidity on leverage was significantly consistent with empirical studies of Deesomisak, Paudyal, Pescteto (2004); Udornirinkula, Junareonvong, Jaraporn (2011) and Najjar & Petrov (2011).

3.2.3. Size: Firm size is another important capital structure determinant due to the large amount of literature shows differing views on the relationship between firm size and debt ratio. The theory of trade-off believes that firm size has a significant role in capital structure choice. It also states that sizable firms are more diversified and less subject to risk of financial distress. In addition, larger firms have less volatile annual revenues and can easily borrow with less cost than small-sized firms’ due to better reputation and diversification. From the perspective of trade-off and agency theories, any decrease in debt cost leads to increasing debt ratio in capital structure, therefore it is predicted a positive correlation between gearing ratio and firm size (Titman & Wessels, 1988). Beside of above mentioned discussion, many other authors indicated that firm size positively affects leverage ratio. Some of those authors were Rajan & Zingales (1995); Wald (1999); Amidu (2007); and Caglayan & Sak (2010).

On the other hand, a negative relationship between the size of firm and the proportion of debt was suggested by the pecking order theory. This theory expects that larger firms have a lower informational asymmetry problem comparing with small firms, thus this leads to be more capable to issue new shares when they need funds for investments (Rajan & Zingales, 1995). Moreover, larger firms have longer history that gives the impression that they have retained earnings, so they should not borrow when able to fund their investments internally (Frank & Goyal, 2009). It is also confirmed by Titman & Wessels (1988) that firm size is negatively associated with the firm leverage.

3.2.4. Growth opportunities: Researchers have disagreed in determining the relationship between firm growth and its leverage due to conflicting views proposed in the related theories. From the standpoint of the pecking order theory, companies that have higher growth opportunities first finance their projects by internal sources such as retained earnings that may not always enough during growth condition. The growth demands more funds; therefore, an external financing is required in this condition through increasing leverage. It is clear that the pecking order theory suggests that the company growth is positively correlated to its leverage proportion in the capital structure (Tong & Green, 2005). Moreover, many studies showed a positive relationship between growth and debt for example, Kester (1986); Chen (2004) and Huang & Song (2006).

On the other side, the trade-off theory proposes a negative association between firm leverage and its growth. This theory illustrates that any growth opportunity need to be financed but it should be with less possible cost and risk. Thus, it suggests that growth increases cost and chance of financial distress when firms support their growth opportunities with more debt. Therefore, any increase in cost and risk of financial distress may restrict firms from having more debt. An inverse correlation between growth and leverage was evidenced in many empirical studies for example, Titman & Wessels (1988); Rajan & Zingales (1995); Fama and French (2002) and Gaud et al. (2005).

3.3 Iraqi Stock Exchange:

The ISX was established in 2004 and it is headquartered in the capital of Iraq (Baghdad). It is administratively and financially independent from the Iraqi government and non-profit entity which is managed by the board of governors. However, it complies with regulations of the Iraqi Securities Commission and the Iraqi Securities Law. (http://www.isx-sq.net)

The ISX is aimed to achieve the following objectives:
- Training its members and the listed companies.
- Enhancing the interests of investors.
- Capital market development in Iraq to enhance the national economy of the country and help the companies to build the capital needed for investment.
- It also aims at raising awareness among investors about investment opportunities.
- Analyzing and disseminating statistics and necessary information.
- Connecting with other stock markets internationally in an attempt to develop the market.

4. DATA ANALYSIS TECHNIQUE

Descriptive analysis, Pearson coefficient correlation and multiple regressions analysis and Multicollinearity test have been entered and conducted.

4.1. Descriptive Analysis

Table 1. Descriptive Statistics

| Source: Output of data analysis by authors |
| --- |
| **N** | **Mean** | **Std. Deviation** |
| **Leverage** | 96 | 2.19089 | 1.673939 |
| **Growth** | 96 | 32.58802 | 73.671191 |
| **Profitability** | 96 | 0.107 | 0.021984 |
| **Liquidity** | 96 | 1.78564 | 1.195102 |
| **Size** | 96 | 11.6074 | 0.302726 |
| **Valid N (listwise)** | 96 | |

The above table shows the descriptive statistics of the study variables. The average profit that study samples able to make from their total assets is approximately 3% and Standard Deviation is 0.021. The second independent variable is the Size of the study samples. Since the average mean is 116% and the Standard deviation is 0.034, it indicates that the size of the chosen firms (Banks) is large. The average Liquidity is roughly 18% and the Standard Deviation is 1.195. It means that the most of the listed banks’ current assets are bigger than its current liabilities by 18 times. During the observation period, the average growth of the listed banks is 32.5% and the Standard Deviation is 73.671. As well as, since the total debit average is 2.190% and Standard Deviation is 1.673. It shows that for financing their business operation, approximately 2% of the study variables are used debt finance.
Growth and while it's 5%, a strong positive correlation is significant at the 0.05 level (2-tailed). The value of the independent variables in the tolerance column does not exceed 0.7. Secondly, it is illustrated by Tabachnick and Fidell (2007) that the coefficients table also provides a multicollinearity problem since the correlation among independent variables is 0.000, which is less than 0.01 level. The above table reveals a strong negative relationship between leverage and liquidity which means that the independent variables namely (Growth, Profitability, Liquidity, and Size). It indicates that only 50% of the variation in leverage is explained by the degree of (Growth, Profitability, Liquidity, and Size). Whilst, only 49% variance in leverage is being explained by other indicators that not been studied in this research.

4.4. Multiple Linear Regressions

The above table reveals that correlation coefficient (R) is 0.717, which means that the independent variables namely (Growth, Profitability, Liquidity, and Size) are influencing the dependent variable. The coefficient of determinants (R Square) value is 51%. It indicates that only 51% of the variation in leverage is explained by the degree of (Growth, Profitability, Liquidity, and Size). This result unlikely follows to “trade-off theory” that “larger firms are more stable with low business risk, so they have higher leverage than small firms while it contradicts agency and pecking-order theories that larger firms have a lower degree of information asymmetry and more retained cash causing them to use less debt”.

4.3 Multicollinearity test

Generally, there are two ways by which multicollinearity test can be detected. Firstly, Kennedy (2008) argues that if the correlation among independent variables is below (0.7), the multicollinearity problem does not exist. This is obviously can be seen in the table (2) that there is not any multicollinearity problem since the correlation among independent variables does not exceed (0.7). Secondly, it is illustrated by Tabachnick and Fidell (2007) that the coefficients table also provides multicollinearity test by looking at the numbers of tolerance and VIF columns of independent variables. They show that the value of the independent variables in the tolerance column should be greater than (0.10), while in the VIF column; the value should be less than (10).

Table 3. Multicollinearity test

| Independent variables | Tolerance | VIF |
|-----------------------|-----------|-----|
| Growth                | 0.990     | 1.010 |
| Profitability         | 0.991     | 1.009 |
| Liquidity             | 0.982     | 1.018 |
| Size                  | 0.998     | 1.002 |

Source: Output of data analysis by authors

The table clearly confirms that the multicollinearity problem does not exist as long as the values of the independent variables are within the required limits in both tolerance and VIF columns. This, in turn, increases the reliability of the multiple regression analysis.

Table 4. Multiple Linear Regressions

| Model Summary | R | R Square | Adjusted R Square | Std. Error of Estimate |
|---------------|---|----------|-------------------|------------------------|
| Regression    | .717 | .514 | .493 | 1.192248 |
| Residual      | 1.364.84 | 4 | 34.211 | .000 |
| Total         | 266.197 | 95 | 24.068 | .000 |

a. Predictors: (Constant), Size, Growth, Profitability, Liquidity

b. Dependent Variable: Leverage

Source: Output of data analysis by authors

Table 5. ANOVA

| Source | Sum of Squares | df | Mean Square | F | Sig. |
|--------|----------------|----|-------------|---|------|
| Regression | 136.844 | 4 | 34.211 | 24.068 | .000 |
| Residual | 129.352 | 91 | 1.421 |
| Total | 266.197 | 95 | .000 |

a. Dependent Variable: Leverage

b. Predictors: (Constant), Size, Growth, Profitability, Liquidity

Source: Output of data analysis by authors

Table 6. Regression Coefficients

| Model | Unstandardized Coefficients | Standardized Coefficients | t | Sig. |
|-------|----------------------------|--------------------------|---|------|
| (Constant) | -.29.525 | 4.719 | -6.256 | .000 |
| Growth | .001 | .002 | .033 | .444 | .658 |
| Profitability | -.18.030 | 5.589 | -3.37 | -3.226 | .002 |
| Liquidity | -.594 | .103 | -4.24 | -5.751 | .000 |
| Size | 2.875 | .405 | .520 | 7.108 | .000 |

a. Dependent Variable: Leverage

Source: Output of data analysis by authors
The multiple linear regression equation is being developed as follows:

\[
\text{LEVERAGE} = \text{CONSTANT} + \beta_1 \text{GROWTH} + \beta_2 \text{PROFITABILITY} + \beta_3 \text{LIQUIDITY} + \beta_4 \text{SIZE} - 29.525
\]

- 0.033 \text{GROWTH} - 0.237 \text{PROFITABILITY} - 0.424 \text{LIQUIDITY} + 0.520 \text{SIZE}

It is obvious from the equation that the independent variables namely Profitability, Liquidity and Size are significant with the leverage except the growth indicator shows insignificant with the leverage. It also reveals that leverage will be -29.525 if it is not influenced by the independent variables. Hereafter, the leverage is mostly being influenced by the size followed by liquidity, profitability and growth.

Size is scored the highest beta value (\( \beta = 0.520, p < 0.000 \)). In addition to, liquidity counted the second highest standardized coefficient (\( \beta = 0.424, p < 0.000 \)). The third highest beta scored by the profitability (\( \beta = 0.237, p < 0.002 \)).

Growth indicator has the lowest standardized coefficient value (\( \beta = 0.033, p < 0.658 \)).

Table (6) illustrates that there is an insignificant positive relationship between Growth and Leverage (\( \beta = 0.033, p > 0.658 \)). This result indicates that the growth of the study samples is not the factors that determines banks leverage among study samples. The result is not sufficient and relevant with pecking order theory, from the standpoint of the pecking order theory, companies that have higher growth opportunities first finance their projects by internal sources such as retained earnings that may not always enough during growth condition. This result is similar and in line with, Kester (1986); Chen (2004) and Huang & Song (2006). However, the result contradicts with, Titman & Wessels (1988); Rajan & Zingales (1995); Fama & French (2000) and Gaud et al. (2005).

Accordingly, the null hypothesis will be accepted (H_0) which conclude that growth is insignificant with capital structure of the banks listed on ISX.

Furthermore, a significant negative relationship is being revealed between Profitability Leverage (\( \beta = -0.267, p < 0.000 \)). This result shows that the profitability of the study samples is the factor that determines banks leverage among study samples. The result indicates that the high profitability firms prefer using retained earnings or internal funding rather than using debt financing. This result supports the result of Titman and Wessels (1988), Rajan & Zingales (1995), Pandey (2001), Sayilgan et al. (2006), Gill et al. (2009), Banchuenvijit (2009), Karawish & Karawaih (2010), Mishra (2011), Tongkong (2012), Afandi et al. (2012), Kiran (2013), Forte et al. (2013), and Abdul Jamal et al. (2013). On the other hand, the result contradicts with Mohamed (2012), Oppong-Boakye (2013). Consequently, the null hypothesis will be rejected (H_0) which conclude that profitability is insignificant with capital structure of the banks listed on ISX.

Moreover, a significant negative relationship is being revealed between the independent variable namely Liquidity and the dependent variable Leverage (\( \beta = -0.444, p < 0.000 \)). This result shows that there is a strong negative relationship between liquidity and leverage which means that the companies with high liquidity prefer to use internal funding rather going for debt finance. According to Eriots et al. (2007) it has been mentioned that for the companies and business rely on generates high cash inflows with maintaining a high level of current assets. This result supports with the result of Mohamad et al. (2007), Mat Kila and Wan Mansor (2008), Hossain & Ali (2012), Abdul Jamal et al. (2013), Md-Yusuf et al. (2013). Accordingly, the null hypothesis will be rejected (H_0) which conclude that liquidity is insignificant with capital structure of the banks listed on ISX.

Correspondingly, a significant positive relationship is found between the independent variable namely Size and the dependent variable Leverage (\( \beta = 0.579, p < 0.000 \)). This result indicates that the Size of the study samples is the factors that determines banks leverage among study samples. This result is similar and in line with, Titman & Wessels (1988); Rajan and Zingales (1995); Wald (1999); Amidu (2007) and Caglayan & Sak (2010); Khrawish & Khrawi (2010); Kiran (2013); Oppong-Boakye (2013). However, the result contradicts with Titman & Wessels (1995); Rajan & Zingales (1995); Bevan & Danbolt (2002); Chen (2004), Tarig and Hijazi (2006), Mat Kila & Wan Mansor (2008); Frank & Goyal, (2009); Fauzi et al. (2013). Therefore, the null hypothesis will be rejected (H_4) which conclude that size is insignificant with capital structure of the banks listed on ISX.

### Table 7. Test of Hypothesis

| Hypothesis | Results |
|------------|---------|
| 1. Growth is insignificant with capital structure of the banks listed on ISX. | Accepted |
| 2. Profitability is insignificant with capital structure of the banks listed on ISX. | Rejected |
| 3. Liquidity is insignificant with capital structure of the banks listed on ISX. | Rejected |
| 4. Size is insignificant with capital structure of the banks listed on ISX. | Rejected |

### 5. CONCLUSION AND RECOMMENDATION

#### 5.1. Conclusion

The fundamental aspect in the corporate finance is the financing behavior. Thus, in any firms, the key questions to be answered is “When, Where, Why and How to obtain funds?”

Hence, how to adjust and regulate strategic financing mix, the determining of capital structure will guide decision makers the real facts of financing behavior. Accordingly, this study has attempted to explore the effect of growth, profitability, liquidity and size on capital structure of the banks listed on ISX. The data has been obtained from the financial statements of (16) banks with a total of 96 observations during the period 2009 to 2014. The data analysis showed that about 51% of variation in capital structure explained by the factors aforementioned. As far as capital structure determinants for Iraqi banks is concerned, the result of the Pearson correlation analysis shows that the independent variable namely (profitability, liquidity and size) had a significant relationship with the dependent variable leverage. However, the growth indicator shows insignificant relationship with the leverage. On the other hand, the regression analysis shows that the independent variables namely (profitability and liquidity) have a strong significant relationship with the leverage negatively, whereas size has a positive significant relationship with the dependent variable. In contrast, the growth indicator as an independent variable shows insignificant relationship with the leverage.

#### 5.2. Recommendation

It is recommended that future studies can examine other internal factors (firm specific factors) such as age, tangible assets, firm risk or volatility, and so on which they have not been used in this study.

It is also recommended that future studies can investigate the external factors (macroeconomic factors) such as tax policy and capital market conditions that determine capital structure of the banks listed on ISX. Therefore, they could explore other factors and create new knowledge.

This study concentrates on the banking industry of Iraq. It is suggested that future studies can focus on multiple sectors and conduct their studies in order to compare the results among the sectors.

Last but not least, growth as an independent factor has found to have no effect on banks’ leverage since this study used (16) banks out of (35) banks listed on ISX. Therefore, it is recommended that future studies can increase the sample size and this, in turn, may lead to different results.
REFERENCES

Abbasi, E. & Delghandi, M. (2016). Impact of Firm Specific Factors on Capital Structure based on Trade off Theory and Pecking Order Theory - An Empirical Study of the Tehran’s Stock Market Companies. Arabian Journal of Business and Management Review, 6 (2), 1-4.

Abdul Jamil, A., Goahta, C., Mohidin, R., Abdul Karim, M.R., Lim, T.S. & Ch’ng, V., (2013). Capital Structure Decisions: Evidence from Large Capitalized Companies in Malaysia. Interdisciplinary Journal of Contemporary Business, [e-journal] 5(5). Available at: ijcrb.webs.com [Accessed 6 April 2017]

Acaravci, S. (2015). The Determinants of Capital Structure: Evidence from the Turkish Manufacturing Sector. International Journal of Economics and Financial Issues, 5 (1), 158-171.

Affandi, S., Wan Mahmood, W.A.M. & Abdul Shukur, N., (2012). Capital Structure Of Property Companies In Malaysia Based On Three Capital Structure Theories. South East Asian Journal of Contemporary Business, Economics and Law, [e-journal] 1. Available at: http://klibel.com/wp-content/uploads/2012/12/Capital-Structure-Of-Property-Companies-In-Malaysia-Based-On-Three-Capital-Structure-Theories.pdf [Accessed 10 April 2017]

Akinjomide, O. J. & Olagunju, A. (2013). Determinants of Capital Structure in Nigeria. International Journal of Innovation and Applied Studies, 3 (4), 999-1005.

Amidu, M. (2007). Determinants of capital structure of banks in Ghana. Baltic Journal of Management, 2(1), 67-79.

Baker, M. & Wurgler, J. (2002). Market timing and capital structure. Journal of Finance, 57(1), 1-32.

Banchuenvijit, W., (2009). “Capital structure determinants of Thai listed companies,” The Chute International Academic Conference, New Orleans Louisiana, 2009. [Online] Available http://conference.cluteonline.com/index.php/IAC /2011NO/schedCont/presentations/search?lnitial=B&track=1 1[Accessed 12 April 2017]

Bevan A.A. & Danbolt J., (2002). Capital structure and its determinants in the UK – A decompositional analysis. Applied Financial Economics, [e-journal] 12. Available through: Anglia Ruskin University Library website http://libweb.anglia.ac.uk [Accessed 7 March 2017]

Booth, L. A., Demurguc-Kunt, A., & Maksimovic, V. (2001). Capital structures in developing countries. Journal of Finance, 56(1), 87-130.

Caglayan, E. & Sak, N. (2010). The determinants of capital structure: evidence from the Turkish Banks. Journal of Money, Investment and Banking, Issue 15, 57-65.

Chen, J. J. (2004). Determinants of Capital Structure of Chinese-listed Companies. Journal of Business Research, 57(12), 1341-1351.

Deesomsak, R., Paudyal, K. & Pescetto, G. (2004). The determinants of capital structure: evidence from the Asia Pacific region. Journal of Multinational Financial Management, 14(4-5), 387-405.

Ertios, N., Vasiouli, D. & Ventoura-Neokosmid, Z., (2007). How firm characteristics affect capital structure: an empirical study. Managerial Finance, [e-journal] 33 (5). Available through: Anglia Ruskin University Library website <https://libweb.anglia.ac.uk> [Accessed 6 March 2017]

Fama, E. & French, K. (2001). Disappearing dividers: Changing firm characteristics or lower propensity to pay? Journal of Financial Economics, 60(1), 3-43.

Fama, E. F. & French, K. R. (2002). Testing trade-off and pecking order predictions about dividend and debt. The Review of Financial Studies, 15(1), 1-33.

Fama, E.F., & French, K.R. (2000), Testing Tradeoff and Pecking Order Predictions about Dividends and Debt, The Center for Research in Security Papers, University of Chicago, Working Paper No.506.

Fauzi, F., Basuyai, A., & Idris, M. (2013). The Determinants of Capital Structure: An Empirical Study of New Zealand-Listed Firms. Asian Journal of Finance & Accounting, 5(2), 1-21.

Fisseha, K. M. (2010). The determinants of capital structure: Evidence from Commercial Banks in Ethiopia. Working paper, Master research project, Mekelle University. Retrieved from https://opendocs.ids.ac.uk/opendocs/handle/123456789/5265

Forte, D., Barros, L. & Nakamura, W., (2013). Determinants of the Capital Structure of Small and Medium Sized Brazilian Enterprise. Brazilian Administration Review, [e-journal] 10 (3). Available through: Anglia Ruskin University Library website <http://libweb.anglia.ac.uk> [Accessed 6 April 2017]

Forte, Denis, Barros, Lucas Ayres, & Nakamura, Wilson Toshiro. (2013). Determinants of the capital structure of small and medium sized Brazilian enterprises. BAR - Brazilian Administration Review, 10(3), 347-369.

Frank, M. Z. & Goyal, V. K. (2009). Capital structure decisions: Which factors are reliably important? Financial Management, 38, 1-38.

Friend, I. & Lang, L. (1988). An empirical-test of the impact of managerial self-interest on corporate capital structure. Journal of Finance, 43(2), 271-281.

Gaud, P., Jani, E., Hoesli, M. & Bender, A. (2005). The capital structure of Swiss companies: an empirical analysis using dynamic panel data. European Financial Management, 11(1), 51-69.

Ghasemi, M. & Ab Razak, N. H. (2016). The Impact of Liquidity on the Capital Structure: Evidence from Malaysia. International Journal of Economics and Finance, 8(10), 130-139.

Gill, A., Biger, N., Pai, C., & Bhutani, S. (2009). The determinants of capital structure in the service industry; evidence from United States. The Open Business Journal, 2(1), 48-53.

Graham, J. R. & Harvey, C. R. (2001). The theory and practice of corporate finance: Evidence from the field. Journal of Financial Economics, 60(2), 187-243.

Harris, M., & Raviv, A. (1991). The theory of capital structure. The Journal of finance, 46(1), 297-335.

Hossain, M. & Ali, M., (2012). Impact of Firm Specific Factors on Capital Structure Decision: An Empirical Study of Bangladeshi Companies. International Journal of Business Research and Management (IJBRM), [e-journal] 3(4).

Huang, G. & Song, F. M. (2006). The Determinants of Capital Structure: Evidence from China. China Economic Review, 17(1), 14-36.

Hussain, S., Hanza, S. and Miras, H. (2015). The Determinants of Capital Structure for Malaysian Food Producing Companies. International journal of accounting and business management. 1 (1), 1-25.

Kennedy, P., (2008). A Guide to Econometric. 6th edn., Blackwell Publishing, Malden.

Kester, C. W. (1986). Capital and Ownership Structure: A Comparison of United States and Japanese Manufacturing Corporations. Financial Management, 15(1). 5–16.

Khrawish, H. & Khrayvesh, A., (2010). The Determinants of the Capital Structure: Evidence from Jordanian Industrial Companies. JKAU: Econ. & Adm, [e-journal] 24 (1). Available at: www.kau.edu.sa/Files/320/Researches/55328_25671.pdf [Accessed 7 February 2017].

Kirun, S. (2013), “Determinants of capital structure: A comparative analysis of textile, chemical and fuel and energy sectors of Pakistan (2001-2006),” International Review of Management and Business Research, 2(1), 37-47.

Kraus, A. & Litzenberger, R. H. (1973). A State-Preference Model of Optimal Financial Leverage. Journal of Finance, 28(4), 911-922.

Lim, T. C. (2012). Determinants of Capital Structure Empirical Evidence from Financial Services Listed Firms in China. International Journal of Economics and Finance. 4 (3), 191-203.

Margaritis, D. & Psillaki, M. (2008). Capital structure and firm efficiency. Journal of Business Finance and Accounting, 34(9-10), 1447-1469.

Mat Kila, S., & Wan Mansor, W. (2008). Capital Structure and Firm Characteristics: Some Evidence from Malaysian Companies. Journals of Applied Finance, 15(7), 19-25.

Md-Yusuf, M., Mohamad Yunus, F. & Md Supaat, N. F. L., (2013). Determinants of Capital Structure in Malaysia Electrical and Electronic Sector. World Academy of Science, Engineering and Technology, [e-journal] 78 Available at: www.waset.org/journals/waset/v78/n156.pdf [Accessed 6 February 2017]

Mishra, C., (2011). Determinants of Capital Structure – A Study of Manufacturing Sector PSUs in India. International Conference on Financial Management and Economics IPEDR [e-journal] 11. Available at:https://openaccesslibrary.org/index.php/Journal/index?access_token=02a99b75-0200-409d-acbb-7f541a194a9c
Modigliani, F. & Miller, M. H. (1958). The Cost of Capital, Corporation Finance and the Theory of Investment. The American Economic Review, 48(3), 261-297.

Modigliani, F. & Miller, M. H. (1963). Corporate income taxes and the cost of capital: a correction. The American Economic Review, 53(3), 433-443.

Mohamed Zabri, S. (2012). The Determinants of Capital Structure among SMEs in Malaysia. Proceedings International Conference of Technology Management, Business and Entrepreneurship, [e-journal]. Available at: eprints.uthm.edu.my/3442/1/TGM056.pdf [Accessed 14 February 2017].

Myers, S. C. & Majhuf, N. S. (1984). Corporate financing and investment decisions when firms have information investors do not have. Journal of Financial Economics, 13, 187-221.

Najjar, N. & Petrov, K. (2011). Capital structure of insurance companies in Bahrain. National Journal of Business and Management, 6(11), 138-145.

Oppong-Boakye, P., Appiah, K. & Afolabi, J. (2013). “Determinants of capital structure: Evidence from Ghanaian firms,” Research Journal of Finance and Accounting, 4(4), 44-54.

Pandey, I. (2001). Capital Structure and the Firm Characteristics: Evidence from an Emerging Market, IIMA Working Paper 2001-10-04.

Rajan, R. & Zingales, L. (1995). What do we know about capital structure - Some evidences from international data? Journal of Finance, 50(5), 1421-1460.

Sangeetha, M. & Sivathaasan, N. (2013). Factors Determining Capital Structure: A Case study of listed companies in Sri Lanka. Research Journal of Finance and Accounting, 4(6), 236-247.

Sayilgan, G., Karabacak, H. & Kucukkocaoğlu, G. (2006). The Firm-Specific Determinants of Corporate Capital Structure: Evidence from Turkish Panel Data, Investment Management and Financial Innovations, 3, 125-137.

Shibru, M., Kedir, H. & Mekonnen, Y. (2015). Factors Affecting the Financing Policy of Commercial Banks in Ethiopia. International Journal of Research in Business and Social Science. 4 (2), 44-53.

Silwal, P. P. (2016). Asset Liquidity and Capital Structure: Empirical Evidence from Nepal. Journal of Interdisciplinary Studies, 2 (2), 55-68.

Tabachnick, Barbara G., & Linda S. Fidell. (2007). Using multivariate statistics. Boston: Pearson/Allyn & Bacon.

Tariq, Y. B. & Hijazi, S. T. (2006). “Determinants of capital structure: A case for the Pakistani cement industry,” The Lahore Journal of Economics, 11(1), 63-80.

Titman, S. & Wessels, R. (1988). The determinants of capital structure choice. Journal of Finance, 43(1), 1-19.

Tong, G. & Green, C. J. (2005). Pecking order or trade-off hypothesis? Evidence on the capital structure of Chinese companies, Applied Economics. Retrieved from http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.127.2401&rep=rep1&type=pdf [Accessed 10 March 2017].

Tongkong, S. (2012). Key factors influencing capital structure decision and its speed of adjustment of Thai listed real estate companies. Procedia - Social and Behavioral Sciences, [e-journal] 40. Available through: Anglia Ruskin University Library website <http://libweb.anglia.ac.uk> [Accessed 8 March 2017].

Udomsirikula, P., Jumreornvong, S. & Jiraporn, P. (2011). Liquidity and capital structure: The case of Thailand. Journal of Multinational Financial Management, 21(2), 106-117.

Wald, J. (1999). How firms characteristic affect capital structure: an international comparison. Journal of Finance, 22 (2), 161-188.
فاكترون كارتنيكين ل بيكري سيراميبدي دكمن بنين (16) بانكن توماركير ل بزارى دارابيب بئ ديربى

همه 2009م ته سالا 2014م

باحثه:

تارامنج زق في خاكسني النمو ديايريينا ون في حاكلان كرتنيكين ل بيكري سيراميبدي دكمن بنين (16) بانكن توماركير ل بزارى دارابيب بئ عراق." هه 2009م ته سالا 2014م. نيراركفا تفتحاء كرا كرتنيكين ل بيكري سيراميبدي دكمن، بانكن في خاكسني النمو ديايريينا ون في حاكلان كرتنيكين ل بيكري سيراميبدي دكمن، بانكن ينكيزه: (كشبر، كارتنيكين)

تهاختينه و قفامه) ون دوكت كارتنيكين سيرابخ بئ خاكسني النمو ديايريينا. بانكن دسالا دارابيب دوكت كارتنيكي ينكيزه نيبودانو بيبينا بيكري سيراميبدي. بيكريتاتانا نشيف بونون فاكسبي با بيرTextInput (تانيك) (تفاجينججوو خانه دياربير. ديريمو كر فاكترون (كشبر) نه دوكت كارتنيكي نوفر كارتنيكين لبيكر سيراميبدي دكمن و بيكري كارتنيكي نوفر كارتنيكي دسالا دارابيب دوكت بانكن (سوصح) في خاكسني النمو ديايريينا. هه 2009م ته سالا 2014م. نيراركفا تفتحاء كرا كرتنيكين ل بيكري سيراميبدي دكمن، بانكن ينكيزه: (كشبر، كارتنيكين)

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كلبتيك: بيكري سيراميبدي، كشبر، كارتنيكين، نهختينه، قفامه، ديارابيب، دسالا دارابيب، بانكن فاربى دارابيب بئ عراق.

العوامل المؤثره على هيكلية رأس المال ل (16) مصرفا المدرجة في سوق العراق للأوراق المالية خلال الفترة
(2009-2014)

الملخص:

تهدف هذه الدراسة إلى تحديد العوامل التي تؤثر على هيكلية رأس المال ل (16) مصرفا المدرجة في سوق العراق للأوراق المالية خلال الفترة ما بين 2009 إلى 2014. هناك عدة عوامل يمكن أن تؤثر على هيكل رأس المال. في هذه الدراسة تم التركيز على ارتباطها فقط لبيانات هذه العوامل على القيم المالية للكيانات. ثم تم الاعتماد على مؤشر النمو والربحية والنمو والحجم كمؤشر مستقل لهذه الدراسة. بينما تم استخدام الجرحنة المحسنة لقياس هيكل رأس المال. باستخدام الابتكار الحسابي المتعدد بواسطة برنامج (SPSS) (الجمعية الاقتصادية للعلوم الاجتماعية) تم التوصل إلى نتائج مختلفة. النتائج أظهرت أن النمو ليس من محددات هيكل رأس المال ولا تؤثر أطافا على القيمة المالية للبنك بناء على البحث. أما بالنسبة للعوامل الربحية السيولة فقد خلصت الدراسة أن وجود علاقة سلبية ذات احتسابية بين هذه العوامل وهيكل رأس المال. من جانب آخر، أظهرت النتائج التي نحن من العوامل التي تأثر أبحاثنا ودلاز ذات احتسابية على القيمة المالية. هذه الدراسة يمكن أن تساهم بشكل كبير في الدراسات التنبؤية لهذا البنوك لاختيار التركيب الأمثل لرأس المال.

الكلمات المفتاحية: هيكلية رأس المال، النمو، الربحية، السيولة، الحجم، القيمة المالية، سوق العراق للأوراق المالية.