DETERMINANTS OF CAPITAL STRUCTURE: EVIDENCE FROM BANKING SECTOR IN ALBANIA

By

Saida Hasanaj, Msc

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Department of Banking and Finance

Epoka University

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Approval Sheet

I certify that an Examination Committee has met on February 11, 2015, at 14:00 o' clock, at the meeting room, to conduct the final examination for Saida Hasanaj, student of Master of Science in Banking and Finance thesis entitled **"Determinants of Capital Structure: Evidence from Banking Sector in Albania"** in accordance with *Epoka University (Higher Degree) Regulation "On second cycle study programs"*. The Committee recommends that the candidate be awarded the relevant degree. Members of the Examination Committee are as follows:

Chairman, PhD

Professor: Assist. Prof. Dr. Urmat RYSKULOV

Faculty of Economics and Administrative Science

Epoka University

Co Supervisor, M.Sc

Professor: M.Sc Avenir LLESHANAKU

Faculty of Economics and Administrative Science

Epoka University

Examiner 1, PhD

Professor: Prof. Dr. Gŏngör TURAN

Faculty of Economics and Administrative Science

Epoka University

Examiner 2, PhD

Professor: Assist. Prof. Dr. Eglantina HYSA

Faculty of Economics and Administrative Science

Epoka University

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Declaration Statement

1. The material included in this thesis has not been submitted wholly or in part for any academic award or qualification other than that for which it is now submitted.

2. The program of advanced study of which this thesis is part has consisted of:

i) Research Methods course during the undergraduate study

ii) Examination of several thesis guides of particular universities in Western Balkan countries as well as a professional book on this subject

Saida Hasanaj

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Abstract

The aim of this thesis is to give a general view on theoretical and empirical study of capital structure in Banking system in Albania, its components and the factors affecting the decision how to efficiently allocate the capital needed for the second level banks. There are many factors and determinants which affect the capital structuring within a bank. The question each manager should do and the approaches the analysts and researchers have done, is analyzed in this research. The most important components of capital structure are its determinants and how they affect the leverage ratio. In this paper will be introduced an econometric regression analyses about second level banks in Albania. The sample is composed of some important determinants of four biggest second level banks (BKT, Raiffeisen Bank, Intesa Sanpaolo Bank, ProCredit Bank) operating in Albania for years 2008 - 2013. Size, profitability, growth and tangibility are used as independent variables, while leverage ratio is the dependent variable. The empirical study determines if these variables are important over the capital structure and whether the independent variables are significant over the leverage ratios of the second level banks.

As a result of this research findings, it is found that the main determinant factors which contribute to the bank leverage level of the Banking industry in Albania between the years 2008 to 2013 are mainly capital adequacy, tangibility, bank size and profitability with all of these factors conforming to sign expectations based on following empirical findings.

Key words: Capital Structure, Leverage Ratio, Debt Financing, Equity Financing, Determinants of Capital Structure

Abstrakt

Qëllimi i këtij punimi është dhënia e një panorama teorike dhe empirike studimit mbi strukturën e kapitalit në Sistemin Bankar në Shqipëri, komponentëve dhe faktorëve të cilët kanë efekt në vendimarrjen eficente mbi akordimin e kapitalit të nevojshëm në bankat e nivelit të dytë. Ekzistojnë disa faktorë të cilët ndikojnë në strukturën e kapitalit në një bankë. Pyetja që duhet të bëjë cdo drejtues, dhe hipotezat e nxjerra nga analiste dhe studiues të bëra ndër vite, do të analizohen në këtë punim. Komponentet më të rëndësishëm të strukturës së kapitalit janë përcaktuesit e kapitalit dhe si ndikojnë ato në raportin e levave (borxhit). Ne këtë punim do të paraqitet një analizë e regresionit ekonometrik për bankat e nivelit të dytë në Shqipëri. Në shembullin do të paraqitën disa përcaktues të rëndësishëm në 4 bankat më të mëdha (BKT, Bank Raiffeisen, Banka Intesa Sanpaolo, Banka Procredit) që operojnë në Shqipëri për vitet 2008-2013. Madhësia, fitimi, rritja dhe prekshmeria janë perdorur si variabla të pavarura, ndërkohë raporti i borxhit është përdorur si variabël e varur. Ky studim përcakton nëse këto variabla janë të rëndësishme në strukturën e kapitalit dhe nëse variablat e pavarura janë të rëndesishëm për raportin e levave në banka e nivelit të dytë në Shqipëri.

Si rezultat i këtij studimi, është gjetur se përcaktuesit kryesorë që kontribuojnë në nivelin e borxhit të industrisë bankare në Shqipëri mes viteve 2008-2013 janë kryesisht, madhësia, fitimi, rritja dhe prekshmeria bazuar në gjetjet e meposhtme empirike.

Fjalet Kyce: Struktura e Kapitalit, Raporti Levave, Financimi i Borxhit, Financimi i Kapitalit, Përcaktuesit e Strukturës së Kapitalit.

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Ph.D. Gongur Turan and Msc. Candidate Saida Hasanaj, (June 2014) Determinants of Capital Structure: Evidence from Banking Sector in Albania, Partially Published, Mediterranean Journal of Social Science MCSER Publishing, ISSN 20-2117 (online).

INTRODUCTION

One of the foremost necessary decisions of managers within a company is to find a suitable financial instrument to finance their company and production. Capital structure is one of the most debatable and important points in financial management. It includes project finance, dividend policy, issuing of long term debts, buyouts, financing of mergers, etc. The optimal capital structure is obtained when there is a minimal cost of capital and a maximizing dividend to shareholders.

When a company is founded and starts to grow, capital is required. The sources of the capital are provided by two main sources; debt capital or equity capital. Debt capital has two advantages: First, the interest will be deducted from the tax base and thus reduce the real cost of debt; the second, the creditors provide a good return, thus during periods when the company's profits is increasing they do not share this profit with the firm's partners who offered the debt. However, there are two disadvantages of this mixed debt capital: First, the debt ratio would increase the risk of the firm and the firm's interest burden will rise higher. Second, if the profits of the company are decreased and the company faces difficulties, during the due date for the liquidation of the debt's interest, it will be insufficient to meet the start of a process. As a result, the debt capital during good days pushes the partners to the corner, and during bad days would bring them a hefty bill.

Capital structure in financial institutions differs from non-financial institutions. For banks, which are the largest sector of financial institutions in Albania, relating to capital regulations liabilities are the most important factors determining the capital structure.

In the first part of this study the factors affecting capital and capital structure will be analyzed, in the second part the approaches of capital structure and how they are used and in the third part the determinants of capital structure, Albanian banking system, its development and deficiencies. Also an empirical analyze of how capital structure of four biggest banks in Albania. How determinants as profitability, capital adequacy, size and tangibility relate to the total debt ratio. In the empirical study will be used the banking sector of Albania. As in Albania operate 16

second level banks, and is the most developed sector, we will see how these banks use to manage the debt ration.

From a one-sided perspective, capital structure theory has been covered by numerous academics. Furthermore, the application of this theory to banks has been limited and its application to banks within Albania has been almost non-existent.

According to Drumond (2009), currently enormous focus is being placed on bank practices and risk profiles. This is due to the recent global financial crisis which has led to the collapse of some of the largest banking institutions in the world. This critical focus on banks is being applied in an attempt to identify risk factors that contributed to the global financial crisis and to implement regulatory controls that will mitigate those risks. The capital structure of banks is an area which can be easily controlled by regulation.

From the theoretical perspective, the study aims to contribute the knowledge on the topic of capital structure and regulation amongst banks in numerous ways. The study aims to make a contribution by making a comparison of the various funding mechanisms and funding mix adopted by banks in Albania in an attempt to identify best practices.

From the practical perspective, the findings of the study should be of invaluable assistance to management of Albanian banking system in their decision making process and their attempts to maximize their firms performance and value.

Chapter one includes the literature review, about theory and analytic researches and studies of the previous authors regarding the capital structure in different firms, banks and industries. Chapter two refers to the main concept of capital structure, theories and approaches that researches believe that capital structure is implemented in firms and banks and the last topic of the chapter is the Basel accord, its implementation in banks, impact and the pros and cons.

Chapter three is related to the analyses and the determinants that the regression is based on for this study. It is explained how the data used give an empirical analyses about the four banks in Albania and how most important determinants of capital structure affect the leverage ratio.

CHAPTER ONE: LITERATURE REVIEW

Capital structure is one of the most discussed topics from entrepreneurs, managers and other people interested on the way the companies and firms are allocating the financial assets. Many academics and economist argued about this topic and the relationship of the capital structure determinants and total debt ratio.

The term ‘’capital structure’’ refers to the long term financing of a firm and one of the key reasons for attracting such focus is the possible relationship it may have with a firm’s value. Essentially, the choices of financing that a company has available to it are either from an internal source, external source or a combination of both. Internal sources of finance primarily refer to its working capital retained and the earnings of a firm. External finance consists of debt and equity in very broad terms.

Modigliani and Miller were the main researches regarding the capital structure, their components and theories, having a high interest and popularity in finance cycle. In their publication on ‘’Capital Structure Irrelevance Theory’’ (1958) were carried out many conclusions about the capital structure theories called MMI. Also in their publication in MMII (1963) included one of the absent component, the tax effect on the capital structure. Their main debating when they started their research was that market value of a firm is independent from capital structure being that the flash flow of a firm is not affected by capital structure. In 1963 they revised their stance and they concluded that a firm’s value is not affected by financing decision and their suggestion was that higher profits firms should use more debts.

In publications of Robicheck and Myers (1966) they argued that the debt in corporations and companies is a strong reason in order to avoid the bankruptcies, they force the investors to finance their promised payments on their debts.

The developments in corporate finance last 20 years have produced a plenty of ideas how capital structure matters in firm’s value and firms investments decisions. Akhtar, Husnain and Mukhtar (2012) in their research paper found that the determination of capital structure do not need science but only number analysis to determine the factors used for debt, equity and financing.

Dewaelheyns and Hulle (2009) made the difference between the capital structure in Private and Public Firms. The private firms were not financed only from internal but also from external financing, which have an important impact on decision. Although the private firms have limited access in financing debt, they still expand their activities using the internal financing until they meet their needs using the Pecking Order Theory, Mayers (1984).

According to Song (2005) the determinants of capital structure are dependent from the nature of the debt financing. Each determinant has a different impact on short term and long term debt. In her research concluded that size and tangibility have opposite effects in short term and long term financing debts.

Regarding the industrial firms, capital structure is derived from different works and researches, while there exist a materially difference for capital structure of financial institutions. According to Rajan and Zingales (1995) and Harris and Raviv (1992), in order to increase robustness for their predictions, further substantiations are needed. It may be pursued by empirical testing in different industries and periods of different countries.

Recently, banking regulation has taken an important role in international and national economies after the US market crises. Although, US crises affected internationally, its impact should not be generalized to other countries and areas, being that it would be imprudent comparing different industries, economies and policies of different countries.

According to Drummond (2009), there are three important reasons that explained why banking should be supervised by regulators. First one is related to the society, being that banks usually provide crucial service to the public, as payment system and loan provision. Next was regarding the exposure of the bank to risks and the third one is related with continuous risk which may bring risk to country financial stability and economy.

Diamond and Rajan did a research on 1999 over lending relationship where they analyzed the role of capital in banks. In their assumption was taken for analyze projects where entrepreneurs can generate cash flow at highest level. In long term project, outside financiers could finance only the repayment to liquidate the project, while entrepreneurs cannot commit human capital to the project. So the result was that projects are illiquid and cannot be totally

financed by generated cash flow. They also in 2001 developed a theory of banking in which a 'fragile financial structure' (i.e. large fraction of deposits) is necessary for the bank to credibly commit to extract all the value from its relationship loans. The bank could choose not to monitor after lending. The model assumed that depositors can run the bank in that case, which forces it to monitor the borrower. In this framework, increasing capital could lead to a reduction in liquidity creation and to less loan value.

Chen and Mazumdar (1994) suggested that the bank capital structure is and will remain unresolved. Orgler and Taggart (1983) posited that capital structure theory gives the framework of banks capital structure while Merton Miller's (1995) asked whether empirical studies answers the entire questions over consistency of banks debt to equity choice. All these grounds give a comprehensive topic to understand the capital banking structure dilemma through the investigation of financial leverage.

Alhadeff and Alhadeff (1957) emphasized that banking regulation has also been of special interest as the activities of banks influence an economies money supply. The recent global financial crisis has ensured that the topic of banking regulation receives special focus and banks come under scrutiny (Drumond, 2009). According to Ferri and Majnoni in their publication in 2001 capital requirements and banking regulation are set by Basel Accord in national regulator in worldwide. The Capital Accord proposed by the Basel Committee on Banking Supervision in 1988 was initially intended for the bank of G-10 countries. The Basel Accord has since become the standard for national regulators worldwide and led to countries introducing minimum capital requirements on most banking institutions (Chiuri, Ferri & Majnoni, 2001).

The original Basel Accord was based on broad credit risk requirements and has over the years been amended to introduce trading book requirements as well. The original Basel Accord put forward a requirement of a total risk-weighted capital ratio of 8% that each bank should adhere according to Basel Committee on Banking Supervision (1988). This ratio was calculated as the ratio of a bank's capital to those banks total risk-weighted assets. Failure to adhere to this minimum would result in the shareholders being able to recapitalize the bank in question. Regulatory authorities could thereafter step in and proceed with the liquidation of the bank if the

shareholders failed to act. Banks could achieve this regulatory minimum in various ways; either by issuing new equity, decrease the amount of their assets, or they could merely change the portfolio mix of their assets by switching to lower risk assets while keeping their overall asset level constant (Cumming & Nel, 2005). The original Basel Accord succeeded in raising international capital levels but came under considerable criticism. Due to this criticism the second accord was drafted which sought to improve on the imperfections of the first.

Pillar 1 [1] is related to the minimum capital requirements and prescribes the appropriate minimum capital requirements to cater for market risk, operational risk and credit risk. Pillar 2 (Basel Committee on Banking Supervision, 2005:204), relates to the supervisory review process and defines the roles of banking supervisors and describes the powers conferred unto them. Pillar 2 also details how a bank's management should go about in its management of the risks as defined in Pillar 1. Basel II was an improvement over Basel I as it created the framework for supervisors to have greater involvement in the review and regulation of banks. Pillar 3 (Basel Committee on Banking Supervision, 2005:226), relates to market discipline and sets out the policies of best practice that a bank should follow to adequately disclose information to the public regarding their risk exposures, risk profile and risk mitigation practices.

In the developing countries, Basel II is expected to provide a strong encouragement for enhancing banking supervision, while the banks themselves are going to be more sophisticated in risk management.

Actually, referring to some of its concrete requirements, Basel II represents a standard that presents some difficulties in implementation. For example, lack of domestic rating agencies or their low development in the developing countries, means that many unrated internal risks be weighted by 100 percent. Though additional new elements of risk-sensitivity may exist, such as higher requirement for additional capital, for overdue loans or the requirement for additional capital for all the annulling unconditional commitments, this element would bring about reduced sensitivity to risk in the new standard, and would result in unequal conditions of competition between local banks and foreign ones. When most of internal risks are placed in the non-rated

[1] Basel Committee on Banking Supervision, 2005:12

category, this would make the better rated borrowers in these countries take loans at lower cost from international banks, compared to domestic ones. (Bank of Albania, Annual Supervisory Report: 2005)

CHAPTER TWO: FACTORS AFFECTING CAPITAL AND CAPITAL STRUCTURE

2.1. The Concept of Capital Structure

The definition of capital in finance science, "despite the sources that provide managing of the debt, like obvious possibilities, also there are other sources that provide founds and provisions like reserves and retained earnings.

It is essential that banks maintain adequate capital resources to sufficient quality and quantity commensurate with the nature and scale of their activities and the risks inherent in these activities. To allow an affective transition to the new standards the permitted constituents of regulatory capital and the extent to which they can be used will need to be clearly specified to allow banks to plan ahead and to continue to finance their activities on appropriate and efficient basis.

A company, in general, provides the funds needed mainly from two sources: Foreign source and shareholders' equity. Firms' capital structure reflects the decisions regarding financing. Capital structure, the debt within it and equity components explain the structure that emerged. Determining a firm's financial structure, we should respond to two main questions; the first of these questions, the firm's total resources of long-term and short-term funds how should be distributed. Secondly, for the funds to be attracted how should be the rates of equity sources and foreign sources. For the distribution of the total sources of funds, the owner of the company should analyze the composition of the assets.

Foreign source and the Self-Supply Differential Features

Credit, loan association representing debt owner's relation with the capital and their characteristics are grouped under four headings:

a) Duration,

b) The Company is entitled to claim on income,

c) The right to claim over the assets of the company,

d) Right to participate in the management, control rights.

A) Duration

No matter how long is the duration of foreign source (debt), the company should make the debt repayment on the specific date they agreed with the part who gave the loan. If there is no particular period for the equity, the company is continuously the nature of the source. The owner or owners of the firm, in order to receive back their investment in the company, firm or transferred rights to a third party, by using legal requirements, should try to liquidate the firm by reducing the capital required. Otherwise the repayment of equity is done on the specific date, or the capital redemption provided outside of privileged companies is not the case.

B) Right to Request on the firm's income.

The right to claim on the firm in terms of revenue debt and equity is divided in to the following three points:

a) Priority to the request

Lenders, the company's revenue, the owner or owners of the company are entitled to priority in comparison. After you have fulfilled all obligations to the lenders of the company stakeholders, some of the partners in the firm's share the profits that are recognized priority for the distribution of profit after preference shareholders, only then can share the profits given.

b) Requesting certainty

The company, whether it gets profit or not, for using certain amount of foreign resources in response, they need to pay interest as a consequence the interest payable, profit-and-loss sharing certificates, except for financial assets such as bonds, profit sharing, depending on the firm's income does not indicate a change. In other words, when borrowing the interest, burden of the company shall be fixed rate or variable.

c) The amount requested

Lenders to the company, if the amount of demand in certain limited periods of principal and interest payments are not fulfilled and that, despite the existence of rights to resort to legal means the firm or its partners with share of profits claims, may fluctuate over the years. Lacks of

profit distribution or in the situation when there are no competent decision makers, shareholders are not able to apply the executive ways to receive dividends.

C) Right to demand on the firm's assets

The right to claim over the assets of the firm, the more there is a case of liquidation of the company. Case of liquidation of the firm, the firm's assets, lenders, owners and partners of the company are entitled to priority in comparison. But the remaining balance after the payment of all debts of the firm, all is shared between the partners.

If the firm, when providing credit of a portion of the assets, shown as secure, in the situation when they cannot comply with its obligations, the lenders has the right to find ways to get back the money. The company and its partners have made a firm assurance that the is a special safety behind the investment.

D) The right to participate in Management

The company's management, in principle, provided the company with equity or shareholders rights reserved. Lenders are not allowed to talk directly to the management of the company. However, when there are special conditions during the loan agreement, loan providers get involved in the management of the company to some extent (to intervene), the management of the possibilities to limit some of the activities in question. As exceptional cases, the owners of redeemed shares, share certificates, as well as when are denied the right to vote, are provided the right to participate in the management of equity.

Financial markets, especially since the early1980s, which are described with a hybrid character, bearing debt and equity capital structures of some of the elements, (shares, convertible bonds, profit-and-loss sharing certificates, redeemed shares, bonds indefinitely, etc.) were being used as financial instruments.

2.1.1. Basic Questions for Capital Structure

Finance managers, referred as the relationship between two main sources of founding, are required to make the various basic decision-making policies. Should the company provide funds through borrowing? If the company gets debts for the optimal capital structure, in other words optimal foreign sources, what should be the composition of the equity?

If the foreign source of financing (debt) is used, between short -and long-term liabilities, by keeping in mind interest rate expectations and the liquidity requirement, what should be the most appropriate combination? If there is the need to increase equity financing, in how many parts should the company be divided in order not to distribute the profit within the company and so how much should be ensured through the release of a new capital increase.

In practice, firms' capital structures are very different. However, in general, the following patterns can be seen in the different capital structure of the firms.

i. Foreign source/ equity ratio balanced, foreign sources of short-term rates are relatively small, whereas weight is more than in the long-term foreign sources, a high percentage of equity in the paid-in capital, retained earnings, capital structure which is relatively low.

ii. Foreign source/ equity ratio balanced, mainly short-term liabilities, long-term debt ratio is low, the undistributed earnings of equity are largely formed at the share of equity in the capital structure of the Company's share capital.

iii. Foreign source/ equity ratio is low, short-term foreign liabilities, equity capital structure mainly consisting of retained earnings.

iv. Foreign source/ equity ratio is low, the long-term foreign liabilities, which are more than the share of equity in the capital structure of retained earnings.

v. Foreign source/ equity ratio is high, mainly short-term foreign liabilities of own resources of the majority of paid-up capital in the capital structure.

vi. Foreign source/ equity ratio is high, usually short-term liabilities, stockholders' equity in the capital structure of higher retained earnings.

2.1.2. Factors Affecting the Capital Structure Decisions

Businesses, the creation of capital structure, in other words the investment decisions, even when not deciding on how much capital or equity to use, economic conditions of the country in which they operate, are affected by the sector and its features.

2.1.2.1. General Economic Situation

Developments in the economy and the economic policies followed by decision-makers, directly or indirectly, business investment decisions affecting the composition of the resources used to finance these investments, businesses can make changes on the market values.

In countries where Gross National Product (GNP) rises, the country is perceived to have a positive development in its economic performance. GDP as an economic units belonging to a country in a certain period gives the total monetary value of final goods and services produced. Over the years a steady increase in GDP shows the country's economic well-being, so activities and the number of businesses in the country increase. This situation will have a positive impact on the securities markets.

Money and the capital market developments, to the cost of providing a variety of resources, there source availability aspects are important. If interest rates are expected to increase in the future, it appeals to be important that a contraction of debt funds to be taken as long-term debt at fixed rates. If the possibility of future funding on favorable terms Increase and interest rates are expected to fall in the short-term, debt with floating interest rates are appropriate.

Taking healthy financing decisions, it is necessary to make predictions about the future economic situation. Therefore, sources of funding, in an informed manner and within the framework of the light of expectations about the future should be taken. While doing estimations about the general economic situation related to the preparation of the financial plan, the following points should be given importance:

1) Annual Development Volume

In economic life in general, or when the company is expected to have a rapid development of the industrial sectors in which it operates, in this case the firms, can observe the financing strategy that allows flexibility. Funds due to the volume of work created by the company's development, tries to avoid potential problems in the use of more and more foreign source. On the other hand, a contraction of the economy or the relevant branch of industry is expected, avoiding debt and emphasizing on equity-financing, in terms of risk reduction is an appropriate attitude.

2) Money and Capital Markets Developments.

Developments in money and capital markets are important aspects for the cost of providing a variety of resources to resource availability. For example, you can borrow funds for the future that are expected to rise in recession times and can measures interest in advance. Favorable conditions in the future will increase the ability to find funding; the firm's financing policy is to protect the freedom of movement for today monitoring, variable rate short-term benefit from foreign sources may be appropriate.

If the interest rates are expected to increase, long-term debts at fixed rates, if the short-term rates are expected to decrease variable (floating) interest rate of borrowing are appropriate.

3) Tax Rate Developments

The interests paid with foreign sources, tax expenses to be written in terms of income, give the advantage of a tax on foreign sources that provides financing. If income tax rates increase in the future, attractiveness of debt financing, increases the equity of the finances.

However, tax rates or dividend distribution companies (dividend) are factors that affect auto-financing policies. Distributed and undistributed corporate income taxation at different rates, share (emission) in the face of premium tax status, affecting the financing decisions. These expected changes in tax rates, undoubtedly are effective on profit distribution companies and on self-financing decisions.

4) Developments in Foreign Exchange Markets and exchange rates

Developments in foreign exchange markets and exchange rates of local (national currency) or foreign currency debt issue are affected by firms' choices.

2.1.2.2. Industrial Properties

Industry financial decisions are affected by the above listed characteristics:

1) Impact seasonal movements

The effect of seasonal fluctuations in sales of wide range of industries, in a relatively large extent, feels the need for flexible, short-term sources of finance.

2) Cycle (periodic) Impact of the gestures

Generally unfounded industries producing consumer goods (especially food industry), based in the family budget, industries that produce cheap junk food have turned it in a habit for common use of goods sales, largely unaffected by cyclical fluctuations. In contrast the high income elasticity of sales of goods shows the ups and downs of the national income fluctuations more rapidly. Especially in industries producing capital goods, durable consumer goods-producing industries, is cyclical sensitive.

Industries affected by cyclical fluctuations in sales, when there is a choice between funding sources, risk, and flexibility, there are two important factors to be taken into account. This is a heavy burden of debt industries, increasing the risk of financing the activities that debt settlement companies may put them in a difficult position and not leave them alive.

More sensitive to cyclical industries is the use of relatively more equity, in terms of risk, mitigation is useful.

3) Industry Competition Form

Severe competitions in the future periods are difficult to forecast sales and profits in industries in a healthy way, to load on excessive risk, equity and foreign sources of finance should be given more weight.

Lack of competition in industries where sales and profits are limited or comparatively stable, there is a healthy way of forecasting possibilities, companies operating in these industries, the degree of financial leverage financing up grades using more and more foreign source, does not create a risky situation.

4) Currently stage in the industry.

Like in industries or other active organisms, such as the nascent, by growing, maturing, or stepping back, enter into recession. Development of industries in general should pass through these stages.

Industry in its fancy or childhood, when the probability of failure is higher than equity financing, weight should be given to reduce the risk of equity financing. The period of industry's growth and development, funding flexibility, freedom of movement, comes to the fore needing to provide funds quickly and easily. Industries are generally observed in the age of maturity, the

companies they have self-financing, self-reinforcing, because of the foreign source capital/ equity ratio, shows a downward trend.

2.1.2.3. Company Properties

The firm's overall economic situation, in the country which it operates and in the industry it belongs, extra properties and company properties influence the choice of capital structure. The firm's organizational form and legal nature, size, age, assets, structure, growth desire, the attitude of managers, profitability, and capital structure make decisions which affects the life cycle.

Every business operating in the same sector, though with different features, have impressive role in shaping the capital structure of these features. Within these features form of business organization and legal structure, size, asset structure, credit worthiness, the attitude of managers can be counted.

Large-scale enterprises, small-scale compared make use of the financial markets in achieving more effective funding sources. Small businesses, financing a large extent, can provide the owner or owners' equity and the seller have to rely on loans. However, debt can find a limited extent. Such enterprises are also extremely limited bargaining power of finding foreign sources.

2.2. APPROACHES AND THEORIES TO AFFECT CAPITAL STRUCTURE OF THE RESOLUTIONS

2.2.1. Approaches of Capital Structure

The main purpose of the capital structure decisions, through a combination of appropriate long-term funding sources, is the maximum market value of the firm. Referred to as the optimal capital structure of the composite, the firm minimizes the total cost of capital. However, different views on the existence of an optimal capital structure have been proposed. Focused on such ideas, changing the composition of the funds used or the market value of a firm's cost of capital is actually influencing or not. Different approaches to the firm's capital structure decisions are collected at four key points.

i. Net operating income approach,

ii. Net income approach,

iii. Traditional Approach,

iv. Modigliani-Miller Approach.

This is the focal point of views, the real value of the funds used by changing the composition or the cost of capital of a company is to determine with what happens to it. All of these approaches are based on certain assumptions moves. These assumptions are as follows:

Income tax is concerned, however, be noted that this assumption is removed later.

• Operation provided distributes profits as a share of all profits.

• Operations, does not lead to any cost.

•The company's profit before interest and taxes are fixed.

• The Company's operational risk is constant.

Based on the above assumptions, company deals with three ratios. These ratios are kb, ke and ko.

1. Provider of the debt return: (k_b)

2. Return on capital owners (k_e)

3. The total capital cost of the company (k_o)

Each of the four approaches in determining the capital structure, leverage ratio (Debt /Shareholders' equity= B/ S) increased; k_b, k_e, k_o are concerned with the values of the assets.

2.2.1.1. Net Income Approach

Net Income Approach, the assessment of a company, the leverage factor in determining the value of taking into account is the impact of the approach to be regarded as excessive. Indeed such approach, according to the capital structure of a firm (the degree of leverage factor) by changing the market value to the upgrade, has the opportunity to reduce the cost of capital.

Net income approach, according to the capital structure of enterprises debt / equity ratio by increasing the weighted average cost of capital is the result of a decline due to an increase in market values. Average amount cost of capital (ko), due to the increased level of debt is decreasing. Average amount cost of capital, cost of equity capital which is adjusted by ke zero debt level, adjustment of the debt level to100% is the cost of debt equal to kb.

One of the basic assumptions of this approach is that the cost of borrowing a small cost of equity capital (kb<ke). Therefore, the value of the entity, cash flows, is due to be because of the discounted using the discount rate to be obtained in the future, in the extent the weighted average cost of capital business (discount rate) will be reduced, and thus the value of the entity that will be extremely high.

In the net income approach, and the firm's total capital cost (ko) and a market value (V), the debt/ equity ratio is argued. The basic assumption of this approach is that, the equity ratio remained unchanged kb and ke.

In the net income approach, using the firm in accordance with the highest possible degree of leverage reaches an optimal capital structure. The reached market value of the firm's optimal capital structure lowers average cost of capital upgrading. The firm's market value and the market value of debt is the sum of the market values of equity.

2.2.1.2. Net Operating Income Approach

Net operating income approach, while giving business borrowing, cost of equity (ke) is expected to increase. But the rise in the cost of equity capital, borrowing costs (kb) to resolve the impairment, capital structure, regardless of the weighted average cost of capital will remain unchanged. In other words, the weighted average cost of capital provision of cheaper foreign sources, will increase the cost of equity, but will not change the weighted average cost of capital. The low cost of foreign resources will remove the rise of the cost of equity.

In the net operating income approach, the company's net operating income is a fixed rate of capitalization in the market value of the firm to capitalize. As a matter of fact approach to the capitalization rate for the company (average cost of capital) is assumed constant for the entire capital structure. As a natural consequence of this assumption, the changes in a firm's capital structure, the company defends the affect the market value and average cost of capital. However, the company's debt level increases, so does the cost of equity capital. This is because the risk of the firm's debt ratio increases, the firm's partners to increase their capital is invested in high-risk level, will want a high rate of return. In addition in the net operating income approach, increase in the cost of equity, compensate for the cost of debt to equity has been declining and ultimately accepts the average amount cost of capital that does not change.

According to this theory, the firm's value by discounting future cash flows are the total capital cost. For this reason, the total capital cost of the firm, the firm is independent of capital structure.

Net operating income approach assumes that the profit remains constant without being affected by the change in leverage, "leverage effect and the cost of capital cannot be changed". Therefore, the approach is as follows: As can be seen, the optimal structure of a capital is totally irrelevant.

2.2.1.3. Traditional Approach

According to the traditional approach to the evaluation and the cost of capital for the firm, a firm has a single optimal capital structure and reduces the cost of capital and the market value of firms taking advantage of the leverage factor increase. In the traditional approach, the company the cost of equity capital is higher than the cost of foreign financing.

According to the traditional approach, the net operating income approach, as well as the cost of debt capital is tax-deductible for both partners and a higher rate of return so they expect a high degree of risk, the cost of equity is higher than the cost of foreign capital. For this reason, the company by using more foreign sources can reduce the cost of equity (discount rate). After the optimal point is exceeded, due to the risk, both owners and the owners of the equity and debt capital since they will demand higher returns, the total capital cost will increase and the firm's market value will reduce.

There are three assumptions under Traditional Approach. For a certain period, the interest rate remains the same, and as the leverage increases, the interest rate increases too. Second one is related to shareholders equity, whether the expected rate remains stable or increases. It is proved that when shareholders equity faces a financial risk and then obtain the optimal point, expected rate increase rapidly. As a result of change of interest rate and expected rate and WACC (weighted average cost of capital) decreases and increases, the lowest point of the curve will determine the optimal point of capital structure.

2.2.1.4. Modigliani-Miller (MM) Approach

The relationship between capital structure and cost of capital in the Modigliani-Miller approach described above with the "Net Operating Income" approach is the same. In other

words, the Modigliani-Miller argues the relationship between capital structure and cost of capital "Net Operating Income" approach.

An analysis by MCC, have agreed that there is an excellent market. Assumptions in the model:

• Buying and selling of shares does not require any expense transactions,

• There are buyers and sellers in the market enough, and a person does not occur in a significant impact on markets.

• By individuals from securities markets and related information can be provided for free now

• All buyers and all sellers borrow the same interest rate.

• All investors behave rationally and profits of the company are involved with an expectation of homogeneous.

• The companies operated under the same conditions and contain the same risk in this regard is homogeneous

• There is no Taxes (this assumption is then removed)

In summary of this approach, according to MCC the companies that have the same income have also equal degree of risk. Let us assume that under the same grade of risk, company A uses grade debt to equity and company B is financed by debt capital. None of the partners, by saying that A company used financial leverage as reward, market price of the shares, and therefore does not increase the total value. Partners own financial debt-to-equity capital structure, changing at any expense can generate equal returns. For this reason the partners, for a company that was financed with equity capital, the need for additional capital as debt-financed, will not modify their ideas about the value of the company.

MCC's capital structure, the views on the relationship of cost of capital and the market firms, they endure due to lack of criticism undergoing on realistic assumptions, and in particular the capital market arbitrage occur as claimed by the authors that suggested this phenomenon. In short, the MCC put forward ideas and assumptions that real life is not much interest; these views have led to the invalidation of today.

Modigliani& Miller(1963), they made a correction after 5 years when firstly the article was written "Corporate Income Tax and Capital Cost": During the correction they took in

consideration tax variables and emphasized that they could maximize the market value of firms taking advantage of debt tax shield.

2.2.2. Theories of Bank Capital Structure

There are four main theories that explain the decision of capital structure with banks. Being that there is a confusion and dilemma about the mix of debt and equity and how banks use to manage their financing operations, these theories give facilities to construct the optimal decisions in the context of modern banking capital structure.

2.2.2.1. Static Tradeoff Theory

Trade off theory explains how firms are encourage to increase their debt ratio being that the firm decides on debt to equity ratio as according to the assumptions, there exists some optimal capitals structure and thus, external cash flows are reduced. According to Myers and Mjluf (1984) the proper way that firm can achieve the optimal capital structure and maximizing firm's value, is by balancing the bankruptcy costs with the tax benefits. After the evolution of trade off theory, researchers are included in deeper discussions adapting in more realistic assumptions and analyses in different companies, taking as the main factor, the firm's profitability. Assumptions raised and coming results is that higher profitable firms have less debt ratio being that these profits are used as finance sources.

2.2.2.2. Agency Theory

Agency cost is called in other words as costs of conflict of interest. Within a firm, the agency cost is spread in different levels. One of the most concerned one is the conflict between shareholders and managers, Jensen and Meckling (1976). This arises being that managers tend to predict less effort on maximizing firms' profit being that at the end they do not tend to receive the entire gain. The other cost that is raised from conflicts is between the shareholders and debt holders. Share holders tend to invest in projects that are suboptimal projects. If the investment would be a failure, the failure will be beared by debt holders while if the project will be successful, the return will be gained by shareholders. Thus the agency cost of capital investment is highly risky, and the choice for an optimal capital structure should include the balance of agency cost and managerial discretion.

2.2.2.3. The Pecking – Order Theory

The Pecking Order theory strongly supports the idea that firms use external debt only when retained earnings are insufficient for meet company's needs. The key prediction of pecking order theory is financing by strict ordering. Even when raising outside funds, most of the firms hold some internal funds (cash and short-term investments). This is so obvious that it is rarely considered in tests of the pecking order. It is implicitly assumed that these funds are held for reasons that are outside the theory, such as for transactions. Almost all discussions maintain some version of an "other things equal" interpretation of the relative use of internal and external funds.

2.2.2.4. Bankruptcy Cost Theory

When the possibility for a firm to have a default on financing is greater that zero, then there exist a bankruptcy cost. According to Modigliani and Miller (1963), it is optimal for a firm to be financed by debt in order to benefit from the tax deductibility of debt. According to Pettit and Singer, 1985 the greater the probability of bankruptcy a firm faces as the result of increases in the cost of debt, the less debt they use in the issuance of new capital.

2.2.2.5. Market Timing Theory

The market timing theory is one of the more recent theories and is purported by Baker and Wurgler (2002). As explained by Baker and Wurgler the theory is simply that a firm's current capital structure is the result of all historical attempts to time the equity market (Baker & Wurgler, 2002). Managers would look at conditions in the debt and equity markets and issue either debt or equity based on which was more favorable at the time. At times when conditions are favorable additional finance may be raised to exploit the favorable circumstances even if there were no immediate projects that warranted such finance (Frank & Goyal, 2009). As mention by Baker and Wurgler (2002), two instances where equity market timing may result in the dynamics of capital structure being similar; with rational managers or investor and unfavorable selection costs, or with irrational managers or investors and perceived mispricing.

2.3. BASEL ACCORDS

In 1974, after creation of Basel Committee, became effective a number of international standards on banking activity and supervision. Among the variety of these recognized standards, we would point out the Capital Standard and its calculation, known as Basel Capital Accord. This accord was announced officially on July 1988 which is known as the 1988 Accord.(Bank for International Settlements, Monetary & Financial Stability)

In 1988, after the introduction of the Basel Accord, banks' capital and capital adequacy requirement are increased in a considerable way. So, banks with capital levels below the minimum required increased their capital ratios more than banks with satisfactory capital level. It is a fact that, even after making some changes in the Accord, still it has not hindered the banking developments and cannot be viewed as detached from important financial developments, which impact on banks' business that are presenting a risk profile different from the one described by the current accord. As it is already known, the current accord focuses only on credit risk, but the credit risk is not the only one the banks are faced with. Besides the credit risk, banks are facing other risks in their daily work, such as the liquidity risk, market risk (exchange rate risk, and interest rate risk), legal risk, operational risk, reputation risk, and strategic risk. Also, the risk management practices, passing through some critical changes, led to development and increased use of such sophisticated patterns, such as Value at Risk, Credit Metrics, and Credit Risk which are largely preferred. Bank's capital structure consists of Tier 1 and Tier 2 capital. The major components of Tier 1 capital are equity share capital, equity share premium, statutory reserves, general reserves, special reserve and capital reserves. Tier 2 capitals consist of subordinated debt, provision for standard assets, revaluation reserves, special reserve (swap) and investment reserve. (Composition of Capital disclosure requirements, Basel Committee on Banking Supervision, June 2012)

2.3.1. Implementation of Basel II in developing countries.

As banks are going to be more sophisticated, Basel II is being implemented in banking system of developing countries in order to ensure more comprehensive supervision.

Referring to some of its concrete requirements, Basel II presents some difficulties in implementation. For example, lack of domestic rating agencies or their low development in the developing countries, means that many unrated internal risks be weighted by 100 percent.

Though additional new elements of risk-sensitivity may exist, such as higher requirement for additional capital, for overdue loans or the requirement for additional capital for all the annulling unconditional commitments, this element would bring about reduced sensitivity to risk in the new standard, and would result in unequal conditions of competition between local banks and foreign ones. When most of internal risks are placed in the non-rated category, this would make the better rated borrowers in these countries take loans at lower cost from international banks, compared to domestic ones.

2.3.2. ALBANIAN BANKING SYSTEM

Albania entered the path of development in 1990 from an economy directed by regulations of East Countries which now is following the way of development according to the scheme of Western European countries. In 1990 Albania began e new face of political, social and economic prospective. New reforms were implemented which brought positive impacts in different sectors within the country. Due to the centralized economy, Albania inherited a completely underdeveloped financial system, with a little experience in the banking system and a nearly unknown non-banking system and financial market. Recently, the Albania's financial system has evolved to a significant degree, except the financial shock in the market caused by the collapse of pyramid scheme in 1997.

Financial transformation is mainly concerned in its primary sector that of financial institutions which were operating in the market, being that the other two sectors were inexistent during communist system. During 1991 – 1992 was created the new banking system according to Estern countries banking models.

The first level bank was established Bank of Albania as the only one, operating with the attributes of central bank and other three ones were established as second level banks, operating as state-owned banks, which are then privatized. Still nowadays banking system in Albania is the strongest and largest sector operating in Albanian market. It is composed of 16 second level banks which are mostly privatized by foreign entities and total capital is coming 98% from

abroad, as shown in Table 1 of banks shareholder. On 1996 some banks started to operate in the market, in 1997 because of pyramid scheme, bank system was in dilemma: - to liquidate, restructuring or privatization - and only in 2004 lending began to boost until 2008 when financial crises started. Banks which are 100% financed from foreign are strongest to other local banks. As shown in Table 2, also these banks are biggest according to size and number of branches. These banks are mainly financed by retail deposits and business lending. Recently has been characterized by improved information and communication technology utilized by the banking system. Banks have upgraded some of their existing software or have acquired new ones, which enable a more efficient use of the banking accounting manual and initiate new services, such as e-banking.

As banking sector plays a major role in economy of Albania, it should choose a strategic mix of capital in order to increase the firms' value and ensure operations to achieve the optimum capital structure.

The Bank of Albania has gradually adopted an approach for alignment with European directives and Basel II on the activity of financial institutions and capital adequacy, taking into account the actual Albanian banking system development and needs. This approach will start with the adoption of standard methods for assessing, measuring and monitoring risk, and will continue, in the medium term, with internal and advanced models. In July 2013 Bank of Albania approved a new regulation on the capital adequacy ratio, as a recast of the existing regulation in the light of Basel II. The new legal act is important to both banks in the system and the supervisory authority. It aims at adapting standard methods on market risk and credit risk, as well as the basic indicator and the standardized approach methods for the operational risk to calculate the capital requirement for banks. This will help banks to address better their needs for capital, monitoring these risks at their own initiative and ensuring in any case compliance with the required levels.

Basel II regulation was drafted with assistance from central Bank of Italy in the framework of a two-year twinning program, and provided for a better alignment of our supervisory regulatory framework. Moreover, this regulation is considered to have been launched at an appropriate period, as this standard passed successfully the test in countries and

banks that are active in international markets, for which it was designed. It has created a more complete picture with all the positive and negative aspects arising from its practical implementation. The regulation is seen as an opportunity for banks, to further perfect risk management systems and calculate capital needs more effectively, ensuring, at the same time, a more rational connection of banks' capital with its risk profile.

CHAPTER THREE: DETERMINANTS OF BANKS CAPITAL STRUCTURE

According to AFME (Association for Financial Markets in Europe) is essential that banks maintain adequate capital resources to sufficient quality and quantity commensurate with the nature and scale of their activities and the risks inherent in these activities. To allow an affective transition to the new standards the permitted constituents of regulatory capital and the extent to which they can be used will need to be clearly specified to allow banks to plan ahead and to continue to finance their activities on appropriate and efficient basis.

The capital structure decisions are affected from several determinants which are the main factors that help managers take decisions on capital structuring. As mentioned above there are many factors that affect capital structure of firms and banks, as macro-economic variables of a country which are unchangeable and irrelevant to all firms. Micro factors, which are the individual characteristics of a bank, affect capital structure relevant to theories stated earlier. Main determinants of capital structure are: capital adequacy, tangibility of assets, size and profitability.

There exist a huge number of empirical studies on capital structure determinants, and almost all the studies are related to relationship of leverage ratio and determinants mentioned above. These empirical tests have measured significance of various variables using diverse methodologies and are focused on country specific, industry specific and firms to find the determinants of capital structure. Although these many researches, the analyses and studies results are almost the same.

Dependent variables

To build the analyses the leverage or debt ratio is used as dependent variable, total debt, short term debt and long term debt. Many researchers have used the book value to calculate and estimate the debt ratios and leverage of the firm and they use the three variables because it is dangerous to use only total debt, because of the inability to give an exact conclusion. The reason is the inability of examining the factors affecting the short and long debt to be identified.

Independent Variable

Capital Adequacy: The capital adequacy is generally the banks strength and stability as it is the measurement of capital ratio to its assets: loans and investments. So the increasing in capital increases the risk of earnings variations in the future. Therefore the most concerning problem of the managers, are the control of the firms and the concern of creditors to limit default risk. Capital structure can be positively related to long term debt and negatively related to short term debts according to hypothesis of ceteris paribus[2].

Tangibility: Greater will be the ability to issue secured debts if the firm's assets are more tangible (Booth, 2001). When a firm has a large amount of fixed assets, it can borrow with relatively lower interest rates from creditors. So a firm with greater fixed assets borrows more than a firm with low amount of fixed assets as the interest will be lower. Therefore there is a positive relationship between the leverage ratio and the tangibility of assets.

Banks Size: There exists a conflict between the viewpoints about the relationship of leverage relative to banks size. One says that there is a positive relationship between the leverage and banks size. The large banks do not consider the bankruptcy costs as a variable in determining the level of leverage. Therefore larger banks have less chances of bankruptcy. The second assumption consists on the negative relationship between the leverage and banks size (Rayan and Zingles 1995), as there is an asymmetric information on large banks. This reduces the chance of undervaluation of new equity issues and thus leads to using more equity financing.

Profitability: There are some theoretical predictions conflicting in the relationship between leverage and profitability. According to pecking order theory, firms with high ratios of profitability, uses their own financing rather than outside sources. According to Jensen (1986) predictions, he stated that there is a positive relationship between the financial leverage and profitability if the banks control is effective.

The Trade-off theory points out that more profitable firm are less exposure to bankruptcy risk. According to this theories related study, there is a negative relationship between profitability and leverage ratios.

[2] Latin phrase which is generally used for saying 'with other things being the same'. It is particularly crucial in the study of cause and effect relationship between two specific variables such that other relevant factors influencing these are assumed to be constant by the assumption of Ceteris Paribus.

3.1. Data description

In this study the data and methodology are based on the dates of the capital structure of four second level banks operating in Albania. The sample is composed of some important determinants of four biggest second level banks in Albania for years 2008 - 2013. Size, profitability, growth and tangibility are used as independent variables, while leverage ratio is the dependent variable. Four most important banks taken for this analysis are: Banka Kombetare Tregrate, Raiffeisen Bank, Intesa SanPaolo bank, and Procredit Bank. Determinants will be analyzed based on the published data by banks in their official websites of the annual reports. Necessary items of balance sheet and income statement for finding the variables need for the regression is: total assets, total equity, fixed assets, profit before tax and interest expenses. The result is found by using the program SPSP, giving the relationship between depend variable of leverage ratio and independent variables of capital adequacy, tangibility, size and profitability.

3.2. Methodology

For theoretical studies, factors affecting this important issue of the banks are analyzed, given the positive and negative consequences of each, approaches and theories and their valuations over years and the determinants affecting the capital structure. In the empirical study the data are used to give the relationship between the leverage ratio and the independent variables as capital adequacy, tangibility, size and profitability and to find the optimum relation between them for the second level banks in Albania.

Hypothesis:

This study has tested the following null hypothesis on relation between the defined variables and capital structure of four listed banks in Albania:

H: There is no significant relation between Bank Leverage and Capital Adequacy, Bank Size, Tangibility, Profitability.

Econometric Model

For the empirical study and regression analysis and formula used for a regression of determinants of capital structure is:

$$LEVERAGEi,t = \beta 0 + \beta 1(SIZEi,t) + \beta 2(PROFi,t) + \beta 3(TANGi,t) + \beta 4(CAPADEQi,t) + \in i$$

Where:

LEVERAGE: 1 minus Equity all over the Total Asset

SIZE: Natural Logarithm of Total Assets

TANG: Total Logarithm of Total Assets

PROF: Profits before Interest and Tax plus Interest Expense all over Total Assets

CAPADEQ: Bank's core capital expressed as a percentage of its risk-weighted asset

3.3. Analyses and the results

Table 1: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	,884(a)	,782	,733	,008918504 5024	,782	16,103	4	18	,000	2,488

Table 2: ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	,005	4	,001	16,103	,000(a)
	Residual	,001	18	,000		
	Total	,007	22			

a Predictors: (Constant), capital adequacy, profitability, bank size, tangibility
b Dependent Variable: leverage

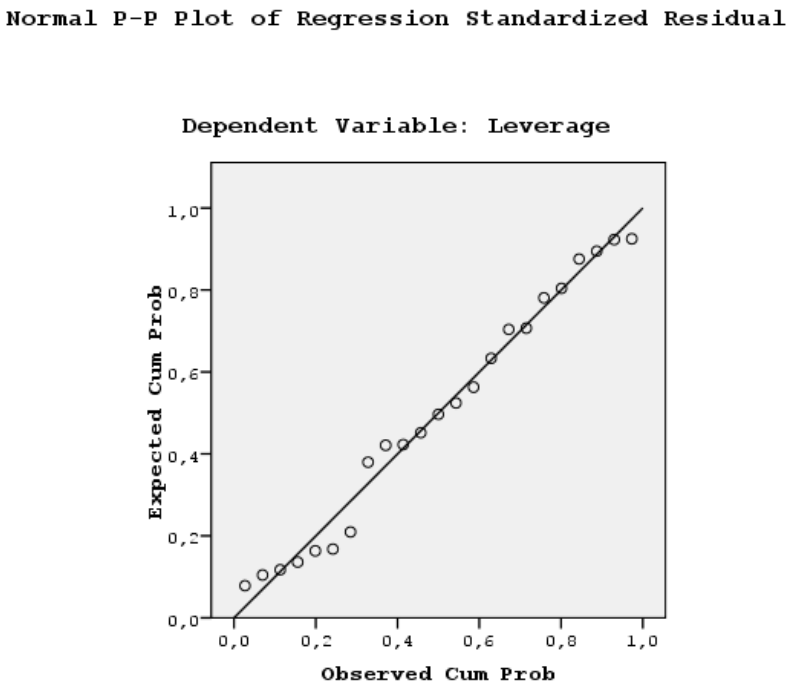
Model Summary table and Anova table above shows the main result from the data analyzed for this study. As can be seen in the table above, the model estimated give almost a perfect result as compared to the various theories as well as empirical literatures reviewed on the determinants of

capital structure among banks generally. The estimated model above has an R2 and Adjusted R2 88.4% and 78.2% respectively as its coefficient of variation. This indicates that majority of the variations or changes in the capital structure of the understudied bank in Albania a largely determined by the dependent variables selected for this study. 88.4% is explained by five independent factors of capital structure while 11.6% is attributed to other factors. This is further supported by the F-Statistic which is given at 16 and significant at 1% level of significance from the F-Statistic Prob. This shows that the coefficients of the variables in our model are statistically different from zero and good fit with the data. The Durbin-Watson Statistic estimated at 2.48 indicates that there is no trace of serial correlation in the error terms of our model which may render it a spurious regression. Still on table 1 above, it can be observed that all the determinants of Bank Leverage in our model are statistically significant at 1%.

Regression Standardized Residual

Mean: -9,65 E=16, Std. Dev.- 0,905, N-23

Figure 1: P-p Plot of Regression Standardized Residual



In the figure is shown the probability Plot of the standardized figures which seems that the assumption is acceptable for these data. This scatter plot shows that there exist e linear correlation between dependent variable and independent ones and it also has a homoscedasticity.

Regression Results:

As a result of this research findings, it is found that the main determinant factors which contribute to the bank leverage level of the Banking industry in Albania between the years 2008 to 2013 are mainly bank size, tangibility, profitability and capital adequacy, factors with all of these factors conforming to sign expectations based on empirical findings in this research work. The study recommends that future studies should increase the length of the research period of the study to ensure that there is no biasness in drawing up samples for conclusions. Perhaps by covering a longer time period (although it is difficult to find data for Albanian second banks), it will be more meaningful in explaining dependent variable.

CONCLUSIONS

In this thesis is provided a general overview of capital structure and how the firms finance their operations by debt financing or equity financing. It includes the factors affecting the capital structure and their importance; the main questions each manager should do while taking the risk of operating, factors affecting the decisions about the financing, approaches which gave a theoretical and empirical result over the years about the changes on the overview of the capital structuring.

The sector of determinants of capital structure gives the reasoning opinion that the determinants of capital structure factors are the best mix of numbers to choose the financing by debt or equity. The main determinants mentioned above are the highest influential factors to determine the leverage of the banks.

As banks are going to be more sophisticated, Basel II is being implemented in banking system of developing countries in order to ensure more comprehensive supervision. In Albania also Basel II implementation has brought efficiently in capital allocation and adequacy.

As a result of this research findings, it is found that the main determinant factors which contribute to the bank leverage level of the Banking industry in Albania between the years 2008 to 2013 are mainly capital adequacy, tangibility, bank size and profitability with all of these factors conforming to sign expectations based on previous empirical and theoretical findings.

REFERENCES

1. Akhtar, P. *The Determinants of Capital Structure: A Case from Pakistan Textile Sector (Spinning Units)*
2. Aliaj, A. (2013) *Bank's Rating a Need or Necessity in Albanian Banking Syste,* Mediterranean Journal of Social Sciences MCSER Publishing, Rome-Italy, 4/10
3. Alicia, M. & Robinson, D. (2010). *The capital structure decisions of new firms, national bureau of economic research.* Cambridge, National Bureau of Economic Research
4. Anderson R. W. (2002). *Capital structure, firm liquidity and growth*. National Bank Of Belgium
5. Angelo, H. & Malusis, R. W. (1979). *Optimal Capital Structure under Corporate and Personal Taxation.* Journal of Financial Economics. 8, 1, 3-29.
6. Atkeson, A. & H. Cole (2005) *A Dynamic Theory of Optimal Capital Structure and Executive Compensation,* Working paper, NBER 11083.
7. Bank for International Settlements Communications, , (2013) *Composition of capital disclosure requirements,* Basel Committee on Banking Supervision
8. Bank of Albania (2013). *Annual Report 2013*
9. Bank of Albania, (2005) *Supervision Annual Report*
10. Bhaird, C. & Lucey, B. *Determinants of the Capital Structure of SMEs: A Seemingly Unrelated Regression Approach.*
11. Brounen, D. & Piet M. A. (2001). *Capital Structure TheoryEvidence from European Property Companies' Capital Offerings' 'Forthcoming in Real Estate Economics.*
12. Cadsby, C. B., Frank, M., & V. Maksimovic, (1998*) Equilibrium dominance in experimental Financial Markets,* Review of Financial Studies.
13. Castanias, R. (1983), *Bankruptcy Risk and Optimal Capital Structure,* Journal of Finance.
14. Dittmar, A. (2004) *Capital Structure in Corporate Spinoffs,* Journal of Business 77
15. Ellili N. (2011) *Examining The Capital Structure Determinants: Empirical Analysis of Companies Traded on Abu Dhabi Stock Exchange:* International Research Journal of Finance and Economics, 450-2887
16. Eriksson, M. & Hede, J. (1999). *Optimal capital structure - A case study of three real estate companies.*

17. Harris, M. and Raviv, A. (1991). *The Theory of Capital Structure*. Journal of Finance 46:297-355.
18. Hassan, H. *Basel II – Disclosures Requirements,* KPMG Public Accountants & Consultants
19. Ilyas, J. *The Determinants of Capital Structure: Analysis of Non- Financial Firms Listed in Karachi Stock Exchange in Pakistan*
20. Intesa SanPaolo Bank, *Annual Report 2008-2013*
21. Jensen, M. and Meckling, W. (1976). 'Theory of the Firm: Managerial Behavior, Agency Costs, and Capital Structure'. Journal of Financial Economics 3: 305-360.
22. Kester, C. W. (1986), *Capital and Ownership Structure: A Comparison of United States and Japanese Manufacturing Corporations.* Financial Management.
23. L., Aivazian, V., Demirguc-Kunt, A., and Maksimovic, V. (2001), *Capital Structure in Developing Countries.* Journal of Finance,
24. Leland, H. E. (1994). *Corporate Debt Value, Bond Covenants, and Optimal Structure.* Journal of Finance, 49.
25. Masulis, R. W. (1980). *The effects of capital structure change on security prices:* A Study of Exchange Offers
26. Modigliani, F. & Miller, M. (1963). *Corporate income taxes and the cost of capital: a correction.* American Economic Review
27. Modigliani, F. & Miller, M.H. (1958). *The Cost of Capital, Corporate Finance, and the Theory of Investment*. American Economic Review
28. Myers & N. Majluf. (1984), *Corporate Financing and Investment Decisions When Firms Have Information Investors Do Not Have*. Journal of Financial Economics, 13.
29. Naidu, W. (2011) *The Implications Of Capital Structure Theory And Regulation For South African Banking Institutions*
30. National Commercial Bank, *Annual Report 2008-2013*
31. Prahalathan, B. *The Determinants of Capital Structure: An empirical Analysis of Listed Manufacturing Companies in Colombo Stock Exchange Market in SriLanka.* SriLanka. University of Kelaniya.
32. Procredit Bank, *Annual Report 2008-2013*
33. Raiffeisen Bank, *Annual Report 2008-2013*

34. Reimoo, Z. (2008). *Determinants of Capital Structure: Evidence from UK Panel Data*
35. Ross, S. (1977). *The Determination of Financial Structure: The Incentive-Signaling Approach.* Bell Journal of Economics, 8, 23−40.
36. Serrasqueiro, Z. & MaçãsNunes, P. *Determinants of Capital Structure: Comparison of Empirical Evidence from the Use of Different Estimators*. International Journal of Applied Economics
37. Song, H. S. (2005). *Capital Structure Determinants: An Empirical Study of Swedish Companies.*
38. Yan, Y., Shi, X., Barry, P., Paulson, N., & Sherrick, B. (2008) *The Structure Model Based Determinants of Capital Structure: A Seemingly Unrelated Regression Model.*

Appendices

Appendix A. Second Level Banks Shareholders

No.	Banks	Shareholders	Equity share	Ownership	Capital origin	Home country
1.	RAIFFEISEN BANK	Raiffeisen SEE Region Holding GmbH	100	Private	Foreign	Austria
2.	NATIONAL COMMERCIAL BANK	Çalik Finansal Hizmetler A.S.	100	Private	Foreign	Turkey
3	UNITED BANK OF ALBANIA	Islamic Development Bank (IDB) Jeddah	86.70	Private	Foreign	Saudi Arabia
		Ithmaar Bank (former Shamil Bank of Bahrein)	4.63	Private	Foreign	Kingdom of Bahrain
		Dallah Albaraka Holding	2.32	Private	Foreign	Saudi Arabia
		Business Fokus SDN BHD	1.47	Private	Foreign	Saudi Arabia Malaysia
		Individuals	4.88	Private	Foreign	Saudi Arabia
4	INTESA SANPAOLO BANK ALBANIA	Intesa Sanpaolo S.p.A (ISP)	98.61	Private	Foreign	Italy
		Italian Association for the enterprises operating abroad S.p.a (SIMEST)	1.39	Private	Foreign	Italy
5	Tirana Bank	Piraeus Bank	98.48	Private	Foreign	Greece
		Tzivelis Ioannis	1.52	Individual	Foreign	Greece
6	NBG BANK ALBANIA	National Bank of Greece	100.00	Private	Foreign	Greece
7	ALPHA BANK ALBANIA	Alpha Bank, Greece	100.00	Private	Foreign	Greece
8	VENETO BANK	Veneto Banca Holding	100.00	Private	Foreign	Italy
9	PROCREDIT BANK	ProCredit Holding A.G.	100.00	Private	Foreign	Germany
10	INTERNATIONAL COMMERCIAL BANK	Financial Group ICB Holding	100.00	Private	Foreign	Swizerland
11	CREDIT AGRICOLE BANK ALBANIA	IUB HOLDING A.S, FRANCE	100.00	Private	Foreign	France
12	CREDIT BANK OF ALBANIA	8 Individuals	100.00	Private	Foreign	Kuwait
13	CREDINS BANK	15 Individuals	72.85	Private	Domestic	Albania
		B.F.S.E. Holding B.V.	19.53	Private	Foreign	Holland
		State Secretariat for Economic Affairs (SECO) of Switzerland	2.79	Public - Private	Foreign	Switzerland
		Albanian Savings Loan Union	4.83	Private	Doemstic	Albania
14	SOCIETE GENERALE ALBANIA BANK	SOCIETE GENERALE	88.64	Private	Foreign	France
		8 Individuals	11.36	Private	Domestic	Albania
15	UNION BANK	European Bank for Reconstruction and Development (EBRD)	11.18	Private	Foreign	England
		Financial Union Tirana	84.90	Private	Domestic	Albania
		2 Individuals	3.92	Private	Domestic	Albania
16	FIRST INVESTMENT BANK, ALBANIA	First Investment Bank, Bulgaria	100.00	Private	Foreign	Bulgaria

Source: Bank of Albania

Appendix B. Second Level banks size in Albania

NO	Banks	No. of Branches in the Country	No. of Agencies	No. of branches Abroad	No. of Branches and Agencies Total
1	Raiffeisen Bank	44	59		103
2	National Commercial bank	57	3	1	61
3	United Bank of Albania	4	2		6
4	Veneto Banka	15			15
5	Tirana Bank	49	4		53
6	National bank of Greece-Albania	27	1		28
7	International Commercial Bank	7			7
8	Alpha Bank-Albania	43			43
9	Intesa SanPaolo Bank Albania	17	14		31
10	Procredit Bank	20	12		32
11	Credit Agricole Albania	12	8		20
12	Credit Bank of Albania	1	2		3
13	Credins Bank	37	8		45
14	Societe Generale Albania	45			45
15	Union Bank	15	14		29
16	Fist Investment Bank	5	4		9
	Total	398	131	1	530

*****Source: Annual Report 2013 of Bank of Albania

Appendix C

A) Descriptive Statistics

	Mean	Std. Deviation	N
leverage	,094248681261	,0172612937781	23
tangability	,017998067348	,0144792849833	23
banksize	19,282,289,579,565	14,136,946,202,671	23
profitability	,045401585696	,0077784729334	23
capitaladequacy	15.90087	2.428458	23

B) Correlations

		leverage	tangability	banksize	profitability	capitaladequacy
Pearson Correlation	leverage	1,000	,035	-,554	-,691	,315
	tangability	,035	1,000	-,680	-,108	-,282
	banksize	-,554	-,680	1,000	,282	-,143
	profitability	-,691	-,108	,282	1,000	-,139
	capitaladequacy	,315	-,282	-,143	-,139	1,000
Sig. (1-tailed)	leverage	.	,437	,003	,000	,072
	tangability	,437	.	,000	,311	,096
	banksize	,003	,000	.	,096	,257
	profitability	,000	,311	,096	.	,264
	capitaladequacy	,072	,096	,257	,264	.
N	leverage	23	23	23	23	23
	tangability	23	23	23	23	23
	banksize	23	23	23	23	23
	profitability	23	23	23	23	23
	capitaladequacy	23	23	23	23	23

C) Residuals Statistics(a)

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	,063128836453	,121032685041	,094248681261	,015260219791 1	23
Residual	-,022005569189 8	,010365342721 3	,000000000000	,008067090852 4	23
Std. Predicted Value	-2,039	1,755	,000	1,000	23
Std. Residual	-2,467	1,162	,000	,905	23

a Dependent Variable: leverage

D) Variables Entered/Removed(b)

Model	Variables Entered	Variables Removed	Method
1	capitaladequacy, profitability, banksize, tangability(a)	.	Enter

a) All requested variables entered.

b) Dependent Variable: leverage

E) Coefficients (a)

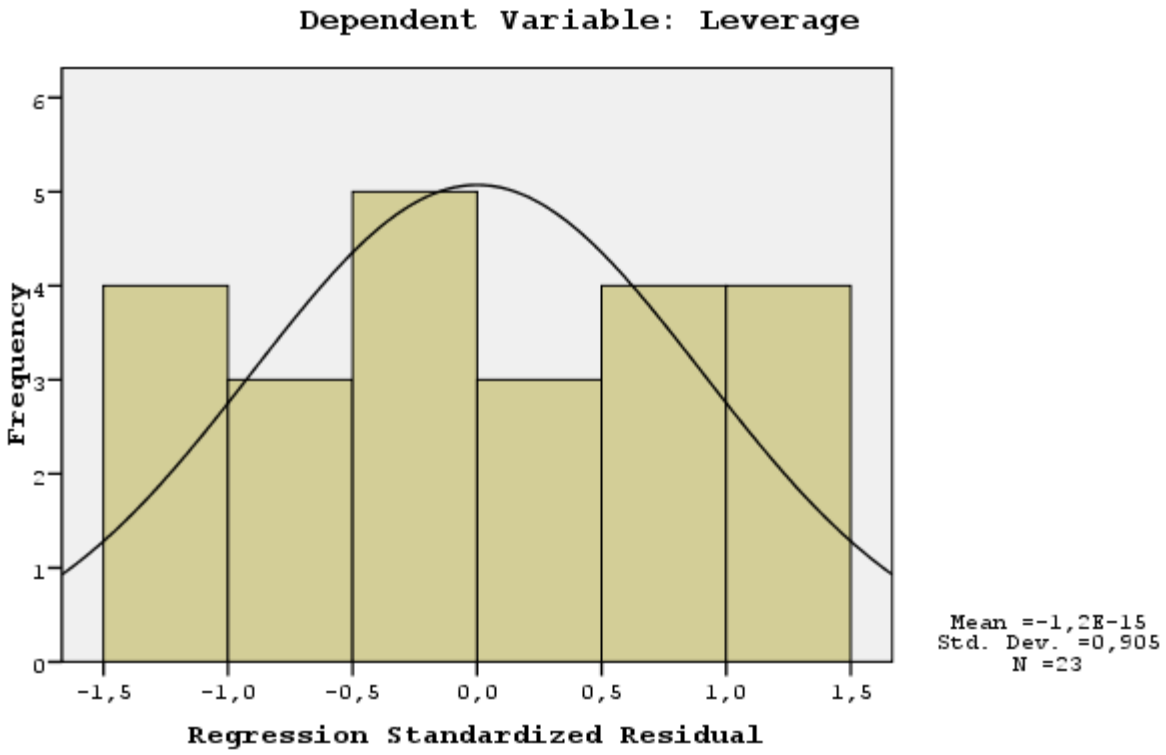
Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.	95% Confidence Interval for B		Correlations			Collinearity Statistics	
		B	Std. Error	Beta	Lower Bound	Upper Bound	Zero-order	Partial	Part	Tolerance	VIF	B	Std. Error
1	(Constant)	,354	,052		6,790	,000	,244	,464					
	Tangability	-,692	,211	-,581	-3,282	,004	-1,135	-,249	,035	-,612	-,362	,388	2,579
	Banksize	-,010	,002	-,804	-4,575	,000	-,014	-,005	-,554	-,733	-,504	,393	2,547
	Profitability	-1,182	,257	-,533	-4,602	,000	-1,722	-,643	-,691	-,735	-,507	,905	1,105
	Capital adequacy	,000	,001	-,038	-,291	,774	-,002	,002	,315	-,068	-,032	,709	1,410

a) Dependent Variable: leverage

F) Co linearity Diagnostics (a)

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions				
		(Constant)	tangability	banksize	profitability	capitaladequacy	(Constant)	Tangability
1	1	4,606	1,000	,00	,00	,00	,00	,00
	2	,354	3,605	,00	,35	,00	,00	,00
	3	,028	12,808	,00	,00	,00	,45	,26
	4	,011	20,322	,02	,00	,07	,55	,34
	5	,001	76,409	,98	,64	,93	,00	,40

a Dependent Variable: leverage


Histogram
Dependent Variable: Leverage
Frequency
6
5
4
3
2
1
0
-1,5
-1,0
-0,5
0,0
0,5
1,0
1,5
Regression Standardized Residual
Mean =-1,2E-15
Std. Dev. =0,905
N =23

Appendix D. Data Used For Analysis from Biggest 4 Banks In Albania

BANK	Annual Period	TOTAL ASSETS	EQUITY	FIXED ASSETS	PROFIT BEFORE TAX	INTEREST EXPENSE
BKT	2013	2,675,742,240	214,965,851	27,942,467	43,833,483	75,024,078
BKT	2012	2,337,313,966	184,303,789	28,168,784	34,658,836	69,640,869
BKT	2011	1,864,688,845	138,164,513	18,722,658	32,943,416	57,638,540
BKT	2010	1,502,901,546	118,669,847	16,475,450	27,938,081	49,672,970
BKT	2009	1,340,041,653	94,670,654	19,371,484	14,563,173	46,397,055
BKT	2008	1,161,289,588	83,854,509	18,701,259	21,767,075	46,965,320
RZB	2013	290,565,434	29,822,475	1,867,322	4,881,078	5,023,677
RZB	2012	318,918,623	31,068,139	1,987,074	5,776,688	8,138,185
RZB	2011	322,854,297	29,479,347	1,808,116	7,856,490	7,673,450
RZB	2010	277,983,651	27,653,642	1,565,787	6,055,051	7,105,850
RZB	2009	253,202,760	24,501,423	1,647,341	5,240,963	8,524,410
RZB	2008	253,589,262	19,798,640	1,978,504	5,695,410	8,954,111
ISP	2013	139,237,787	17,999,512	1,454,468	1,219,399	3,116,189
ISP	2012	129,932,085	16,907,160	1,416,355	904,156	3,230,632
ISP	2011	129,033,450	14,559,079	1,530,969	2,545,104	3,211,788
ISP	2010	120,632,012	12,712,506	1,656,909	2,168,409	3,318,184
ISP	2009	114,384,761	10,990,958	1,862,884	1,782,745	3,463,147
ISP	2008	107,125,613	9,028,194	2,027,981	2,144,874	3,562,523
PRO	2012	39,979,809	4,430,007	1,579,414	62,684	1,264,838
PRO	2011	39,850,575	4,363,679	1,684,311	310,864	1,240,882
PRO	2010	40,610,102	4,102,460	1,753,335	135,053	1,681,056
PRO	2009	41,231,390	3,042,140	1,873,366	206,786	1,544,874
PRO	2008	30,135,047	2,828,259	1,481,282	371,690	1,239,070

**Source: Annual Reports from selected Banks for years 2008-2013*

Appendix F. Variable data used for regression

Year	BANK	LEVERAGE	TANGIBILITY	BANK SIZE	PROFITABILITY	Capital Adequacy
2013	BKT	**0.080338774**	0.010442884	21.70749265	0.044420408	14.60
2012	BKT	**0.078852816**	0.012051776	21.57226823	0.044623746	14.30
2011	BKT	**0.074095210**	0.010040634	21.34636004	0.048577518	12.90
2010	BKT	**0.078960492**	0.010962428	21.13066344	0.051640809	13.10
2009	BKT	**0.070647545**	0.014455882	21.01596653	0.045491293	13.20
2008	BKT	**0.072208094**	0.016103872	20.87279694	0.059186266	17.80
2013	RZB	**0.102636000**	0.006426511	19.48733936	0.034087864	22.54
2012	RZB	**0.097417133**	0.006230662	19.58044653	0.043631422	15.84
2011	RZB	**0.091308514**	0.005600409	19.59271169	0.048102008	15.15
2010	RZB	**0.099479379**	0.005632659	19.44307286	0.047344155	17.11
2009	RZB	**0.096766015**	0.006506015	19.34970115	0.054365020	17.94
2008	RZB	**0.078073649**	0.007802002	19.35122644	0.057768696	16.43
2013	ISP	**0.129271740**	0.010445929	18.75169373	0.031138013	21
2012	ISP	**0.130123049**	0.010900733	18.68252245	0.031822686	16.17
2011	ISP	**0.112831812**	0.011864900	18.67558223	0.044615501	15.56
2010	ISP	**0.105382517**	0.013735235	18.60825525	0.045482065	15.38
2009	ISP	**0.096087599**	0.016286120	18.55507842	0.045861808	16.17
2008	ISP	**0.084276699**	0.018930870	18.48951266	0.053277613	17.23
2012	PRO	**0.110806082**	0.039505291	17.50388511	0.033204811	12
2011	PRO	**0.109501005**	0.042265664	17.50064739	0.038939112	14.1
2010	PRO	**0.101020652**	0.043174848	17.51952741	0.044720621	15.4
2009	PRO	**0.073782111**	0.045435432	17.53471042	0.042483651	16.2
2008	PRO	**0.093852782**	0.049154793	17.22119940	0.053451385	15.6

**Source: Annual Reports from selected Banks for years 2008-2013*