Notre Dame University
Faculty of Business Administration & Economics
Graduate Division

&

Bordeaux Management School
Institute of International Business
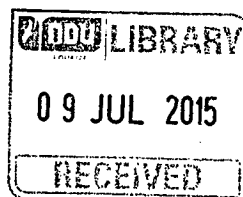
Determinants of the Dividend Policy: An Empirical Study on the
Lebanese Listed Banks

Submitted By:
Christopher Maladjian

Supervised By:
Dr. Rim El-Khoury

A Thesis Submitted in Partial Fulfillment of the
Requirements for the Joint Degree of the Master of Business
Administration (M.B.A.) and the Master of Science in
International Business (M.I.B.)

NDU-Lebanon
2013

Approval Certificate

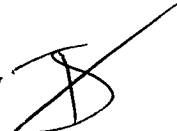# DETERMINANTS OF THE DIVIDEND POLICY: AN EMPIRICAL STUDY ON THE LEBANESE LISTED BANKS

BY

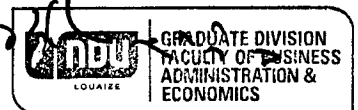## CHRISTOPHER MALADJIAN

GRADE: _____ A _____

Approved by

Supervisor's Name and Signature: Dr. Rim El-Khoury

Reader's Name and Signature: Dr. Ghassan Beyrouthy

Committee Chair Name and Signature: Dr. Roy Khoueiry

GRADUATE DIVISION
FACULTY OF BUSINESS
ADMINISTRATION &
ECONOMICS

_____ May 6, 2014 _____
Date

DECLARATION

I hereby declare that this Thesis is entirely my own work and that it has not been submitted as an exercise for a degree at any other University.

Christopher Leon Moladjian

FULL NAME

ABSTRACT

Purpose – This paper aims at investigating the factors determining the dividend payout policy in the Lebanese banks listed on the Beirut Stock Exchange.

Methodology – To achieve this objective, this study considers the impact of seven variables, namely, profitability, liquidity, leverage, firm size, growth, firm risk and previous year's dividend payout on the dividend payout ratios by using an unbalanced panel dataset of audited financial statement of listed banks between the years of 2005 and 2011. Two models were tested and seven hypotheses were investigated using the OLS and the dynamic panel regressions.

Findings – Empirical results show that the dividend payout policies are positively affected by the firm size, risk and previous year's dividends, but are negatively affected to the opportunity growth and profitability. The results obtained might indicate that firms pay dividends with the intention of reducing the agency conflicts. Furthermore, managers take into consideration the stability of dividends while determining the dividend policy. However, the variables that are negatively significant indicate that the Lebanese listed firms prefer to invest their earnings aiming to grow their institutions rather than to pay more dividends.

Research limitations – The small sample size with a short time frame and limited resources could have affected the quality of the study's output.

Practical Implications – Researchers and investors could use this study as a benchmark for further research and future investments.

Originality - This study has delivered some insights on the determinant factors of the dividend policy in the Lebanese listed banks.

Keywords: Dividend policy, dynamic panel, OLS, commercial banks, agency conflict, Lintner's Model.

LIST OF TABLES

LIST OF FIGURES

ACKNOWLEDGMENTS

I wish to express my heartfelt appreciation and gratitude to all the people that have contributed to the completion of this thesis.

Above all, I would like to express my gratitude to Dr. Rim El Khoury, my thesis supervisor, for the exceptional guidance, detailed comments, critical inputs, and her time. Without her support and assistance, this thesis would have never been completed. I would also like to express my indebtedness to Dr. Ghassan Beyrouthy, my thesis reader, for his valuable feedback, warm encouragement, and support.

The support of my family cannot be acknowledged enough. I am dearly grateful to my parents for their endless encouragement and continued support to finish this work. Without them none of this would ever have happened.

CONTENTS

Chapter 1

Introduction

The purpose of the first chapter is to provide a general introduction to the research topic. The chapter begins with a discussion of the problem background followed by the objective and purpose of the study. Thereafter, the international perspective, limitations and organization of the research are explained.

1.1   Background

Dividends are payments made by businesses to their shareholders. They seem to be viewed by both the directors and the shareholders as the equivalent of an interest payment that would be made to a lender as a compensation for the shareholders' delaying consumption. Dividends are also seen as a distribution of the business's recent profits to its owners, the shareholders (McLaney, 2009).
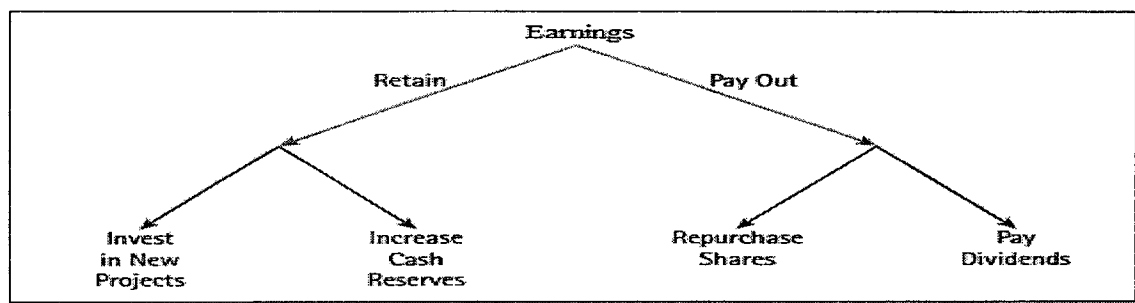
Figure 1: Earnings distribution
(Source: Berk et al., 2010)

Figure 1 illustrates the alternative uses of earnings. If the firm chooses to retain the earnings, it will invest in new projects or add to cash reserves to fund future investment. If the firm chooses to distribute the earnings, it can do so by repurchasing shares or paying dividends. Therefore, we can assume that dividend policy is one of the issues that every company faces. Firms and institutions are faced with the dilemma of either distributing dividends to its stockholders or investing them back in their upcoming projects so as to foster further growth to the business. The decisions concerning how

much earnings should be distributed, how stable should the distribution be, and how much should be retained are the concerns of the dividend policy decisions.

The topic of dividend policy is one of the most lasting issues in modern corporate finance. Black (1976, page 5) argues that "The harder we look at the dividend picture, the more it seems like a puzzle, with pieces that just don't fit together". This mystery led to the emergence of a handful of competing theoretical justifications for dividend policy. However, according to Brealey and Myers (2003), after two decades of non-stop research and despite several years of research, the dividend policy problem is still listed as one of the top ten crucial unresolved issues in the world of finance in which no consensus has been reached.

1.2 Need for the Study

Lebanon is in the track of continuous economic growth registering increasing GDP growth in a challenging operating environment which indeed is displaying favorable performances in the Lebanese economy. Banking is the key sector of the Lebanese economy, accounting for 35% of the GDP growth (The Lebanese Banking Sector, n.d.). With the display of strength in the Lebanese banking sector, individual investors as well as institutions have been extensively interested in becoming shareholders. Eventually, this expands the need to recognize the driving elements of the dividend payment policy in Lebanon through empirical analysis. Therefore, a study on the determinants of a dividend payout policy is appropriate in view of this observable fact.

The examination of the dividend policy in the Lebanese listed banks has been limited. Until today, this study seeks to add an explanation by providing a detailed analysis of dividend policy determinants in Lebanon, an emerging sector that has been poorly analyzed till today.

1.3 Purpose of the study

This paper aims to enrich the knowledge and understanding of different aspects affecting dividend payouts of the Lebanese banking sector. The specific objectives are:

i. To ascertain the determinants and to specify the effect of each factor on the dividend payout ratio in the Lebanese banking industry.

ii. To contribute to the body of research related to the determinants of the corporate dividend policy by adding new empirical evidence using data from banks listed on the Beirut Stock Exchange (BSE).

iii. To try out previously used dividend models, mainly the Lintner Model, on the listed banks so as to compare and interpret the results.

1.4   International Perspective

Dividend policy is one of the most controversial topics and researched areas of corporate finance. Many dividend theories have been submitted around the world to give an explanation on how the dividend decisions are being undertaken. This study attempts to give justice to the significance of both the topic of dividend policy as an area of international financial research, and also to the literature that has been produced addressing this topic, by reviewing the most important and influential studies in this area. It also attempts to outline the main theories and explanations of dividend policies and to review the main empirical studies on the corporate dividend policy. We are going to see that some factors that affect the dividend policy in developed stock markets seem to apply to the emerging markets, but often in different ways and on a different scale. A number of financial determinants have been argued as potentially important in determining the dividend policy of the Lebanese listed banks.

1.5   Organization of the study

The study develops seven research hypotheses, which are used to represent the main theories of these banks' dividends policy. The rest of the paper is organized as follows: Chapter 2 gives a state of knowledge of the Lebanese banking sector, and a brief explanation of the dividend policy and the theories related to it. Chapter 3 discusses the data, variables, scope and sample size of the study; it also formulates the hypotheses and explains the reasons for choosing the appropriate types of research methodology. Furthermore, Chapter 4 describes the research methodology and presents the findings of the results. Finally, Chapter 5 displays the conclusions that have been drawn from the results of the study and provides recommendations for the future research.

Chapter 2

Literature Review

This chapter serves as an introduction to banking and to dividend payout theories. The first part commences by defining a bank and its function. It continues with a historical brief of the Lebanese banking sector and its advantages. It will then cover the banks listed on the Beirut Stock Exchange, which will be studied throughout the thesis. The second part explains the concept of dividend and dividend payout policies, reviews the main theories, and examines the relevant empirical studies on the determinants of the dividend payout policy.

2.1. State of Knowledge of the Lebanese Banking Sector

2.1.1 Banks: Definition and Functions

Finance is the life blood of trade, commerce and industry. Nowadays, the development of any country mainly depends on the banking system, which acts as the backbone of modern business.

The term bank was either derived from the Old Italian word "*banca*" or from the French word "*banque*", meaning a bench or money exchange table. In older days, European money lenders used to display coins of different countries in big quantity on benches for the purpose of exchanging. The term 'Bank' has been defined in different ways by different economists. According to Walter Leaf (1920) "A bank is a person or corporation which holds itself out to receive from the public, deposits payable on demand by cheque." Horace White (1968) has defined a bank, "As a manufacture of credit and a machine for facilitating exchange." According to Lahoti (1987), "A bank is an establishment that provides individuals with advances of money, and to which they entrust money when not required by them for use."

Regardless of the definition, banks have to execute a variety of functions which are familiar to both developed and developing countries. According to Somashekar (2009), these functions are known as 'General Banking' functions of the commercial banks.
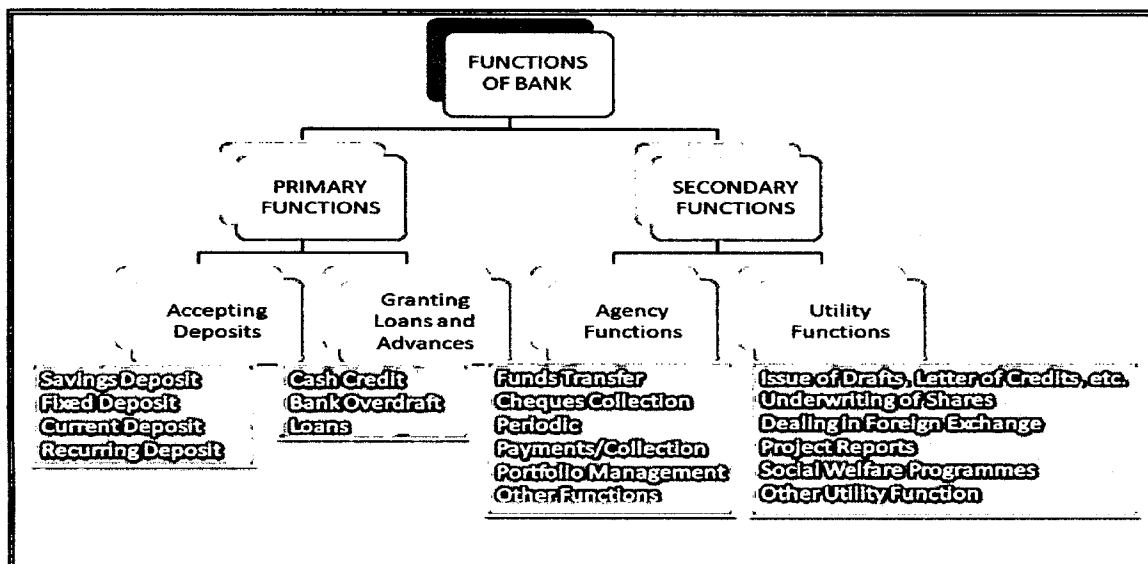
Figure 2: Functions of Commercial Banks

(Source: Bhatia, R., 2012)

Commercial banks perform many functions, which can be divided into two categories: Primary and Secondary functions as shown in Figure 2.

A. Primary Functions

The primary functions are the main activities and main sources of income for the bank.

The primary functions of the commercial banks include:

1. *Acceptance of deposits*: Accepting deposits is the primary function of a commercial bank to mobilize savings of the household sector. Generally, there are four types of deposits which are as follows:

    a. Savings deposit: In such deposits, withdrawals are subject to certain restrictions.

b. Fixed deposits: They have been made for a specific time period and no one can withdraw from it before the maturity of that period.

c. Current deposits: Deposits can be withdrawn and put back whenever depositors desire.

d. Recurring deposits: A certain sum of money is periodically deposited into the bank. On the expiry of a certain time period, withdrawals are allowed.

2. *Advancing loans*: The second important function of commercial banks is to provide advance loans to their customers. The interest charged on these loans represents the main source of the banks' income.

a. Cash Credit: The bank gives a loan to the borrower against certain security. However, the entire loan is not given at one particular time; instead the amount is credited into his account in the bank.

b. Overdraft Facilities: This is when the bank allows the depositor to draw over and above his account up to a previously agreed limit.

c. Loans: A loan is an advance authorized from a bank to a customer for a fixed period at an agreed rate of interest.

B. Secondary Functions

The secondary banking functions of the commercial banks include:

1. Agency Services

The bank acts as an agent to its customers and performs a number of agency functions which includes:

a. Transfer of Funds: The bank transfers funds from one branch to another or from one location to another.

b. Collection of Checks: The bank collects the money from the checks through the clearing section of its customers. The bank also collects money from the exchange fees.

c. Periodic Payments: Upon the instructions of the client, the bank makes periodic payments in respect to electricity bills, rent, etc.

d. Periodic Collections: The bank can be responsible for collecting salaries, pensions, dividends and other periodic collections on behalf of the clients.

e. Portfolio Management: The bank can carry out the purchase and sale of shares and debentures on behalf of the clients and accordingly debit or credit the customers' account.

f. Other Agency Functions: The bank can also act as a trustee, executor, adviser and administrator on behalf of its clients. It can act as a representative of the client to deal with other banks and institutions.

2. *General Utility Services*

The bank also performs general utility functions, such as:

a. Issuing of Drafts and Letter of Credits: Banks issue drafts for transferring money from one location to another. They also issue letter of credit, especially in case of import/export trade.

b. Underwriting of Shares: The bank underwrites shares and debentures through its merchant banking division.

c. Dealing in Foreign Exchange: The commercial banks are allowed to deal in foreign exchange by buying and selling foreign currencies.

d. Project reports: The bank can collect and publish economic data from time to time.

e. Acting as a referee for its clients: The purpose is to strengthen their creditworthiness.

2.1.2 History and Overview of the Lebanese Banking Sector

The birth of the Lebanese banking system started in the 19th century, when the French and Western influence began to show noticeably on the Lebanese soil. Through their capability to penetrate Lebanon because of the weak Ottoman Empire, the French established an economic structure that was based on capitalism. According to the Banque Du Liban website, after the First World War and under the French authorization, the banking system in Lebanon was dominated by the presence of branches of foreign institutions. These foreign banks focused on the financing of Lebanon's foreign trade, leaving the domestic financing to local banks whose capital was limited and whose scope of activities was restricted to the region of their establishment. Local banks mainly engaged in discounting short term bills of exchange, providing collateral loans and advances against goods or in the form of current accounts, engaging in foreign exchange trading and accepting deposits. They greatly relied on the receipt of deposits offering higher deposit rates of interest. However, a great proportion of funds were retained with foreign banks abroad (History of Banque Du Liban, n.d.).

Starting with Lebanon's independence in 1943 and continuing with the establishment of the Banque du Liban in 1964, the banking system in Lebanon prospered. The pronounced difference between foreign and domestic Lebanese banks had been relatively reduced as the former no longer greatly monopolized the foreign financing of Lebanon, or contributed to its domestic financing, and began competing for local deposits. In fact, the Lebanese banking system witnessed the entry of 13 foreign banks and more than 40 Lebanese banks from which some of them became the biggest banking institutions in the country (History of Banque Du Liban, n.d.).

In the period prior to the establishment of the Banque du Liban (BDL), banks operating in Lebanon were classified by the Ministry of Finance and the Lebanese banking system was characterized by the absence of specific banking regulations and supervision. Banks merely abided by the Code of Commerce which regulated commercial businesses, with the exception of the Bank Secrecy Law enacted in 1956. However, since 1964, regulations, supervision, and control were introduced with the enactment of the Code of Money and Credit and the establishment of BDL, which was granted regulatory and

supervisory authority over the banking system as part of its function to safeguard its soundness. Since that time, a list of banks operating in Lebanon has been issued by BDL in January of every year (History of Banque Du Liban, n.d.).

The establishment of the Beirut Stock Exchange (BSE) in 1920 had given six Lebanese banks the opportunity of a good start by reanimating the Lebanese economy through opening new opportunities for the growth of local businesses. The BSE enabled various investors around the world to invest in Lebanese shares, which boosted the economic and banking performance in Lebanon, by opening the opportunity for foreign investment (History of Banque Du Liban, n.d.).

Nowadays, the Lebanese banking and financial sector is unique in its attractive features, its resilience and its stability, despite numerous periods of political unrest. The sector has also proven its ability to constantly evolve by adapting to national, regional and international trends and requirements. It has remained attractive to more resilient, long-sighted investors in the region and beyond (History of Banque Du Liban, n.d.).

According to the yearly reports of Bilan Banques, the Lebanese banking sector has played a major role in fueling the economic growth of Lebanon and ensuring the relative stability of the financial sector as a whole. This was achieved by sustaining a major growth in earnings amid high liquidity levels while operating in a weak domestic environment characterized by political instability and an ongoing Global Financial Crisis. The sector has steadily grown over the years driven by several comparative advantages specific to it, namely, a banking secrecy law, a skillful workforce, a relatively stable currency, and more importantly, a strict regulatory framework and conservative policies set by the central bank.

The growth in the banking activity clearly highlights the confidence in the Lebanese banking sector within the context of perfect capital mobility across borders and with the capital increasingly being transferred to the most immune banks and financial institutions around the world (History of Banque Du Liban, n.d.).

Banks and other financial institutions in Lebanon fall under the jurisdiction of the Bank of Lebanon (BDL), the country's central bank, which is the bank regulatory authority. The Bank of Lebanon controls the entry into the banking industry, defines the scope of banking activities and sets prudential regulations and codes of practice for banks. The BDL is also vested with other powers aimed at the supervision and development of the banking sector. The Banking Control Commission (BCC) is the bank supervisory authority. It is responsible for supervising banking activities and ensuring compliance with the various financial and banking rules and regulations (History of Banque Du Liban, n.d.).

2.1.3 The Lebanese Banks in the BSE

Table 1 indicates, the ranking of six Lebanese banks listed on the BSE in 2012.

Ranking By Profits 2012			
Banks	**Profits in million LBP**	**Market cap in million USD**	**Rank**
Audi	579,289	2199.92	1
BLOM	504,845	646.60	2
Byblos	252,300	893.51	3
Beirut	176,167	319.63	6
BLC	72,494	99.52	10
BEMO	7,988	94.58	17

Table 1: Ranking by profits of the banks in study in 2012

(Source: Bankscope)

2.1.3.1. Bank Audi

Ranked number one in 2012, Audi Saradar Group is a Lebanese joint stock company that is registered since 1962. The bank is a full fledged regional bank with a presence in 12 countries. This bank, through its headquarters as well as its branches in Lebanon and its presence in Europe, the Middle East and North Africa, provides a full range of retail, commercial, investment and private banking activities.

As of December 31, 2012, Bank Audi had one of the largest branch networks in Lebanon, with 80 branches covering the Greater Beirut area and other strategic regions in Lebanon, as well as a network of 73 branches in the MENA region (outside Lebanon) and six branches in Turkey. Audi Bank has two principal subsidiaries in Lebanon, three principal subsidiaries in Europe and six principal subsidiaries in the MENA region in addition to a principal subsidiary in Turkey (Bank Audi's Corporate Profile, n.d.).

2.1.3.2. BLOM Bank

BLOM Bank SAL, a Lebanese joint stock company, was incorporated in 1951 was ranked second in Lebanon in 2012,. As one of the oldest established banks in Lebanon, if not the region, BLOM bank has always been at the center of the country's banking system. Throughout the years, it has also maintained a track record of exceptional performance.

Although BLOM bank has 61 branches in Lebanon, its strategy is based on regional expansion to markets with strong fundamentals and on the diversification of its universal services so as to become a leading regional bank. As a result, it has the widest foreign presence among Lebanese banks, with a presence in 12 countries (BLOM Bank's Milestones, n.d.).

2.1.3.3. Byblos Bank

Ranked as third in 2012, Byblos Bank SAL, a Lebanese joint stock company, was incorporated in 1961. It is a leading financial institution focused on domestic and selected overseas markets. Byblos Bank now has 77 branch networks spread evenly across Lebanon and is actually present in 12 countries in the Middle East, Europe, and Africa (The Byblos Bank Story, n.d.).

2.1.3.4. Bank of Beirut

Ranked six in 2012, Bank of Beirut is a Lebanese joint stock company listed on the Beirut Stock Exchange. It was established in Lebanon in 1963, and it provides a full range of banking services through a network of 58 branches in Lebanon, and a network of foreign entities.

This bank's primary activities consist of retail banking services, including consumer lending, deposits and saving plans, a wide range of commercial and corporate banking services. It also includes a variety of credit facilities and lending to large corporations and SMEs, correspondent banking services, trade finance services, including letters of credit and letters of guarantee as well as treasury, capital markets and asset management activities (History of Bank of Beirut, n.d.).

2.1.3.5. BLC Bank

Ranked tenth in 2012, BLC Bank is a Lebanese joint stock company founded in the early 1950s in Beirut by the Abou Jaoudeh family. BLC has one of the larger branch networks in Lebanon with 40 domestic branches and four branches in the United Arab Emirates in Dubai, Abu Dhabi, Ras Al Khaimah and Sharjah. It is also a 95.61% shareholder of Universal Savings Bank (USB Bank PLC), which has a network of 16 branches throughout Cyprus (BLC Bank´s Milestones, n.d.).

2.1.3.6. Bank BEMO

Ranked seventeenth in 2012, Bank BEMO is a Lebanese joint-stock company established in 1994 and is listed on the Beirut Stock Exchange. The bank provides a full range of commercial, corporate and private banking activities through a network of 9 branches in Lebanon in addition to a branch in Limassol, Cyprus. Bank BEMO is in the process of opening two branches in Iraq (Bank BEMO Overview, n.d.).

2.2. Concepts of Dividend and Dividend Policy

Dividend policy is an issue of interest in financial literature. The literature currently provides different theories to explain the different facts about dividend payout policy. This part attempts to focus on the concept of dividend and dividend policy.

2.2.1 Concept of Dividend

In discussing the meaning of dividend policy, it is important to highlight what a dividend is. According to Frankfurter and Wood (2003), dividends are commonly defined as the distribution of earnings in real assets among the shareholders of the firm in proportion to their ownership. This definition is made up of three equal parts. First, dividends can be distributed only from earnings and not from any another source of equity. Second,

dividends must be in the form of a real asset. Although it is common practice to pay dividends in cash because of the convenience of the matter, evidence shows that during high levels of inflation some firms have paid dividends in the form of the product they were producing. Third, all stockholders are paid in dividends relative to their holdings in the corporation.

Companies that are listed in the stock exchange are usually obligated to pay out dividends on a quarterly or semiannual basis. The semiannual or quarterly payment is referred to as the interim dividend. The final payment, which is usually paid at the end of the financial year of the company, is known as the final dividend. Dividends are normally paid after the corporate tax has been deducted.

2.2.1.1. Forms of Dividend

There are different forms of dividends, including cash dividends, stock dividends, stock splits, and property dividends. According to Berk et al. (2010), most companies pay a regular cash dividend each quarter, but occasionally this regular dividend is supplemented by a one-off extra or special dividend which is usually much larger than a regular dividend.

However, dividends are not always in the form of cash. More often, companies also declare stock dividends which are additional shares instead of cash given to each shareholder for every share currently owned. A similar method to stock dividend is a stock split which increases the number of shares outstanding without any change in the company's assets, profits, total value, and retained earnings. Similar to stock dividends, stock splits reduce the value per share. However, the difference between the two methods is technical. Stock dividend is shown in the accounts as a transfer from retained earnings to equity capital, whereas a split is shown as a reduction in the par value of each share (Brigham and Ehrhaldt, 2002).

Gitman and Zutter (2010) argue that there are two other types of dividend payments. The first one is the Scrip or bond dividend. It is a promise made by the company to the shareholders to pay them at a specific future date. This form of payment is generally used when the company does not have sufficient money. The second type of dividend

payment offered by today's firms is the dividend reinvestment plans (DRIPs), which enable stockholders to use dividends received on the firm's stock to acquire additional shares at little or no transaction cost.

2.2.2   Concept of Dividend Policy

Dividend policy is concerned with the decisions regarding dividend payout and retention. According to Baker (2009), these dividend decisions are a type of financing decision that affects the amount of earnings that a firm distributes to shareholders versus the amount it retains and reinvests. Dividend policy refers to the payout policy that a firm follows in determining the size and pattern of cash distributions to shareholders over time. It is usually set by the company's board of directors, with the input of senior management.

2.2.2.1.   Types of Dividend Policy

There are different types of dividend policies including constant payout, progressive policy, residual policy, zero dividend policy and non-cash policy.

First, the constant (or fixed) dividend payment ratio policy is a dividend policy whereby a company sets up a dividend payout ratio and applies it to the earnings. This policy ensures that retentions as well as dividends fluctuate with earnings and sends a clear signal to investors about the level of the company's performance (Watson and Head, 2007). However, this policy can be traumatic to companies with volatile profit earning.

However, the progressive policy occurs when dividend payments are on a steady increase usually in line with inflation. Every effort is made to sustain the increase in dividends even though marginal. Rarely, the firm may be constrained to cut down on dividend payout to sustain its operations (Watson and Head, 2007).

According to Gitman and Zutter (2010), a pure residual dividend policy is a policy whereby a company pays out dividends only when its internally generated funds are not completely used up for investment purposes. Under this policy, dividends are likely to fluctuate sharply with variations in earnings and changes in investment plans.

The smoothed dividends policy is designed to produce smoothly growing dividends. With this policy, dividend payments are unlikely to be changed due to temporary fluctuations in earnings. Instead, the stability of any change in earnings is assessed before any change is made to dividends (Gitman and Zutter, 2010).

Finally, some companies may decide not to pay dividends. This policy is called the Zero Dividend Policy. It is especially common in new companies that require capital to execute its projects. All earnings are thus retained for expansion plans of the company. Investors who prefer capital gains to dividends because of taxation will logically be attracted by this kind of policy. This type of policy is quite easy to operate and avoids all the costs associated with payment of dividends (Watson and Head, 2007). However, in order to give shareholders a choice between dividends or new shares, the company might choose to buy back shares. This is called a share repurchase. This has a significant advantage in terms of tax to the shareholder. While the dividend is fully taxed just as ordinary income, the stock repurchase or buyback is not taxed until the shares are sold and the shareholder makes a capital gain (Gitman and Zutter, 2010)

Concerning the types of dividend policy, Gitman and Zutter (2010) came to four conclusions. First, rapidly growing firms generally do not pay out cash to shareholders. Fama and French (2001) have studied dividend payments in the United States and found that only about a fifth of public companies pay a dividend. Some of the non-dividend paying firms are those who used to pay dividends in the past but then fell on hard times and were forced to conserve cash. Most of the non-dividend payers are growth companies as well as many small, rapidly growing firms that have not yet reached full profitability. Investors hope that these firms will eventually become profitable and they will pay dividend when their rate of new investments slow down.

Second, slowing growth, positive cash flow generation, and favorable tax conditions can prompt firms to initiate cash payouts to investors. The ownership base of the company can also be an important factor in the decision to distribute cash. Furthermore, companies in which tangible assets make up large fraction of the total value tend to have high dividend payouts.

Third, cash payouts can be made through dividends or share repurchases. Many companies use both methods. In some years, more cash is paid out via dividends, but sometimes share repurchases are larger than dividend payments. A stock repurchase occurs when a company asks stockholders to sell their shares back to the company. This is another way for a company to increase value for stockholders. First, a repurchase can be used to restructure the company's capital structure without increasing the company's debt. Additionally, rather than changing its dividend policy, the firm can offer value to its stockholders through stock repurchases, keeping in mind that capital gain taxes are lower than taxes on dividends. More recently, Dittmar and Dittmar (2004) found that when permanent earnings increase, firms increase dividends only modestly while substantially increasing repurchases. However, when temporary earnings increase, firms use funds only to repurchase stock. Lastly, when business conditions are weak, firms are more willing to reduce share buybacks than to cut dividends.

2.3.   Theoretical Framework and The three Schools of Thought

The dividend policy issue has attracted the attention of many academicians and researchers. They came up with a number of theoretical models describing the factors that corporate managers should consider when setting dividend payout decisions. There seems to be very little agreement on whether a dividend payout increases the stock value, reduces it, or makes no difference at all. This disagreement was described by Black (1976) as the dividend puzzle.

Brealey and Myers (2003) explained the dividend debate by dividing the issue into three schools of thought. On one side, the "Leftists" believe that increases in dividends reduce the firm value due to tax differentials and transaction costs (Tax clientele theory and Transaction Cost theory). On the other side, the "rightists" agree that there is a positive relationship between dividends and firm value, thus investors prefer to receive dividends (Bird In Hand, Agency Effect, Signaling, and Behavioral Effect). In between, there is what they cite as "middle-of-the-roaders" who argue that dividend policy is irrelevant in the decision of a firm's value creation and hence, managers should not worry about them (Dividend irrelevance Theory)

2.3.1. The Rightists

Much of the traditional finance literature has claimed for high dividend payouts as a means to increase a firm's value. Graham and Dodd (1951) were the first to explain and defend this ideology. Stockholders and investment advisers continually pressure corporate treasurers for increased dividends. There are four theories that the traditional rightists rely on when it comes to paying higher dividends, which are Bird In Hand theory, Agency theory, Signaling theory, and Behavioral Effect.

2.3.1.1. Bird-in-hand theory

The opposing view towards Miller and Modigliani's dividend irrelevance theory is that dividends affect the company's value and this assumption is represented by the so called "bird in hand theory". The theory was first proposed by Lintner (1956) and Gordon (1959). They explained that if all other factors are equal, investors prefer dividends to capital gains because they perceive dividends today as a certain cash flow, as opposed to capital gains in the future which are uncertain.

The name "bird in hand" implies that all studies that argue that dividends are positively correlated to the company's value. It is based on the expression that "A bird in the hand is worth more than two in the bush". In financial terms, the theory means that investors are more willing to invest in stocks that pay current dividend rather than to invest in stocks that do not pay dividends or even pay dividends in the future. This is due to the high degree of uncertainty related to capital gains and dividends paid in the future. Current dividends are more predictable than capital gains since the stock price is determined by market forces and not by the managers. Hence, future dividend has a higher degree of uncertainty (Keown et.al, 2007).

Furthermore, Gordon (1963) insisted on the idea of paying dividends because when making dividend payouts, the firm gets a higher rating from rating agencies as compared to a firm not making any dividend payout. With a better rating, the firm will be able to raise funds more easily from capital markets. Furthermore, the firm might be able to borrow at privileged rates and enjoy better facilities. All of the above arguments indicate that dividend payouts will increase the value of the firm.

However, the 'bird in hand' theory has been subject to a large amount of criticism. For example, Brealey (1992) argues that this argument is one of the "common misunderstandings" in finance. Additionally Miller and Modgiliani (1961) and Bhattacharya (1979) also support the argument that the Bird-in-the hand theory was flawed and consider it the "bird in the hand fallacy".

2.3.1.2. Agency cost theory

Another argument in favor of generous dividend payments is the agency cost theory. The underlying assumption is that managers may not necessarily always act as maximizing shareholders' wealth. The problem here is the information asymmetry between managers and shareholders which gives rise to agency conflicts as defined by Jensen and Meckling (1976). The latter study provided a new view of the agency problem and most studies concerning agency costs used Jensen and Meckling's research as a benchmark. They define the agency cost as a cost that arises between the principals (stockholders) and the agents (management) while the principals hire and delegate the agents with a certain power to maximize the wealth of the principals. This argument is based on the assumption that managers may conduct actions in accordance with their own self-interest which may not always be beneficial for shareholders. Hence, as argued by Jensen and Meckling (1976) and extended by Rozeff (1982) and Easterbrook (1984), the agency theory states that the payment of dividends reduces the cash flow remaining to managers and forces those who control the firm to seek external financing. External finance is costly and exposes the company to markets' scrutiny. Hence, reducing the possibilities of investing in negative net present value (NPV) projects. This external inspection ensures that management acts in the best interest of shareholders.

Another theory that explains the agency cost theory is the free cash flow theory presented by Jensen (1986). He argues that the agency costs arise as the free cash flow increases. Shareholders have to increase the supervision in order to prevent the managers from engaging in excessive spending or unprofitable investments. Therefore, and in order to prevent agency conflicts between the two parties, Jensen argues that the companies should pay excessive free cash flow as dividends to shareholders. Otherwise,

the managers may follow their own personal agenda instead of maximizing the wealth of the shareholders.

2.3.1.3. Signaling theory

A more convincing argument in favor of dividends, is the signaling theory or the asymmetric information, which is associated with propositions put forward in Bhattacharya (1979), Miller and Rock (1985), John and Williams (1985), and others. It is based on the idea of information asymmetries between managers and investors where managers as insiders choose dividend payment levels and dividend increases to signal private information to investors.

According to Asquith and Mullins (1983), managers have an incentive to signal this private information to the investment public when they believe that the current market value of their firm's stock is undervalued. The increased dividend payment serves as a credible signal which suggests that managers, who are expecting improved returns in the future, would be more willing to share the earnings with the shareholders. By increasing the dividend, the firm commits itself to a future cost (dividend payment), yet this is interpreted positively by the market since it signals the capacity of the management to generate cash flows. This fact would lead investors to re-evaluate the cash flows and hence increase the share prices. Furthermore, Miller and Modigliani (1961), who argued in favor of the dividend irrelevance theory, stated that dividend may have a signaling effect in the real world when the capital market is not perfect.

2.3.1.4. Behavioral Theory

Advocates of behavioral finance, such as Shefrin and Statman (1984) introduced concepts such as prospect theory and mental accounting to explain why investors like dividends. They suggested that investors prefer dividend paying stocks more than homemade dividends because of self-control problems. The idea is that investors want to prohibit themselves from consuming too much in the present. Therefore, they allow themselves only to spend resources received from regular income as dividends.

Schiller (1984) indicates that an investor's behavior is influenced by societal norms and attitudes, which is usually ignored by financial researchers and theoreticians. The reason

is that human behavior is hard to be implemented into financial or statistical models. Including these behavioral factors in the financial modeling system would strengthen and enrich the corporate dividend policy theory and help to explain many problems.

2.3.2.   Middle-of-the-road and the irrelevance theorem

The "middle-of-the-road" party was founded in 1961 by Miller and Modigliani. They published a theoretical paper talking about the irrelevancy of the dividend policy in a world with perfect capital markets, rational investors, fixed investment, financing and operating firm's policies. By the standards of 1961, Miller and Modigliani were considered as leftist radicals, because at that time, most people believed that even under idealized assumptions, increased dividends made shareholders better off. Afterwards, this theory was pushed towards the center by a new Leftist party which argued for the low dividends.

2.3.2.1.   Dividend Irrelevance Theory

In 1961, Merton Miller and Franco Modigliani presented one of the most influential dividend theories. Although it was generated more than 50 years ago, it is still considered as one of the most respected theories. They put forward the irrelevance theorems, more commonly known as the MM theorems. As the name of the theory suggests, it states that under perfect capital markets[1], the dividend policy has no effect on the price of the firm's stock. Miller and Modigliani (1961) proposed that there are 3 possible cases to consider, each confirming that dividends do not affect firm's value.

In the first case, they argued that the firm's value is determined only by its basic earning power and its business risk. In other words, MM explained that the value of the firm depends only on the income produced by its assets, and not on how the income is split between dividends and retained earnings.

The second case is when a corporation has to issue new shares to finance the payout to the shareholders. Miller and Modigliani argue that the sale of new shares increases the

---

[1] By perfect market we mean no taxes, transaction or flotation cost and no agency costs or contracting cost associated with stock ownership. Markets are complete and frictionless, and all firms are assumed to have the same risk class.

firm's financial value, but at the same time the payment of dividends decreases this value. As long as shares are sold at their fair market value, these two effects offset each other and the value of a firm remains unchanged.

The last case assumes that stakeholders require dividends, whereas a firm does not intend to payout its profits. If they require immediate cash, they can sell part of their shares to another investor and create their homemade dividends. If the shares are sold at a fair market value, the value of a company remains unaffected. This implicates that corporations cannot do anything for the shareholders that they cannot do for themselves. Equally, if the firm pays a higher dividend than the shareholder's requirements, they can use the surplus dividends to purchase additional stocks. These two examples discussed above are the underlying assumptions of the irrelevance hypothesis and should make the shareholders indifferent between capital gains and dividends. As a result, the unwillingness of the shareholders to pay more for dividend-paying stocks explains the dividend irrelevance theorem.

These conclusions initiated a heated debate since much of the traditional empirical research supported the relevance of the dividend policy on the firm's value. For example, Fischer Black (1976) argued that there may be infinite reasons of paying dividends and posed the question: "If dividends are irrelevant, why do corporations pay dividends?" and "why do investors pay attention to dividends?" According to Black (1976), dividends may simply represent the return to the investor who faces a particular level of risk when investing in the company. He also added that companies pay dividends as a means of rewarding existing shareholders and making the company a worthwhile investment.

Overall, many empirical studies appear to support MM's dividend irrelevance proposition. Yet, many others do not. Today, many academics seem to be still debating whether dividend policy matters. However, in practice, firms in general tend to believe in the importance of dividend policy and pay cash dividends (Brealey and Myers, 2003).

2.3.3. The Leftists (the radical left)

According to Brealey and Myers (2003), the main argument of the "anti-dividend" school is the tax effect of dividends on stock prices. Their strategy is simple: Whenever dividends are taxed heavily than capital gains, firms should pay the lowest cash dividend they can get away with. This view even suggests that the best interest of the firm is served by not paying any dividends because of the tax disadvantage of ordinary income over capital gains. There are three arguments that the leftists rely on when it comes to paying lower dividends, which are the tax clientele theory and the transaction cost theory.

2.3.3.1. Tax Preference theory

According to Litzenberger and Ramaswamy (1979), and Barclay (1987), the tax preference theory is derived from the fact that dividends used to be taxed at a higher level than other capital gains. Furthermore, taxes on dividends are paid upon the receipt of dividend, while taxes on capital gains can be deferred. Because they are taxed at a higher rate, dividends are more costly in the majority of countries, explaining why there is a preference for capital gains over cash dividends, assuming that the transaction cost does not exceed the tax benefit. As a result, the theory argued that investors are willing to pay a premium for those companies who pay lower or no dividends.

Furthermore, Brigham and Houston (2004) pointed out three tax-related reasons for thinking that investors might prefer a low dividend payout to a high payout in USA. First, long-term capital gains are taxed at a lower rate than the dividend payments, which will push wealthy investors[2] to prefer the company to retain its earnings within its business. Second, capital gain taxes are not paid until a stock is sold. Due to time value effect, an amount of taxes paid in the future has a lower effective cost than the amount paid today. Third, if a stock is held by someone until he or she dies, no capital gains tax is due at all. In other words, the beneficiaries who receive the will completely escape the capital gains tax. Because of these tax advantages, investors may prefer to have companies retain most of their earnings.

---

[2]Wealthy investors: who own most of the stock and receive most of the dividends

2.3.3.2. Transaction cost theory

Firms may incur costs in distributing dividends, while investors may incur costs in collecting and reinvesting these payments. Moreover, both firms and investors may incur costs when, due to paying dividends. However for the firm to pay some dividends and finance its investment, it is going to resort to external financing. Thus, the transaction cost is the cost of external financing. The firms with high levels of financial leverage face a high levels of fixed charges, which lead those firms to pay lower levels of dividends because of the cost of external financing (Higgins, 1972).

Furthermore, Allen and Michaely (2003) explained that due to costs associated with raising external finance, the transaction cost theory suggests that firms should utilize the retained earnings to the extent possible. Dividend should only be paid when this does not result in a shortage of internal funds required for investment. Therefore, Rozeff (1982) suggested that firms that have greater need in external financing would maximize shareholder's wealth by adopting lower payout policies.

Rozeff (1982) suggested that leverage, potential growth and risk, are all factors that can increase the need for costly external funds. First, high levels of leverage entail high fixed costs that the firm has to meet. Second, growth potential means that the firm is faced with good investment opportunities which require funds. Third, firm risk suggests that dependency on external finance is higher because there is uncertainty regarding generated earnings.

2.3.4. Other Theories

There are other theories that explain dividend payout policies, but which do not fit into any category. Those theories are the pecking order theory, the clientele effect and life cycle theory.

2.3.4.1. Pecking order theory

Donaldson (1961) first introduced the pecking order theory as a theory to explain observed financial behavior of firms but Myers and Majluf (1984) proposed a modified version of the theory which was the complete opposite of the agency theory. They argue that firms experiencing high growth rates generally have large investment requirements

and these firms should be characterized by low pay-out ratios. This theory can explain a tendency in corporate financing behavior to rely on internal sources of funds and when external financing is necessary, debt is preferred over equity. The pecking order theory is related to the capital structure of the firm and to the order of financing, with the assumption of asymmetric information between the firm and its external investors. Companies prioritize their sources of financing, first internal financing, then debt, and lastly raising equity as a "last resort".

2.3.4.2. Clientele Effect

Miller and Modigliani (1961) described the clientele effect by stating that each firm is has its own shareholders who find its optimal dividend policy. This is what is called the clientele effect. According to Kalay (1984), most investors pay higher taxes on dividends than on capital gains, however, depending on which type of investor is considered, there is a separation into different tax brackets. Some investors have low marginal tax rates or are completely tax-exempted (pension funds). Because of these different tax implications for different types of investors, a tax clientele effect may arise. Because dividends normally suffer from tax disadvantages, investors with low income tax brackets are more willing to invest in high dividend yield stocks. Whereas those with high income brackets, prefer to hold non-paying stocks. If the investor required some regular income, he could make "homemade dividends".

Lease, et al. (1976) concluded that the elderly have a stronger preference for dividend-paying stocks than do younger investors because they receive less regular salary. The elderly retired investors, as they have little or no labor income, rely more heavily on income from their security holdings.

Furthermore, investors tend to have different financial needs and investment objectives such as growth, capital preservation, and income generation. These goals vary in terms of investor's age, family size, education expenses, employment package, and other characteristics. Changing the characteristics of firms (e.g. product line, investment and dividend policy, etc) could have an impact on the clientele.

2.3.4.3. Life cycle Theory

The life cycle theory is also named as one of the explanations for dividend payment. Mueller (1972) proposed a formal theory that a firm has a relatively well-defined life cycle, which is relevant to the firm life cycle theory of dividends. The theory argues that as companies pass through the different stages in their lives, they tend to modify the dividend policy depending on the financial needs of each stage. This theory means that firms that are in their growth stages are less likely to pay more dividends as compared to firms that are at their maturity stages. Old firms therefore, because they do not have a lot of growth opportunities to fund, are expected to pay more dividends.

2.4. Overview of Empirical Studies on Dividend Payout

2.4.1. Introduction

Many theories and models have been attempted to examine the numerous aspects affecting the dividend policy, but the roots of the empirical literature has been credited to John Lintner (1956) who conducted his study on American companies in the middle of 1950s. Since then, there has been an ongoing debate on dividend policy resulting in controversial and inconclusive results.

To analyze the importance of stability in dividends and target payout ratio, he selected more than 600 listed and well-established companies and surveyed the sample using a questionnaire. Then, he conducted extensive interviews with managers of 28 selected American companies to further explain results. His results revealed that (i) the primary determinants of dividend payout changes were the most recent earnings and the past dividend paid, (ii) management place more attention on dividend changes than on absolute dividend levels, (iii) most managers try to stabilize dividends to avoid dividend cuts and they are reluctant to reduce the dividend policy because they believe that a tax cut would hurt the stock price, (vi) managers are very conservative in changing the dividend payout policy so that they would not change it unless they are sure that the new level of dividend is sustainable, and (v) investment requirements has little effect on dividend payout.

He also developed a partial adjustment model to describe the dividend decision process that explained 85 percent of year-to year dividend changes. He found a gradual increase in dividend payout to follow a target payout ratio, but the speed of adjustment toward the target ratio differed greatly among companies. This theory can be explained in a mathematical format explained below.

Suppose that a firm always stuck to its target payout ratio. Then the dividend payment in the coming year (DIV_1) would equal a constant proportion of earnings (E_1):

DIV_t = target dividend

    = target ratio * E_t

The dividend *change* would equal

$DIV_t - DIV_{t-1}$ = target change

    = target ratio * E_t - DIV_{t-1}

A firm that always stuck to its target payout ratio would have to change its dividend whenever earnings changed. But the managers in Lintner's survey were unwilling to do this. They believed that shareholders prefer a steady progression in dividends. Therefore, even if circumstances appeared to warrant a large increase in their company's dividend, they would move only partway toward their target payment. Therefore, their dividend changes seemed to conform to the following model:

$DIV_t - DIV_{t-1}$ = C * target change

    = C * (target ratio * E_t - DIV_{t-1})

Where:

DIV_t is the dividend for the current period,

DIV_{t-1} is the dividend for the previous period,

C is the adjustment rate

Et is the earning for the current period

Thus, Lintner's simple model suggests that the existing rate of dividend is the central benchmark for the determination of current dividend and that the level of earning is that starting point to see whether dividend should change. Therefore, the current dividend payment is the function of net current earnings and dividend paid in the previous year. Furthermore, he added that the more conservative a company is, the more slowly it would move toward its target. Therefore, its adjustment rate could be lower .

After the Lintner model, many researches empirically tested this model to confirm its validity. Fama and Babiak (1968) tested the Lintner model along with several models on the dividend data of 392 major North American industrial firms to find the best one that explain future dividends. They concluded that Lintner's dividend model has succeeded fairly well in explaining the dividend changes of individual firms, but they found that the model can be improved by replacing the constant with a lagged profit, which led to a slight improvement in the model explanatory power.

The ground breaking seminal article by Miller & Modigliani (MM) in 1961 that introduced the dividend irrelevance theory altered the mentality of many researchers regarding the dividend policy. MM argued that in a perfect market condition, the dividend decision has no impact on the value of the firm or on the shareholders' wealth so it is an irrelevant decision. However, the presence of market imperfections (taxes, transactions costs, information asymmetry, agency problems, etc...) have provided the basis for the development of various theories which supported the dividend relevance theory including tax preference, signaling, and agency explanations.

2.4.2. Empirical Findings in Emerging Countries

Therefore, since Miller and Modigliani (1961) introduced the dividend irrelevance hypothesis and Black (1976) addressed the "Dividend Puzzle" in their studies, a number of researchers tried to solve this puzzle to learn the most important determinants of the dividend policy. Many researchers tested Lintner's model ability to explain the dividend decision process in U.S firms (Darling, 1957; Dharymes and Kurz, 1964; Fama and Bablak, 1968; Baker et al., 1985; Fama and French, 1997; and Shirvani and Wilbratte

1997) and in emerging economies (Mookerjee, 1992, Glen et al. 1995 and Aivazian et al., 1999). Many of the studies concluded that dividend payment behavior in emerging countries is significantly different than those of developed markets. Factors such as culture, perceptions, market size, market depth, efficiency, regulations and taxation, make emerging countries a special case.

Several studies were conducted to cover this part of the world. The review of the empirical studies in this section focuses on those conducted in emerging countries generally and on banks specifically since 1990s and it is presented chronologically.

2.4.2.1. Empirical Findings on Corporate Dividend Decisions

Mookerjee (1992) was the first who used Lintner's model in an emerging country. He investigated the dividend behavior in the Indian market by testing it against the data from 1949 to 1981. He concluded that Lintner's model explained the dividend behaviors in the Indian environment. Furthermore, he added that the explanatory power of the model will increase if the external finance is included in the model as an explanatory variable. Therefore, Indian firms believe that they should pay dividends even if their profit level is low and even if they have to go for external financing (borrowing).

Annuar and Shamsher (1993) investigated the dividends and earnings behavior of firms listed on the Kuala Lumpur Stock Exchange (now known as Bursa Malaysia). Their They found that that the dividend decisions of the firms partially depended on their current profits and past dividends. They also found that firms have long-term target dividends, which is conditioned upon their earnings ability.

Wang et al. (2002) compared the dividend policy of Chinese and UK listed companies, and found that the UK companies had a clear dividend policy in which annual dividends are increasing and all companies are paying a cash dividend. In contrast, Chinese companies had unstable dividend payments and their dividend ratios were heavily dependent on the firm's current earnings.

Aivazian, et al. (2003) examined the dividend policy of a sample of companies from eight emerging markets, and compared them to a sample of 99 US companies. He found

that emerging firms displayed dividend behaviors similar to US firms, in the sense that dividends are explained by profitability, debt, and the market-to-book ratio. However, their sensitivity to these variables varies across countries. He also found mixed results regarding the relationship between size and dividend policy for several emerging markets.

Amidu and Abor (2006) conducted a study on the determinants of dividend payout ratios in Ghana during a six-year period. Using an Ordinary Least Squares model, the results showed positive relationships between dividend payout ratios and profitability, cash flow, and tax. The results also showed negative associations between dividend payout and risk, institutional holding, growth and market-to-book value. However, the significant variables in the results were the following: profitability, cash flow, sales growth and market-to-book value.

Al Yahyaee (2006) examined the dividend policy of Omani firms in the financial and non-financial sectors between 1989 and 2004. The results suggested that there are common factors that affect the dividend policy of both financial and non-financial firms, and there are others that affect only non-financial firms. The common significant factors are profitability, size, and business risk. However, government ownership, leverage, and age have a strong influence on the dividend policy of non-financial firms but no effect on financial firms. On the other hand, agency costs, tangibility, and growth factors do not appear to have any significant impact on the dividend policy of both financial and non-financial firms.

Al-Malkawi (2007) examined the determinants of corporate dividend policy in Jordan using a firm-level panel data set of all publicly traded firms on the Amman Stock Exchange between 1989 and 2000. Using Tobit specifications, the results suggested that the firm's age, size, and profitability positively and significantly affected its dividend policy, but there was a negative relationship with the firm's financial leverage. He concluded that the existing theoretical literature on dividend policy can be applied to an emerging capital market such as Jordan. Many of the factors that were found to be

significant in the determination of dividend policy are the same as those found in developed capital markets.

Al-Twaijry (2007) conducted a research on the dividend policy of 300 firms listed on the Kuala Lumpur stock exchange. The results suggest that the current dividends are affected by its pasts and future forecast. Furthermore, the results show that there are no significant association of the dividend payout ratios with the past, present or future net earnings. Additinally, the correlation between dividend payout ratio and future earnings growth is negative and insignificant. However, there is a significant negative correlation between the company's financial leverage and its dividend policy.

Al Kuwari (2009) used a panel dataset of nonfinancial firms listed on Gulf Co-operation Council (GCC) countries between 1999 and 2003. Using a series of random effect Tobit models, the results suggest that the dividend policy is strongly and directly related to the government ownership, firm size and firm profitability, but negatively to the leverage ratio. The results showed that firms pay dividends with the objective of reducing the agency problem and maintaining firms' reputation, since the legal protection for outside shareholders was limited. In addition, and as a result of the significant agency conflicts interacting with the need to build firms' reputation, the dividend policy was found to depend heavily on firm's profitability.

Parua and Gupta (2009) undertook a research on the determinants and trends of dividends in 607 listed Indian companies from 1993 to 2005. They found that past, current and expected future profits had significant positive role in determining the dividend payout ratio. Evidence shows that the cash balance and cash flow had significant negative relationship with the dividend rate. Factors like Interest expense, capital expenditure, tax ratio and share price had almost no role on the dividend payment.

Okpara (2010) analyzed the determinants of the dividend Payout policy of firms from Nigerian Securities and Exchange Commission. They found that profitability affects

negatively the payout ratio whereas liquidity and previous year's dividend exert a positive impact on the payout ratio. Therefore, they concluded that these three factors (profit, liquidity and previous year's dividends) were good predictors of the dividend payout policy in Nigeria

Al Ajmi and Hussain (2011) aimed to study the dividend decisions of a sample of 54 Saudi Arabian listed firms during 1990-2006. They found that Saudi firms had more flexible dividend policies since they were willing to cut or skip dividends when profit declines and pay no dividends when losses were reported. Lagged dividend payments, profitability and cash flows were found to be determinants of dividend payments. However, the agency costs were not a critical driver of dividend policy of Saudi firms.

Imran (2011) empirically investigated the factors affecting the dividend payout decisions of Pakistan engineering sector using the data of 36 listed firms during 1996-2008. Using various panel data techniques, he found that the dividend payout was positively affected by last year's dividend, earning per share, profitability, sales growth and the size of the firm, whereas it was negatively affected by the cash flow. The liquidity of the firm was insignificant in the case of Pakistani engineering firms.

Sinaei and Habibi (2012) aimed to study the determinants of the dividend payout ratio on firms listed in The Tehran's Stock Exchange (TSE) from 1999 to 2008. The results showed that there is a significant and negative relationship between the dividend payout ratio and market-to-book ratio and capital expenditure. On the other hand, there is a positive relationship with the compensation and debt to equity ratio (financial leverage). A summary of Dividend Studies on Emerging Countries is presented in Table 2

Author(s)	Date	Sample Size	Summary of Key Findings
Mookerjee	1992	-	Indian firms pay dividends even if their profit levels are low and even if they have to go for external financing.
Annuar and Shamsher	1993	-	Dividend decisions of the firms listed on Kuala Lumpur partially depended on their current profits and past dividends.
Wang et al.	2002	102	Chinese companies had unstable dividend payments and their dividend ratios were heavily dependent on the firm's current earnings.
Aivazian, et al.	2003	8 emerging markets compared to 99 US firms	Emerging firms displayed dividend behavior similar to US firms.
Amidu and Abor	2006	-	There was an association of profitability, cash flow, sale growth and market-to-book value with the dividend payout in Ghana.
Al Yahyaee	2006	147	The significant factors affecting the dividend payout policy of Omani firms were profitability, size, and business risk.
Al-Malkawi	2007	160	Existing theoretical literature on dividend policy can be applied to an emerging capital market such as Jordan.
Al-Twaijry	2007	300	The Current dividends of firms listed on Kuala Lumpur were affected by its pasts and future forecast.
Al Kuwari	2009	245	The dividend policy of nonfinancial firms listed on GCC countries was strongly and

			directly related to the government ownership, firm size and firm profitability, but negatively to the leverage ratio.
Parua and Gupta	2009	607	Past, current and expected future profits have significant positive role in determining the dividend payout ratio in Indian companies.
Okpara	2010	-	Profitability affected negatively the payout ratio whereas liquidity and previous year's dividends have a positive impact on the payout ratio of firms in Nigeria.
Al Ajmi and Hussain	2011	54	Lagged dividend payments, profitability and cash flows were the main determinants of the dividend payments of Saudi Arabian firms.
Imran	2011	36	The dividend payout in Pakistan engineering sector was positively affected by last year's dividends, earnings per share, profitability, sales growth and the size of the firm.
Sinaei and Habibi	2012	126	There is a significant and negative relationship between the dividend payout ratio and market-to-book ratio and capital expenditure of firms listed in Tehran stock exchange.

Table 2: Summary of Dividend Studies on Emerging Countries

2.4.2.2. Empirical Findings on Bank Dividend Decisions

Gupta and Walker (1975) were one of the first who provided the banking-related study on dividend policy. They analyzed the data of980 banking firms from1965 to 1968 to find the determinants of the dividend policy of banks. They found a positive relationship between dividends and current profits, the change in profits from the prior year, the sum of profits over time, and the growth in total assets and liquidity. However, they found a negative relationship between the liquidity and the bank's dividend payout. They concluded that while current and past profits as well as asset growth are all related to dividends, the liquidity's impact is much greater on dividends than on the other three variables.

Mayne (1980) compared the dividend policies of banking firms owned by bank holding companies (BHCs) to those outside the BHC framework using data from 1973 to 1976 of more than 12,000 "small" banking firms. She found that banks associated with holding companies pay out more dividends than do their non-BHC counterparts. She concluded that the total assets, income before securities gains, equity, total assets growth rate, and a holding company's dummy variable were highly significantly related to dividends, as hypothesized. However, the total assets and growth show a negative relationship while all others have a positive relationship.

Kennedy and Scott (1984) conducted a study on the determinants of the dividend payout ratios of 120 large banks in the United States during the period of 1967–1976 as a function of 20 variables. The results showed that determinants such as the size and the number of shares outstanding may be timeless indicators of dividend policy, and other variables such as location may no longer be relevant. The passage of the Reigle-Neal Interstate Banking and Branching Act of 1994 eliminated the geographic limitations, which were likely related to the regional proxies that the authors used.

Kennedy and Nunnally (1986) studied the dividend payout ratios for 1982–1983 using regression techniques to select the significant determinants of the payout ratios in different scenarios. They analyzed the data of about 80 large banking firms, depending

on the model specifications and data availability in each case. The prior year's dividend payout ratio and the stock's price-earnings (PE) ratio consistently entered the analysis as important determinant variables.

Mercado-Mendez and Willey (1995) examined the agency costs of the 104 largest U.S, banking firms during 1985–1989. They used a dividend yield-inspired measure estimated as a function of earnings volatility, total assets, and a measure that attempts to incorporate managers' exposure to overinvestment in the managed firm. They related the manager exposure to personal wealth tied into general shareholders' returns through increased stock ownership, options, and other factors. The only variable with a significant relationship to the dividend yield is the total assets, which has a positive relationship. They concluded that banks use "more dividends to control for agency costs."

Casey and Dickens (2000) investigated the impact of the Tax Reform Act of 1986 on the dividend policies of banks. Using the basic Rozeff (1982) model, which considers dividend yield as a function of insider ownership, past revenue growth, forecasted revenue growth, the firm's systematic risk (beta), and the number of the firm's common stockholders, the study examines data covering 1982–1992. The results showed that only the forecasted revenue growth and the number of stockholders are significant in explaining dividend payout ratios of banks for the period. Therefore, Casey and Dickens use this result as evidence that the dividend policies of banks differ from non regulated firms. They modify the basic Rozeff model by adding a capital adequacy measure (equity divided by total assets) and a dummy variable to differentiate the periods before and after the Tax Reform Act's passage. The results offered support for banks' dividend payouts increasing after the top marginal tax rates on dividends decreased. The results also provide support for the hypothesis that banks with greater capital ratios have larger payout ratios.

Casey, Dickens and Newman (2002) examined bank dividend policy and its variables in USA using 4,112 firm observations from 1998-2000 data. The analysis suggested a

negative relationship between dividend payments and investment opportunities, signaling, ownership, and risk. However, it showed a positive relationship to size and dividend history.

Lee (2009) investigated the determinants of dividend policy in Korean banking industry using a panel data of Korean banks during 1994-2005. The study found a positive relationship between the bank's profitability and the dividend payout. Furthermore, there was a strong and significant relationship between the size of the banks and its dividend payouts. They concluded that because banks were subject to monitoring and surveillance from their regulator on their operations, the dividend policy would be more closely associated with their riskiness.

Kinfe (2011) undertook an empirical study on the determinants of dividend payout of six private banks in Ethiopia during 2006 to 2010. By using Lintner's model, the study concluded that there was a positive relationship between the firm size and the dividend payout ratio. Also, there was no relationship between payout ratio and profitability, growth and leverage. Furthermore, the study concluded that the firm's liquidity had negative relationship with the dividend payout. The final conclusion of the study was that banks in Ethiopia considered agency conflicts, previous year's dividend and liquidity when making decisions to pay dividends.

Marfo-Yiadom and Agyei (2011) carried out the same study on sixteen banks in Ghana covering a five year period (1999-2003). The results showed that profitability, leverage, changes in dividends and collateral capacity had a positive significant impact on the dividend policies of banks in Ghana. On the other hand, they found that growth and firm maturity had a negative significant influence on the dividend payout. Additionally, The cash flow had a negative relationship with dividend policy and the result was not significant. Therefore, the major factors of dividend policy of the banks were profitability, leverage, changes in dividend, collateral capacity, growth and firm maturity.

Table 1 below provides a summary of dividend studies of banks in US and in the emerging countries that we talked about above.

Author(s)	Date	Sample size	Summary of Key Findings
Gupta and Walker	1975	980	Dividends are related to profits, total asset growth, and liquidity.
Mayne	1980	>12,000	Dividends are related to total assets, income before security gains, equity, total asset growth, and holding company affiliation.
Kennedy and Scott	1984	120	Dividends are related to firm size, number of shares outstanding, and various measures of geographic restriction.
Kennedy and Nunnally	1986	80	Dividends are related to prior-year dividends and the price-earnings ratio.
Mercado-Mendez and Willey	1995	104	Dividend yield has a positive relationship to total assets, and dividends provide a way to decrease agency costs.
Casey and Dickens	2000	46–82	Dividends are positively related to capital; dividends increase after the marginal rate of dividend income decreases.
Casey, Dickens and Nwman	2002	4,112	Dividends are negatively related to investment opportunities, signaling, ownership, and risk. Also, positively related to firm size and previous dividends.
Lee	2009	-	There was a positive relationship between the bank's profitability and the dividend payout.
Kinfe	2011	6	There was a positive relationship between the firm size and the dividend payout ratio.

Marfo-Yiadom and Agyei	2011	16	Profitability, leverage, changes in dividend and collateral capacity had a positive significant impact on the dividend policies of banks in Ghana

Table 3: Summary of Dividend Studies of banks

(Source: Baker, 2009)

2.5. Variables Affecting Dividend Policy

Although many researchers have identified a variety of determinants for the dividend policy decision, the review of the literature showed that the researches were done mostly in developed the countries around the world and in some emerging countries like Pakistan, India and Malaysia. However, the issue of dividend did not receive any serious attention among academic scholars in Lebanon.

Among all the research findings, only the below mentioned explanatory variables will be considered as the potential determinants of dividend policy in the Lebanese listed banks:

Banks' characteristics that affect firms' dividends policy include the firm's profitability, size, liquidity, financial leverage, growth opportunities, firm risk, and previous year's dividends.

2.5.1. Profitability

Lintner (1956) found that profits are one of the main determinants of dividend policy in addition to dividends of the previous year. The profit is considered to be a crucial factor that affects the dividend policy. Profitable firms are willing to pay higher amounts of dividends and hence a positive relationship is expected between the firm's profitability and its dividend payments (Amidu & Abor, 2006). This result is also supported by the signaling theory of dividend policy. In other words, profitable firms pay high dividends to convey shareholders of their good financial performance (Ho, 2003).

In his study, Aivazian et al. (2003) found that emerging market firms face similar dividend behavior as the US firms, in the sense that dividends are explained by profitability and debt ratios; however, their sensitivity to these variables varies with

every country. Upon empirically testing the effect of the profitability on the dividend policy, they found that there is a positive relationships between those two factors.

In the developed countries, Pruitt and Gitman (1991) surveyed financial managers of 1,000 US firms regarding their investment, financing, and dividend decisions taken in their firms. Their evidence suggested that current and past years' profits are one of the most important influences on the dividend payout as well as the year-to-year variability of earnings, and the growth in earnings. Furthermore, Baker and Powell (2000) supported the findings that the level of current and expected future earnings are affecting the dividend policy in addition to the pattern of past dividends payments.

However, we should note that in the emerging countries, Annuar and Shamsher (1993) found that the dividend decisions and the long term target dividends of firms in Malaysia partially depended on their current profits.

2.5.2. Firm Size

There are a number of researchers who argued that the size of the company is one of the factors that have the largest influence on the dividend payout ratio (Lloyd et.al, 1985; Holder et.al, 1998; Hedensted and Raaballe, 2006 and Gill et al., 2009). Lloyd, *et al.* (1985) was among the first to adjust Rozeff's model by adding "firm size" as an additional factor. They found that firm size as an important explanatory variable of dividend payout ratio of firms.

Large firms are supposedly to be mature with easier access to capital markets, which reduce their dependence on internal funds. Thus, it should be easier for them to pay more dividends. This shows that, large firms can afford to pay higher dividends than the smaller ones (Aivazian et al., 2003). Furthermore, large companies are more likely to increase their dividend payouts to reduce agency costs because they usually have more diverse shareholders. For example, Sawicki (2005) pointed out that dividend payouts can indirectly facilitate monitoring the performance of managers in large firms. Most probably, large firms will encounter information asymmetry issues due to ownership dispersion, which will diminish shareholders ability to monitor the internal and external activities of the firm. However, paying large dividends can be the solution for such a

problem because large dividends lead to an increase in the need for external financing, which will lead to an ongoing monitoring of the firm's actions by its own creditors.

Supporting this logic Jensen et al. (1992), Redding (1997), and Fama and French (2001) found that large firms distribute a higher amount of their net income as cash dividends than do small firms, suggesting a positive relationship between dividend payout policy and firm size.

2.5.3. Liquidity

The firm size may not be the sole determinant of the dividend-agency relationship. The liquidity or the free cash flow of the firm may also be significant. If a company has adequate cash flows, it would like to distribute cash dividend in order to keep its shareholders satisfied. Moreover, because firms have to make their dividend payments in cash, they have to be liquid enough to distribute dividends and to remain solvent (Benito and Young, 2001).

This relationship is expected to be positive under the agency theory, which have been discussed by Jensen, et al. (1992), Rozeff (1982) and Easterbrook (1984) in their studies. The agency theory refers to the conflict of interests between the managers and its shareholders. Managers may follow their own personal agenda to maximize their personal wealth and may invest in negative net present value investments instead of maximizing the wealth of the shareholders. Jensen (1986) argued that companies with high free cash flows have to pay higher dividends in order to reduce the agency conflict between managers and shareholders. Furthermore, larger dividend payments force firms to seek external financing, which will reduce the possibility for inefficient investments.

Empirically, Anil and Kapoor (2008) conducted a study among Indian IT-companies during the period 2000-2006. They found a positive relationship between the firm's liquidity and dividend payout ratio and stated that a good liquidity position is an important factor which influences companies' dividend payout ratios. Companies with stable and high cash flows are more likely to pay dividends compared to companies with low or unstable cash flows.

In their study of the Chinese listed firms, Liu and Hu (2005) found that if the cash dividends are less than the free cash flow, the firm will have residual cash. On the other

hand, if cash dividends are more than the free cash flow, then the firm will need financing to meet the requirement of cash dividend. Therefore, a poor liquidity position suggests a less generous dividend payout due to shortage of cash.

However, Ayub Mehar (2003) observed a negative relationship between dividend and liquidity position of a firm, so that a firm with a good liquidity position does not necessarily imply a higher dividend payout ratio.

2.5.4.   Financial leverage

The financial structure of a firm consists of both debt and equity financing. Long-term financing usually refers to the firm's capital structure, and the degree to which a firm relies on debt financing is called financial leverage. A firm's leverage plays an important role in explaining the firm's dividend policy.

The most commonly used explanation for the negative relationship between the dividend payout ratio and financial leverage is that firms with high financial leverage tend to have low payouts ratios to reduce the transaction costs associated with external financing. Supporting this logic, Rozeff (1982) argued that internal financing will not be sufficient enough for growing companies planning to increase their investments and to keep the dividend payout levels constant. However, because external financing is usually relatively expensive, expanding companies might probably choose to decrease their dividend payouts. A firm with a high leverage means larger fixed payments to cover the external financing, which will become partial substitute for the dividend payments. Furthermore, the high leverage increases the transaction costs and the risk of the firm, which will result in low dividend payments because firms need to maintain their internal cash flow to pay their obligations rather than to distribute them to shareholders.

Furthermore, Jensen (1986) argued that the debt can also serve as a substitute instrument for dividends in diminishing the agency costs of the free cash flow. Just by a taking a loan, a firm will be fully committed to its creditors to close their debt. The company will be under constant surveillance by its creditors to assure the safety of the firm's cash flows which will reduce the optional funds available to managers. This suggests that highly levered firms are expected to have low dividend payouts.

A growing number of studies have found that the level of financial leverage negatively affects dividend policy which means that firms with low debt ratios are willing to pay more dividends (Jensen et al., 1992; Agrawal and Jayaraman, 1994; Faccio et al., 2001; Gugler and Yurtoglu, 2003; Al-Malkawi, 2005).

On the other hand, Dhillon (1986) and Chang and Rhee (1990) found conflicting evidence for the relationship between dividend payout ratios and leverage when the firm used debt to distribute dividends. Therefore, the greater the debt ratio, the higher is the dividend received by the shareholders. This result is supported by the signaling theory as the company pays dividends to signal investors the good condition of the company.

2.5.5. Growth opportunities

According to Jensen (1986) and Lang and Litzenberger (1989), firms with high growth and future investment opportunities will need the internally generated funds to finance those projects. Hence they will choose to cut, or pay fewer dividends, to reduce their need for costly external financing. The negative relationship between growth opportunities and dividend is predicted by the liquidity hypothesis, the pecking order theory, and the life cycle theory. First, firms with slow growth and fewer investment opportunities will probably pay more dividends to prevent managers from over-investing firms' cash. This is consistent with the liquidity hypothesis, where companies with high investment opportunities are expected to have an overinvestment crisis. Thus a dividend would play an incentive role by removing resources from the firm and decreasing the agency costs of free cash flows (Al-Malkawi, 2007).

Second the negative relationship between firms' growth opportunities and dividend payouts is consistent with the pecking order theory of Kanwal and Sujata (2008) which states that a firm which prefers internal sources for financing its investments distributes fewer dividends as compared to a firm which finances the investment expenditure from external sources. They concluded that firms experiencing high growth opportunities will have low payout ratios.

Third, according to the "life cycle theory", as firms become mature, their growth and investment opportunities diminish, resulting in a cut in their capital expenditures which will leave them with more free cash flows to pay as dividends. They pointed out that a

raise in dividends is a sign of change for the shareholders, which will show the firm's transition from higher growth phase to a lower growth phase.

Empirically, Fama and French (2001) confirmed that investment opportunities influenced the dividend policy. They found that firms with better growth and investments opportunities have lower dividend payments. Firms that have never paid dividend are usually smaller and less profitable than firms that pay dividend, but with more investment opportunities.

The negative relationship between dividend policy and firm's investment opportunities have been documented by many researchers such as Rozeff (1982), Jensen, et al. (1992), Alli, et al. (1993), Collins et al. (1996), Mohammed, et al. (2006), Al-Malkawi (2008). However, Jose (2001) did not find a significance dependence between growth opportunities and dividends of 484 European banks belonging to 22 countries and D'Souza (1999) found this insignificant relationship for international firms in the sample. On the other hand, Myers and Bacon (2004) argued that firms uses their excess of equity capital to fund the growth of the company and takes an additional debt to distribute the dividends in order to give a good signal to its current and future shareholders. Therefore, they concluded that opportunities of growth resulted in the payment of higher dividends to signal the company's excellent performance.

According to Amidu and Abor (2006), the dividend payout policy is not totally decided after a firm's investment and financing decisions have been made; rather, the dividend decision is taken along with the investment and financing decisions.

2.5.6.   Firm Risk

A lot of studies have been conducted in order to determine the relationship between the riskiness of companies and the dividend payout ratio. Rozeff (1982) mentioned that firms with high leverage and high risk paid low dividends. Risky firms with high volatility in their cash flows have more difficulty in planning for future investments which will increase their need for external financing, resulting in a lower dividend payout ratio. According to the pecking order theory, because external financing is more

expensive, companies choose to decrease their dividend payouts in order to avoid the expensive external financing (Rozeff, 1982; Al-Kuwari 2009; Al- Shubiri, 2011).

Many previous studies have demonstrated a strong negative relationship between the level of riskiness and the dividend payout ratio. Chang and Rhee (1990) found that firm risk is negatively associated with dividend policy. Holder et al. (1998) and Ho et al. (2003) supported this conclusion and noticed that firm risk is a crucial indicator for the business while making dividend policy decusions..

However, not every scholar has the same opinion regarding the risk determinant. For example, Mollah et al. (2002) found that firms listed on the Dhaka Stock Exchange paid a large dividend, even though they were considered risky.

2.5.7. Previous year's dividends

Lintner (1956) was one of the first researchers who have regarded the previous dividend payments as a key indicator of a firm's capacity to pay dividends because it was assumed that the firm's management will always try to maintain a stable dividend policy. An extensive study by Fama and Babiak (1968) reported that several firms simply opted for a stable dividend policy and based their current dividends on the previous year's dividends. They also confirmed that Lintner's hypothesis was relevant and suggested that it provides a fairly good explanation of how companies decide on the dividend payout rate.

In Pakistan, Ahmed and Javid (2009) examined the determinants of the dividend payout policy of 320 non-financial firms listed in Karachi Stock Exchange. The results showed that there is a positive relationship between Pakistani firm's current earnings per share and past dividend per share with the dividend payments. However, the dividend payout ratio tends to be more sensitive to current earnings than to prior dividends. Furthermore, Mollah (2009) suggested that dividend decisions are primarily governed by current profitability and lagged dividends.

2.6.   Conclusion

In summary, after explaining the concept of the dividend policy, the literature suggests that there are a number of determinants that determine the dividend policy for firms. Miller and Modigliani (1961) viewed dividend payment as irrelevant and that the investors are indifferent between dividend payment and capital gains. However, Black (1976) opposed their view and posed the questions, "If dividends are irrelevant, why do corporations pay dividends?" and "Why do investors pay attention to dividends?"

Although the answers to these questions may appear simple, dividend payment is still a puzzle and various theories have been developed with the main objective to explain why companies pay dividends.

The empirical review reveals the fact that corporate profitability, liquidity, size, financial leverage, previous year's dividends, growth opportunities and firm risk may impact the dividend payout ratio. Although the theories presented in this chapter identified many potential determinants of the dividend payments, however, the question regarding which of these theories best explain the dividend practice remains a "puzzle". The reason of this dilemma is because of   the above mentioned variables represent different dividend theories and has mixed results across industries and countries.

Up to our knowledge, it is the the first empirical study that investigates the determinants of the dividend policy of the Lebanese banks. Therefore, assumptions and conclusions will be taken from the previous studies conducted on other emerging markets and developed markets which will help us reach a rational answer.

Chapter 3
Research Methodology

The aim of the chapter is to present the research methodology adopted in this study. The chapter is arranged as follows. The first part of the chapter presents the research approach adopted in this study, the sampling procedure and methods, followed by the research questions and hypotheses. Then, data collection is discussed and variables needed to answer our research question are described. Finally, the techniques of data analysis are presented.

3.1.   Research Approach

When conducting a study, the researcher has to make a decision concerning which method to apply. Decisions regarding the selection of research instrument is very important, since the research method involves a systematic and orderly approach employed towards the collection and analysis of the data used in the study so that useful information and meaning can be derived from it (Jankowicz, 2000). It could be either a quantitative or a qualitative approach or even a combination of the two approaches (Creswell, 2013). The quantitative research is often concerned with establishing relationships between variables by collecting numerical data that are analyzed using mathematically and statistically based methods (Aliaga and Gunderson, 2002). This approach can be verified by observation and experimentation, thus the relationship between the independent and dependent variables is studied in detail. This is advantageous because the researcher is more objective about the findings of the research. However, one of the main disadvantages of the quantitative research is that the results disregard the individual human thought or choice to predict behavior. Another disadvantage is that a large sample of the population must be studied for the results to be statistically accurate (Malhotra, 2004).

The second approach is the qualitative approach, which typically involves fieldwork in which the researcher observes and records behaviors, values, relationships and events in their natural setting (Bryman, 2008). Qualitative research which is useful during the

early stages of a study provides insights and understanding of the problem setting. Furthermore, it does not require any strict design plan to follow which gives the researcher freedom to let the study unfold more naturally. Another advantage of the qualitative research is that the researcher gains more detailed and rich data in the form of comprehensive descriptions of the study. However, the qualitative research will be very time coming. Furthermore, the researcher will be deeply involved in the process, which gives the researcher a subjective view of the study and its participants. The lack of objectivity and the bias view of the researcher will skew the data gathered and will result in incorrect conclusions (Malhotra, 2004).

The third approach is the mixed approach which is a new movement in the educational research where the researcher incorporates both qualitative and quantitative research approaches within a stage of the study in such a way that the qualitative and quantitative information complements each other. Using the qualitative approach, evaluators collect in-depth information to answer some questions, and, using a quantitative approach, evaluators collect numerical information for other questions (Creswell, 2013). The advantage of a mixed method approach is that it balances efficient data collection and analysis with data that provides context. The quantitative method quickly and efficiently captures potentially large amounts of data from large groups of stakeholders and the qualitative facilitates the understanding and interpretation of the quantitative data. However, the challenge of a mixed method approach is to ensure that the two data collection methods complement but do not duplicate each other. When data collection methods are duplicative, costs for gathering that information are essentially doubled (Creswell, 2013). In light of the discussion above, the quantitative method is predominantly used.

Since our study is based on the empirical research, the statistical measurements deduced from the secondary data will be our main focus to measure the responsiveness of the dividend payouts to different factors. Therefore, the quantitative research will be the appropriate method to proceed in our study. The target population of the study is all the Lebanese banks traded on the BSE and operating in Lebanon. Currently, six banks are traded on BSE, therefore, numeric data of the variables are collected from financial reports for seven consecutive years for these Lebanese banks. However; because of our

sampling criteria explained below, two banks were eliminated from our sample resulting to 28 observations. These data are to be analyzed in the STATA program by the Ordinary Least Squares (OLS) Regression method.

3.2.   Research questions and Hypotheses

The evidence of several dividend theories has grown in the past five decades, but deficiencies and contradictions in the literature persist. The preceding discussions of gaps in the literature on dividend policy theory and its determinants prompted the following research questions:

A. What are the bank-specific factors affecting the dividend payout policies in the Lebanese banks listed on BSE?

B. Is Lintner's Model on dividend behavior applicable on the Lebanese banks as it was on several other institutions and countries?

In order to determine whether there is a relationship between the dividend payout ratio and the company selected factors, we formulated a number of hypotheses. According to Keller (2005), a hypothesis is a statement that something is true and a hypothesis test is a process that uses sample statistics to test a claim about the value of a population parameter. Typically, a hypothesis test involves two hypotheses: the null hypothesis and the alternative hypothesis. The Null hypothesis which is the hypothesis that is going to be tested is symbolized by H_0, while the Alternative hypothesis which is a hypothesis to be considered as an alternative to the null hypothesis is symbolized by H_a.

The structure of all hypotheses is the same; while the null hypothesis states that there is no relationship between the bank specific factors and the dividend payout ratio ($H_0: r = 0$), the alternative hypothesis states that there is a relationship between the bank selected factor and the dividend payout ratio, ($H_1: r \neq 0$). However, while conducting this test, two possible errors may occur (Keller, 2005). A type I error arises when a null hypothesis is rejected even though it is true and the type II arises when a false null hypothesis is not rejected.

Another important factor used in order to access the significance of the tests is the p-value. According to Keller (2005), the p-value is one of the most important variables to consider when conducting a regression analysis since it measures the amount of statistical evidence supporting the alternative hypothesis. In order to be able to reject the null hypothesis in favor of the alternative hypothesis, the p-value should be as low as possible. One of the most important factors that influence the p-value is the cost of making one of the two errors discussed above. If the cost of making an error is high, the significance level should be set relatively low (Keller 2005). The normal assumption is to use a significance level of 5 percent which was applied by majority of studies (Amidu & Abor 2006). Therefore, a p-value lower than 5 percent indicates that there is strong evidence that the alternative hypothesis is true and the null hypothesis will be rejected (Keller 2005). The hypothesis used in the study:

H_0: Some bank's specific factors do not affect the dividend payout ratio of Lebanese banks

H_a: Some bank's specific factors affect the dividend payout ratio of Lebanese banks

This hypothesis will be divided into 7 sub-hypotheses which are constructed to examine the impact of each of the seven variables that were selected from the literature on the dividend policy.

3.3. Data and Variables

3.3.1. Data and its Source

The data are classified as either primary or secondary. The secondary data are data collected by others for other purposes than for the research in question. The primary data, on the other hand, are data collected by the researcher for the specific research problem at hand. This study uses secondary sources, consisting of published documents such as annual reports from internet sites, online journals, books, and articles. The advantages of using secondary data are time and money saving.

The study will focus on Lebanese banks listed on Beirut Stock Exchange (BSE) using secondary data collected mainly from Bilan Banques and Bankscope database that

contains the financial statements of Lebanese banks. However, some of the financial data are missing from this database, resulting in incomplete information, which will affect the accuracy of the results. Therefore, the missing part will be filled by hand by browsing the official website of each bank and getting the relevant figures from their annual reports. The selection of this period was based on the latest period of available data on Bankscope. In this study, a purposive sampling technique is employed in selecting banks into the sample using the following criteria:

a. Banks with regular annual report and account for the study period.

b. Banks with positive earnings throughout the period of the study 2005 to 2011

c. Banks with continuous dividend payout history throughout the period of the study 2005 - 2011.

The rationale behind adopting these criteria is that it will provide the variables to be regressed to ascertain the significance of the determinants of dividend payout in the banking industry. After the above filtering, the four listed banks remained to be investigated for a period of seven years from 2005-2011 are:

1. BLOM bank

2. Audi bank.

3. Byblos bank

4. Bank of Beirut

3.3.2.   Variables

According to Healey (2008), a variable is a characteristic of a unit being observed that may assume more than one of a set of values to which a numerical measure or a category from a classification can be assigned. In any specific theory, some variables will be identified as causes and others will be identified as effects or results. In the language of science, the causes are called independent variables and the effects or result variables are called dependent variables.

3.3.2.1 Dependent variables

The dependent variable is the event studied which is expected to change whenever the independent variable is altered. It is identified as an effect, result, or outcome variable. The dependent variables are thought to be caused by the independent variable (Healey, 2008).

Since this study is going to measure the dividend policy, the dependent variable should represent the dividend payment and it will be the dividend payout ratio[3], similar to many previous studies (Rozeff, 1982; Lloyd, 1985, and Amidu & Abor, 2006). The dividend payout ratio is defined as the percentage of the company's earnings that is distributed to shareholders. This definition takes only internal factors into considerations and is therefore independent from external factors (Penman, 2009).

$$Dividend\ payout\ ratio = \frac{\text{Dividends per share}}{\text{Earnings per share}}$$

The reason for not using the amount of dividends is that it fluctuates so much between banks, and in order to be comparable, the dividend payout ratio is a reasonable estimate to view their actual performance on dividend policy.

3.3.2.2 Independent variables

The independent variables, also known as explanatory variables are manipulated variables in an experiment or study whose presence or degree determines the change in the dependent variable. Thus, they are identified as causal variables which are thought to cause the dependent variable (Healey, 2008).

In this research, there are plenty of potential determinants for the dividend decisions. Based on the literature review previously mentioned, the explanatory variables that are found relevant to be included in our study are: firm profitability, size, liquidity, leverage,

---

[3] The two most common measures of dividends are the dividend payout ratio and the dividend yield. Both of these methods provide reliable measurements, but they measure dividend payments in different ways. Many scholars have discussed the difference between these two measurements. They concluded that both have advantages and drawbacks which may affect the results of the study (Fama & French, 1998) (Lamont, 1998) (Friend & Puckett, 1964) (McManus et al. 2004).

risk, growth and previous year's dividend. Although these variables have already been applied in previous researches, different calculations have been used to measure each one of them.

Thus, some identifiable factors affecting dividend policy considered in this study with their testable hypothesis and their calculation are presented as follows:

Profitability

The size of a firm's profit has been considered as an important factor of the dividend policy. Researchers as Lintner (1956), Pruitt and Gitman (1991), Deangelo et al. (2004), Amidu and Abor (2006) and many others, have found profitability as one of the most essential determinants of dividend payout policy. This is because profitable firms are willing to pay higher amounts of dividends and hence a positive relationship is expected between firm's profitability and its dividend payments. This outcome is also supported by the signaling theory of dividend policy. In other words, profitable firms pay dividends to convey their good financial performance (Bhattacharya, 1979; Chang and Rhee, 1990; Ho, 2003; Aivazian et al., 2003).

Bank's profitability will be measured by return on equity (ROE), which is considered as an important predictor of the changes in earnings (Freeman, Ohlson, and Penman, 1982). As Nissim and Ziv (2001) explains in their article: *"Since dividend changes are positively correlated with current ROE, the expected change in earnings is likely to be negatively correlated with the dividend change. Hence, a lack of correlation between earnings changes and dividend changes would actually indicate that dividend changes are informative about future earnings."*

Based on the above discussion, profitability is expected to be a key determinant of the dividend policy in Lebanese Listed banking sector. To test this hypothesis, the after tax earnings per total equity is used as a measure of a firm's profitability. The hypothesized relationship between profitability and dividends is as follows:

H1: Profitability positively affects the dividend policy of the Lebanese listed banks

Firm Size

There are a number of researchers who argued that the size of the company is one of the factors that have the largest influence on the dividend payout ratio. Large companies tend to be more competitive, with access to capital, better credit rating, more customers, and other factors, which will enhance their profitability and increase their ability to pay higher dividends (Dickens et al, 2002). Supporting this logic Lloyd et al. (1985), Jensen et al. (1992), Redding (1997), Holder et al. (1998), Fama and French (2001), Aivazian et al. (2003) and Sawicki (2005) suggested that there is a positive relationship between dividend payout policy and firm size.

The Size of the firm is measured by the natural logarithm of the firm's Total Assets. This measure has frequently been used by earlier researchers such as Gill et al. (2009). Based on the aforesaid discussion and consistent with the previous research, the firm size is expected to have a positive relationship with the dividend payouts. Therefore, the second hypothesis regarding the firm size is formulated as:

H2: Firm size positively affects the dividend policy of the Lebanese listed banks

Liquidity

A lot of research has been conducted in order to test the relationship between the company's cash position and the dividend payout ratio. In determining the relationship between liquidity and dividend payments, many academicians have used the cash flow as a measure of liquidity (Amidu and Abor, 2006, Gill, et.al, 2006, and Anil and Kapoor , 2008). They found the cash flow as a major determinant of the firm's dividend payout policy and should therefore be included in the study. However in this study, current ratio is used as a measure of liquidity where current ratio is equal to current assets divided by current liabilities (Kania and Bacon, 2005, Kanwal and Kapoor, 2008, and Ahmed and Javid, 2009)

A firm's liquidity is an essential factor that affects the dividend policy. Firms with higher cash accessibility are able to pay higher dividends than firms with insufficient cash. This positive relationship is supported by the signaling theory of the dividend policy (Ho, 2003). Furthermore, previous researches have concluded that liquidity has a positive

relationship with the dividend payments and this can be explained by the agency theory of cash flow. Jensen (1896) explained that firms with high cash flows are most probably going to pay higher dividends in order to diminish the agency conflict between its managers and shareholders. Otherwise, the managers may pursue their own personal agenda and maximize their personal wealth or even invest in unsuccessful projects instead of maximizing the wealth of its shareholders. Accordingly based on the foregoing discussion, the hypothesis related to liquidity is:

H3: Firms' liquidity positively affects the dividend policy of the Lebanese listed banks

Growth opportunities

If a firm is growing rapidly, it will demand of capital. Hence, more the need for funds to finance the expansion increased, the more likely the firm is to retain earning rather than to pay them as dividends which will diminish the chance of minimizing the agency conflict (Chang and Rhee, 1990. Consequently, firms with high growth opportunities are likely to retain a greater portion of their earning, resulting in lower dividend payout ratio.

However, in order to examine whether investment growth opportunities affect dividend policy, a precise alternate should be chosen. A number of studies used the change in revenues (interest and non-interest revenues) as a proxy variable for growth opportunities in dividend and investment policy relationship.

Higgins (1972) concluded that the dividend payout is negatively related to a firm's need for funds to finance growth opportunities. Furthermore, researchers such as Rozeff (1982), Jensen, et al. (1992), Alli, et al. (1993), Mohammed, et al. (2006), and many others have found a significant negative relationship between dividends and firms' investment opportunities. Based on the foregoing discussion, the following hypothesis is proposed:

H4: Growth opportunities negatively affect the dividend policy of the Lebanese listed banks

Financial leverage

The empirical evidence regarding the effect of leverage on dividend payout is mixed. A growing number of studies have found that the level of financial leverage negatively affects dividend policy which means that firms with low debt ratios are willing to pay more dividends (Jensen et al., 1992; Agrawal and Jayaraman, 1994; Faccio et al., 2001; Gugler and Yurtoglu, 2003; Al-Malkawi, 2005). Firms with higher level of leverage are committed to fixed payments to service their debt, which restrict the distribution of dividends. Furthermore, banks with higher leverage ratio or lower capital adequacy are under regulatory pressure which puts a restriction on paying high dividends (Dickens et al, 2002).

However, Kania and Bacon (2005) have found a significant positive relationship, concluding that firms might use debt funds to pay off dividends.

To analyze the extent to which debt can affect dividend payouts, the ratio of deposits (both short-term and long term deposits) to total assets is used as a proxy for leverage and the fifth hypothesis states the following:

H5: The financial leverage negatively affects the dividend policy of the Lebanese listed banks.

Firm Risk

Several analyses have been conducted in order to determine the relationship between the riskiness of companies and their dividend payout ratios. Nevertheless, the variables used in order to measure the risk have been different. Holder et.al (1998) and Al Yahyaee (2006) used the standard deviation of the return, Amidu & Abor (2006) used the variance of the cash flow. Rozeff (1982), Al Kuwari (2009) used firm's beta and Dickens et al (2002) employed the market over book ratio. However, in this study, the risk is measured by the P/E ratio defined as the market price per share divided by Earning per share because it implicitly incorporates the perceived risk of a given company's future earnings (Fama and French 1998, Friend and Puckett 1964). Higher dividend payout reduces the risk of future liquidity problem which increases stock price and the PE ratio. This action will suggest that investors are expecting higher earnings growth in the future (Fama and French, 1998). High PEs may be linked with low risk

and higher payout ratios, whereas low PEs may be faced with high risk and lower payout ratios.

Researchers such as Rozeff (1982), Al-Kuwari (2009), Al- Shubiri (2011) and many others have demonstrated a strong negative relationship between the level of riskiness and dividend payout ratio. However, we should mention that not every scholar has the same opinion regarding the risk determinant. For example, Mollah et al. (2002) found that firms listed on the Dhaka Stock Exchange paid a large dividend, even though they were considered risky. Furthermore, some argue that leverage ratio is associated with business risk because businesses with higher leverage would incur higher fixed costs and eventually higher volatility in earnings.

As a result, based on the foregoing discussions regarding the firm risk, the following hypothesis is proposed:

H6: Firm Risk (P/E) positively affects the dividend policy of the Lebanese listed banks.

Previous year's dividends

Previous year's dividends has been regarded as the primary indicator of a firm's capacity to pay dividends. In the real world, it is often believed that companies pay a steady stream of dividends because investors perceive firms that have stable dividends as stronger and more valuable. Lintner (1956) showed that historical dividends are essential in determining current dividends. The model was tested and reaffirmed by Fama and Babiak (1968), Ahmed and Javid (2009) and Mollah (2009) who concluded that the previous year's dividends positively affect the current dividend payout ratio of a company. In this study, the last year's dividends distribution is used as a proxy variable for historical dividends and the following hypothesis is proposed:

H7: The previous year's dividend positively affects the dividend policy of the Lebanese listed banks

3.4. Techniques of Data Analysis

The data analysis techniques employed are the descriptive statistics, correlation techniques and regression analysis. First, the descriptive statistics utilizes numerical and graphical methods to look for patterns, to summarize and to present the information in a set of data that is easy for the reader to understand (Bluman, 2010).

Second, the Correlation analysis measures the relationship between two variables. The resulting value which is called the "Pearson's correlation" or "Pearson's r" or "correlation coefficient", shows if a change in the independent variable will result in a changes in the dependent variable. It also measures the strength of association between two variables. The sign and the absolute value of a correlation coefficient describe the direction and the magnitude of the relationship between two variables. The value of a correlation coefficient ranges between -1 and 1 and the greater the absolute value of a correlation coefficient, the stronger the linear relationship. A positive correlation means that if one variable gets bigger, the other variable tends to get bigger. However, a negative correlation means that if one variable gets bigger, the other variable tends to get smaller and finally "No correlation" means the variables does not tend to either increase or decrease (Anderson et al., 2008).

The following is the formula of Pearson's correlation:

$$ r = \frac{n(\Sigma xy) - (\Sigma x)(\Sigma y)}{\sqrt{[\, n\Sigma x^2 - (\Sigma x)^2\,][\, n\Sigma y^2 - (\Sigma y)^2\,]}} $$

Third, a regression is a statistical method used to describe the nature of the relationship between variables, that is, positive or negative, linear or nonlinear. A simple relationship analysis is called simple regression, and there is one independent variable that is used to predict the dependent variable. Whereas, in a multiple relationship, called multiple regressions, two or more independent variables are used to predict one dependent variable (Bluman, 2010). In our study, we are going to apply the multiple regression; namely the Ordinary Least-Squares (OLS) regression because it minimizes the sum of

squared vertical distances between the observed responses in the dataset and the responses predicted by the linear approximation (Brooks, 2008).

3.4.1 The models

Lintner's model (1956) is the foundation for the present study to investigate the dividend behavior of the listed banks in Lebanon. He concluded that the only explanatory factors of the dividend payments are the EPS and the lagged dividend payments

According to Lintner, the functional form the dividend is:

$Div = f(EPS_t, Div_{t-1})$ and $Div_t = a_0 + b_1 EPS_t + b_2 Div_{t-1} + e_{i,t}$

Where:

DIV_t is the dividend for the current period,

DIV_{t-1} is the dividend for the previous period

EPS_t is the earning per share for the current period

$e_{i,t}$ is the error term

a_0 is the constant term

Then, the second model (Model II) extends linter's model (Model I) through the inclusions of other explanatory variables so as to identify the factors that determine firm's dividend Payout. However, in Model 2, the dependent variable (dividend per share) will be replaced by the dividend payout ratio explained above and the earnings will be replaced by ROE (return on equity).

The panel character of the data collected allows for the use of the panel data methodology. The panel data involves the pooling of observations on a cross-section of units over several time periods and provides results that are simply not detectable in pure cross-sections or pure time-series studies (Freeman, 1984). We can address a broader range of issues and tackle more complex problems with panel data than would be possible with pure time-series or pure cross-sectional data alone. Furthermore, by combining cross-sectional and time series data, one can increase the number of degrees

of freedom, and thus the power of the test, by employing information on the dynamic behavior of a large number of entities at the same time. The additional variation introduced by combining the data in this way can also help to mitigate problems of multicollinearity that may arise if the time series are modeled individually (Brooks, 2008). So the general form of the panel data model can be specified as:

$$Y = a + bX_{i,t} + e_{i,t}$$

Where: Y represents the dependent variable, which is the firm's dividend policy

$X_{i,t}$ contains the set of explanatory variables in the model

$e_{i,t}$ is the disturbance term

a is taken to be constant over time t and specific to the individual cross-sectional unit i

i and t denote the cross-sectional and time-series dimension respectively

In light of the above model and based on the selected variables, the current study uses the following econometric model:

$$DPR = f (PROF, LIQ, GRO, SZ, LEV, PE, PYD)$$

$$DPR_{i,t} = a_i + b_1 PROF_{i,t} + b_2 LIQ_{i,t} + b_3 GRO_{i,t} + b_4 SZ_{i,t} + b_5 LEV_{i,t} + b_6 PE_{i,t} + b_7 PYD_{i,t} + e_{i,t}$$

Where DPR= Dividend payout rate

   PROF= Profitability

   LIQ= Liquidity ratio

   GRO= Opportunity Growth

   SZ= Size of firm

   LEV= Financial Leverage

PE= Firm's Risk

PYD= Previous Year's Dividends

a_i represents the intercept of the regression equation

b_1, b_2, b_3, b_4, b_5, b_6, and b_7 are the regression coefficients of PROF, LIQ, LEV, SZ, PE GRO, and PYD

$e_{i,t}$ denotes the disturbance term

The dividend policy, which is the dependent variable, is defined as dividend divided by net income and the explanatory variables included are: profitability (PROF), firm size (SZ), liquidity (LIQ), growth opportunity (GRO), financial leverage (LEV), firm risk (PE) and previous year's dividends (PYD). These variables are defined in Table 1 along with the expected sign.

Variables	Symbol	Description	Expectation
Dividend Payout	DPR	Cash Dividend/ Net profit	
Profitability	PROF	ROE -Net Profit less Preference Dividends/ Shareholder's equity	+
Firm Size	SZ	Natural Logarithm of Total Assets	+
Liquidity	LIQ	Current Assets/ Current Liability	+
Growth Opportunity	GRO	(Current Revenue - previous Revebue)/previous sales	-
Financial Leverage	LEV	Debt/ Total assets	-/+
Firm Risk	PE	Market Price Per share/Earning per share	-/+
Previous Year's Dividends	PYD	Previous Year's Dividend Payout	+

Table 4: Variables with their symbols and expectations

3.4.2   Regression

Since we are using a panel data, three regression methods can be performed namely: the pooled Ordinary Least Squares (OLS), the fixed effect, and the random effect methods. The pooled OLS method pools all the data together and assumes homogeneity across individuals (i.e. banks). The fixed and random effect methods assume unobserved heterogeneity between individuals. In the fixed effects model, the individual-specific effect is a random variable that is allowed to be correlated with the explanatory variables. The term "fixed effects" is due to the fact that, although the intercept may differ across individuals (banks), each individual's intercept does not vary over time. In the random effects model, the individual-specific effect is a random variable that is uncorrelated with the explanatory variables. It proposes different intercept terms for each entity and again these intercepts are constant over time, and the relationships between the explanatory and the other variables are assumed to be the same both cross-sectionally and temporally (Brooks, 2008).

To find the best suitable model between fixed and random effects, the Hausman test is employed. The null hypothesis of the test states that the random effect method is the preferred regression method.

3.4.3   CLRM assumptions

Before the regression is run, the model is tested for the Gauss-Markov theorem or the Classical Linear Regression Model (CLRM) assumptions. It's classified in to seven assumptions, which are: errors equal zero mean test, stationarity, normality, homoscedasticity, autocorrelation, multicollinearity and linearity tests. All computations were produced using the STATA version.

3.4.3.1.   Assumption 1: The errors have zero mean (E (e) = 0)

According to Brooks (2008), if a constant term is included in the regression equation, this assumption will never be violated. Thus, since the regression model used in this study included a constant term, this assumption was not violated.

3.4.3.2. Assumption 2: Unit-Root test (Stationary test)

The unit root test tests whether a time series variable is non-stationary using an autoregressive model. The stationary time series test is one whose probability distributions are stable over time in the following sense: if we take any collection of random variables in the sequence and then shift that sequence ahead h time periods, the joint probability distribution must remain unchanged (Wooldridge, 2002). In our study we are going to use Fisher test.

The Fisher-type test proposed by Maddala and Wu (1999), uses p-values from unit root tests for each cross-section i. The formula of the test looks as follows:

$$P = -2\sum_{i=1}^{N} ln\ p_i$$

The test is asymptotically chi-square distributed with 2N degrees of freedom (Ti →1 for finite N). A big benefit is that the test can handle unbalanced panels. Furthermore, the Fisher test can be calculated either considering the augmented Dickey-Fuller tests or the Philips Perron test (PP test).

The Augmented Dickey Fuller test (ADF) tests whether a one-time differencing (d = 1) will make the time series stationary; that is, whether the series has a unit root. The ADF regression tests for the existence of unit root of y_t that represents all variables (in the natural logarithmic form) at time t. The test for a unit root is conducted on the coefficient of y_{t-1} in the regression. If the coefficient is significantly different from zero (less than zero), then the hypothesis that y contains a unit root is rejected (Woolridge, 2005).

Phillips–Perron test (named after Peter C. B. Phillips and Pierre Perron) is a unit root test that is used in a time series analysis to test the null hypothesis that a time series is integrated of order 1. The PP tests are non-parametric unit root tests that are modified so that serial correlation does not affect their asymptotic distribution. It reveals that all variables are integrated of order one with and without linear trends, and with or without intercept terms (Sarbapriya, 2012).

According to Sarbapriya (2012), the PP test provides better results than ADF test and it attempts to satisfy the stationarity conditions for all the variables. Therefore, we will use the PP test to satisfy the stationarity of this study.

3.4.3.3. Assumption 3: The Normality test

Second, the normality assumption assumes that the errors of prediction are normally distributed. The Skewness-Kurtosis, ShapiroWilk, and Shapiro- Francia tests might be used to check the null hypothesis that the sample is drawn from a normally distributed population (Park, 2002). Furthermore, the normality will be tested by plotting the QQ plot of residuals in the regression and by using Bera-Jarques Statistic. According to Brooks (2008), if the residuals are normally distributed, the histogram should be bell-shaped and the Bera-Jarque statistic would not be significant. This means that the p-value given at the bottom of the normality test screen should be greater than 0.05 to support the null hypothesis of presence of normal distribution at the 5 percent level.

3.4.3.4. Assumption 4: The Homoscedasticity test

Furthermore, assumption of homoscedasticity occurs when the variance of the errors is constant or equal. However, if the errors do not have a constant variance; it is said that the assumption of homoscedasticity has been violated. This violation is termed as heteroscedasticity. Heteroscedasticity is generally shown by a cluster of points that is wider as the values for the predicted dependent variable get larger (Wooldridge, 2002). In this study, White test will be used to test the existence of heteroscedasticity across the range of explanatory variables. The white test is a special case of the Breusch-Pagan test, where the assumption of normally distributed errors has been relaxed. To do the white test, we proceed by regressing the OLS residuals on constant, original regressors, the squares of the regressors, and the cross products of the regressors and obtain the R2 value. The test can be constructed by TR2$\approx$ X2(q), where q is the number of variables in the auxiliary regression less one. We reject the null if TR2 is sufficiently large. The White procedure has large-sample validity.

Furthermore, another method to test for homoscedasticity is the Breusch–Pagan test. the Breusch–Pagan test named after Trevor Breusch and Adrian Pagan, tests whether the

estimated variance of the residuals from a regression are dependent on the values of the independent variables. It tests the null hypothesis that the error variances are all equal versus the alternative that the error variances are a multiplicative function of one or more variables.

3.4.3.5. Assumption 5: The Autocorrelation Test

The autocorrelation assumption is that the covariance between the error terms over time is zero. It assumes that the errors are uncorrelated with one another. If the errors are not uncorrelated with one another, it would be stated that they are serially correlated. Usually, Durbin-Watson (DW) value in the main regression table is considered and used to test the presence of autocorrelation (Brooks, 2008). However DW is used only in the time series data.

In the panel data, there is the Wooldridge test (2002), which is very attractive because it requires relatively few assumptions and is easy to implement. Because the test is so flexible, simulations must be performed for a number of different cases. Wooldridge's procedure begins by estimating the parameters by regressing the dependent and independent variables and obtaining the residuals. The procedure regresses the residuals from the regression with first-differenced variables on their lags and tests that the coefficient on the lagged residuals is equal to $-.5$ which will mean that there is no serial correlation.

3.4.3.6. Assumption 6: The multicollinearity Test

First, multicollinearity in the regression model suggests substantial correlations among independent variables. Multicollinearity refers to the situation in which the independent variables are highly correlated. When explanatory variables are multicollinear, there is an overlap of predictive power. This may result in a paradoxical effect, whereby the regression model fits the data well, but none of the independent variables has a significant impact in predicting the dependent variable (Gujarati, 2004). The existence of multicollinearity between independent variables is tested by calculating the Variance Inflation Factor (VIF) where VIF= $1/(1\text{-}R2)$. When significant multicollinearity issues exist, the variance inflation factor will be very large for the variables involved. The

presence of multicollinearity within the set of independent variables can cause a number of problems in the understanding the significance of individual independent variables in the regression model. More specifically, a VIF coefficient less than 10 indicates that the variable is considered independent of other variables in the model (Chatterjee and Price, 1977) and multicollinearity has no significant effect on the regression results. Furthermore, multicollienary will be tested using Pearson correlation between the independent variables. Correlation below 0.7 indicates that multicollinearity is not a potential problem (Anderson et al., 2008).

After these variables are identified, there are several approaches that can be used to eliminate or combine collinear variables, resolving the multicollinearity issue (Brooks, 2008).

3.4.3.7. Assumption 7: Linearity Test

Linearity is the assumption of a linear relationship between the independent and dependent variable. Linearity is usually most evident in a plot of the observed versus predicted values or a plot of residuals versus predicted values. A preferable method of detection is examination of residual plots. Gan and Koehler (1990) proposed statistics that can be interpreted as measures of linearity of the PP plot, for use in goodness of fit testing of univariate data sets to parametric families. The points should be symmetrically distributed around a diagonal line in the former plot.

3.4.4   In case of a Dynamic Panel Data

After proving that a lagged independent variable is significant in our study, we can assume that our data consist of a Dynamic panel data. The dynamic panel data occurs when the model of interest is a regression model in which the lagged value of the dependent variable is one of the explanatory variables. Here we are going to apply the Arellano-Bond panel data estimation. Arellano and Bond (1991) proposed an estimation for the linear dynamic panel data models where the declared endogenous variable occurs as an explanatory variable in a delayed form.

Chapter 4

Empirical results

This chapter presents the empirical results of the study. First, it describes the statistical tests of the determinants. Second, it tests the basic ordinary least square (OLS) assumptions. Finally, it discusses the statistical analysis of the regression results of the two models.

4.1. Descriptive statistics

Table 5 provides a summary of the descriptive statistics of the dependent and independent variables for the four listed Lebanese banks for a period of seven years from year 2005-2011 with a total of 28 observations. The table reports the mean, standard deviation, number of observations, minimum and maximum of the dependent and the independent variables included in the regression.

Variable	Obs	Mean	Std. Dev.	Min	Max
Div payout	28	.3151712	.069769	.1864021	.4207732
PROF	28	.1256013	.025594	.0931866	.1748346
LEV	28	9.845365	2.572428	.0124135	14.93614
SZ	28	16.75062	.5527737	15.6882	17.58414
LIQ	28	.4180964	.117309	.2426	.7369
GRO	28	.2385063	.1748022	.0271954	.6795626
PE	26	9.765716	4.238197	3.631264	18.07265
PYD	28	.3218438	`.0676328	.1864021	.4207732

Table 5: Descriptive statistics

(Source: STATA)

According to the table, most variables comprise 28 observations except the PE ratio. This is due to missing reported figure from Bankscope. Variables with any missing values will be dropped, leading to 26 observations, which will be used in the regression.

Variables of leverage and price-earning ratio present larger standard deviation as compared with other variables. It revealed that the leverage ratio and their risks have more significant variance than other variables.

The mean of the dividend payout ratio was 31.5 percent with a standard deviation of 7 percent. This means that the listed banks in Lebanon, under the period of study, paid out 31.5 percent of their net income after tax as dividend. Regarding the standard deviation, it means that the value of the dividends can deviate from its mean to both sides by seven percent and suggesting that the dividend payout ratio was not highly dispersed. It is also noticed that the previous year's dividend payout ratio has the same results as the dividend payout ratio but with a little bigger mean of 32 percent.

To check the profitability and its relationship with the dividend policy, the return on equity (ROE) was used as a proxy. The average profitability was 12.5 percent which means that on the average, for each one thousand LBP investment in the equity of these banks, there was a 125 LBP return. The maximum value of ROE for the year was 17 percent whereas the minimum value was 9 percent. Furthermore, the standard deviation of 2.56 percent indicates that there was low variation from the mean.

Regarding the leverage, it was proxied by the debt ratio (total debt divided by total equity). The mean of debt ratio of the sampled firms was 9.84 percent. It reveals that debt represents nearly 9.84 percent of the capital of listed banks. The highest debt ratio for a listed bank in a particular year was 15 percent and in the same way the minimum ratio for a listed bank was only 0.0125 percent, suggesting a high variance.

The average value of the growth variable as proxied by change in total revenue was 23.85 percent. This implies that on average, the listed banks' revenues increased by 23.85 percent over the study period. The maximum value of growth for the study period was 68 percent and a minimum value of 2.7 percent. The standard deviation was 17.48 percent.

Furthermore, to check the size of listed banks and its relationship with the dividend policy, natural logarithm of total asset was used as a proxy. The mean of the natural

logarithm of total assets over the period of 2005 to 2011 was 16.75 with a standard deviation of 0.553. The maximum value was 17.58 while the minimum value was 15.69. The standard deviation might be due to the inclusion of Bank of Beirut, the smallest banking institution in the sample.

Moreover, the average value of the firm's risk as proxied by the price per earnings ratio was 9.766 which means that the investor is willing to pay 9,766 LBP for 1,000 LBP of current earnings. The maximum value of the PE for the study period was 18 and a minimum value of 3.63.

Finally, the average value of the liquidity measured by the current ratio was 0.4181 times. This means that for 1,000 LBP of current liability, there was 418.1 LBP of current asset to meet the obligations. The maximum value and the minimum value was 0.737 and 0.2426 percent respectively for the study period.

4.2. Tests for the Classical Linear Regression Model (CLRM) Assumptions

To maintain the data validity and robustness of the regressed result of the research, the basic classical linear regression model (CRLM) assumption must be tested.

Consequently, the seven CLRM assumptions that need to be satisfied and that are tested in this study are the following: errors have a zero mean, stationarity, normality, homoscedasticity, autocorrelation,, multicollinearity, and linearity tests. According to Brooks (2008), when the assumptions are satisfied, it means that we have used all the information available from the patterns. However, if an assumption is violated, it means that there is a pattern of data that we have not included in our model, and we could actually find a model that fits the data better. Before testing the significance of the slopes and analyzing the regressed result, seven tests are made for identifying any misspecification and correcting them so as to augment the research quality.

4.2.1.   Assumption one: The errors have a zero mean

According to Brooks (2008), if a constant term is included in the regression equation, this assumption will never be violated. Thus, since the regression model used in this study included a constant term, this assumption was not violated.

4.2.2.   Assumption 2: Stationarity or Unit Root test

A common assumption in many time series techniques is that the data are stationary. A stationary process has the property that the mean, variance and autocorrelation structure do not change over time. If the variables in the regression model are not stationary, then it can be proved that the standard assumptions for asymptotic analysis will not be valid. In other words, the "t-ratios" will not follow a t-distribution, so we cannot validly undertake hypothesis tests about the regression parameters (Sarbapriya, 2012). To estimate the slope coefficients, one should first conduct a unit root test, whose null hypothesis is that a unit root is present. If that hypothesis is rejected, one can use the OLS regression (Wooldridge, 2002). In this study, stationarity of the data is tested using Fisher test-a unit root test for unbalanced panels as suggested by Maddala and Wu (1999).   The Fisher test can be calculated in two methods: either taking into consideration the augmented Dickey-Fuller test or taking into consideration the Philips Perron test. Since both methods gave similar results, we will go forward to incorporate the Philips Perron test.

Fisher-type unit-root test based on Phillips-Perron tests			
Ho: All panels contain unit roots		Number of panels = 4	
Ha: At least one panel is stationary		Number of periods = 7	
Variables	Lags	chi-squared	p-value
Dividend Payout	0	73.5005	0.0000
PROF	0	145.4379	0.0000
LEV	0	36.6703	0.0000
PE	0	19.5565	0.0122
LIQ	0	26.4366	0.0009
SZ	1	20.3498	0.0091
GRO	0	84.4458	0.0000
PYD	0	75.8825	0.0000

Table 6: Fisher-type unit-root test based on Phillips-Perron tests

(Source: STATA)

Under the Philips Perron test, the null hypothesis states that all panels contain unit roots. However, since the results reported in Table 6 indicate that all the variables are stationary since all the P-values are below 0.05; this null hypothesis will be rejected. Since the "SZ' variable is not stationary, this variable cannot be included when estimating the regression. On the other hand, the one lag of this variable is needed to make it stationary; however, including it will make us lose some observations. Therefore, to solve this problem we will run two models: (1) One including the lag of "SZ" variable, and (2) one excluding the lag of "SZ" variable. These two models will be compared later on to see if the firm size is a significant variable that should be included in the determinants of the dividend payout. If so, then, the one lag value of this variable will be included in the regression.

4.2.3.   Assumption 3: Normality test

Normality of the error distribution assumes that the errors of prediction are normally distributed. Testing whether the residuals are normally distributed requires compromising the estimation of coefficients and the calculation of confidence intervals. Sometimes, the error distribution is "skewed" by the presence of a few large outliers. Since parameter estimation is based on the minimization of squared error, a few extreme observations can exert a disproportionate influence on parameter estimates (Baltagi, 2005). According to Brooks (2008), if the residuals are normally distributed, the Bera-Jarque statistic would not be significant. This means that the p-value given at the bottom of the normality test screen should be greater than 0.05 to support the null hypothesis of presence of normal distribution at the 5 percent level.

		Jarque Bera test			
		Skewness/Kurtosis tests for Normality			
Variable	Obs	Pr(Skewness)	Pr(Kurtosis)	adj chi2(2)	Prob>chi2
Residuals	24	`0.1856	0.7232	2.07	0.3549

Table 7: Jarque Berra test

(Source: STATA)

Three types of tests will be used to check whether residuals are normal. Specifically, two numerical methods (Jarque Berra test and Shapiro-Wilk test) and one graphical method (Quantile-Quantile Plots (Q-Q Plot)) will be conducted.

The above table witnesses that normality assumption holds, i.e., the coefficient of kurtosis was 0.72, and the Jarque Bera statistic has a P-value of 0.35 which is higher than the significance level of 0.05 implying that the null hypothesis is not rejected and the data were consistent with a normal distribution assumption. Furthermore, it implies that the inferences made about the population parameters from the sample parameters tend to be valid.

Table 8 presents the results from a well-known test of normality which is the Shapiro-Wilk Test. Shapiro-Wilk Test is used in this assumption since it is more appropriate for small sample sizes (less than 50 samples)(Woolridge, 2002). Since the Shapiro-Wilk test of residuals yielded a statistical value of 0.36, which is greater than the significance level of 0.05, the data is considered normal.

Shapiro-Wilk W test for normal data				
Variable	Obs	W	V	z	Prob>z
Residuals	24	0.95592	1.189	0.353	0.3619

Table 8: Shapiro-Wilk test
(Source: STATA)

Lastly, normality will be tested graphically using the output of a normal Q-Q Plot. If the data are normally distributed then the data points will be close to the diagonal line. If the data points drift from the line in an obvious non-linear fashion, then the data are not normally distributed. As we can see from the Figure 3, the data is normally distributed.

In conclusion, graphical method and numerical methods provide sufficient evidence that the residuals are normally distributed.
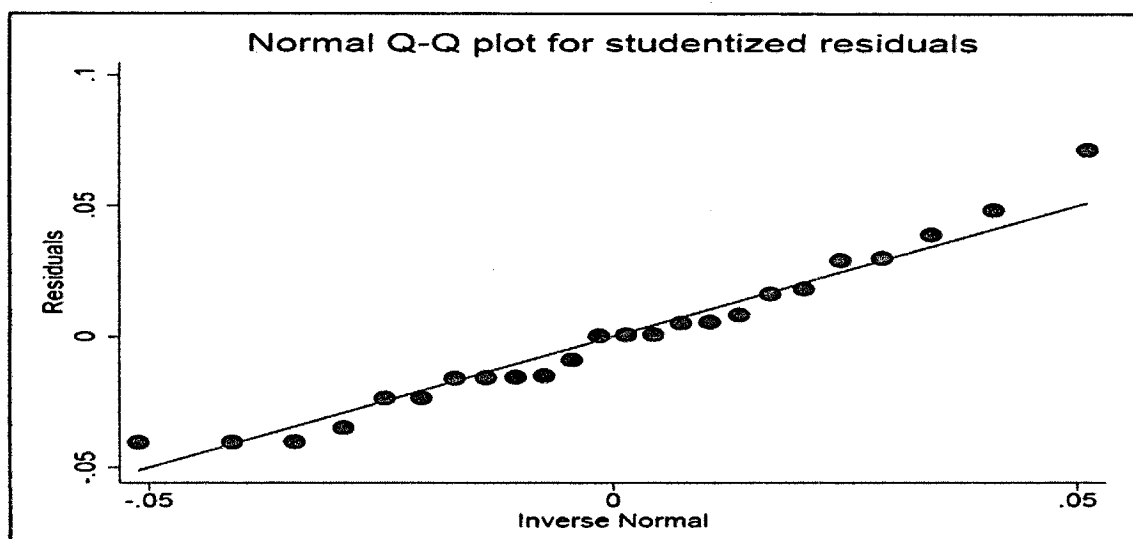
Figure 3: Normal Q-Q plot for studentized residuals.

(Source: STATA)

4.2.4.   Assumption 4: Homoscedasticity test

Homoscedasticity assumes that the variance of the errors is constant or equal. However, if the errors do not have a constant variance, it is said that the assumption of homoscedasticity has been violated. This violation is termed as heteroscedasticity. In this study, the Breusch pagan test and the White test were used to test the existence of heteroscedasticity across the range of explanatory variables.

Breusch-Pagan Test		White's test	
Ho: Constant variance		Ho: homoskedasticity	
		Ha: unrestricted heteroskedasticity	
chi2	0.72	chi2	24.00
P-value	0.3966	P-value	0.4038

Table 9: Breusch Pagan Test and White test

(Source: STATA)

Results reported in Table 9 indicate that the null hypothesis cannot be rejected since the p-values of both tests are considerably greater than 0.05. This means that there is an absence of heteroscedasticity in the study.

4.2.5.   Assumption 5: Autocorrelation test

This assumption states that the errors are linearly independent of one another. It assumed that the errors are uncorrelated with one another. However, if they are correlated with one another, it would be stated that they are autocorrelated.

Since the Durbin Watson test can be used to test the existence of autocorrelation, or correlations between the errors of only the time series, Wooldridge (2002) derived a simple test for autocorrelation in panel-data models where a significant test statistic indicates the presence of serial correlation. This tst is called the Wooldridge test.

The autocorrelation is not considered a problem in micro-panels with very few years. However, it is considered a problem in macro-panels with long time series. The autocorrelation causes the standard errors of the coefficient to be smaller than they actually are and higher R^2.

Although we are dealing with a micro unbalanced panel data, we decided to run the Wooldridge test for autocorrelation.

Wooldridge test for autocorrelation in panel data	
H0: no first order autocorrelation	
F(1, 3)	1.878
Prob > F	0.2641

Table 10: Wooldridge test

(Source: STATA)

The results shown in Table 10 fail to reject the null hypothesis since the p-value of 0.26 is higher than the significance level of 0.05. We conclude that the serial correlation is not a problem given the fact that we are dealing with a small panel.

4.2.6. Assumption 6: Multicollinearity test

This assumption of multicollinearity states that independent variables are not correlated with one another over time or cross sectional; they are said to be orthogonal to one another. But, if the variables are correlated with one another, it will be a violation of the CLRM assumption of autocorrelation among the independent variables and it will be stated that the data has a multicollinearity problem. Accordingly, multicollinearity refers to the state in which the independent variables are highly correlated. This is because when the independent variables are highly correlated with one another, they share essentially the same information. Thus, together, they may explain a great deal of the dependent variable, but may not individually contribute significantly to the model. Thus, the impact of multicollinearity is to reduce any individual independent variable's predictive power by the extent to which it is associated with the other independent variables (Baltagi, 2005). Among several ways of multicollinearity tests, Pearson correlation and Variance Inflation Factor (VIF) are used for this purpose. The Pearson correlation is an important technique of testing multicolineartiy of independent variables by investigating the relationship of biviariate variables (Wooldridge, 2002).

	PROF	LEV	LIQ	GRO	PE	PYD	lagSZ
PROF	1.0000						
LEV	0.0288	1.0000					
LIQ	0.3502	-0.1165	1.0000				
GRO	-0.1401	0.0006	0.1343	1.0000			
PE	-0.4658	0.1873	-0.0252	0.2773	1.0000		
PYD	0.4099	0.1668	0.0002	0.2242	0.2709	1.0000	
Lag SZ	0.6361	0.1511	0.0625	-0.0355	-0.6102	0.1545	1.0000

Table 11: Pearson Correlation Test of explanatory variables

(Source: STATA)

Malhotra (2004) stated that multicollinearity problem exists when the correlation coefficient among variables should be greater than 0.75. All correlation results shown in Table 11 above are below 0.75, which indicates that multicollinearity is not a potential

problem in this study. However, we should state that some of the correlation coefficient among variables are high, but this does not necessarily create a multicollinearity problem unless biviatate variables are linearly related. To confirm, the variance inflation factors (VIF) for the independent variables are computed. Therefore, those independent variables with the values of VIF greater than 10 indicate possible problem of multicollinearity.

Variable	VIF	Tolerance
PROF	3.52	0.284332
PE	2.88	0.346729
lagSZ	2.59	0.386163
PYD	2.19	0.457387
LIQ	1.47	0.681787
GRO	1.29	0.773213
LEV	1.21	0.825747
Mean VIF	2.16	

Table 12: Variance Inflation Factor (VIF) of the explanatory variables
(Source: STATA)

The results of this test are presented in Table 12. The mean VIF was 2.16, which is much lower than the limit of 10. The VIF for individual variables was also very low. This indicates that the explanatory variables included in the model were not substantially correlated with each other.

4.2.7.   Assumption 7: Linearity test

The linearity test is the assumption of a linear relationship between the independent and dependent variables. Nonlinearity is usually most evident in a plot of the observed versus predicted values or a plot of residuals versus predicted values, which are a part of standard regression output. The points should be symmetrically distributed around a diagonal line in the former plot or a horizontal line in the latter plot. Figure 4 presents a P-P plot of regression output for evidence of a linearity pattern of the data.
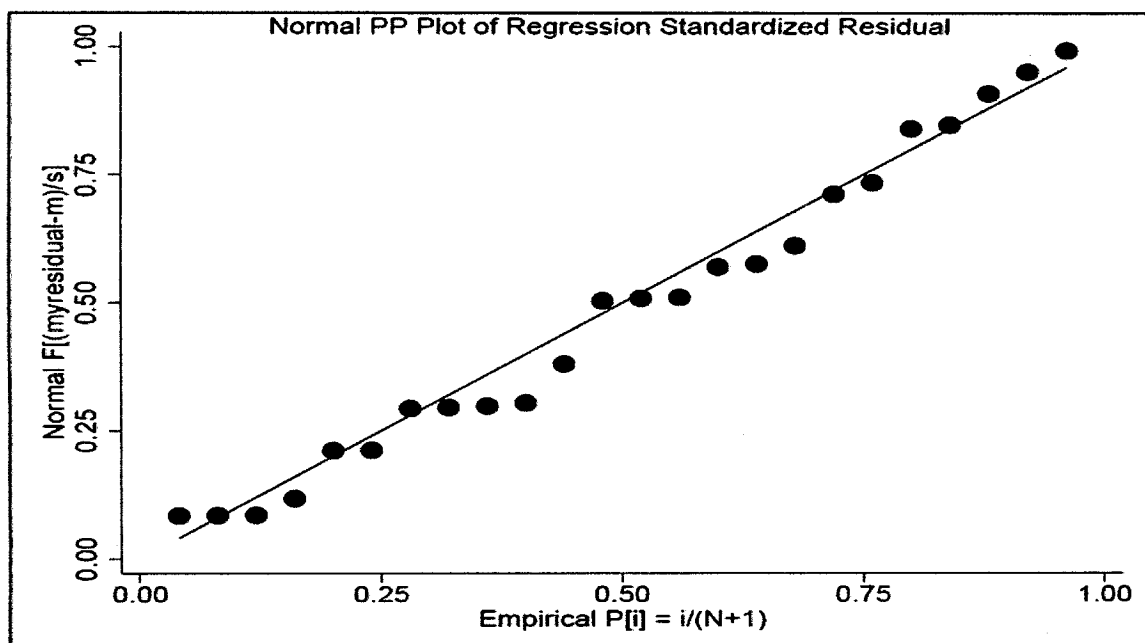
Figure 4: Normal PP plot of regression standardized residual

(Source: STATA)

4.3. Regression results

First, Lintner's model will be replicated using the data obtained from the Lebanese listed banks and the results will be analyzed. Second, other explanatory variables will be included in the regression so as to identify the factors that determine firm's dividend Payout.

4.3.1. Model I: Lintner's Dividend Model

This part of this study is based on Lintner's perception of the dividend distribution. He concluded in his study that the dividend payment pattern of a firm is influenced sorely by its current year's earnings and previous year's dividend payment. Thus, to replicate Lintner's model in the Lebanese listed banks, the only determinants that we chose to regress against the dividend payments are the earning per share and its lagged dividend payments.

OLS Regression		
	Coef	**P-value**
EPS	.0695796	0.257
LDP	.8681437	0.000***
• **Number of obs = 28** • **Adj R-squared = 0.9684** • **F = 644.49**		

*** indicates significant at 1% significance level

Table 13: OLS Regression of Model I

(Source: STATA)

The results in Table 13 show that the coefficient of lagged dividend payments is positive and statistically significant. These results are similar to several studies done on emerging markets. Ahmed and Javid (2009) and Al-Ajmi and Hussain (2011) considered that lagged dividend payments are an essential determinant of dividend payments. However, the coefficient of EPS has a positive sign, as hypothesized, but is statistically insignificant which means that the Lebanese listed banks do not follow a stable dividend payout policy. These findings are consistent with those reported by Aivazian, et al. (2003) on some emerging capital markets firms who do not follow a stable dividend policy. Therefore, the results from Lintner's model show that the coefficients of both lagged dividends and EPS are positive but only the LDP is statistically significant which clearly indicate the importance of lagged dividends on current year's dividend decisions. Finally, a deeper look at the adjusted R^2 value of Table 13 reveals that the existing model explains 96.8 percent of the dividend payout pattern of the Lebanese listed banks.

4.3.2.   Model II: Determinants of Dividend Payouts

Model two aims to investigate the determinants of dividend payouts by including seven variables with seven year observations. The OLS regression was used as an extension of Lintner's model to examine whether PROF, LIQ, LEV, SZ, GRO, PE and PYD were significant determinants of the dividend payments.

4.3.2.1. FEM vs REM

There are broadly two types of panel estimator approaches that can be employed in financial research: fixed effects models (FEM) and random effects models (REM) (Brooks 2008). To check which one provides more reliable estimates for this study, the Hausman test was employed and the results are presented as follows.

Hausman Test	
Case I: Using lag SZ	**Case II: without SZ**
• chi2(7) = 8.60	• chi2(6) = 4.84
• Prob>chi2 = 0.2823	• Prob>chi2 = 0.5640

Table 14: Hausman test of cases I and II
(Source: STATA)

The null hypothesis of the test was that the random effect method is the preferred regression method. Table 14 show that the p-value for both tests are 28% and 56% respectively, which means that regardless of whether the size variable is included or not, the null hypothesis was not rejected. Hence, we can assume that the unobserved individual effects are not correlated with the observed regressors. Consequently, the random effect method was preferable. This result supports Baltagi's (2005) recommendation that the random effects (RE) method is an efficient estimator for the unbalanced panel models (Baltagi 2005).

Accordingly, REM was employed to estimate the relationship between the dependant variable and the independent variables in both cases.

4.3.2.2. REM vs OLS

To choose between the random effects regression model and the ordinary least square regression model (OLS), the Lagrange multiplier test (LM) will be used.

Lagrangian multiplier test for random effects	
Case I: Using lag SZ	**Case II: Without SZ**
Prob = 1.0000	Prob = 1.0000

Table 15: Lagrangian multiplier test for random effects

(Source: STATA)

The null hypothesis in the LM test states that the variance across entities is zero, so no significance difference across units (no panel effect). Results reported in Table 15 show that we fail to reject the null hypothesis since the p-value is bigger than 0.05 and conclude that the random effect in both cases is not the appropriate method to choose in our study. This shows that there is no significance differences across listed banks, thus we can run a simple OLS regression.

4.3.2.3. OLS regression results for Model II

The empirical evidence on the determinants of banks' dividend policy is based on the OLS regression of unbalanced panel data. Two models are presented to test the impact of several combinations of regressors to prevent stationarity problems. Case I reports the results including one lag of the size variable, while case II present the results excluding the size variable.

OLS regression				
	Case I: Using lag SZ		Case II: without SZ	
divpayout	Coef.	P>|t|	Coef.	P>|t|
PROF	-1.570964	0.009**	-.5689751	0.369
LEV	.0212759	0.630	.0733147	0.245
LIQ	.063731	0.391	.0144196	0.887
GRO	-.1062898	0.049*	-.1126452	0.109
PE	.0017633	0.555	-.0013341	0.700
PYD	.8887931	0.000**	.8347557	0.001**
LagSZ	.0879873	0.001**	-	-
	• Number of obs = 24 • F= 10.30 • Adj R-squared= 0.7389		• Number of obs = 26 • F = 4.17 • Adj R-squared = 0.4320	

*, ** indicates significant at 5% and 1% significance level respectively

Table 16: OLS regression on both cases
(Source: STATA)

By comparing the results for Case I and Case II, the findings revealed that Case I was the efficient method estimating the regression results, with a higher regression fit of 73.89 percent, higher F value of 10.30, and with a larger number of significant explanatory variables. However Case II, have a lower regression fit of 43.20 percent, a lower F value of 4.17, and a lesser number of explanatory variables by two. The results suggest that adding the control variable (lag SZ) improves the explanatory power of the regression. Because of the preferred measure, the discussion of the regression results will be based on Case I which include the lag SZ.

4.4. Analysis and Findings

This section of the chapter discusses some of the main implications of the results. The analysis is based on the results of the regression between the dependent variable and the independent variables presented in Table 16. Results using the random effect are presented in Appendix B and did not show any significant differences from those shown using OLS. Therefore, the results obtained under these different methods are jointly analyzed.

Profitability

Profitability was found to be a statistically significant determinant of the dividend payout decision in the Lebanese listed banks. Although the sign of the coefficient was not as expected, Table 16 reports that the coefficient of the profitability is negative and statistically significant at a one percent level. This means that if the profitability of a bank increases, its dividend payout ratio paid by the bank will decrease. Supporting this logic, Okpara (2010) found the same result and concluded that when firms experience surplus earnings, they allocate most of them in to retention for the plugging back and growth of the firm. Furthermore, Ferris, et al. (2003) found that firms in the United Kingdom pay dividends while they had negative earnings. However; the findings are contradicted by Pruitt and Gitman (1991), Baker and Powell (2000), Aivizian et al (2003) and Amidu and Abor (2006). The reconciliation between the two results may rest on the difference between the samples used.

Hence, profitability is considered an important factor in influencing the dividend payments. This result clearly rejects the hypothesis H₁, since profitability has a negative and significant impact on dividend policy of listed banks in Lebanon.

Firm Size

Firm size is a statistically significant determinant of the dividend policy as expected. This result supports hypothesis (H₂) that predicts that firm size and dividend ratio should have a positive association. The results presented here are consistent with the findings of Redding (1997) and Fama and French (2001) who found that the probability of paying dividends increases with firm size. Larger firms pay a higher cash dividends for several reasons. First, large firms face high agency costs as a result of ownership dispersion (Rozeff, 1992). Second, as a result of the weak control in monitoring the management in large firms, a large dividend payout increases the need for external financing, which in turn leads to the increased monitoring of these firms by the creditors. Another explanation for this positive association might be related to large firms' easier access to capital markets, and their ability to raise funds with lower issuance costs for external financing. Consequently, large firms are better able to distribute higher dividends to shareholders than the small firms. Furthermore, the positive relation between the probability to pay dividends and size supports are accepted and proposed by many finance scholars because they assume that larger firms have easier access to capital markets (Lloyd, et al., 1985 and Fama and French, 2002).

Liquidity

Liquidity was not found to be one of the determinants of dividend payments. However as expected, the results indicated a positive, although insignificant, relationship between liquidity and dividend payout ratios.

This relationship is expected to be positive under the agency theory, which have been discussed by Jensen, et al. (1992), Rozeff (1982) and Easterbrook (1984) in their studies. The agency theory refers to the conflict of interests between the managers and its shareholders. Managers may follow their own personal agenda to maximize their

personal wealth and may invest in negative net present value investments instead of maximizing the wealth of the shareholders. Jensen (1986) argued that companies with high liquidity have to pay higher dividends in order to reduce the agency conflict between managers and shareholders. Furthermore, larger dividend payment forces the firm to seek external financing, which will reduce the possibility for inefficient investments.

However, in this study, the liquidity is not considered an important factor in influencing dividend payment. This result clearly rejects the hypothesis H3, since liquidity has a positive but non-significant impact on the dividend policy of listed banks in Lebanon.

Growth

It is predicted that firms with high growth or investment opportunities tend to retain their income to finance their investments, thus paying less or no dividends. As expected, the result shows that the relationship between growth and dividend payout policies is negative and significant at five percent significance level with a p-value of 0.049. This is indicative of the fact that, growing banks require more funds in order to finance their growth and therefore would typically retain greater proportion of their earnings by paying low dividend. Thus, taking into consideration the pecking order theory, banks with large investment opportunities pay fewer dividends. The expected negative sign is also predicted by the agency theory and by life-cycle theory.

This means that Lebanese listed banks with high growth opportunities tend to pay fewer dividends. This view is supported by Higgins (1972), who noticed that dividend payout ratio is negatively related to a firm's need for funds to finance growth opportunity.

Hence, the growth opportunity is considered an important factor in influencing dividend payments. This result clearly supports the hypothesis H4, since growth has a negative and significant impact on dividend policy of listed banks in Lebanon.

Financial Leverage

The financial leverage was not found to be one of the determinants of dividend payments. Furthermore, against all odds, it has a positive relationship with the dividend policy. This result means that banks with high debt ratios are willing to pay more dividends. Supporting this logic, Dhillon (1986) and Chang and Rhee (1990) concluded that the firm used debt to distribute dividends. Therefore, the greater the debt ratio, the higher is the dividend received by the shareholders. This result is supported by the signaling theory as the company pays dividends to signal to the investors the good condition of the company.

Despite its positive sign, the financial leverage is insignificant, suggesting that this variable is not an essential factor in influencing dividend payments. Hence, hypothesis H5 is rejected, since leverage has no significant impact on dividend policy of listed banks in Lebanon.

Firm Risk

The firm risk was not found to be one of the determinants of the dividend payments. However, as expected, the results showed a positive relationship between liquidity and dividend payout ratios. Risky firms with high volatility in their cash flows have more difficulty in planning for future investments which will increase their need for external financing, resulting in a lower dividend payout ratio. According to the pecking order theory and because external financing is more expensive, companies choose to decrease their dividend payouts in order to avoid the expensive external financing (Rozeff, 1982; Al-Kuwari 2009; Al- Shubiri, 2011).

Despite its positive coefficient, the variable is not significant. Accordingly, firm risk is not an essential factor in influencing dividend payments. Hence, hypothesis H6 is rejected, since firm risk has no significant impact on dividend policy of listed banks in Lebanon.

Previous year's dividend payments

Previous year's dividends were also found to be statistically determinant variable of the dividend payout ratio in the Lebanese listed banks. The results show that the coefficient of previous year's dividend payments is positive. As mentioned in the first model, these results are similar to numerous studies on emerging markets such as Al-Ajmi and Hussain, (2011) and Ahmed and Javid, (2009) that report previous year's dividend payments as an important determinant of dividend payments.

According to these results, the previous year's dividends are the most essential factor in influencing dividend payments of the Lebanese listed banks. Hence, this result clearly supports hypothesis H7, since previous year's dividends has a positive and significant impact on dividend policy of listed banks in Lebanon.

The magnitude and significance of the coefficient on the previous year's dividends might suggest a dynamic nature of the model. Results using the dynamic panel data model are reported in Table 20 in Appendix C.

In general, the results are similar to Table 16, with the exception of PE which gained significance. Thus, according to the model, the firm risk is an essential factor in influencing dividend payments of the Lebanese listed banks. Hence, this result clearly supports the hypothesis H6, since the firm risk has a positive and significant impact on dividend policy of listed banks in Lebanon.

4.5. Conclusion

First, the classical linear regression model (CLRM) assumptions are tested to ensure the appropriateness of using the OLS regression. Since all assumptions are not violated, OLS were safely applied. Second, to examine whether individual effects are fixed or random, a Hausman specification test (Baltagi, 2005) was conducted providing evidence in favor of the RE model. Afterwards, to choose between the random effect and the pooled OLS, the LM test was conducted providing evidence in favor of OLS regression. The same linear specification is estimated in two cases; one with and without the lag size

variable. The impact of this additional variable is assessed by the improvement in the overall explanatory power of the equation.

Third, the regression findings were analyzed. To conclude, the significance of the firm size supports the idea that the main objective of the Lebanese listed banks are to reduce the agency conflict and maintain bank's reputation. It also shows that larger firms have easier access to raise fund and distribute dividends to shareholders better than smaller firms. The inverse relationship between profitability and dividend might show that Lebanese listed banks, due to the political unrest of the country, might use the surplus earnings to allocate most of them in retention for the plugging back for harsh economical periods. We can also assume that the surplus earnings of the firm are being allocated mostly to the growth of the company so that the banks can open new branches in different regions and countries. Therefore, we can assume that the negative significance of the growth opportunity and the profitability are inter-related. Furthermore, the previous year's dividends were one of the biggest influences on the Lebanese listed bank's dividend policy. Finally, the last variable is the firm risk, which its significance depends on the model used. The significance of this variable could be due to the fact that banks that enter into high risk ventures are able to attract premium interest that boosts their returns.

Unfortunately, two variables appeared to be statistically insignificant: the financial leverage, and the liquidity. This suggests that these variables do not have a direct influence on the dividend payments. In other words, Lebanese listed banks took into account the firm size, last year's dividends, profitability, and growth and to a less extent of the risk, more than the leverage and liquidity, when they are making decision to pay dividends.

Table 17 indicates the summary of our expectations with the actual findings:

Variables	Expectation	Actual Results	Statistical Significance test
Dividend Payout			
Profitability	+	-	Significant
Firm Size	+	+	Significant
Liquidity	+	+	Insignificant
Growth Opportunity	-	-	Significant
Financial Leverage	-/+	+	Insignificant
Firm Risk	-/+	+	Significant
Previous Year's Dividends	+	+	Significant

Table 17: Comparison of the Test Result with the Expectation

Chapter 5
Conclusions and Recommendations

The purpose of the final chapter is to summarize the findings, answer the research questions and further develop the analysis from chapter four. We will thereafter discuss the limitations of the current study, followed by its implications. Finally, recommendations will also be provided as well as suggestions for further research.

5.1.   Conclusion

The main purpose of the study was to examine the relationship between the dividend payout ratio and certain bank selected factors. The second purpose was to examine whether the Lintner model was applicable on the Lebanese listed banks. Therefore, the research questions were:

(1) *What are the bank-specific factors that affect the dividend payout policies in the Lebanese banks listed on the BSE?*

(2) I*s Lintner's Model on dividend behavior applicable on the Lebanese banks as it was on several other institutions and countries?*

In order to answer the research questions, we conducted both the OLS and dynamic panel model regression on a sample consisting of four listed banks on Beirut Stock Exchange. The study is based on a time period of seven years and it includes the years between 2005 and 2011. The bank selected factors included in the study are: firm profitability, size, liquidity, leverage, risk, growth, and previous year dividends. The analytical techniques used were descriptive statistics, correlation, and regression analysis. The regression results provided the estimate for the model. The estimate was used to interpret the relationship between the dependent and independent variables. Some of the results obtained comply with the existing dividend theories and previous studies while the rest of the results had an unexpeted outcome. Two models were estimated and seven hypotheses were tested. The following conclusions can be deduced from the findings of the study.

In Model I, while applying Lintner's model (1956) on our sample, we concluded that the coefficients of both lagged dividends and EPS are positive but only the lagged dividend is statistically significant which clearly indicate the importance of lagged dividends on the current year's dividend decisions. Therefore, accordingly, we can conclude that Lintner's model does not apply on the Lebanese listed banks.

In Model II, while testing the impact of seven factors on the dividend payout ratio, we concluded that only five of the seven explanatory variables can explain the dividend policy, which are firm size, profitability, growth, previous year's dividends, and risks. The results indicate that large banks choose to pay more dividends to diminish agency conflicts. It also implies that large banks have better access to big clients, hence to big deposits to raise funds and distribute dividend to shareholders.

The negative and significant relationship between profitability and dividend policy gave us two diverse interpretations. The first one is explained by the current situation in Lebanon. The political instability of the country obliges banks to use the surplus earnings to allocate most of them into retention for the plugging back for harsh economical periods. The other explanation is that the surplus earning of the firm are being allocated mostly to the growth opportunities of the company so that banks can open new branches in different regions and countries where they found projects with positive NPV. Therefore, since both the growth opportunity and the profitability are negatively significant of we assumed that they are inter-related.

The two models also revealed that previous year's dividend payout (PYD) was the most essential variable that affected dividend payout ratio of the banks, which means that last year's dividends affect today's dividend policy. Finally, the last positive significant variable is the firm risk, which increases the performance of listed banks in Lebanon. The result suggests that banks that enter into high risk ventures are able to attract premium interest that boosts their returns.

5.2.   Limitations of the results

The study suffers from four major limitations, which are mentioned below.

Firstly, the small sample size with a short time frame and limited resources may affect the qualities of the study output. Statistical tests normally require a larger sample size to ensure the accuracy of the estimated data.

Secondly, the secondary data collected were from Bilan Banques and Bankscope database that contains the financial statements of the Lebanese banks. However, some of the financial data were missing from this database, resulting in incomplete information, which might affect the accuracy of the results.

Thirdly, seven bank selected factors were included in the research. Although the factors included in the research are the most commonly used factors in previous studies and they should be relevant for the study, it is possible that other factors might have a greater impact on the dividend payout ratio than the ones included in the research.

Fourthly, although we have cross sectional time series data, some information is missing, so we have an unbalanced data. The unbalanced panel data diminishes the possibility of estimation and regression techniques since most existing estimation techniques are for balanced panel data.

5.3.   Implications

As the BSE is a newly established emerging exchange market, the trading mechanism is not operating smoothly in comparison to the well equipped developed markets. However, since we hardly find empirical studies conducted on emerging markets, this study has many implications for the participants.

Firstly, researchers could use this study as a benchmark for further research. Throughout the research process, we have described all important aspects and assumptions in order to make sure that other researchers are able to replicate our findings. Since the research follows a quantitative method, we have carefully described how the data was found and used. Furthermore, we provided an extensive explanation regarding the methodological assumptions, research strategy and approach.

Secondly, this study will provide some directions to the interested parties such as investors and portfolio analysts of the emerging markets. Both current and potential investors are provided with information regarding which factors they should consider when predicting future dividends.

Thirdly, this research will explore the avenues of further research on dividend policy of an emerging market. It is also plausible that this study will help the associated parties in the emerging markets and consequently will guide the market towards the maturity.

Fourthly, understanding the determinants of dividend policy has significant implication on individual investor's investment policy depending on their dividend preference. Investors who want to select the paying dividend firms might have to look into the five mentioned factors before selecting the bank.

Fifthly, the board of directors of the Lebanese listed banks should give consideration to profitability, growth, previous years' dividends, firm size and risk when they set the dividend policy as they are found to be the most significant variables that affect the dividend policy of listed banks. This will help them to make an efficient, effective, and reasonable dividend payout decision which in the long run will help them to achieve their objective of maximizing profit and satisfying employees and shareholders' needs.

5.4.   Recommendations

On the basis of the findings of this study, we have drawn the following recommendations and suggested the directions toward which future research could be directed.

First, the inclusion of additional variables such as the firm maturity, insider ownership, capital structure and institutional ownership of the firm could be examined.

Second, the application of macroeconomic variables is another potential extension of the present research.

Third, the investors' views towards dividend policy were uncovered by the findings, so it can be explored by future researchers

Fourth, future studies can look at the effect of the explanatory variables on the dividend policy of other institutions like listed non-financial corporations.

Fifth, further research can use other appropriate regression techniques such as Tobit and Probit models to determine the determinants of the dividend payment decisions of the banking industry.

Finally, another potential research area could involve studying how investors view dividend policy and examining the portfolios of various investors and their demographic attributes so as to unravel the mystery of dividend puzzle in a better way.

References

Agrawal, A. & Jayaraman, N. (1994). The Dividend Policies of all Equity Firms: A Direct test of Free Cash Flow Theory. Managerial Decision Economics, 15, 139-148.

Ahmed, H. & Javid, A. (2009). Dynamics and Determinants of Dividend Policy in Pakistan(Evidence from Karachi Stock Exchange Non-Financial Listed Firms. International Research Journal of Finance and Economics, 29, 110- 125.

Aivazian, V., Booth, L. & Cleary, S. (1999). Signaling, Dividends and Financial Structure: Implications from Cross Country Comparisons. Rotman School of Managemen, Finance 1

Aivazian, V, Booth, L. & Cleary, S. (2003). Do emerging market firms follow different dividend policies from US firms?. Journal of Financial Research, 26 (3), 371–387.

Al-Ajmi, J. & Hussain, H. (2011). Corporate dividends decisions: evidence from Saudi Arabia. The Journal of Risk Finance, 12 (1), 41-56.

Aliaga, M. & Gunderson, B. (2002). Interactive Statistics, 2nd edition. New York: John Wiley and Sons, Inc.

Al-Kuwari, D. (2009). Determinants of the Dividend Policy in Emerging Stock Exchanges: The Case of GCC Countries. Global Economy & Finance Journal, 2 (2), 38-63.

Allen, F. & Michaely, R. (2003). Payout policy. In: G.M. Constantinide, M. Harris, and R. Stulz, Handbook of the Economics of Finance, 1(A), 337-429.

Alli, K. L., Khan, A. Q. & Ramirez, G. G. (1993). Determinants of corporate dividend policy: a factorial analysis. The Financial Review, 28 (4), 523-547.

Al-Malkawi, H. N. (2005). Dividend Policy of Publicly Quoted Companies in Emerging Markets: The Case of Jordan. (Unpublished doctoral dissertation). School of Economics and Finance, University of Western Sydney, Sydney.

Al-Malkawi, H. N. (2007). Determinants of Corporate Dividend Policy in Jordan: An Application of the Tobit Model. Journal of Economic and Administrative Sciences, 23(2), 44-70.

Al-Malkawi, H. N. (2008). Factors Influencing Corporate Dividend Decision: Evidence from Jordanian Panel Data. International Journal of Business, 13 (2), 177-195.

Al- Shubiri, F. (2011). Determinants of Changes Dividend Behavior Policy: Evidence from the Amman Stock Exchange. Far East Journal of Psychology and Business, 4 (2), 1-15.

Al-Twaijry, A. (2007). Dividend policy and payout ratio: evidence from the Kuala Lumpur stock exchange. The Journal of Risk Finance, 8 (4), 349-363.

Al-Yahyaee, K. (2006). Capital structure and dividend policy in a personal tax free environment: the case of Oman. (Unpublished PhD Dissertation). University of New South Wales, Australia.

Amidu, M. & Abor, J. (2006). Determinants of dividend payout ratios in Ghana. The Journal of Risk Finance, 7 (2), 136-145.

Anderson, D. R., Sweeney, D. J. & Williams, T. A. (2008), Statistics for business and economics. Thomson South-Western.

Anil, K. & Kapoor, S. (2008). Determinants of dividend payout ratios: a study of Indian information technology sector. International research journal of Finance and Economics, 15, 1-9.

Annuar, M. N. & Shamsher, M. (1993). The dividend and earnings behavior of firms on the Kuala Lumpur Stock Exchange Pertanika. Journal of Social Sciences and Humanities, 10, 73-84.

Arellano, M. and Bond S. (1991). Some Tests of Specification for Panel Data: Monte Carlo Evidence and an Application to Employment Equations. Review of Economic Studies, 58, 277-297.

Asquith, P. & Mullins, D. W. Jr. (1983). The Impact of Initiating Dividend Payments in Shareholders's Wealth. The Journal of Business, 56 (1), 77 – 96.

Baker, H. K. (2009). Dividends and Dividend Policy. Kolb Series in Finance, JohnWiley & Sons, Inc.

Baker, H. K., Farrelly G. E. & Edleman R. B. (1985). A survey of management views on dividend policy. Financial Management, 14(3), 1007-1034.

Baker, H. K. & Powell, G. (2000). Determinants of corporate dividend policy: a survey of NYSE firms. Finance Practice and Education, 10 (1), 29-40.

Baltagi, B. H. (2005). Econometric Analysis of Panel Data Econometric Analysis of Panel Data, 3rd Edition. Wiley

Bank Audi's Corporate Profile, (n.d.). http://www.banqueaudi.com/aboutUs/Pages /corpProfile .aspx?pic_url=corprofile

Bank BEMO Overview, (n.d.). Retrieved from http://www.bemobank.com/bemo .php?id1=2.

Barclay, M. J., (1987). Dividends, taxes, and common stock prices: The ex-dividend day behavior of common stock prices before the income tax. Journal of Financial Economics, 19, 31–44.

Benito, A., Young, G. (2001). Hard times or great expectations: Dividend omissions and dividend cuts by UK firms. Working paper, Bank of England, No. 147.

Berk, J., DeMarzo, P. & Harford, J. (2010). Fundamentals of Corporate Finance, Second edition. Pearson Prentice Hall.

Bhatia, R. (2012). Banking basics. Retrieved from http://financenmoney.in/banking-basics.

Bhattacharya, S. (1979). Imperfect Information, Dividend Policy, and "The Bird in the Hand" Fallacy. The Bell Journal of Economics, 10 (1), 259-270.

Bilan Banques, (n.d.). Bank Data Financial Services. Lebanon.

Black, F. (1976). The Dividend Puzzle. Journal of Portfolio Management, 2, 5–8.

BLC Bank's Milestones, (n.d.). Retrieved from http://www.blcbank.com/milestones.

BLOM Bank's Milestones, (n.d.). Retrieved from http://www.blombank.com/english/ newSub. aspx?pageid=9061.

Bluman, A. (2010). Elementary Statistics: A Step by Step Approach, 4th Edition. MHHE

Brealey, R. A. (1992). Does Dividend Policy Matter? Revolution in Corporate Finance, 2nd edition. Cambridge, Massachusettes: Blackwell Publishers Inc.

Brealey, R. A. & Myers, S.C. (2003). Principles of Corporate Finance, 7th edition. New York: McGraw Hill.

Brigham, E. F. & Ehrhardt, M. C. (2002). Financial Management: Theory and Practice. USA: South-Western.

Brigham, E. F. & Houston, J.F. (2004). Fundamental of financial management, 10th edition. Thomson, South-Western

Brooks, C. (2008). Introductory Econometrics for Finance, 2nd edition. New York: Cambridge University Press.

Bryman, R. (2008). Social Research Methods, 3rd edition. Oxford University Press

Casey, K. M. and Dickens, R. N. (2000). The Effects of Tax and Regulatory Changes on Commercial Bank Dividend Policy. Quarterly Review of Economics and Finance, 40 (2), 279-293.

Casey, K. M., Dickens, R. N. & Newman, J. A. (2002). Bank Dividend Policy: Explanatory Factors. Quarterly Journal of Business and Economics, 41, 3-12.

Chang, R. P. & Rhee, S. G. (1990). The Impact of Personal Taxes on Corporate Dividend Policy and Capital Structure Decisions. Financial Management Association, 19(2), pp. 21-31.

Chatterjee, S. and Price, B. (1977). Regression analysis by example. New York: Wiley

Collins, C., Saxena, A. & Wansley, J. (1996). The role of insiders and dividend policy: a comparison of regulated and unregulated firms. Journal of Financial And Strategic Decisions, 9 (2), 1-9.

Creswell, J. W. (2013). Qualitative, quantitative, and mixed methods approaches, 4th edition. Thousand Oaks, CA: Sage.

Darling, P. G. (1957). The Influence of Expectations and Liquidity on Dividend Policy. Journal of Political Economy, 65 (3), 209-224.

DeAngelo, H., DeAngelo, L. & Skinner, D. (2004). Are Dividends Disappearing? Dividend Concentration and the Consolidation of Earnings. Journal of Financial Economics, 72, 425-456.

Dharymes, P. J. & Kurz, M. (1964). On the Dividend Policies of Electric Utilities. The Review of Economic and Statistics, 46 (1), 76-81.

Dhillon, U. P. (1986). Corporate ownership, dividend policy, and capital structure under asymmetric information. (Thesis Ph.D.)Louisiana State University and Agricultural & Mechanical College.

Dickens, R. N., Casey, M. & Joseph, A. K. (2002). Bank Dividend Policy: Explanatory Factors. Journal of Business and Economics, 41, 3-12.

Dittmar, A. & Dittmar R. (2004). Stock Repurchase Waves: An Explanation of the Trends in Corporate Payout Policy. Working Paper, University of Michigan.

Donaldson, G. (1961). Corporate Debt Capacity: A Study of Corporate Debt Policy, and Determination of Corporate Debt Policy. Boston: Division of Research, Graduate school of Business Administration, Harvard University

D'Souza, J. (1999). Agency cost, market risk, investment opportunities and dividend policy an international perspective. Managerial Finance, 25 (6), 35-43.

Easterbrook, F.H. (1984). Two Agency-cost Explanations on Dividends. American Economic Review, 74, 650-59.

Faccio, M., Lang, L. & Young, L. (2001). Dividends and Expropriation. American Economic Review, 91, 54–78.

Fama, E. & Babiak, H. (1968). Dividend policy of Individual Firms: an Empirical Analysis. Journal of the American Statistical Association, 63, 1132-1161.

Fama, E. & French K. (1997). Industry Costs of Equity. Journal of Financial Economics. 43, 153-193

Fama, E. & French K. (1998). Value versus Growth: The International Evidence. Journal of Finance, 53, 1975-1999

Fama, E. & French K. (2001). Disappearing Dividends: Changing Firm Characteristics or Lower Propensity to Pay. Journal of Financial Economics, 60, 3-43.

Fama, E. & French. K. (2002). Testing Tradeoff and Pecking Order Predictions about Dividends and Debt. Review of Financial Studies, 15, 1–33.

Ferris, S., Jagannathan, M. and Pritchard A. (2003). Too busy to mind the business? Monitoring by directors with multiple board appointments. Journal of Finance, 58, 1087–1111.

Frankfurter, G. & Wood, B. (2003). Dividend Policy: Theory and Practice. USA: Elsevier Science.

Freeman, R. (1984). Longitudinal analyses of the effects of trade unions. Journal of Labor Economics, 2 (1), 1-26.

Freeman, R. N., Ohlson, J. A. & Penman, S. H. (1982). Book rate-of-return and prediction of earnings changes: An empirical investigation. Journal of Accounting Research, 20 (2), 639-653.

Friend, I., & Puckett, M. (1964). Dividends and Stock Prices. The American Economic Review, 5 (54), 656-682.

Gan, F. F., & Koehler, K. L. (1990). Goodness of t-tests based on P–P probability plots. Technometrics, 32, 289–303.

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

Gitman, L. and Zutter, C. (2010). Principle of Managerial Finance, 13th Edition. Prentice Hall Series in Finance.

Glen, J., Karmokolias, Y., Miller, R. and Shah, S. (1995). Dividend Policy and Behavior in Emerging Markets. IFC Discussion Paper No.26

Gordon, M. J. (1959). Dividends, earnings and stock prices. Review of Economics and Statistics, 41 (2), 99-105.

Gordon, M. J. (1963), Optimal Investment and Financing Policy. Journal of Finance, 18 (2), 264-272.

Graham, B. & Dodd, D. (1951). Security Analysis. New York: McGraw-Hill.

Gugler, K. & Yurtoglu, B. (2003). Corporate governance and dividend pay-out policy in Germany. European Economic Review, 47, 731-758.

Gujarati, N. (2004). Basic Econometrics. Singapore: McGraw-Hill

Gupta, M. C. & Walker D. A. (1975). Dividend Disbursal Practices in Commercial Banking. Journal of Financial and Quantitative Analysis, 10 (3), 515-529.

Healey, J. (2008). The Essentials of Statistics: A Tool for Social Research, 2nd edition. Wadsworth: Cengage Learning

Hedensted , J., & Raaballe , J. (2006). Dividend Determinants in Denmark. School of Economics and Management. Working Paper, Aarhus: University of Aarhus

Higgins, R. C. (1972). The corporate dividend-saving decision. Journal of Financial and Quantitative Analysis, 7 (2), 1527-1541.

History of Bank of Beirut, (n.d.). Retrieved from http://www.bankofbeirut.com/ Corporate /en/History

History of Banque Du Liban, (n.d.). Retrieved from http://www.bdl.gov.lb/about-banque-du-liban.html

Ho, H. (2003). Dividend Policies in Australia and Japan. International Advances in Economic Research, 9 (2), 91-100.

Holder, M. E., Langrehr, F. W. and Hexter, J. L. (1998). Dividend Policy Determinants: An Investigation of the Influences of Stakeholder Theory. Financial Management, 27 (3), 73-82.

Imran, K. (2011). Determinants of Dividend Payout Policy: A Case of Pakistan Engineering Sector. The Romanian Economic Journal, 41, 47-59.

Jankowicz, A. (2000). Business Research Projects, 3rd Edition. London: Thomson Learning,

Jensen, G., Solberg, D., & Zorn, T. (1992). Simultaneous Determination of Insider Ownership, Debt, and Dividend Policies. Journal of Financial and Quantitative Analysis, 27, 247-263

Jensen, M. C. (1986). Agency Costs of Free Cash Flow, Corporate-Finance, and Takeovers. American Economic Review, 76 (2), 323-329.

Jensen, M. C., & Meckling, W. H. (1976). Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure. Journal of Financial Economics, 3 (4), 305-360.

John, K. & Williams, J. (1985). Efficient Signalling with Dividends and Investments. Journal of Finance. 42 (2): 321-343

Jose M. L. (2001). Capital Market Valuation of Dividend Policy. Journal of Business Finance and Account, 16(5), 65.

Kalay, A. (1984). The Ex-Dividend Day Behavior of Stock Prices: A Re-Examination of the Clientele Effect. The Journal of Finance, 37 (4), 1059-1070.

Kania, S. L. & Bacon, F. W. (2005). What factors motivate the corporate dividend decision?. American Society of Business and Behavioral Sciences E-Journal, 1(1), 95-107.

Kanwal, A. & Kapoor, S. (2008). Determinants of Dividend Payout Ratios-A Study of Indian Information Technology Sector. International Research Journal of Finance and Economics, 15, 63-71.

Kanwal, A. & Sujata, K. (2008). Determinants of Dividend Payout Ratios-A Study of Indian Information Technology Sector. International Research Journal of Finance and Economics, 15, 63-71.

Keller, G. (2005). Statistics for management and economics, 7th edition. Duxbury: Thomson

Kennedy, W. F., & Nunnally, B. H. Jr. (1986). An Empirical Examination of Large Bank Dividend Payout Ratios, 1982–1983. Financial Review, 21 (3), 48.

Kennedy, W. F. & Scott, D. F. Jr. (1984). An Analysis of Large Bank Dividend Policy. Review of Business and Economic Research, 20 (1), 28–38.

Keown, A. J., Martin, J. D., Petty, J. W., & Scott, D. F. (2007). Foundations of Finance: The Logic and Practice of Financial Management, 6th edition. London: Pearson Prentice Hall.

Kinfe, T. (2011). Determinants of dividend payout: an empirical study on banking industry in Ethiopia 2006-2010. (Unpublished Master thesis). Addis Ababa University

Lahoti, A. (1987). Politics of banking: A study of Dhampur. Institute of Advanced Studies Meerut University.

Lamont, O. (1998). "Earnings and Expected Returns." Journal of Finance, American Finance Association, 53(5), 1563-1587.

Lang, L.H.P. & Litzenberger, R.H. (1989). Dividend Announcements. The Journal of Financial Economics, 24, 181 – 191

Leaf, W. (1920). Banking. New York: H. Holt and company

Lease, C., Lewellen W., & Schlarbaum G. (1976). Market Segmentation: Evidence on the Individual Investor. Financial Analysts Journal, 32 (5), 53–60.

Lee, S. W. (2009). Determinants of dividend policy in Korean banking industry. Banks and Bank Systems, 4, 67-71.

Lintner, J. (1956). Distribution of Incomes of Corporations among Dividends, Retained Earnings, and Taxes. American Economic Review, 46 (2), 97-113.

Litzenberger, R. & Ramaswamy, K. (1979). The Effect of Personal Taxes and Dividends on Capital Asset Prices: Theory and Empirical Evidence. Journal of Financial Economics, 7, 163-195.

Liu, S. & Hu, Y. (2005). Empirical Analysis of Cash Dividend Payment in Chinese Listed Companies. Nature and Science, 1 (3), 65-70.

Lloyd W. P., Jahera S. J. , Page D. E. (1985). Agency cost and dividend payout ratios. Quarterly. Journal of Business and Economics, 24(3), 19-29

Maddala, G. S. and Wu, S. (1999). Cross-country Growth Regressions: Problems of Heterogeneity, Stability and Interpretation. Applied Economics, 32, 635-642.

Malhotra, N. K. (2004). Marketing research: an applied orientation, 4th edition. Upper Saddle: Prentice-Hall

Marfo-Yiadom, E. & Agyei, S. A. (2011). Determinants of Dividend Policy of Banks in Ghana. International Research Journal of Finance and Economics, 61, 99-108.

Mayne, L. S. (1980). Bank Dividend Policy and Holding Company Affiliation. Journal of Financial and Quantitative Analysis, 15 (2), 469-480.

McLaney, A. (2009). Business Finance: Theory and Practice, 8th edition. London: Pearson Education Limited.

McManus , I. D., Gwilym , O. A., & Thomas , S. (2004). The Role of Payout Ratio in the Relationship between Stock Returns and Dividend Yield. Journal of Business Finance & Accounting, 31, 1355-87.

Mehar, A. (2003). Corporate governance and dividend policy. Pakistan Economic and Social Review, XLIII, 115-128.

Mercado-Mendez, J. & Willey T. (1995). Agency Costs in the Banking Industry: An Examination of Ownership Behavior, Leverage, and Dividend Policies. Journal of Economics and Finance,19 (3), 105–117.

Miller, M. H, & Modigliani, F. (1961). Dividend Policy, Growth, and the Valuation of Shares. Journal of Business, 34, 411-433.

Miller, M. and Rock, K. (1985). Dividend Policy under Asymmetric Information. The Journal of Finance, 40 (4), 1031-1051.

Mohamed, E., Oyelere, P. & Al Jifri, K. (2006). State corporate governance in Oman: progress has been rapid, sophistication has increased, but there is still room for improvement. Journal of Taxation and Regulation of Financial Institutions, 22, 70–8.

Mollah, S.A. (2009).Testing Partial Adjustment Behavioral Models in Emerging Markets: Evidence from Pre and Post Market Reforms in Bangladesh. Global Journal of Business Research 3 (1), 1-14.

Mollah, S., Keasey, K. & Short, H. (2002). The Influence of Agency Costs on Dividend Policy in an Emerging Market: Evidence from the Dhaka Stock Exchange. Working Paper, Leeds university Business school.

Mookerjee, R. (1992). An Empirical Investigation of Corporate Dividend Payout Behavior in an Emerging Market. Applied Financial Economics, 2 (4), 243- 246.

Mueller, D. C. (1972). A Life Cycle Theory of the Firm. Journal of Industrial Economics, 20 (3), 199-219.

Myers, M. & Bacon, F. (2004). The determinants of corporate dividend policy. Academy of Accounting and Financial Studies, 8(3): 17-28.

Myers, S. C. & Majluf, N. S. (1984). Corporate Financing and Investment Decisions When Firms Have Information that Investors Do Not Have. Journal of Financial Economics, 13, 187-221.

Nissim, D. & Ziv, A. (2001). Dividend Changes and Future Profitability. Fournal od Finance, 56, 2111-2133.

Okpara, G. C. (2010). A Diagnosis of the Determinant of Dividend Pay-Out Policy in Nigeria: A Factor Analytical Approach. American Journal of Scientific Research, 8, 57-67.

Park, H. (2002). Univariate Analysis and Normality Test Using SAS, Stata, and SPSS. Working paper, Indiana: University Information Technology Services, Indiana University.

Parua, A. & Gupta, A. (2009). Dividend history and determinants in selected Indian companies. Australasian Accounting Business and Finance Journal, 3(4), 45-86.

Penman, S. (2009). Financial Statement Analysis and Security Valuation, 4th edition. New York: McGraw-Hill Education

Pruitt, S. W. & Gitman, L. W. (1991).The interactions between the investment, financing, and dividend decisions of major US firms. Financial Review, 26 (33), 409-30.

Redding, L. (1997). Firm Size and Dividend Payouts. Journal of Financial Intermediation, 6, 3-38.

Rozeff, M. S. (1982). Growth, beta and agency costs as determinants of dividend payout ratios. Journal of Financial Research, 5(3), 249-59.

Rozeff, M. S. (1992). How companies set their dividend-payout ratios. The Revolution in Corporate Finance, Oxford: Blackwell Publishers

Sarbapriya, R, (2012). Empirical Testing of International Fisher Effect in United States and Selected Asian Economies. AITM, World Science Publisher, 2 (1), 187-201.

Sawicki, J. (2005). An Investigation into the Dividend of Firms in East Asia. Working Paper, Nanyang Technological University, Singapore.

Schiller, R. J. (1984). Stock prices and social dynamics. Brookings Papers on Economic Activity, 2, 457-510.

Shefrin, H. & Statman M. (1984). Explaining Investor Preference for Cash Dividends, Journal of Financial Economics, 13, 253–282.

Shirvani, H. & Wilbratte, B. (1997). The Relationship Between the Real Exchange Rate and the Trade Balance: An Empirical Reassessment. International Economic Journal, 11 (1), 39-50

Sinaei, A. & Habibi, L. (2012). An Investigation of Factors Relevant to Payout Ratio in Listed Firms on the Tehran Stock Exchange. International Journal of Multidisciplinary Management Studies, 2 (2), 22-37.

Somashekar, N.T. (2009). Banking. New Delhi: New Age International

The Byblos Bank Story, (n.d.). Retrieved from http://www.byblosbank.com.lb/Global-The-Byblos-Bank-Story.

The Lebanese Banking Sector, (n.d). Retrieved from http://alphacap.com/aboutus/ lebanese_banking_sector.

Wang, M., Gao, S. & Guo, G. (2002). Dividend Policy of China s Listed Companies. Working Paper.

Watson, D. and Head. A. (2007). Corporate Finance: Principles & Practice, 4th Edition. Pearson Education Limited.

White, H. (1968). Money and banking illustrated by American history. Boston and London: Ginn & Co.

Wooldridge, J. (2002). Econometric Analysis of Cross Section and Panel Data. Massachusetts London: The MIT Press Cambridge.

Appendix A: Fixed-effects regression

Fixed-effects regression				
	Case I: Using lag SZ		**Case II: without SZ**	
Divpayout	**Coef.**	**P>|t|**	**Coef.**	**P>|t|**
PROF	-1.410305	0.091*	-.641822	0.450
LEV	.0288521	0.505	.0543842	0.318
LIQ	.0738701	0.367	-.006966	0.936
GRO	-.1239107	0.044**	-.2295689	0.002***
PE	.0125416	0.027**	.0115994	0.104
PYD	.9664621	0.000***	.6346357	0.002***
LagSZ	.1254849	0.025 **	-	-
	• Number of obs = 24 • R-sq = 0.7152 • F= 7.84		• Number of obs = 26 • R-sq = 0.2789 • F = 5.53	

*, **, *** indicates significant at 10%, 5%, and 1% significance level respectively

Table 18: Fixed-effects regression on case I and II

(Source: STATA)

Appendix B: Random-effects regression on case I and II

Random-effects regression				
	Case I: Using lag SZ		Case II: without SZ	
Divpayout	Coef.	P>|t|	Coef.	P>|t|
PROF	-1.570964	0.003***	-.5689751	0.357
LEV	.0212759	0.624	.0733147	0.230
LIQ	.063731	0.378	.0144196	0.885
GRO	-.1062898	0.033**	-.1126452	0.093*
PE	.0017633	0.546	-.0013341	0.696
PYD	.8887931	0.000***	.8347557	0.000***
LagSZ	.0879873	0.000***	-	-
	• Number of obs = 24		• Number of obs = 26	
	• R-sq= 0.8183		• R-sq= 0.5684	
	• chi2= 72.08		• chi2 = 25.02	

*, **, *** indicates significant at 10%, 5%, and 1% significance level respectively

Table 19: Random-effects regression on case I and II

(Source: STATA)

Appendix C: Dynamic panel data regression

Arellano-Bond dynamic panel-data estimation		
Div payout	**Coef.**	**P>|t|**
PROF	-1.410305	0.085*
LEV	.0288521	0.519
LIQ	.0738701	0.378
GRO	-.1239107	0.036**
PE	.0125416	0.019**
LagSZ	.1254849	0.017**
	• Number of obs = 20 • chi2= 48.75	

*, ** indicates significant at 10% and 5% significance level respectively

Table 20: Dynamic panel data regression

(Source: STATA)