DETERMINANTS OF DIVIDEND POLICY IN MALAYSIAN BANKING SECTOR

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MASTER OF SCIENCE (FINANCE)
UNIVERSITI UTARA MALAYSIA
July 2013

DETERMINANTS OF DIVIDEND POLICY IN MALAYSIAN BANKING SECTOR

By

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Thesis Submitted to
Othman Yeop Abdullah Graduate School of Business,
Universiti Utara Malaysia,
in Fulfillment of the Requirement for the Degree of
Master of Science (Finance)

Othman Yeop Abdullah
Graduate School of Business

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ABSTRAK

Tujuan kajian ini adalah untuk mengkaji faktor-faktor yang mempengaruhi polisi dividen dalam sektor perbankan di Malaysia. Dalam kajian ini, sembilan belas bank komersil di Malaysia telah dipilih sebagai sampel dan ia termasuk lapan bank domestik dan sebelas bank luar negara. Regresi Kaedah Kuadrat Terkecil (*Ordinary Least Squares*) digunakan untuk mengkaji impak leveraj, keuntungan, kecairan, dividen masa lepas, saiz firma, pertumbuhan jualan, cukai korporat, dan risiko perniagaan terhadap polisi dividen dalam sektor perbankan dalam jangka masa lima tahun, iaitu dari tahun 2007 hingga 2011. Hasil kajian ini menunjukkan bahawa keuntungan, kecairan, dividen masa lepas, saiz firma, dan pertumbuhan jualan mempunyai hubungan positif dengan polisi dividen, manakala leveraj, cukai korporat, dan risiko perniagaan mempunyai hubungan negatif dengan polisi dividen. Hasil kajian juga menujukkan bahawa keuntungan, dividen masa lepas, saiz firma, dan cukai korporat adalah faktor utama yang mempengaruhi keputusan pembayaran dividen. Selain itu, kami mendapati bahawa pembayaran dividen oleh bank-bank domestik adalah lebih tinggi daripada bank-bank luar negara.

Katakunci: Polisi dividen, Pembayaran dividen, Sektor perbankan

ABSTRACT

The purpose of this study is to examine the factors that influence dividend policy in the Malaysian banking sector. For this purpose, a sample of 19 commercial banks in Malaysia were selected including eight domestic banks and eleven foreign banks. Ordinary Least Squares (OLS) Regression was used to examine the impact of leverage, profitability, liquidity, past dividend, size of firm, sales growth, corporate tax, and business risk on dividend policy in the banking sector over a period of five years from 2007 to 2011. The empirical results of this study show that profitability, liquidity, past dividend, size of firm, and sales growth have a positive relationship with dividend payout. Meanwhile, leverage, corporate tax and business risk have a negative relationship with dividend payout. The results of the analysis indicated that profitability, past dividend, size of firm and corporate tax were the major factors that affected dividend payment decision. Furthermore, we found that domestic banks had higher dividend payout than foreign banks.

Keywords: Dividend policy, Dividend payout, Banking sector

ACKNOWLEDGEMENT

I would like to take this opportunity to express my gratitude to everyone who had contributed to the success of this thesis.

I would like to express my sincere appreciation to my supervisor Madam Faoziah binti Idris who provided guidance and support. Her encouragement enabled this thesis to be completed.

Besides my supervisor, I would like to thank all my lecturers for their advice and suggestion.

Finally, I would like thanks to my beloved family for theirs years of encouragement and support.

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LIST OF ABBREVIATION

ANOVA	Analysis of Variance
B	Beta
BHCs	Bank Holding Companies
Bhd.	Berhad
BNM	Bank Negara Malaysia
df	Degrees of Freedom
GRETL	Gnu Regression, Econometrics and Time-series Library
Ha	Alternate Hypothesis
Ho	Null Hypothesis
KLSE	Kuala Lumpur Stock Exchange
M	Malaysia
MM	Miller and Modigliani
N	Sample from Population
OLS	Ordinary Least Squares
sen	Malaysia Sen
Sig.	Significant
SPSS	Statistical Package of Science Social
Std.	Standard
t	t-Statistic
UUM	Universiti Utara Malaysia
VIF	Variance Influence Factor
$\hat{Y}$	Estimatior of Y

CHAPTER ONE

INTRODUCTION

1.0 Chapter Overview

In this chapter, we will discuss eight sections: section 1.1 background of the study, section 1.2 problem statement, section 1.3 research questions, section 1.4 research objectives, section 1.5 significance of the study, section 1.6 scope and limitations of the study, section 1.7 organization of the thesis, and section 1.8 chapter summary.

1.1 Background of the Study

Dividend policy is one of the critical issues in corporate finance. The company earns income from its business which is then invested in operating assets, buying securities, paying debts and distributing to stockholders. Income paid to shareholders is called dividend. Researchers and companies are always concerned about dividend payment while investors are interested to know the value of dividend. Some issues have arisen in terms of proportions of dividend from income which should be distributed to shareholders, that is, whether they should be paid cash dividend, stock dividend or they should not be paid at all. Therefore, many controversies have emerged from prior empirical studies related to dividend policy. Financial managers of the company should consider financial and non-

financial factors before making decisions on dividend payment. There are two types of factors that being used by most of the previous studies to investigate the dividend payout. Financial factors like leverage ratios, liquidity ratios, profitability ratios, sales growth, firm's size, past dividends, business risks, investment opportunities and so forth. On the other hand, non-financial factors are called economic factors, political factors, investor's perception, and competitors in the same industry.

Over the past decades, many finance scholars used extensive theory to find out about factors that might be important to determine a firm's dividend policy. Although all these theories have explained some important aspect of corporate finance literature on dividend policy, the question is: Which is the most appropriate theory to explain dividend policy? What we know is researchers have developed several theories to explain the factors that might influence company dividend payment that will benefit managers to make the right decision. Firm value will deteriorate if managers do not examine the whole picture of divided policy by considering factors which will affect dividend payment. Dividend policy is an important issue in corporate finance for many reasons. First, it involves huge amounts of money and it is a basic component of a firm's financial policy and how to make investment decisions. Second, dividend policy is a puzzle for academic researchers and company managers. Many questions have been raised by researchers such as why and when company needs to pay dividends, why investors need to pay attention on dividends, what factors will increase or decrease dividend payment and so on. "The harder we look at the dividend picture, the more it seems like a puzzle, with pieces that don't fit together" (Black, 1976). Black's statement

is supported by Bhattacharyya (2007a) and Al-Malkawi et al. (2010). They applied various theories of dividend policy in their study but they found that dividend puzzle is still unsolved.

Numerous studies have discussed dividend policy decisions through surveys from the managerial points of view (Baker et al., 1985; Shleifer and Vishny, 1997; Dhanani, 2005; Khan et al., 2011; Naser et al., 2013). Most of the managers believe that agency, dividend clientele, signaling, pecking order, transaction cost, bird in the hand, catering, tax preference, and life cycle theories are able to help them explain why firms need to pay dividends to shareholders. Through several studies, a number of researchers have identified the factors that influence managers to make dividend payment decisions (Lintner, 1956; Pruitt and Gitman, 1991; Pourheydari, 2009; Baker and Powell, 2012). These factors include profitability, stability earnings, firm size, liquidity, debt level, patterns of past dividends, and growth opportunities as important factors for managers to determine firm's dividend policy. Bhattacharyya (2007b) pointed out that managers with higher productivity pay lower dividends and invest more in business activities while managers with lower productivity pay higher dividends and are therefore, less efficient. Fama and Babiak (1968) investigated various dividend models to explain dividend behaviour and they found that managers tend to have a stable dividend policy rather than frequently changing the dividend policy. Baker and Powell (1999) revealed that managers of firms perceive that dividend policy influences firm value.

Chiang et al. (2006) carried out a survey on groups of professional investors on their perception of dividends. Their findings concluded that most investors prefer dividends and they do not like dividend cuts. On the other hands, some of the professional investors of the firm also believed that dividends are important. The study also found that paying dividends by firms according to different in size and at different stages of their life cycle may be myopia. In his regards, dividend patterns do exist, but the signaling factors on the paying dividends is still unclear explanation.

Many studies examined dividend policy in a general way without focus on any particular industry or sector. Hence, this time we will focus on dividend policy in Malaysian banking industry which is one of the most important industries in Malaysia. The Malaysian commercial banks consist of domestic and foreign banks. The major subsidiaries foreign banks come from the United States, United Kingdom, Japan, China, and Thailand. The reason we focus on banking sector is because dividend policy for financial firms is different from non-financial firms. Bank is a company; shareholders usually will expect to receive some income as their return on investments while the ability of the bank to pay dividends to shareholders will depend on its financial performance. Shareholders will not receive dividends if the bank does not perform well. This study also provides us important insights into dividend policy of domestic and foreign banks.

1.2 Problem Statement

Malaysia is a developing country with a different market, features and system. "Malaysia is planning to become a fully-developed country through transformation of economy plan in the year 2020 (VISION, 2020)" (Sixth Malaysia Plan, 1991). Hence, Malaysia is not escape from having a dividend policy that may differ from other countries. In this regards, dividend policy in banking sector is needed that enable the banks to play a vital role in supporting the economic growth of the country. In supporting the economic growth, the Bank Negara Malaysia (BNM) is concerned to restructure the banking system through the process of mega merger financial institutions in order to attain the economics of scale and produce a high level of efficiency in the aftermath of Asian crisis.

Substantial changes can lead the Malaysian banking sector to become more dynamic and competitive thereby enabling domestic banks to compete with foreign banks. After the financial crisis, banks should have a comprehensive plan to manage their available funds that aim to maximize shareholders' wealth. Therefore, banks should maintain target dividend payouts over time.

Currently, many academics still continue to conduct research on this field in order to get valid theoretical and empirical results on dividend policy. A number of research studies in this area have evidenced that some factors have an effect on dividend policy decisions. There are many researchers who conducted studies on dividend policy in the banking sector (Casey and Dickens, 2000; Dickens et al., 2002; Theis and Dutta, 2009; Abreu and Gulamhussen, 2013). Some factors have

been known to have an effect on the banking sector dividend policy and these include leverage, profitability, liquidity, past dividends records, company size, sales growth, corporate tax and business risk.

The Malaysian banking system comprises three types of financial institutions which are commercial banks (domestic and foreign banks), investment banks and Islamic banks. The purpose of this study is to examine the factors that influence the dividend policy in Malaysian commercial banks. Meanwhile, we are also interested to know what are the differences in dividend policy between domestic and foreign banks.

1.3 Research Questions

The main objective of this study is to examine factors that influence the dividend policy in the Malaysian banking sector and tries to identify which factors strongly influence the dividend policy. Based on this study, the research questions investigated are as follows:

1. What is the relationship (positive or negative) between the independent variable (leverage, profitability, liquidity, past dividend, size of the firm, sales growth, corporate tax and business risk) and the dependent variable?
2. Does leverage, profitability, liquidity, past dividend, size of the firm, sales growth, corporate tax and business risk have an impact on the dividend policy decision in the Malaysian banking sector?
3. Is there any difference in dividend policy between domestic and foreign banks?

1.4 Research Objectives

The main objective of this study is to investigate the factors that influence dividend policy in the Malaysian banking sector.

The specific research objectives are as follows:

1. To identify the relationship between leverage, profitability, liquidity, past dividend, size of the firm, sales growth, corporate tax and business risk and dividend policy.
2. To identify the factors (leverage, profitability, liquidity, past dividend, size of the firm, sales growth, corporate tax and business risk) that affect the dividend policy in Malaysian banking sector.
3. To compare the dividend policy between domestic and foreign banks.

1.5 Significance of the Study

The study attempts to investigate the extent to which the factors influence dividend policy in the Malaysian banking sector. The significance of the study are as follows:

1 This will help corporate managers identify the characteristics which will be considered when they make dividend policy decision.

2 For government policymakers and other parties such as Bank Negara Malaysia, this empirical study will provide them an important knowledge about dividend policy. Besides that, the findings will help them to improve current regulations in the future.

3 This study will provide a good opportunity for investment agencies and investors by understanding the linkage between dividend policy and the banking sector. They can use the findings of this study to evaluate which bank has good dividend payments when doing investment decisions.

4 Furthermore, this study also provides the knowledge for researchers and academics on dividend policy in the Malaysian banking sector. In addition, this helps them to understand the whole picture of dividend policy in the banking sector when doing further studies.

1.6 Scope and Limitations of the Study

This study aims to investigate the factors that influence dividend policy in the Malaysian banking sector between the 2007 and 2011 period. The scope of this study is on leverage, profitability, liquidity, past dividend, size of firm, sales growth, corporate tax and business risks.

The limitations of this study are as follows:

1 Due to time constraints, it is impossible to choose which banks can be qualified to be a sample. Since the sample size is limited, the value of eight independence variables are also affected.

2 Malaysian bank has different listing period that allows downloading annual report. Some of the banks official websites do not provide their early annual reports. Thus, the accuracy of the findings must be influenced.

3 There are many factors proposed by past studies, but only eight factors are investigated in this study.

4 Some banks do not provide a comprehensive annual report according to the sequence year. With limited sample size, the findings of this study cannot be generalized to all the banks in Malaysia.

5 Confidential information of companies is also one of the obstacles for gaining information for this study.

6 The annual report for five years for each bank will be analyzed. Thus, the empirical results will be different when compared with the ten year analyses.

7 In the annual report, basically firms will provide a positive sign about the financial performance to their investors, which may become an obstacle in drawing actual financial performance.

1.7 Organization of the Thesis

The research is organized into five chapters. Chapter one is an introduction of the background study and provides brief information about dividend policy in the Malaysian banking sector. This chapter introduces the problem statement of this study, research questions, and research objectives, the significance of the study, and scope and limitations of the study. Chapter two is a literature review. It provides an overview of dividend policy, theories developed by academies to explain dividend policy and factors affecting dividend payment decision. Chapter three describes the research framework, hypotheses development, research design, operational definition, measurement of variables or instrumentation, data collection, sampling, data collection procedures and techniques of data analysis. Chapter four provides an analysis of determinants of dividend policy, including a discussion of the independent variables and the specification of the analysis model. Finally, chapter five reports the summary of results, draw conclusions and provide recommendations for future research.

1.8 Chapter Summary

This chapter provides an introduction of the study, problem statement, research questions and objectives. The background of the study discusses the dividend policy. The significance of the study focuses on the contributions of the study on dividend policy in the Malaysian banking sector. The scope and limitations of the study are also discusses.

CHAPTER TWO

LITERATURE REVIEW

2.0 Chapter Overview

This chapter will review existing empirical studies and discusses some theories related to this study. Basically, this chapter provides detail explanations on dividend policy as well as dividend as a determinant that affects the dividend payment of the firm. The chapter comprises section 2.1 definition of dividend, section 2.2 dividend theories, section 2.3 bank dividend policy, section 2.4 literature review on the independent variables, and section 2.5 chapter summary.

2.1 Definition of Dividend

Dividend is a payment to its owners. In other words, firms will pay dividends to shareholders from its earnings. There are two forms of dividend: cash dividend and stock dividend (Ross et al. 2008).

Regular cash dividend is the firm's paid dividend to shareholders in the form of cash. Firms will refer to their dividend policy to decide when to pay and how much dividends to be distributed to shareholders.

Stock dividend is the firm's paid dividend to shareholders in the form of shares. There is no cash involved in this form of dividend. Firms will decide the proportion of shares that have to be distributed to shareholders. Consequently, this type of dividend will increase the number of shares outstanding but the value of share will decline.

Types of Dividend Policies

1. Constant payout ratio dividend policy refers to dividend payment based on a certain percentage of earnings to shareholders during each period.
2. A regular dividend policy is defined as a fixed amount of dividend payment for each period.
3. Target dividend payout ratio is a dividend policy under which the firm plans to pay out a certain percentage of earnings and adjusts dividend payout when firm earnings are increased.
4. Low, regular and extra is a dividend policy based on paying a low regular dividend and the firm will pay extra dividends when earnings are higher than normal in a given period.
5. Smoothed residual dividend policy refers to the firm's attempts to avoid irregular changes in dividends at the minimum level.

2.2 Dividend Theories

2.2.1 Dividend Irrelevance Theory

Miller and Modigliani (MM) (1961) argued that under a certain set of assumptions, dividends were irrelevant and did not affect a firm's share price. According to Miller and Modigliani (1961), dividend policy does not influence firm value under four assumptions: (1) perfect capital markets, (2) no transaction costs, (3) no flotation costs and (4) no taxes. Under MM theory, all participants in the capital market have equal rights to access the same information and there is no interest conflict arising between managers and investors.

2.2.2 Agency Theory

Agency theory is the most important theory which was initiated by Jensen and Meckling (1976). They define the agency theory as: 'a contract under which one or more persons (also known as principal) deal with another person (also known as agent) to perform some service on their behalf which involves delegating some decision-making authority to the agent'. Jensen (1986) stated that interest conflict arises among firm managers and shareholders because managers tend to retain firm resources rather than pay dividends to shareholders. Managers prefer to follow their firm's growth strategies because the growth of a firm will allow them to monitor firm resources but shareholders will expect firms to pay them dividends. Thus, Rozeff (1982) argued that dividend payment will reduce agency costs. Jensen (1986) and Holder et al. (1998) found that firms which have higher degrees

of free cash flow will lead to higher agency costs. Therefore, firms need higher dividend payout in order to minimize agency costs. Jensen and Meckling (1976), Moh'd et al. (1995) and Zeng (2003) suggested that larger firms have higher agency costs than small firms.

2.2.3 Signaling Theory

Dividend signaling was developed by Miller and Rock (1985). This theory deals with asymmetric information between managers and investors. They stated that the firm's managers have more information about firm investment decisions and current earnings than outside investors. Benartzi et al. (1997) used the signaling theory to examine whether dividend changes will impact changes in past and future earnings. They found that dividend change showed past growth of the company's earnings. However, dividend change did not give any signals of changes in future profitability. Chen and Dhiensiri (2009) failed to find that dividends show a signal of the stability of the firm's future cash flows. Marfo-Yiadom and Agyei (2011) found that past dividend has an impact on current year dividend and this supports signaling theory.

2.2.4 Pecking Order Theory

The pecking order theory is developed by Myers (1984) and Myers and Majluf (1984). Under capital structure topic defined pecking order is a stage of financing that starts with retained earnings, followed by debt financing and finally issuing new share through external equity financing (Gitman and Zutter, 2012). The firm will depend first on the internal financing for new investments and distribute dividends to shareholders. If the retained earnings are not sufficient, then the firm will use debt financing. When considering the cost of issuing debt and equity financing, less profitable firms will not pay dividends to their shareholders. Fama and French (2001) and Al-Malkawi (2007) found a positive relationship between profitability and dividends and this is consistent with the pecking order theory. Al-Malkawi (2007) and Mollah (2011) identified a positive relationship between firm size and dividend payment as larger firms have advantages to access capital market for external financing.

2.2.5 Transaction Cost Theory

Transaction Cost is an essential theory in dividend policy. Rozeff (1982) assumes that when the firm pays more dividends, it would incur lower agency costs. However, he added that if the firm pays high dividends, it would lead to a high transaction cost. Holder et al. (1998) stated that higher risk and higher sales growth firms tend to have lower dividend payout ratios and lower transaction costs. Meanwhile, Higgins (1972) and Mollah (2011) suggested that higher level of debts and higher transaction costs will reduce the capability of firms to pay dividends. Moreover, dividend policy is related to the transaction cost and residual theory. This theory suggests that firms will minimize dividend payments to avoid the costs of external financing when large amounts of transaction costs are incurred (Higgins, 1972; Crutchley and Hansen, 1989; Holder et al., 1998).

2.2.6 Life Cycle Theory

The life cycle theory focuses on the firm's life cycle stage. This theory helps us to explain dividend payment of the firm. According to the firm's life cycle theory, it is suggested that a firm starts paying dividends to shareholders when its growth rate and earnings are expected to decrease in the future (Mueller, 1972). Grullon et al. (2002) used maturity hypothesis to explain that firms have different stages and dividend policies in their lives. Firms in the growth stage tend to have low dividend payment because they have a high sales growth and high capital expenditure. When firms reach the mature stage, they tend to pay more dividends because they have low sales growth and low capital expenditure (Anthony and

Ramesh, 1992). Afza and Mirza (2011) showed that firms in the growth stage tend to pay low dividends as compared to firms in the matured stage.

2.2.7 Bird-in-the-Hand Theory

Gordon (1963) and Walter (1963) stated that shareholders prefer cash dividend in the hand rather than future promise of capital gains. Thus, firms will get higher rating from rating agencies. With higher rating, firms can easily raise funds from the capital market.

Gordon (1963) further argues that firms making dividend payouts prefer an increase in the firm value. Gordon (1959) used dividend relevance theory which contended that investors prefer current dividends due to less risks than future dividends or capital gains and this shows that current dividend payment has a positive impact on firm value.

2.3 Bank Dividend Policy

Boldin and Leggett (1995) examined the dividend policy of bank which show a signal of bank quality. The study tested 207 Bank Holding Companies (BHCs) in the United States from six different banking regions. By using the Probit Response model, the empirical results indicated that there was a positive relationship between bank dividends per share and bank quality rating and this is consistent with the dividend signaling theory. Furthermore, it was also found that there was a negative relationship between the dividend payout ratio and bank quality. They stated that dividends per share are important but do not represent a whole picture of the bank's financial position.

Dutta (1999) examined 136 bank holding companies (BHCs) the United States to identify the relationship between insider holdings, dividend policy and debt policy. The study found that insider holdings had no significant relationship with debt while insider holdings had a strong significant relationship with dividends. Banks have a higher level of insider holdings which tend to pay lower dividends to shareholders and this can avoid double taxation. In addition, banks have a higher level of debt and tend to pay higher dividends. The study shows that dividend has a positive relationship with net income and firm expenses but is statistically insignificant.

Casey and Dickens (2000) investigated the effects of taxation and regulatory changes on banks' dividend policy. The results indicate that banks have different dividend policy as compared to other sectors. Meanwhile, their findings shows there is statistical insignificant relationship between dividend policy and past growth rates, business risks or an insider ownership in banking sector. Prior studies suggest that banks have lower taxes, and a higher dividend payout. They added that regulatory changes also affect bank's dividend payouts.

Low et al. (2001) examined the relationship between bank monitoring and corporate dividend policy. They wanted to find out how bank monitoring affected the market's response to a corporate decision on omitting cash dividend payments. The findings showed that small firms have different declaration of omitting cash dividend payments compared with large corporations. Large firms' investors do not consider bank monitoring but they tend to react more negatively if announcements of dividend omission have high levels of bank debt. The investors are more concerned about the firm's ability to meet financial obligations rather than bank review. The study indicated that the level of bank debt will influence bank's decisions on dividends.

Dickens et al. (2002) investigated factors determining the dividends in the banking sector and 677 banks were examined. The results showed a positive relationship between dividend payments and size and past dividend record, and a negative relationship to investment opportunities, signaling, ownership, and risk. Theis and Dutta (2009) re-examined Dickens et al.'s model, and they found that dividend policy had a positive and significant relationship with equity-to-asset and prior

dividends, and a negative and significant relationship with risk and investment opportunities. Meanwhile, there was a nonlinear relationship between insider holdings and dividend yield in the banking industry.

Ameer (2008) studied the impact of the product market competition, and regulations on the dividend policies in the Malaysian banking sector. The study was conducted over the period of 1995 to 2005. The evidence indicated that there was a significant difference in the dividend payout for banks categorized as selling non-interest and a mix of both interest and non-interest based banking products. The findings also showed a significant relationship between increased dividends and earnings, while cut dividends had a significant relationship with changes of non-performing loans, loans ratio in corporate and real sectors and losses in earnings. Furthermore, the study found that foreign banks have higher dividends payout ratio than domestic banks.

Nnadi and Akpomi (2008) reported a significant correlation between taxes and dividend structure of 50 banks in Nigeria. They also stated that profit is a major consideration when making dividend policy decisions of organizations. They added that dividend structures of firms are basically affected by many factors such as liquidity, profitability, investment opportunity, and dividend clientele.

Lee (2009) examined determinants of dividend policy in Korean banking industry during the period from 1994 to 2005 by using panel data. The results indicated that high profitability and low risk banks tend to pay more dividends to shareholders. Meanwhile, the study showed dividend policy in Korean banking sector is closely-

related to risks than other types of sectors. Meanwhile, Abdulrasheed et al. (2011) who stated that banks in Nigeria which tend to pay more dividends to their shareholders when banks have a good financial performance during the period from 1998 to 2007.

Agyei and Marfo-Yiadom (2011) investigated the relationship between dividend policy and bank performance. They used panel data and investigated sixteen commercial banks in Ghana from 1999 to 2003 years. The results showed that banks pay dividend that aimed to increase their performance in the industry. Besides that, their results were also consistent with prior studies that leverage, size of a bank and bank growth increased bank performance, and age of bank showed a mixed relationship. The results show that dividend policy has an effect on firm value. This means that banks have to pay dividends to reduce agency costs and enhance performance of banks.

Huda and Farah (2011) examined the determinants of dividend policy in Bangladesh banking sector. They found that the majority of banks in Bangladesh make dividend payment decisions based on firm size, profitability, liquidity, and retained earnings. Meanwhile, they reported that the net income of banks has the highest potential impact on stock payout and total payout.

Abreu and Gulamhussen (2013) compared the dividend policy of banks before and during the financial crisis. They found that dividend payout had a significant positive relationship with size, profitability, and expected growth and a negative

significant historical growth. This indicated that larger, more profitable, low growth banks are able to pay more dividends to their shareholders.

2.4 Literature Review on the Study Independent Variables

There are many factors that influence firm dividend policy. In this study, we include eight financial factors that will influence dividend policy in the Malaysian banking sector. These include leverage, profitability, liquidity, past dividends, size of firm, sales growth, corporate tax and business risks.

2.4.1 Leverage

Leverage allows a firm to increase substantial of gains or losses through investment of its own funds. Investors are interested to know the firm's financial leverage because it will affect their rate of return. Leverage measures the extent to which a firm uses external funds to finance its activities. Most of the firms finance their activities by using debts. Past literature argued that firm leverage ratio is one of the considerations to determine whether firms will pay dividends to shareholders or not (Crutchley and Hansen, 1989; Jensen et al., 1992; Aivazian et al., 2003). They stated that firms with a low leverage ratio prefer to pay more dividends. High level of leverage will reduce the capability of firms to have residual income to pay dividends. Consequently, leverage would negatively impact dividend payment. Besides that, Liu and Hu (2005) revealed that there was a negative relationship between cash dividend and leverage ratio in China-listed companies. Kowalewski et al. (2007) also emphasize that high leverage companies

are more likely to pay lower dividends. Furthermore, Rozeff (1982) showed that firms with a high level of debt prefer to have low dividend payout ratios in order to minimize the transaction costs associated with external financing. Most researchers found a significant negative relationship between dividend policy and financial leverage (McCabe, 1979; Agrawal and Jayaraman, 1994; Gugler and Yurtoglu, 2003; Al-Najjar, 2009). In contrast, some researchers found a negative but insignificant association between dividend payout and financial leverage (Al-Najjar and Hussainey, 2009; Al-Ajmi and Hussain, 2011; Islam et al., 2012).

However, Chang and Rhee (1990) found that there was a positive relationship between dividend policy and leverage. They suggest that the higher leverage ratio of the firm, the greater dividend will be paid to shareholders. It means firms tend to borrow money to pay dividends to their shareholders. Their results supports signaling theory that firms pay more dividends because they want to allow investors to know that their firm is in good condition. They added that firms that have low payout ratio prefer to use equity financing while firms with a high payout ratio prefer to use debt financing for their activities. In addition, Gill et al. (2010) found a significant positive relationship between dividend payout and leverage for service in manufacturing industries in the United States. Their findings are consistent with Marfo-Yiadom and Agyei (2011) and Malik et al. (2013). However, Abor and Bokpin (2010) showed an insignificant positive relationship between dividend payout and financial leverage.

Naceur et al. (2006) and Ahmed and Javid (2009) had mixed findings on the relationship between dividend policy and leverage. They used various models such as pooled estimation, the country specific effects estimation and the random effect model.

In this study, debt to equity is used to measure the firm's leverage (Naceur et al., 2006; Ahmed and Javid, 2009; Abor and Bokpin, 2010; Malik et al., 2013).

2.4.2 Profitability

Profitability is defined as the ability of the firm to generate profit from its business activities. It is used to measure a firm's business performance. Profitability is the main reason and an important factor that may affect a firms' dividend payment decisions. High profitability firms are more likely to pay higher dividends to shareholders. There is strong evidence that shows that there is a significant positive association between firms' dividend policy and profitability (Naceur et al., 2006; Nnadi and Akpomi, 2008; Abor and Bokpin, 2010; El-Ansary and Gomaa, 2012). The results support the signaling theory of dividend policy in which high profitability firms are able to pay higher dividends to shareholders to show good financial performance from its business activities (Bhattacharya, 1979; Chang and Rhee, 1990; Ho, 2003; Aivazian et al., 2003). Furthermore, Seifert (1997), Nissim and Ziv (2001) and Ameer (2008) stated that there was a positive relationship between dividend changes and earning changes of firms. They point out that firms will adjust their dividends based on their earnings. In addition, DeAngelo et al.

(1992) and Andres et al. (2009) revealed that firms will cut the dividends when their profitability is going down.

However, Kania and Bacon (2005) and Islam et al. (2012) found that there was a significant negative relationship between dividend payout and profitability. This indicates that firms have good profitability ratios; it does not mean that firms will pay more dividends to shareholders. Meanwhile, Chen and Steiner (1999), Gupta and Banga (2010), and Kapoor et al. (2010) also showed that there was a negative relationship between dividend policy and profitability and it was not statistically significant.

Return on equity ratio is used to measure the profitability of the firm. (Chen and Steiner, 1999; Kania and Bacon, 2005; Kapoor et al., 2010; El-Ansary and Gomaa, 2012).

2.4.3 Liquidity

Liquidity is used to measure whether the firm is able to meet its payment obligations. High-liquidity firms have higher cash availability and near cash assets and firms are able to pay higher dividends to shareholders than low-liquidity firms. Ho (2003) and Zeng (2003) revealed that there was a positive relationship between dividend policy and liquidity and the findings support signaling theory. Alli et al. (1993) stated that dividend payment depends on cash flow rather than current earnings because it does not reflect a firm's ability to pay dividends. Firms which have a good and stable cash flow position are more likely to pay dividends to

investors than firms which have unstable cash flow position (Amidu and Abor, 2006; Anil and Kapoor, 2008; Gupta and Banga, 2010). According to Gill et al. (2010) found that there was an insignificant positive relationship between dividend payout and cash flow. Their results show that cash flow is not an important factor to determine dividend policy.

However, Mehar (2005) found a significant negative relationship between dividends payments and liquidity. Mehar (2005) and Al-Najjar and Hussainey (2009) pointed out that if firms have a good liquidity position, it does not mean that firms will pay higher or lower dividends to shareholders. Their findings are consistent with Imran's (2011) study. Some researchers stated that there was negative association between dividend payments and liquidity; it means firms have higher cash dividends in which will reduce the firms' cash position and consequently lead to low liquidity (Darling, 1957; Baker et al., 2001; Myers and Bacon, 2004; Kania and Bacon, 2005). Al-Najjar and Hussainey (2009), Kapoor et al. (2010), Marfo-Yiadom and Agyei (2011) and Adu-Boanyah et al. (2013) found that there was a negative relationship between dividend policy and liquidity but was statistically insignificant.

For this present study, we used cash flow to total assets as a proxy for the liquidity (Al-Najjar and Hussainey; 2009).

2.4.4 Past Dividend

Pattern of past dividends are most important determinants of dividend decisions (Baker et al., 2001). Farrelly et al. (1986) showed that the factor determinants of dividends payment is based on level of future earnings and past dividends pattern. Eriotis and Vasiliou (2003) suggested that firms making dividend policy decisions are not only based on the net distributed earnings, but they also have to consider past dividends. In addition, firms that change dividend policy is based on past earnings and dividend payment records (Charitou et al. 2010).

Pandey (2003) and Al-Twaijry (2007) find that past dividend has a significant relationship to the current dividend payout ratios in Kuala Lumpur Stock Exchange (KLSE) companies. Pandey (2003) stated that Malaysian firms take into account past dividends as an important benchmark for deciding the current dividend payment. Ahmed and Javid (2009) reported that most of the non-financial firms use past dividend per share to determine dividend payment. But they added that current earnings of the firms is a priority to set the dividend policy than past dividend per share.

Moh'd et al. (1995), Imran (2011), Al-Ajmi and Hussain (2011) and Adu-Boanyah et al. (2013) showed that there was a positive association between dividend policy and the previous year's dividend. Imran (2011) suggests that companies decide to increase the current year dividends by referring to past dividends.

Marfo-Yiadom and Agyei (2011) found that there was a positive relationship between changes in the level of dividend payment and dividend payout. They suggest that the current year's dividend is affected by the dividend paid last year and the banks which paid dividends the previous year preferred to pay dividends in the current year.

Lagged dividend per share is used to measure past dividends (Al-Twaijry, 2007; Imran, 2011; Al-Ajmi and Hussain, 2011; Adu-Boanyah et al., 2013).

2.4.5 Size of Firm

Firm size is one of the explanatory variables that affect the companies' dividend policy. Larger firms can pay more dividends from their earnings than smaller firms (Eddy and Seifert, 1988; Redding, 1997; Denis and Osobov, 2008). When large firms are in the mature stage, they have the advantage of accessing capital market by increasing external funds and therefore, internal funding will be decreased, thus this will allow the firms to distribute higher dividends to shareholders (Higgins, 1972; Chang and Rhee, 1990; Gul and Kealey, 1999; Koch and Shenoy, 1999).

There is a strong significant positive relationship between dividend policy and firm size (Lloyd et al., 1985; Mitton, 2004; Al-Najjar and Hussainey, 2009; Leary and Michaely, 2011). In addition, Al-Najjar and Hussainey (2009) suggest that large companies are more diversified than smaller firms; large companies have low risk of financial distress, and they can pay higher dividends to shareholders. In contrast, Al-Kuwari (2012) found that there was a positive relationship between dividend

payout and firm size but it was not statistically significant. This shows that firm size is not a major factor that affects dividend policy.

However, Ahmed and Javid (2009) found size of the firms have a negative relationship with dividend payout policy. Juhmani (2009) and Kapoor et al. (2010) revealed that firm size had a significant negative relationship with dividend payout ratio. The results also indicated that most of the large-sized firms were more likely to invest in their own assets rather than distribute dividends to shareholders. Their study was consistent with the study by Naceur et al. (2006) who found a negative relationship between dividend payments and firm size.

The natural logarithm of total assets is used to measure firm size (Koch and Shenoy, 1999; Ahmed and Javid, 2009; Al-Najjar and Hussainey, 2009).

2.4.6 Sales Growth

Firms that have rapidly-growing revenues tend to pay lower dividends (Myers and Majluf 1984; Jones and Sharma, 2001; and Michaely, 2011). Higgins (1972), Gul (1999), and Abor and Bokpin (2010) revealed that there was a negative association between dividend policy and growth opportunities. Some researchers found that there was a significant and negative association between dividend policy and growth in sales (Alli et al., 1993; Porta et al., 2000; Kania and Bacon 2005; Marfo-Yiadom and Agyei, 2011). This indicates that growing firms need more funds in order to finance their growth. Thus, firms need to retain a greater proportion of their earnings by paying low dividends (Mehar, 2005). However, other researchers failed to find a significant relationship between dividend payout ratio and sales growth (Anil and Kapoor, 2008; Al-Kuwari, 2009; Kim and Gu, 2009). Besides that, most of the researchers found a significant negative relationship between dividend payout and historical sales growth (Rozeff, 1982; Lloyd et al., 1985; Collins et al. 1996; Gill et al., 2010). Higgins (1981) suggests a positive relationship between growth and financing needs.

In contrast, Imran (2011) found that dividend per share has a positive and significant relationship with sales growth. D'Souza and Saxena (1999), Gupta and Banga (2010) and Islam et al. (2012) showed that there was a positive but insignificant relationship between dividend policy and past sales growth.

Ahmed and Javid (2009) found a mixed relationship between dividend policy and sales growth and they used the general method of moment, pooled least square, fixed effect and random effect model.

Due to the fact that banks have different financial statements as compared to non-financial firms, we used sales growth of interest income as a proxy for growth rate (Marfo-Yiadom and Agyei, 2011).

2.4.7 Corporate Tax

According to the tax-preference theory, firms should retain their earnings rather than pay dividends to shareholders due to preferential tax treatment of capital gains versus dividends. This indicates that increasing tax will reduce dividend payouts.

Under the dividend clientele effect, Elton and Gruber (1970), Litzenberger and Ramaswamy (1982), Chang and Rhee (1990) and Kalay and Michaely (2000) found a negative relationship between dividend policy and corporate tax rate. Al-Malkawi (2007) stated that there was a negative association between dividend policy and tax but it was not statistically significant.

Rafique (2012) found that there was a significant relationship between dividend payout and corporate tax in the listed non financial firms. The finding is consistent with past literature. Mehar (2005), Amidu and Abor (2006) and Gill et al., (2010)

revealed that there was a statistically significant and positive relationship between dividend payout and corporate tax. It means the greater the corporate tax, the greater the dividend payout. However, Anil and Kapoor (2008), found a positive but insignificant relationship between dividend payout and corporate tax. Their study indicated that corporate tax was not an important factor which determined dividend policy in the information technology sector. Their findings are also supported by Omet (2004).

Corporate tax divided by net profit before tax is measured as corporate tax (Amidu and Abor, 2006; Anil and Kapoor, 2008; Gill et al., 2010; Rafique, 2012).

2.4.8 Business Risk

Chang and Rhee (1990) state that firms that have stable profits are able to predict their future profits. Therefore, firms with lower risks are capable of distributing dividends than firms with higher risks. Firms pay lower dividends to shareholders when firms are at high business risks due to high degrees of financial leverage. Moreover, Bulan and Hull (2013) showed that the firm's financial constraints are the major factors that determine dividend cut when the firm has high default risks.

Han et al. (1999), Aivazian et al. (2003), Al-Najjar and Hussainey (2009), and Marfo-Yiadom and Agyei (2011) found a significant negative relationship between dividend payments decision and business risk. This means the firm with higher business risks may face bankruptcy. Thus, these firms are less likely to pay dividends to shareholders. Lee (2009) stated that banks with higher risks will pay

more dividends to shareholders than lower risks banks. The results support the transaction costs theory (Holder et al.). However, Amidu and Abor (2006) and Al Kuwari (2009) revealed that there was a negative relationship between dividend payout and business risks but it was not significant.

Some researchers used beta to measure firm risks and they found that there was a statistically significant and positive relationship between dividend policy and firm risk (Anil and Kapoor, 2008; Al-Shabibi and Ramesh 2011). But Abor and Bokpin (2010) failed to find a significant positive relationship between dividend payout and beta.

We used the standard deviation of the firm's return on assets as a proxy for business risk (Han et al., 1999; Aivazian et al., 2003; Marfo-Yiadom, 2011).

Table 2.1: *Key Concepts of the Variables and the Expected Sign*		
Dependent Variable	**Measurement**	**Expected Sign**
Y = Dividend Payout Ratio	$\frac{\text{Dividend per Share}}{\text{Earnings per Share}}$	
Independent Variables	**Measurement**	**Expected Sign**
X_1 = Leverage	$\frac{\text{Total Debt}}{\text{Total Equity}}$	+ / -
X_2 = Profitability	$\frac{\text{Net Income}}{\text{Total Equity}}$	+ / -
X_3 = Liquidity	$\frac{\text{Cash Flow}}{\text{Total Assets}}$	+ / -
X_4 =Past Dividend	Lagged Dividends per Share	+
X_5 = Size of Firm	Natural Logarithm (Total Assets)	+ / -
X_6 = Sales Growth: Annual Sales Growth	Sales Growth in Interest Income	+ / -
X_7 = Corporate Tax	$\frac{\text{Corporate Tax}}{\text{Net Profit before Tax}}$	+ / -
X_8 = Business Risk	Standard Deviation of Return on Assets	+ / -

2.5 Chapter Summary

In this chapter, we discussed several underpinning theories related to dividend policies such as agency theory, signaling theory, pecking order theory, transaction cost theory, life cycle theory and bird hand theory. All these theories are fundamental to explain firm dividend policy. Meanwhile, we also discussed dividend policy in the banking sector and this can help us to identify the differences in dividend policy between financial firms and non-financial firms.

The main aim of this study is to determine the relationship between dividend policy, leverage, profitability, liquidity, past dividend, size of the firm, sales growth, corporate tax and business risk. Past literature and theories provided the explanation on the factors that influence dividend policy.

This study focuses on dividend policy in the Malaysian banking sector. Several studies in the past have discussed the relationship between leverage, profitability, liquidity, past dividend, size of the firm, sales growth, corporate tax and risk from the perspective of dividend policy but not many researchers have conducted research in the banking sector especially in Malaysia.

CHAPTER THREE

METHODOLOGY

3.0 Chapter Overview

This chapter includes ten sections; section 3.1 research framework, sections 3.2 hypotheses/propositions development, section 3.3 research design, section 3.4 operational definitions, section 3.5 measurement of variables/instrumentation, section 3.6 data collection, section 3.7 sampling, section 3.8 data collection procedures, section 3.9 techniques of data analysis, and section 3.10 chapter summary.

3.1 Research Framework

The predictor variables include: leverage, profitability, liquidity, past dividend, size of the firm, sales growth, corporate tax and business risk. The primary dependent variable is dividend payment decision. Figure 3.1 illustrates the theoretical framework of the study.

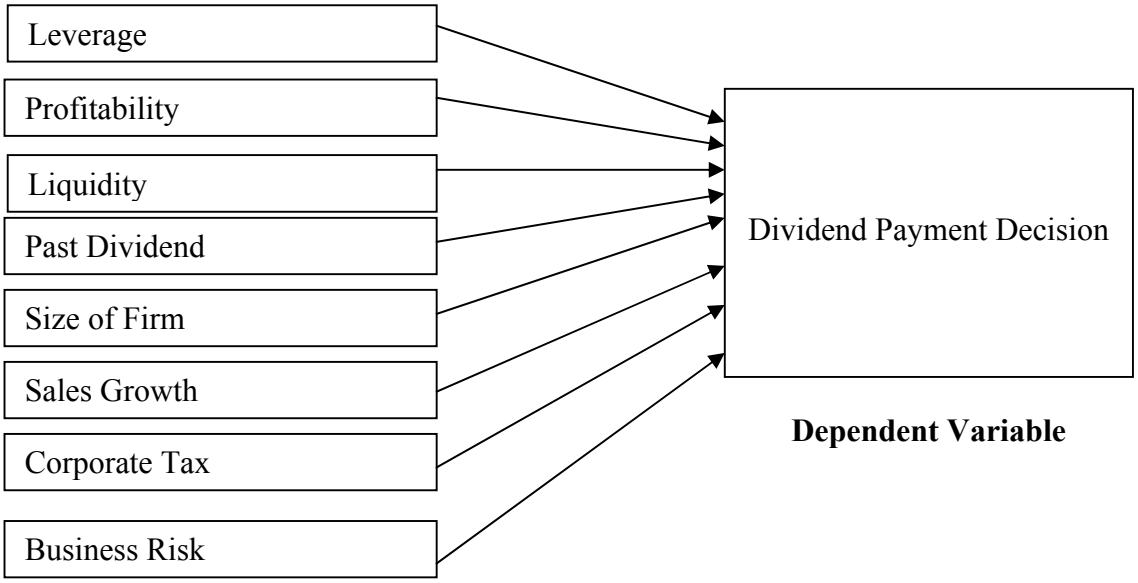

Figure 3.1: *Theoretical Framework*

3.2 Hypotheses/Propositions Development

In this section, we will discuss the relationship between the dependent variable and independent variables. Meanwhile, we are also interested to know whether there are different dividend policies between domestic banks and foreign banks. In this study, we developed hypotheses based on past literature. The findings of this study will help us to make decisions on whether to accept or reject the null or alternate hypothesis.

3.2.1 Leverage and Dividend Policy

H_{01}: Leverage has no significant relationship with dividend policy.

H_{a1}: Leverage has a significant relationship with dividend policy.

3.2.2 Profitability and Dividend Policy

H_{02}: Profitability has no significant relationship with dividend policy.

H_{a2}: Profitability has a significant relationship with dividend policy.

3.2.3 Liquidity and Dividend Policy

H_{03}: Liquidity has no significant relationship with dividend policy.

H_{a3}: Liquidity has a significant relationship with dividend policy.

3.2.4 Past Dividend and Dividend Policy

H_{04}: Past dividend has no significant relationship with dividend policy.

H_{a4}: Past dividend has a significant positive relationship with dividend policy.

3.2.5 Size of Firm and Dividend Policy

H_{05}: Size firm has no significant relationship with dividend policy.

H_{a5}: Size firm has a significant relationship with dividend policy.

3.2.6 Sales Growth and Dividend Policy

H_{06}: Sales growth has no significant relationship with dividend policy.

H_{a6}: Sales growth has a significant relationship with dividend policy.

3.2.7 Corporate Tax and Dividend Policy

H_{07}: Corporate tax has no significant relationship with dividend policy.

H_{a7}: Corporate tax has a significant relationship with dividend policy.

3.2.8 Business Risk and Dividend Policy

H_{08}: Business risk has no significant relationship with dividend policy.

H_{a8}: Business risk has a significant relationship with dividend policy.

3.2.9 Dividend Policy for Domestic Banks and Foreign Banks

H_{09}: There is no difference in dividend policy between domestic banks and foreign banks.

H_{a9}: There is a difference in dividend policy between domestic banks and foreign banks.

3.3 Research Design

This study is designed to explain the relationship between dependent and independent variables. We use hypotheses testing to decide whether there is a significant relationship between the dependent and independent variables. The independent variables comprise leverage, profitability, liquidity, past dividend, size of firm, sales growth, corporate tax and business risk while the dividend payout is the dependent variable.

3.4 Operational Definitions

The following definitions will be used in this study:

1. Dividend policy — dividend policy is the decision regarding dividend payout and profit retention by firms.
2. Dividend payout – dividend payout is the amount of dividends paid relative to the profits available to investors (dividend payout is equal to dividend-per-share divided by earnings-per-share).
3. Leverage – leverage refers to the amount of other people's money being utilized by the firm for its business activities.
4. Profitability – profitability is measured in terms of how firms generate their profits and business performance.
5. Liquidity – liquidity refers to the firm's ability to meet their short term obligations.
6. Past dividend – past dividend is defined as dividends paid by the firm in previous years.
7. Size of firm – size of firm is measured in terms of how large the firm is. Total asset is a benchmark to measure size of firm.
8. Sales growth – sales growth refers to increase in sales of the firm over a specific period.
9. Corporate tax – corporate tax refers to a levy placed on a firm's profit.
10. Business risk – business risk is an uncertain outcome about a firm's current and future earnings.
11. Domestic bank – Domestic bank refers to a bank operating within its own country.

12. Foreign bank – Foreign bank refer to bank is operating outside its own country.

3.5 Measurement of Variables/Instrumentation

In this study, we used two types of variables to examine the factors that influence dividend policy in the Malaysian banking sector. The dependent variable is dividend payout while the independent variables are leverage, profitability, liquidity, past dividend, firm size, sales growth, corporate tax and business risk.

1. Dividend Payout = Dividend per Share to Earnings per Share
2. Leverage = Total Debt to Total Equity
3. Profitability = Return on Equity (Net Income to Total Equity Ratio)
4. Liquidity = Cash Flow to Total Assets
5. Past Dividend = Lagged Dividends per Share
6. Firm Size = The Natural Logarithm of the Total Assets
7. Sales Growth = Sales Growth in Interest Income
8. Corporate Tax = Corporate Tax to Net Profit before Tax
9. Business Risk = The Standard Deviation of Return on Assets

3.5.1 Dependent Variable

The dependent variable is defined as a variable that is predicted and / or explained by some other variables. In this study, our dependent variable is dividend policy.

3.5.2 Independent Variables

Independent variables refer to variables that are expected to influence the dependent variable in some way. In this study, eight independent variables that were included were as follows: leverage, profitability, liquidity, past dividend, size of firm, sales growth, corporate tax and business risk.

3.6 Data Collection

Secondary data is information gathered and recorded by someone other than the researcher who is conducting the current project. There are two categories of secondary data; internal and external. Internal data is generated and recorded by an organization and outsiders have no permission to access it. There are many sources of external data, including journals, books and periodicals, the media, government publications, census data and so on. The advantages of acquiring secondary data as compared to primary data are that the researcher saves money and time.

In this study, data collected was in the form of secondary data from *Bank Negara, Bursa Malaysia* and *Universiti Utara Malaysia* (UUM) library. In addition, we also used journals, books, research papers, and dissertations.

3.7 Sampling

In this study, we selected eight domestic banks and eleven foreign banks which are operating in Malaysia. We used panel data covering the period from 2007 to 2011 for the above 19 banks in Malaysia. We included banks that pay dividends and do not pay dividends. Table 3.1 shows the list of banks.

Table 3.1: *List of Banks*

	Domestic Banks		**Foreign Banks**
1.	Affin Bank Berhad	1.	Bangkok Bank Berhad
2.	Alliance Bank Malaysia Berhad	2.	Bank of China (Malaysia) Berhad
3.	AmBank (M) Berhad	3.	Citibank Berhad
4.	CIMB Bank Berhad	4.	Deutsche Bank (Malaysia) Berhad
5.	Hong Leong Bank Berhad	5.	HSBC Bank Malaysia Berhad
6.	Malayan Banking Berhad	6.	J.P. Morgan Chase Bank Berhad
7.	Public Bank Berhad	7.	OCBC Bank (Malaysia) Berhad
8.	RHB Bank Berhad	8.	Standard Chartered Bank Malaysia Berhad
		9.	The Bank of Nova Scotia Berhad
		10.	The Royal Bank of Scotland Berhad
		11.	United Overseas Bank (Malaysia) Bhd

3.8 Data Collection Procedures

In this study, we collected all the secondary data from *Bank Negara* and *Bursa Malaysia*. Annual reports of the bank are our main resources. In annual reports, we used a balance sheet and income statement to determine the leverage ratio, profitability ratio, liquidity ratio, past dividend, size of firm, sales growth, corporate tax and business risk. Furthermore, we used the Microsoft Excel version 2007 to obtain the figures for the leverage ratio, profitability ratio, liquidity ratio, past dividend, size of firm, sales growth, corporate tax and business risk.

3.9 Techniques for Data Analysis

We used Gnu Regression, Econometrics and Time-series Library (GRETL) and the Statistical Package of Science Social (SPSS) software edition 21 to analyze our data. The analysis includes descriptive statistics, correlation of variables, regression analysis and analysis of variance (ANOVA).

3.9.1 Descriptive Analysis

Descriptive statistics includes methods used for organizing and describing data by using summary measures such as minimum, maximum, means and standard deviation. It is used to interpret the basic features of data.

3.9.2 Ordinary Least Squares (OLS) Regression Model

In this study, we applied the Pooled Ordinary Least Squares (OLS) Regression Model. The main purpose of this model of analysis is to test for factors that influence the dividend policy in the Malaysian banking sector. It examines whether independent variables have an effect on the dependent variable. Besides, it is also used to interpret the correlation between the dependent and independent variables.

Equation

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + \beta_7 X_7 + \beta_8 X_8 + \varepsilon$$

Where:

Y = Dependent variable which represents dividend payout

β_0 = intercept term;

β = Coefficient Beta value;

X_1 = Independent variable which represents leverage;

X_2 = Independent variable which represents profitability;

X_3 = Independent variable which represents liquidity;

X_4 = Independent variable which represents past dividend;

X_5 = Independent variable which represents size of firm;

X_6 = Independent variable which represents sales growth;

X_7 = Independent variable which represents corporate tax;

X_8 = Independent variable which represents business risk;

ε = the random error term.

3.9.3 Correlation Analysis

The outcome of the analyses shows the nature, direction and significance of the correlation of the variables. This is also known as Pearson correlation. The results will determine the interrelationships between the variables.

3.9.4 Analysis of Variance (ANOVA)

We used one-way analysis of variance (ANOVA) to compare whether there were any differences in dividend policy between domestic and foreign banks.

3.10 Chapter Summary

This chapter discussed the methods we applied in this study. The theoretical framework is constructed to identify the factors that influence dividend policy. Hypotheses are developed based on past literature to determine the relationships between the independent and dependent variable and whether there were any significant differences between the independent and dependent variables. The operational definition is the meaning of each variable we used in this study. In this part, we also provide information where we collected the data and the sample size we used. Finally, we discussed the techniques we used to analyze our data. We used several methods to generate our results such as descriptive statistics, ordinary least square model, Pearson correlation, and analysis of variance (ANOVA).

CHAPTER FOUR

RESULTS AND DISCUSSION

4.0 Chapter Overview

In this study, we use different models to generate our results. This chapter comprises seven sections: section 4.1 descriptive statistics, section 4.2 collinearity test, section 4.3 Pearson correlation, section 4.4 multiple-linear regression analysis, section 4.5 analysis of variance (ANOVA), section 4.6 discussion and section 4.7 chapter summary.

4.1 Descriptive Statistics

Table 4.1: *Descriptive Statistics*

	N	Minimum	Maximum	Mean	Std. Deviation
Y: Dividend Payout	95	-105.26	99.26	26.2198	32.32081
X1: Leverage	95	2.17	22.97	10.9431	4.23439
X2: Profitability	95	-19.07	34.06	12.6220	7.86568
X3: Liquidity	95	-99.88	50.34	2.0013	18.17582
X4: Past Dividend	95	0.00	4.52	0.4325	0.89722
X5: Size of Firm	95	20.82	26.50	24.0599	1.47504
X6: Sales Growth	95	-59.35	96.34	6.2737	23.55977
X7: Corporate Tax	95	-0.55	1.86	0.2634	0.19901
X8: Business Risk	95	0.30	1.55	1.0142	0.23389

Table 4.1 shows the descriptive statistics for all the eight variables in this study. Based on the table above, the mean of dividend payout is 26.22 percent and the standard deviation is 32.32 percent. The lowest dividend payout is -105.26 percent and the highest is 99.26. The minimum and maximum values for leverage are 2.17 times and 22.97 times respectively while the mean and standard deviation are 10.94 times and 4.23 times respectively. The minimum and maximum values of profitability are -19.07 percent and 34.06 percent respectively while the mean and standard deviation are 12.62 percent and 7.87 percent respectively.

The mean and standard deviation of liquidity are 2 percent and 18.18 percent respectively while the lowest value is -99.88 percent and the highest value is 50.34 percent. The minimum and maximum values of past dividends were zero sen and 452 sen respectively while the mean and standard deviation are 4.32 sen and 8.97 sen respectively. The minimum value for size of firm is 20.82 times while the maximum value is 26.50 times. The mean for size of firm is 24.06 times with a standard deviation of 1.48 times. Sales growth has a mean of 6.27 percent with a minimum value of -59.35 percent and a maximum 96.34 percent respectively, with a standard deviation of 23.56. The minimum and maximum values for corporate tax are -0.55 times and 1.86 times while the mean and standard deviation are 0.26 times and 0.20 times. The mean and standard deviation of business risk are 1.01 times and 0.23 times respectively while the lowest value is 0.30 times and the highest value is 1.55 times.

4.2 Collinearity Test

Table 4.2: *Collinearity Statistics*

	Tolerance	VIF
X1: Leverage	0.351	2.851
X2: Profitability	0.284	3.520
X3: Liquidity	0.843	1.186
X4: Past Dividend	0.694	1.442
X5: Size of Firm	0.453	2.209
X6: Sales Growth	0.870	1.149
X7: Corporate Tax	0.841	1.188
X8: Business Risk	0.365	2.737

In this study, we examined our explanatory variables to determine whether the variables have multicollinearity or not. Table 4.2 presents the results of the collinearity statistics. The results showed that there is no collinearity for each of the independent variables due to the value of the variance influence factor (VIF) which is lower than 10 and the tolerance value is greater than 0.1. The highest value for VIF is 3.52 and the lowest value is 1.15.

4.3 Pearson Correlation

Table 4.3: *Correlations*

	Y	X1	X2	X3	X4	X5	X6	X7	X8
Y: Dividend Payout	1								
X1: Leverage	0.343**	1							
X2: Profitability	0.487**	0.519**	1						
X3: Liquidity	0.003	0.153	-0.130	1					
X4: Past Dividend	0.358**	0.325**	0.514**	-0.023	1				
X5: Size of Firm	0.432**	0.676**	0.498**	0.017	0.214*	1			
X6: Sales Growth	-0.038	0.160	0.012	0.199	-0.076	-0.046	1		
X7: Corporate Tax	-0.327**	-0.025	-0.068	0.122	0.006	0.088	0.075	1	
X8: Business Risk	0.370**	0.082	0.682**	-0.310**	0.350**	0.225*	-0.051	-0.252*	1

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Table 4.3 presents the bivariate correlations between leverage, profitability, liquidity, past dividend, size of firm, sales growth, corporate tax, business risk and dividend payout. Based on the results, we found that leverage, profitability, past dividend, size of firm, and business risk have significant and positive correlations with dividend payout. However, liquidity has a positive correlation with dividend payout but it was insignificant. On the other hand, corporate tax has a significant negative correlation with dividend payout and sales growth has a negative correlation with dividend payout but are insignificant. The results of Pearson correlation analysis revealed that there is no multicollinearity as the value is below than 0.8 and below than -0.8.

4.4 Multiple Linear Regression Analysis

Table 4.4: *Model Summary*

Model	R	R Square	Adjusted R Square	F-Value	Sig.	Durbin-Watson
1	0.657	0.432	0.379	8.181	0.000	1.642

a. Predictors: (Constant), X8: Business Risk, X6: Sales Growth, X1: Leverage, X7: Corporate Tax, X3: Liquidity, X4: Past Dividend, X5: Size of Firm, X2: Profitability

b. Dependent Variable: Y: Dividend Payout

Table 4.4 reveals that R square is 0.432 which indicates that 43.2 percent of the variation in dividend payout is to explain independent variables and the adjusted R square is 37.9 percent and 62.1 percent could be explained by other variables. Meanwhile, the F-value is 8.18 and is significant (p-value < 0.05) indicating that the dividend payout has been significantly explained by the eight explanatory variables and this is a valid model.

Durbin Waston test indicates that the relation has no autocorrelation because the result is 1.642 which is close to 2.

Table 4.5: *Coefficients*

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-168.520	56.271		-2.995	0.004
	X1: Leverage	-1.193	1.047	-0.156	-1.139	0.258
	X2: Profitability	1.120	0.626	0.273	1.788	0.077
	X3: Liquidity	0.165	0.157	0.093	1.047	0.298
	X4: Past Dividend	7.153	3.515	0.199	2.035	0.045
	X5: Size of Firm	8.695	2.646	0.397	3.285	0.001
	X6: Sales Growth	0.034	0.120	0.025	0.284	0.777
	X7: Corporate Tax	-59.712	14.386	-0.368	-4.151	0.000
	X8: Business Risk	-3.394	18.578	-0.025	-0.183	0.855

a. Dependent Variable: Y: Dividend Payout

The multiple linear regression model estimated is shown in the following equation:

$$\hat{Y} = -168.52 - 1.19X_1 + 1.12X_2 + 0.17X_3 + 7.15X_4 + 8.69X_5 + 0.034X_6 - 59.71X_7 - 3.39X_8$$

(-3.0) (-1.14) (1.79) (1.05) (2.04) (3.23) (0.28) (-4.15) (-0.18)

The figures in parenthesis above are t-statistics.

Based on the t-statistics, we found that there are four out of eight independent variables tested and which are significant in predicting the dividend payout in the Malaysian banking sector. These include profitability, past dividend, size of firm and corporate tax. Meanwhile, the results show that they are statistically insignificant for leverage, liquidity, sales growth and business risk. This indicates that leverage, liquidity, sales growth and business risk are not major factors that influence dividend payout in the Malaysian banking sector.

Table 4.5 shows that profitability, liquidity, past dividend, size of firm, and sales growth have a positive relationship with dividend payout. This indicates that banks will pay more dividends to shareholders when profitability, liquidity, past dividend, size of firm, and sales growth are higher. Meanwhile, leverage, corporate tax and business risk has an inverse relationship with dividend payout in the Malaysia banking sector. It means higher leverage, corporate tax, and business risk will lower the dividend payout.

4.5 Analysis of Variance (ANOVA)

Table 4.6: *Descriptive Statistics*

Y: Dividend Payout

	N	Mean	Std. Deviation	Minimum	Maximum
Domestic Banks	40	34.8062	35.97985	-105.26	92.61
Foreign Banks	55	19.9751	28.09190	0.00	99.26
Total	95	26.2198	32.32081	-105.26	99.26

Table 4.7: *Test of Homogeneity of Variances*

Y: Dividend Payout

Levene Statistic	df1	df2	Sig.
0.062	1	93	0.804

Table 4.8: *ANOVA*

Y: Dividend Payout

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	5093.860	1	5093.860	5.088	0.026
Within Groups	93101.806	93	1001.095		
Total	98195.666	94			

Table 4.6 shows the descriptive statistics for eight domestic banks and eleven foreign banks in Malaysian from 2007 to 2011. From the table, the minimum and maximum values of divided payout for domestic banks were -105.26 percent and 92.61 while the mean and standard deviation were 34.81 percent and 35.98 percent respectively. Banks have a negative dividend payout due to losses in the net income in the year. Meanwhile, the minimum and maximum values of dividend payout for foreign banks were zero percent and 99.26 percent respectively while the average and standard deviation were 19.98 percent and 28.09 percent respectively.

Table 4.7 presents the results of the test of homogeneity of variances. Levene's test probability dividend payout for domestic and foreign banks was 0.804 which indicates that the p-value is greater than 0.05; therefore we can assume that the population variances for each group are relatively equal.

Table 4.8 reveals the results of ANOVA, it is clear that the p-value is less than 0.05 and is therefore statistical significant. The results of this study show that there is a difference in dividend payout between domestic and foreign banks. We can conclude that domestic banks have a higher dividend payout than foreign banks. We also found that some foreign banks are not paying dividends at all to their shareholders.

4.6 Discussion

4.6.1 Leverage and Dividend Policy

Based on Table 4.5, we found that leverage was consistent with the expected sign at -0.156. Even though the study generated the same expected signs with prior literate but the results show that leverage and dividend policy is not statistically significant and the p-value is at 0.258. Our results were consistent with Al-Najjar and Hussainey (2009), Al-Ajmi and Hussain (2011), and Islam et al. (2012). This indicates that the financial leverage is not the factor that influences dividend policy in the Malaysian banking sector. Thus, we reject the alternate hypothesis (H_{a1}). Higher degree leverage banks have the obligation to pay interest to their bondholders. As a priority, banks are restricted to pay higher dividends to shareholders. Meanwhile, banks will face financial slack with high leverage ratio, hence banks tend to pay less or no dividends at all. Besides that, highly levered banks tend to lower their dividend payout ratio due to higher transaction costs.

4.6.2 Profitability and Dividend Policy

In Table 4.5, the profitability produced an expected sign at 0.273 and is statistically significant (p-value = 0.077). This finding is consistent with prior empirical evidence in which banks will pay more dividends to shareholders when their banks have a good profitability ratio (Naceur et al., 2006; Nnadi and Akpomi, 2008; Abor and Bokpin, 2010; El-Ansary and Gomaa, 2012). Meanwhile, this also supports signaling theory. Therefore, we accept the alternate hypothesis (H_{a2}).

After firms have considered internal financing, high profitable banks will distribute higher dividends to shareholders because more internal funds are available and this is consistent with the pecking order argument. Banks which have high profitability tend to pay dividends to shareholders and this shows that these banks have good business performance; this supports signaling argument. Profitable banks are able to pay more dividends because they have a stable operating cash flows and lower business risk.

4.6.3 Liquidity and Dividend Policy

Based on Table 4.5, the study found that liquidity met the expected sign at 0.093 but is statistical insignificant. The liquidity p-value is 0.298 which shows that liquidity is not an important determinant of dividend policy in the Malaysian banking sector. Our results were inconsistent with past studies (Amidu and Abor, 2006; Anil and Kapoor, 2008; Gupta and Banga, 2010). Thus, we reject the hypothesis (H_{a3}). Firms which have a good liquidity position are more likely to pay dividend to investors and this supports the signaling argument. However, our results do not support Alli et.al's (1993) statement that cash flow is an important factor which determines firm dividend payouts. Meanwhile, our results showed that banks have a stable cash flow position; it does not mean banks will pay higher or lower dividends to shareholders.

4.6.4 Past Dividend and Dividend Policy

In Table 4.5, the findings indicate that past dividend produced an expected sign at 0.199 and there is a positive relationship between dividend policy and past dividend. Past dividend is significant and the p-value is 0.045 which means that past dividend will affect Malaysian banks' dividend policy. The findings are in line with prior studies by Al-Twaijry (2007), Ahmed and Javid (2009), Al-Ajmi and Hussain (2011), Marfo-Yiadom and Agyei (2011). Therefore, we accept the hypothesis (H_{a4}). The results indicate that most banks in Malaysia will refer to past record on dividend. Meanwhile, the findings showed that dividend history had a positive impact on the current dividend payment and it supports signaling theory.

4.6.5 Size of Firm and Dividend Policy

Based on Table 4.5, we found that size of firm generated an expected sign at 0.397. The findings showed a strong significant relationship between dividend policy and size of firm and the p-value is at 0.001 level. It means large banks are able to pay dividends to shareholders than small banks. The findings are consistent with Lloyd et al. (1985), Mitton (2004), Al-Najjar and Hussainey (2009), and Leary and Michaely (2011). Thus, we accept the alternate hypothesis (H_{a5}). There are several reasons why larger banks pay higher dividends. First, basically larger banks have higher agency costs (Jensen and Meckling, 1976; Moh'd et al., 1995; Zeng, 2003) thus, they will tend to pay more dividends in order to minimize agency costs. Second, larger banks have advantages to access the capital market with lower

issuance costs for external financing. Consequently, larger banks are more capable of distributing higher dividends than smaller banks.

4.6.6 Sales Growth and Dividend Policy

From Table 4.5, although the findings of the study showed that sales growth generated an expected sign (beta = 0.025) but there is not statistical significance (p-value = 0.777). It means that sales growth was not an important factor that influences dividend policy in the Malaysian banking sector. Our findings are inconsistent with past study (Imran, 2011). Therefore, we reject the hypothesis (H_{a6}). Banks have a higher sales growth, profitability and therefore the banks able pay to more dividends to their shareholders. The findings contradicts with the transaction cost argument and life cycle theory. With higher sales growth, it does not mean banks have lower dividend payouts, higher transaction costs and higher capital expenditure. However, our results revealed that higher sales growth of banks is not a major factor that affect banks' dividend policy.

4.6.7 Corporate Tax and Dividend Policy

Based on the findings in Table 4.5, we found that corporate tax produced an expected sign at -0.368. The results showed strong evidence (p-value < 0.05) that corporate tax is an important factor that influences dividend payout in the Malaysian banking sector. Our findings support tax-preference theory. Thus, we accept our hypothesis (H_{a7}). Banks with a higher corporate tax are less likely to pay dividend to their shareholders and this is contrary to the irrelevant dividend argument. Meanwhile, high corporate tax will reduce earnings of banks. Consequently, banks have lower dividend payouts.

4.6.8 Business Risk and Dividend Policy

In Table 4.5, the results indicate that business risk generated an expected sign at -0.025 (Han et al., 1999; Aivazian et al., 2003; Al-Najjar and Hussainey, 2009; Marfo-Yiadom and Agyei, 2011) but it is insignificant (p-value = 0.855) and showed that business risk is not a factor that determines dividend policy in the Malaysian banking sector. The findings are consistent with Amidu and Abor (2006) and Al Kuwari (2009). Therefore, we reject the hypothesis (H_{a8}). Banks with higher business risk tend to pay lower dividends. Amidu and Abor (2006) suggested that firms experiencing unstable earnings have difficulty in paying dividends to their shareholders, therefore firms pay less or no dividends at all. In addition, banks which face a financial problem will pay less or no dividends due to higher default risk and lower credit rating.

4.6.9 Dividend Policy for Domestic Banks and Foreign Banks

Based on Table 4.8, we found that there is a difference in dividend policy between domestic and foreign banks and the p-value is at 0.026. Thus, we accept the hypothesis (H_{a9}).

We found that some foreign banks do not pay dividends. There are several reasons why firms are not paying dividend to shareholders (Baker et al, 2007). Firms are not paying dividend because firms have a lower profitability, poor liquidity, smaller firm size and fewer growth opportunities. Meanwhile, the results showed that domestic banks have higher dividend payout than foreign banks. The findings are not consistent with Ameer, (2008) study.

4.7 Chapter Summary

In this chapter, the findings on independent variables which influence the dependent variable are discussed, and this includes whether the hypothesis are accepted or rejected. Our dependent variable is dividend payout and the independent variables include leverage, profitability, liquidity, past dividend, size of the firm, sales growth, corporate tax and business risk. We used descriptive statistics, correlation, multiple linear regression analysis, and ANOVA to explain the factors affect dividend policy in the Malaysian banking sector. The output will help us to interpret dividend policy in the Malaysian banking sector.

Moreover, the data was also examined for autocorrelation and multicollinearity in order to ensure consistency. The OLS model helped us to identify which variable has a strong evidence to influence dividend policy in the Malaysian banking sector. Finally, we discussed whether we accepted or rejected the hypothesis based on the findings.

CHAPTER FIVE

CONCLUSION AND RECOMMENDATIONS

5.0 Chapter Overview

This chapter presents the conclusion and recommendations of the study followed by suggestions for future research. This chapter consists of two sections: section 5.1 conclusion, section 5.2 recommendations and 5.3 chapter summary.

5.1 Conclusion

The purpose of this study was to examine the determinants that affect the dividend policy in the Malaysian banking sector. Eight explanatory variables which were examined in this study were leverage, profitability, liquidity, past dividend, size of the firm, sales growth, corporate tax and business risk. The data was collected from 19 commercial banks in Malaysia which included eight domestic and eleven foreign banks.

The analyses used secondary data derived from the annual reports of banks over a five year period from 2007 to 2011. Pooled Ordinary Least Squares (OLS) model was used to estimate the regression equation and to determine which variable was affected payment decision in the Malaysian banking sector. The regression model shows positive relationships between dividend policy and profitability, liquidity,

past dividend, size of firm and sales growth. Meanwhile, the results also show negative associations between dividend policy and leverage, corporate tax and business risk.

The findings reveal that profitability, past dividend, size of firm and corporate tax are statistically significant factors which influence dividend decisions of banks in Malaysia. More profitable banks, larger banks and banks that paid dividends in the previous year were more likely to pay dividends to their shareholders. Besides, banks with higher corporate tax were more likely to pay less dividends to their shareholders and this supports tax-preference theory. In contrast, past literature shows that dividend payment decisions have no statistically significant associations with leverage, liquidity, sales growth and business risk. This indicates that leverage, liquidity, sales growth and business risk were not factors that impact dividend policy in the Malaysian banking sector.

Finally, the findings show that domestic banks have higher dividend payout than foreign banks. Furthermore, some foreign banks do not pay dividend to shareholders at all.

5.2 Recommendation

Based on the results, there are several recommendations for future research. Due to time constraints and limited data, the study only used financial statements over a period of five years to generate results. The results may have been different if the study included financial statements which were over a period exceeding five years. The results did not reach a consensus with results of past research as there was no concrete evidence on the factor that had the strongest influence on dividend policy. In addition, the findings may have differed if some variables had been omitted in this study.

Meanwhile, this study only used the ordinary least squares (OLS) model and therefore, the results may have differed if we had used different models such as tobit model, probit model, logit model, and fixed or random effect model.

Furthermore, there are many other variables that could be included for investigation in this study, such as age of bank, asset structure, tangibility, insider ownership, beta of the firm, growth opportunities, market price of share and so forth.

Based on these findings, it would be useful to consider future research as follows:

1. What determines dividend policy for financial firms and non-financial firms in Malaysia?
2. What determines dividend policy decisions for financial firms in developed and developing countries?
3. What determines dividend policy in the Malaysian Islamic banking sector?

5.3 Chapter Summary

This chapter discusses the findings based on the research questions and research objectives. The results show the variables that had a strong influence on dividend payment decisions in the Malaysian banking sector. Meanwhile, the results also highlight the variables that did not influence dividend policy in the Malaysian banking sector.

Besides, we also provided some recommendations to other researchers on future research topics.

REFERENCES

Abdulrasheed, A., Adenola, Y. K., & Atanda, A. O. (2011). Determinants of performance: A cross generational analysis of Nigerian banks. *European Journal of Social Sciences*, 24(4), 458-465.

Abor, J., & Bokpin, G. A. (2010). Investment opportunities, corporate finance, and dividend payout policy: Evidence from emerging markets. *Studies in Economics and Finance*, 27(3), 180-194.

Abreu, J. F., & Gulamhussen, M. A. (2013). Dividend payouts: Evidence from U.S. bank holding companies in the context of the financial crisis. *Journal of Corporate Finance*, 22, 54–65.

Adu-Boanyah, E., Ayentimi, D. T., & Frank, O. Y. (2013). Determinants of dividend payout policy of some selected manufacturing firms listed on the Ghana stock exchange. *Research Journal of Finance and Accounting*, 4(5), 49-61.

Afza, T., & Mirza, H. H. (2011). Do mature companies pay more dividends? Evidence from Pakistani stock market. *Mediterranean Journal of Social Sciences*, 2(2), 152-161.

Agrawal, A., & Jayaraman, N. (1994). The dividend policies of all-equity firms: A direct test of the free cash flow theory. *Managerial and Decision Economics*, 15, 139-148.

Agyei, S. K., & Marfo-Yiadom, E. (2011). Dividend policy and bank performance in Ghana. *International Journal of Economics and Finance*, 3(4), 202-207.

Ahmed, H., & Javid, A. Y. (2009). The determinants of dividend policy in Pakistan. *International Research Journal of Finance and Economics*, 29, 110-125.

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

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

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.

Al-Kuwari, D. (2012). Are large shareholders conducting influential monitoring in emerging markets? An investigation into the impact of large shareholders on dividend decisions: The case of Kuwait. *Research in World Economy*, 3(2), 52-67.

Alli, K. L., Khan, A. Q., & Ramirez, G. G. (1993). Determinants of dividend policy: A factorial analysis. *The Financial Review*, 28(4), 523-47.

Al-Malkawi, H. N. (2007). Determinants of corporate dividend policy in Jordan: An application of the tobit model. *Journal of Economic & Administrative Sciences*, 23(2), 44-70.

Al-Malkawi, H. N., Rafferty, M., & Pillai, R. (2010). Dividend policy: A review of theories and empirical evidence. *International Bulletin of Business Administration*, 9, 171-200.

Al-Najjar, B. (2009). Dividend behaviour and smoothing new evidence from Jordanian panel data. *Studies in Economics and Finance*, 26(3), 182-197.

Al-Najjar, B., & Hussainey, K. (2009). The association between dividend payout and outside directorships. *Journal of Applied Accounting Research*, 10(1), 4-19.

Al-Shabibi, B. K., & Ramesh, G. (2011). An empirical study on the determinants of dividend policy in the UK. *International Research Journal of Finance and Economics*, 80, 105-120.

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

Ameer, R. (2008). Product market competition, regulation and dividend payout policy of Malaysian banks. *Journal of Financial Regulation and Compliance*, 16(4), 318-334.

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

Andres, C., Betzer, A., Goergen. M., & Renneboog, L. (2009). Dividend policy of German firms: A panel data analysis of partial adjustment models. *Journal of Empirical Finance*, 16, 175–187.

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, 63-71.

Anthony, J. H., & Ramesh, K. (1992). Association between accounting performance measures and stock prices: A test of the life cycle hypothesis. *Journal of Accounting and Economics*, 15, (2–3), 203-227.

Baker, H. K., Farrelly, G. E., & Edelman, R. B. (1985). A survey of management views on dividend policy. *Financial Management*, 14(3), 78-84.

Baker, H. K., & Powell, G. E. (1999). How corporate managers view dividend policy. *Quarterly Journal of Business and Economics*, 38(2), 17-35.

Baker, H. K., & Powell, G. E. (2012). Dividend policy in Indonesia: Survey evidence from executives. *Journal of Asia Business Studies*, 6(1), 79-92.

Baker, H. K., Veit, E. T., & Powell, G. E. (2001). Factors influencing dividend policy decisions of Nasdaq firms. *The Financial Review*, 38, 19-38.

Baker, H. K., Saadi, S., Dutta, S., & Gandhi, D. (2007). The perception of dividends by Canadian managers: New survey evidence. *International Journal of Managerial Finance*, 3(1), 70-91.

Benartzi, S., Michaely, R., & Thaler, R. (1997). Do changes in dividends signal the future or the past?. *The Journal of Finance*, 52(3), 1007-1034.

Bhattacharya, S. (1979). Imperfect information, dividend policy, and "the bird in the hand" fallacy. *The Bell Journal of Economics*, 10(1), 259-270.

Bhattacharyya, N. (2007a). Dividend policy: A review. *Managerial Finance,* 33(1), 4-13.

Bhattacharyya, N. (2007b). Good managers invest more and pay less dividends: A model of dividend policy. *Corporate Governance and Finance Advances in Financial Economics*, 12, 91–117.

Black, F. (1976). The dividend puzzle. *Journal of Portfolio Management*, 2, 5–84.

Boldin, R., & Leggett, K. (1995). Bank dividend policy as a signal of bank quality. *Financial Services Review*, 4(1), 1-8.

Bulan, L., & Hull, T. (2013). The impact of technical defaults on dividend policy. *Journal of Banking & Finance*, 37, 814–823.

Casey, K. M., & Dickens, R. N. (2000). The effects of tax and regulatory changes on commercial bank dividend policy. *The Quarterly Review of Economics and Finance*, 40, 279–293.

Cavana, R. Y., Delahaye, B. L., Sekaran, U. (2001). *Applied business research: Qualitative and quantitative methods*. John Wiley.

Chang, R., & Rhee, S. (1990). The impact of personal taxes on corporate dividend policy and capital structure decisions. *Financial Management*, 19(2), 21-31.

Charitou, A., Lambertides, N., & Theodoulou, G. (2010). The effect of past earnings and dividend patterns on the information content of dividends when earnings are reduced. *A Journal of Accounting, Finance and Business Studies*, 46(2), 153-187.

Chen, C. R., & Steiner, T. L. (1999). Managerial ownership and agency conflicts: A nonlinear simultaneous equation analysis of managerial ownership, risk taking, debt policy, and dividend policy. *Financial Review*, 34, 119-136.

Chen, J., & Dhiensiri, N. (2009). Determinants of dividend policy: The evidence from New Zealand. *International Research Journal of Finance and Economics*, 34, 18-28.

Chiang, K., Frankfurter, G. M., Kosedag, A., & Wood, B. G. (2006). The perception of dividends by professional investors. *Managerial Finance*, 32(1), 60-81.

Collins, M. C., Saxena, A. K., & Wansley, J. W. (1996). The role of insiders and dividend policy: A comparison of regulated and unregulated firms. *Journal of Financial and Strategic Decisions*, 9(2), 1-8.

Crutchley, C. E., & Hansen, R. S. (1989). A test of the agency theory of managerial ownership, corporate leverage, and corporate dividends. *Financial Management*, 18 (4), 36-46.

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. J. (1992). Dividends and losses. *The Journal of Finance*, 47(5), 1837-1863.

Denis, D. J., & Osobov, I. (2008). Why do firms pay dividends? International evidence on the determinants of dividend policy. *Journal of Financial Economics*, 89, 62– 82.

Dickens, N., Casey, K. M., & Newman, J. A. (2002). Bank dividend policy: Explanatory factors. *Quarterly Journal of Business and Economics*, 41(1/2), 3-12.

Dhanani, A. (2005). Corporate dividend policy: The views of British financial managers. *Journal of Business Finance & Accounting*, 32(7) & (8), 1625-1672.

D'Souza, J., & Saxena, A. K. (1999). Agency cost, market risk, investment opportunities and dividend policy: An international perspective. *Managerial Finance*, 25(6), 35-43.

Eddy, A., & Seifert, B. (1988). Firm size and dividend announcements. *Journal of Financial Research*, 11, 295-302.

El-Ansary, O., & Gomaa, T. (2012). The life cycle theory of dividends: Evidence from Egypt. *International Research Journal of Finance and Economics*, 97, 72-80.

Elton, E. J., & Gruber, M. J, (1970). Marginal stockholder tax rates and the clientele effect. *The Review of Economics and Statistics*, 52(1), 68-74.

Eriotis, N., & Vasiliou, D. (2003). Dividend policy: An empirical analysis of the Greek market. *International Business & Economics Research Journal,* (3)3, 49-58.

Fama, E. F., & Babiaik, H. (1968). Dividend policy: An empirical analysis. *Journal of the American Statistical Association*, 63(324), 1132-1161.

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

Farrelly, G. E., Baker, H. K., & Edelman, R. B. (1986). Corporate dividends: Views of the policymakers. *Akron Business and Economic Review*, 17(4), 62-74.

Gill, A., Biger, N., & Tibrewala, R. (2010). Determinants of dividend payout ratios: Evidence from United States. *The Open Business Journal*, 3, 8-14.

Gitman, L. J., & Zutter, C. J. (2012). *Principles of managerial finance* (13th ed.). Boston, Prentice Hall, Pearson.

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. *The Journal of Finance,* 18(2), 264-272.

Grullon, G., Michaely, R., & Swaminathan, B. (2002). Are dividend changes a sign of firm maturity?. *Journal of Business*, 75(3), 387-424.

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

Gul, F. A. (1999). Growth opportunities, capital structure and dividend policies in Japan. *Journal of Corporate Finance*, 5, 141–168.

Gul, F. A., & Kealey, B. T. (1999), Chaebol, investment opportunity set and corporate debt and dividend policies of Korean companies. *Review of Quantitative Finance and Accounting,* 13(4), 401-16.

Gupta, A., & Banga, C. (2010). The determinants of corporate dividend policy. *Decision*, 37(2), 63-77.

Han, K. C., Lee, S. H., & Suk, D. Y. (1999). Institutional shareholders and dividends. *Journal of Financial and Strategic Decisions*, 12(1), 53-62.

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

Higgins, R.C. (1981). Sustainable growth under inflation. *Financial Management*, 10(4), 36-40.

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

Holder, M. E., Langrehr, F. W., & Hexter, J. L. (1998). Dividend policy determinants: An investigation of the influences of stakeholder theory. *Financial Management*, 27(3), 73-82.

Huda, F., & Farah, T. (2011). Determinants of dividend decision: A focus on banking sector in Bangladesh. *International Research Journal of Finance and Economics*, 77, 33-46.

Imran, K. (2011). Determinants of dividend payout policy: A case of Pakistan engineering sector. *The Romanian Economic Journal*, 16(41), 41-60.

Islam, T., Aamir, M., & Ahmad, A. (2012). Determinants and motivators of dividend policy: A study of cement industry of Pakistan. *Mediterranean Journal of Social Sciences*, 3(2), 103-108.

Jensen, G. R., Solberg, D. P., & Zorn, T. S. (1992). Simultaneous determination of insider ownership, debt, and dividend policies. *Journal of Financial and Quantitative Analysis*, 27(2), 274-263.

Jensen, M. C. (1986). Agency costs of free cash flow, corporate finance, and takeovers. *The 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.

Jones, S., & Sharma, R. (2001). The association between the investment opportunity set and corporate financing and dividend decisions: Some Australian evidence. *Managerial Finance*, 27(3), 48-64.

Juhmani, O. I. H. (2009). Determinants of dividend payout policy: Evidence from Bahraini firms. *Journal of International Finance and Economics*, 9(2), 77-86.

Kapoor, S., Mishra, A., & Anil, K. (2010). Dividend policy determinants of Indian services: A factorial analysis. *Paradigm*, 14(1), 24-41.

Kalay, A., & Michaely, R. (2000). Dividends and taxes: A re-examination. *Financial Management*, (Summer), 55-75.

Kania, S. L., & Bacon, F. W. (2005). What factors motivate the corporate dividend decision?. *ASBBS E-Journal*, 1(1), 97-107.

Khan, N. U., Burton, B. M., & Power, D. M. (2011). Managerial views about dividend policy in Pakistan. *Managerial Finance*, 37(10), 953-970.

Kim, H., & Gu, Z. (2009). Financial features of dividend-paying firms in the hospitality industry: A logistic regression analysis. *International Journal of Hospitality Management*, 28, 359–366.

Koch, P. D., & Shenoy, C. (1999). The information content of dividend and capital structure policies. *Financial Management*, 28(4), 16-35.

Kowalewski, O., Stetsyuk, I., & Talavera, O. (2007). *Corporate governance and dividend policy in Poland* (Working Paper). Wharton Financial Institutions.

Leary, M. T., & Michaely, R. (2011). Determinants of dividend smoothing: Empirical evidence. *The Review of Financial Studies*, 24(10), 3197-3249.

Lee, S. W. (2009). Determinants of dividend policy in Korean banking industry. *Banks and Bank Systems*, 4(1), 67-71.

Lintner, J. (1956). Distribution of incomes of corporations among dividends, retained earnings, and taxes. *The American Economic Review*, 46(2), 97-113.

Litzenberger, R. H., & Ramaswamy, K. (1982). The effects of dividends on common stock prices tax effects or information effects?. *The Journal of Finance*, 37(2), 429-443.

Liu, S. & Hu, Y. (2005). Empirical analysis of cash dividend payment in Chinese listed companies. *Nature and Science*, 3(1), 65-70.

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

Low, S. W., Glorfeld, L., Hearth, D., & Rimbey, J. N. (2001). The link between bank monitoring and corporate dividend policy: The case of dividend omissions. *Journal of Banking and Finance*, 25, 2069-2087.

Malik, F., Gul, S., Khan, M. T., Rehman, S. U., & Khan, M. (2013). Factors influencing corporate dividend payout decisions of financial and non-financial firms. *Research Journal of Finance and Accounting*, 4(1), 35-46.

Marfo-Yiadom, E., & Agyei, S. K. (2011). Determinants of dividend policy of banks in Ghana. *International Research Journal of Finance and Economics*, 61, 99-108.

McCabe, G. M. (1979). The empirical relationship between investment and financing: A new look. *Journal of Financial and Quantitative Analysis*, 14(1), 119-135.

Mehar, A. (2005). Corporate governance and dividend policy. *Pakistan Economic and Social Review*, 43(1), 93-106.

Miller, M. H., & Modigliani, F. (1961). Dividend policy, growth, and the valuation of shares. *The Journal of Business*, 34(4), 411-433.

Miller, M. H., & Rock, K. (1985). Dividend policy under asymmetric information. *The Journal of Finance*, 40(4), 1031-1051.

Mitton, T. (2004). Corporate governance and dividend policy in emerging markets. *Emerging Markets Review*, 5(4), 409–426.

Moh'd, M. A., Perry, L. G., & Rimbey, J. N. (1995). An Investigation of the dynamic relationship between agency theory and dividend policy. *The Financial Review*, 30(2), 367-385.

Mollah, S. (2011). Do emerging market firms follow different dividend policies? Empirical investigation on the pre- and post-reform dividend policy and behaviour of Dhaka Stock Exchange listed firms. *Studies in Economics and Finance*, 28(2), 118-135.

Mueller, D. C. (1972). A life cycle theory of the firm. *The 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 Journal*, 8(3), 17-28.

Myers, S. C. (1984). The capital structure puzzle. *Journal of Finance*, 39(3), 575-592.

Myers, S. C., & Majluf, S. N. (1984). Corporate financing and investment decisions when firms have information that investors do not have. *Journal of Financial Economics*, 13(2). 187-221.

Naceur, S. B., Goaied, M., & Belanes, A. (2006). On the determinants and dynamics of dividend policy. *International Review of Finance*, 6(1–2), 1–23.

Naser. K., Nuseibeh, R., & Rashed, W. (2013). Managers' perception of dividend policy: Evidence from companies listed on Abu Dhabi Securities Exchange. *Business Management and Economics*, 1(1), 001-012.

Nissim, D., & Ziv, A. (2001). Dividend changes and future profitability. *The Journal of Finance*, 56(6), 2111-2134.

Nnadi, M. A., & Akpomi, M. (2008). The effect of taxes on dividend policy of banks in Nigeria. *International Research Journal of Finance and Economics*, 19, 48-55.

Omet, G. (2004). Dividend policy behaviour in the Jordanian capital market. *International Journal of Business*, 9(3), 287-300.

Pandey, I. M. (2003). Corporate dividend policy and behaviour: The Malaysian evidence. *Asian Academy of Management Journal*, 8(1), 17–32.

Porta, R. L., Lopez-de Silanes, F., Shleifer, A., & Vishny, R. W. (2000). Agency problems and dividend policies around the world. *The Journal of Finance*, LV(1), 1-33.

Pourheydari, O. (2009). A survey of management views on dividend policy in Iranian firms. *International Journal of Islamic and Middle Eastern Finance and Management*, 2(1), 20-31.

Pruitt, S. W., & Gitman, L. J. (1991). The interactions between the investment, financing, and dividend decisions of major U.S. firms. Financial Review, 26(3), 409–430.

Rafique, M. (2012). Factors affecting dividend payout: Evidence from listed non-financial firms of Karachi stock exchange. *Business Management Dynamics*, 1(11), 76-92.

Redding, L. S. (1997). Firm size and dividend payouts. *Journal of Financial Intermediation*, 6, 224–248.

Ross, S. A., Westerfield, R. W., & Jaffe, J. (2008). *Corporate finance* (8th ed.). New York, McGraw-Hill/Irwin.

Rozeff, M. S. (1982). Growth, beta and agency costs as determinants of dividend payout ratios. *The Journal of Financial Research*, 5(3), 249-259.

Seifert, B. (1997). Earnings and dividend changes: An international study. *Journal of Multinational Financial Management*, 7, 71-81.

Shleifer, A., & Vishny, R. (1997). A Survey of corporate governance. *Journal of Finance,* 52, 737-783.

Theis, J., & Dutta, A. S. (2009). Explanatory factors of bank dividend policy: Revisited. *Managerial Finance*, 35(6), 501-508.

Walter, J. E. (1963). Dividend policy: Its influence on the value of the enterprise. *The Journal of Finance*, 18(2), 280-291.

Zeng, T. (2003). What determines dividend policy: A comprehensive test. *The Journal of American Academy of Business, Cambridge*, 2(2), 304-309.