THE DETERMINANTS OF DIVIDEND PAYOUT IN THE NIGERIAN BANKING INDUSTRY

BY

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DECLARATION

I hereby declare that the thesis titled “The determinants of dividend payout in the Nigerian banking industry” is a product of my research effort, and has to the best of my knowledge, never been previously presented in any submission for a higher degree. All works and articles consulted have been acknowledged accordingly in the bibliography.

_____ _____

Nasirudeen Abubakar **Date**

CERTIFICATION

This thesis entitled THE DETERMINANTS OF DIVIDEND PAYOUT IN THE NIGERIAN BANKING INDUSTRY by Nasirudeen Abubakar meets the regulation governing the award of the degree of Master of Science (Accounting and Finance) of the Ahmadu Bello University, Zaria, and is approved for its contribution to knowledge and literary presentation.

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Dean, Postgraduate School Date
(Name and Signature)

DEDICATION

This project work is dedicated to Almighty Allah most gracious; most merciful; provider, strength and source of all knowledge. Also, to the memory of my late father, Alh. Abdulrahman .O. Abubakar. May Allay SWT pardon bestow on him mercy and grant Aljana Firdausu (Amin). Lastly to my mother, brothers, sisters wife and children who stood by me against all odds.

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ABSTRACT

Dividend policy in the Nigerian Banking Industry differs as each bank decides on what, how and when to pay dividend to its shareholders. The purpose of the study is to ascertain the determinants of dividend payout in the Nigerian banking industry. The specific objectives were to determine the effect of profit after tax, shareholders fund, liquidity, risk, and financial leverage on the dividend payout in the Nigerian banking industry. The study used five sampled banks quoted on the banking subsector of the Nigerian Stock exchange as at December 2008. Secondary data were used for the research work and the data were obtained from Nigerian stock Exchange (NSE) Fact Books from 2001 to 2008 and the financial Statement of the sampled banks for all the years covered by the study. The variables used were the dividend payout, profit after tax, shareholders fund, liquidity represented by cash and bank balances with central bank of Nigeria, risk represented by loan loss provision and financial leverage represented by long term borrowing. The analytical technique used was the multiple regression analysis. The findings reveal that profit after tax, shareholders fund, liquidity, risk and financial leverage are major determinants of dividend payout of banks in Nigeria, while liquidity and risk are the most critical factors determining dividend payout of banks in Nigeria. Nigerian Banks should improve their liquidity position by retaining more earnings and reducing loan loss.

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CHAPTER ONE

INTRODUCTION

1.1 BACKGROUND TO THE STUDY

Understanding dividend policy had for many years been one of the most significant challenges in finance. According to Bhattacharyya et al (2004:2) "Despite decades of study, we are yet to understand completely the factors that influence dividend policy and the manner in which these factors interact". Black (1976) opines that "the harder we look at the dividend picture, the more it seems like a puzzle, with pieces that just don't fit together". Why do corporations pay dividend? Jose-Maria Diez Esteban (2001:16) observes that, "In market oriented countries, financial entities will try to increase their market presence through their dividend policy in order to have a good company reputation, while in bank oriented countries, the most profitable entities pay higher dividends to reduce managerial discretionality in the use of funds. He further added that "companies with a higher level of debt payout lower dividends as in this case the good reputation the company seeks is with its creditors to ensure the attainment of debt in the future. It will therefore fulfill the restrictions to dividends proposed by the debt contracts- principally in market oriented countries or by legal regulations-more common to bank oriented countries."

Bhattacharyya (2003) in Bhattacharyya et al (2004:2) develops a model of dividends payout that is based on the principal agent paradigm. In his model, uninformed principals (Shareholders) set up a menu of contracts to screen agents according to productivity type (which is known to the agent). Higher quality agents are those who have access to more positive net present value (NPV) projects. These agents are induced to invest the firm's cash rather than payout dividends. Lower quality agents do not have the same access to positive NPV projects, and the compensation contract they choose induces them to payout higher dividends. In equilibrium, high quality manager receive higher compensation than do low quality managers and pay out lower dividends.

Ayub (2003:11) recommends the Securities and Exchange Commission of Pakistan (SECP) to impose minimum dividend payout ratio to discourage the tendency of higher retention. He stated that while investors expect a return between 25 and 40 percent, on average, only 12% dividend is declared in the Pakistani stock market.

Harmonized dividend payout ratio in the banking industry can be used also as an indicator signaling distress in a bank. According to the CBN Annual Report (1997:1), "…….distress in the financial system occurs when a fairly reasonable proportion of financial institutions in the system are

unable to meet their obligations to their customers, their owners and the economy as a result of weakness in their financial, operational and managerial capabilities which render them either illiquid and or insolvent". It states further that a number of indicators have been developed for measuring the state of distress in a financial institution and that most of them are variants of the CAMEL rating.

Conflict of interest between corporate insiders such as managers and controlling shareholders, on the one hand and outside investors, such as minority shareholders, on the other hand, are central to the analysis of modern corporation (Jensen and Meckling, 1976) in Fodio (2006:3). The insiders who control corporate assets can use the assets for a range of purposes that are detrimental to the interests of the outside investors. One is thus keen to appraise impact of leverage on shareholders' wealth creation as depicted in shareholders' wealth maximizing cycle vis-a.-vis gearing dynamics in banks.

1.2 STATEMENT OF THE PROBLEM

Despite many research conducted by financial economists, the issue of dividend policy determinants still remains unresolved. Berkly and Myers (2005) listed dividends issue as one of the top ten important unresolved issues in the field of advanced corporate finance. Black and Scholes (1976) have it that dividends are the primary puzzle in the economics of finance. Miller and Modigliani (1961) viewed dividend payment as irrelevant and maintained that given the investment decision of a firm, dividend payout ratio does not affect shareholders' wealth. They argued that the value of the firm depends on the firm's earnings or its investment policy. The split of earnings between dividend and retained earnings has no effect on the firm's value. They maintained that the theory of dividend irrelevance would still hold if the firm raised external funds to finance investment opportunities with positive net present value by issuing debt instead of shares. The implication of the theory is that given two firms that have the same set of available investment opportunities, their values would be the same even if one paid all its earnings as dividend and the other paid no dividends provided that the two firms belong to the same risk class (Olowe: 1998, Osuala: 2005). Other authors such as Black (1976), Jenson and

Meckling (1976), Miller and Rock (1985), John and Williams (1985), Gordon (1962), Walter (1963) and a host of other researchers stressed on the relevance of dividend payment.

In a study conducted by Uzoaga and alozienwa (1974), they highlighted the pattern of dividend policy pursued by Nigerian firms and found little evidence to support the classical determinants of dividend policies in Nigeria. Inanga (1978) and Soyede (1975) insisted that the problem arising from the change in dividend policy could be attributable to the share pricing policy of the capital issue commission (CIC) which seem to have ignored the classical factors that should govern the pricing of equity share issues; an action which has led companies to abandon all classical forces that determine dividend policy.

Oyejide (1976) however in his study found a statistical significant relationship between current year dividends and past year net profit. Adelegan (2003) pointed out that factors such as after tax earnings, economic policy changes, firm growth potentials and long term debts influence the dividend policy of quoted firms in Nigeria. In the Nigerian

context, dividends are often paid twice: the first is the interim dividend and the final dividend.

Dividend policy in the Nigerian Banking Industry differs as each bank decides on what, how and when to pay dividend to it's shareholders. This could be justified in line with the fact that so many factors influence dividend policy and no law subjects a bank to pay a certain percentage of its net profit after tax as dividends to the common stockholder. Ayub (2003:8) observes a negative relationship between dividend payout and liquidity position of a firm and identifies some factors that influence dividend policy as net profit after tax, working capital and insider shares in equity. Nacelur et al (2007) found an insignificant relationship between dividend policy and shareholders fund.

The avalanche of opinion regarding dividend payout is not only examinable but mind probing for academic research. This research is therefore poised at making further contributions by examining the theories but with specific application to the banking sector in Nigeria.

1.3 OBJECTIVES OF THE STUDY

The main objective of the study is to ascertain the determinants of dividend payout in the Nigerian banking industry. The specific objectives are to:

i. Determine the effect of profit after tax on the dividend payout in the Nigerian Banking Industry.

ii. Evaluate the impact of shareholders fund on the dividend payout in the Nigerian Banking Industry.

iii. Find out the effect of liquidity on the dividend payout in the Nigerian Banking Industry.

iv. Ascertain the influence of risk element on the dividend payout in the Nigerian Banking Industry.

v. Investigate the extent to which financial leverage affect the dividend payout in the Nigerian Banking Industry.

1.4 RESEARCH QUESTIONS

The study attempts to provide answers to the following research questions:

1. What is the effect of profit after tax on the dividend payout in the Nigerian Banking Industry?

2. What is the impact of shareholders fund on the dividend payout in the

Nigerian Banking Industry?

3. How does liquidity affect the dividend payout in the Nigerian Banking Industry?

4. What is the influence of risk as measured by loan loss provision on the dividend payout in the Nigerian Banking Industry?

5. To what extent does financial leverage affect the dividend payout in the Nigerian Banking Industry?

1.5 RESEARCH HYPOTHESES

In line with the stated objectives the following hypotheses were formulated:

H_{01} Bank performance as measured by profit after tax has no significant effect on dividend payout in the Nigerian Banking Industry.

H_{02} Shareholders fund has no significant impact on dividend payout in the Nigerian Banking Industry.

H_{03} Liquidity has no significant effect on dividend payout in the Nigerian Banking Industry.

H_{04} Risk has no significant influence on dividend payout in the Nigerian Banking Industry.

H_{05} Financial leverage has no significant effect on dividend payout in the Nigerian Banking Industry.

1.6 SCOPE OF THE STUDY

The study is limited to the banking sector in Nigeria. The population of the study is twenty four banks. Five banks are to be selected representing twenty five percent of the population. The study is based on data obtained from secondary sources (Annual report and accounts of selected banks and The Nigerian stock exchange factbooks) for the period of eight years from 2001 to 2008. The choice of the study period (2001- 2008), was because of the availability of sufficient data required for the study. The variables for the study are dividend payout, profit after tax, shareholders fund, liquidity, risk and financial leverage.

1.7 SIGNIFICANCE OF THE STUDY

Investors and potential investors, both local and foreign, banks' regulator and the general public will be informed on the average dividend payout to net profit after tax ratio payable by a bank in Nigeria. This will go to inform them on where to invest and disinvest based on any observed deviation from the average. It will also help as an indicator of distress in a bank that has consistently paid dividend below the average dividend payout ratio.

The association between dividend payout and risk as measured by loan loss provision will be ascertained. This will help to forestall issues of income smoothing or reduce the magnitude and pace of such to its barest minimum. This is because loan loss provision has always been used as a key factor in income smoothing which tends to misguide investors. A profitable bank should thus be able to pay a higher than average dividend payout to net profit after tax ratio.

It will sanitize the banking industry and protect the interest of minority shareholders who will from time to time compare the dividend payout ratio of their banks with the average dividend payout ratio and take good investment decisions.

It will boost and compel the interest of direct foreign investors to invest in the Nigerian Banking Industry if banks are made to pay the average dividend payout ratio by banks regulators.

The work will complement the efforts of banks' regulators in assessing the soundness of a bank where a bank has consistently failed to pay dividend above the average dividend payout ratio.

CHAPTER TWO

LITERATURE REVIEW

2.1 INTRODUCTION

Dividend payout is at the theory core of corporate finance. It is one of the most debated issues in the finance literature and still keeps its prominent place. Many researchers have devised theories and provided empirical evidence regarding the determinants of a firm's dividend payout. The dividend policy issue, however, is yet unresolved. Clear guidelines for an "optimal payout policy" have not yet emerged despite the voluminous literature. Yet there is still no acceptable explanation for the observed dividend behavior of companies. The factors that drive dividend decision and the manner in which these factors interact is yet to be completely understood. This is known as the dividend puzzle in the finance literature (Nishat and Irfan, 2003).

This review attempts to focus on the concept of dividend and dividend policy, theoretical framework, review of the dividend payout of firms in Nigeria and other empirical studies.

2.2 CONCEPT OF DIVIDEND

A dividend is simply the money that a company pays out to its shareholders from the profits it has made (Doughty, 2000). Such payments can be made in cash or by issuing of additional shares as in script dividend. Davies & Pain (2002) however defined it as the amount payable to shareholders from profit or distributable reserves.

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

According to Kighir (2006), dividends are distributable earnings of a company. The earnings, which are not distributed, constitute retained earnings. The decision on dividend payout and retained earnings constitute the dividend payout policy. The decision on whether or not to declare dividend rests in the hands of the board of directors of a company. However, when declared, it becomes a liability on the company (Company and Allied Matters Act, 1990).

Dividends are not always paid in cash. A firm has options in terms of the form of dividends it could declare to its shareholders. According to Van Home (1998) and Pandey (2005), forms of dividend include: cash dividends, stock dividend (scripts dividend or bonus issue), stock or share splits and property dividends.

2.2.1 CASH DIVIDENDS

Cash dividend is the most common form of dividends paid to shareholders. This form involves cash payment to the shareholders as a return to their investment in the firm. Pandey (2005) highlighted that a firm that pays cash dividends should always have enough cash to cover the dividends. However, in some cases, a firm can supplement cash dividend with bonus issue. In a situation where a firm has no enough cash to cover the dividends, arrangement should be made to borrow funds. Pandey advised that, if a firm practices a stable dividend policy, it should always anticipate its cash requirement in relation to payment of dividends through the preparation of annual cash budget.

Whenever a firm pays cash dividends its liquidity is reduced. This is equally true of the retained earnings (reserves) of the firm. Hasting (1966), explained that

cash dividends reduce both the total assets and net worth of a firm. Consequently, there would be a reduction in the market price of the firm, and more often than not, it is by the amount of cash given out as dividends.

Many shareholders that depend on dividend income for their survival appreciate cash payout. However, some investors have preference to capital gains.

2.2.2 STOCK DIVIDENDS

Stock dividend is also called bonus issue. This is a dividend in the form of additional shares instead of cash. It is the payment of additional stock to shareholders. It represents nothing more than a recapitalization of the company, while the shareholders' proportional ownership remains unchanged (Van Horne, 1998). Under this form of dividend, a number of shares are given to each shareholder in proportion to the number of his existing shares before the dividends are declared.

Pandey (2005) stated that "the declaration of stock dividends would increase the paid-up capital and as well reduce the reserves and surplus (retained

earnings) of the firm in the same proportion". Van Horne (1998) added that the market price per share of a firm that declare stock dividend would decline.

2.2.3 STOCK SPLITS

A stock split is a form of dividend that increases the number of shares outstanding through a proportional reduction in the par value of the shares. As a result, paid-up capital and retained earnings remained unchanged. Shareholders' equity remains the same, only the par value of shares that is reduced. This means there is no form of transfer made to the shareholders.

Van Horne (1998) opined that "stock split is reserved for occasions when the company wishes to achieve substantial reduction in the market price per share, and is accompanied by an increase in cash dividends" Pandey (2005) further posit that "stock split makes trading in shares more attractive, indicates higher future profit and increased dividends".

2.2.4 REVERSE SPLIT

This is the proportionate reduction in the number of outstanding shares to raise the market price per share. According to Van Horne (1998), "reverse split is usually employed under a situation of falling prices of the company's shares". It is

generally an indication of financial difficulty and is intended to increase the market price per share.

2.2.5 PROPERTY DIVIDENDS

When a firm has adequate earnings that are backed with inadequate cash, the firm may decide to pay dividends in the form of transferring some of its assets (e.g. inventory) to the shareholders.

A property dividend helps to conserve cash but has a negative signaling effect. The investors may perceive property dividends as an indication of management failure to generate adequate cash and as well in the area of debt collection. Also shareholder may find it difficult or inconvenient to dispose the properties transferred to them.

2.3 CONCEPT OF DIVIDEND POLICY

Dividend policy is primarily concerned with the decisions regarding dividend payout and retention. It is a decision that considers the amount of profits to be retained by the company and that to be distributed to the shareholders of the company (Watson & Head, 2004). Theoretically, there are different types of dividend policies. These include constant payout, progressive

policy, residual policy, and zero policy and non-cash policy. Investors are seen to belong to a particular group or clientele. This is because they tend to pitch their tent with a particular policy that might suite them. This is the clientele effect of dividend policy (Hutchinson, 1995; Kolb & Rodriguez, 1996).

2.3.1 TYPES OF DIVIDEND POLICY

Constant or fixed policy: The Company pays out a fixed amount of its profit after tax as dividend. Thus, the company maintains a fixed payout ratio of dividend. A company may as a matter of policy, decide to constantly payout sixty percent of its after tax profit as dividend to its shareholders and retaining the remaining fraction. This type of policy allows the shareholders the opportunity to clearly know the amount of dividend to expect from their investments in the company. However as noted by Watson & Head (2004), the policy could be traumatic to companies experiencing a volatile or fluctuating profit earning. This is because of the uncertainty of its profit.

Progressive policy: Payments of dividend is on a steady increase usually in line with inflation. This could result in increasing dividend in money terms. The firm uses the policy as a ratchet. Every effort is made to sustain the increase even though marginal. Seldom, the company may be constrained to cut down on

dividend payout. This is to enable it sustain its operations. This though not a frequent action as it sends a wrong signal to investors. Firms operating this policy will opt to avoid paying dividends during the period rather than consistently cut down on the dividend (Kolb & Rodriguez, 1996).

Residual policy: Dividends are just what is left after the company determines the retained profits required for the future investment. This policy gives preference to its positive NPV (Net Present Value) projects and paying out dividends if there are still left over funds available. Dividend becomes a circumstantial payment only paid when the investment policy is satisfied. There is a tendency therefore that this type of policy could give rise to a zero dividend structure. Firms may need to modify this policy to ensure that investors of the different clienteles are not chased out by a strict application of the policy (Kolb & Rodriguez, 1996).

Zero dividend policy: Some firms may decide not to pay dividend. This is especially common in newly formed companies that rather require capital to execute its projects. All the profit is thus retained for expansion of the business. Investors who prefer capital gains to dividends because of taxation will naturally be lured by this kind of policy. This type of policy is quite easy to operate and avoids all the costs associated with payment of dividends (Watson & Head, 2004).

2.3.2 FACTORS DETERMINING DIVIDEND POLICY.

a. The Theory Of Signal

Within the framework of problems of asymmetry of information existing in the heart of the company, the theory of signals defines dividend policy as a signaling mechanism through which internal shareholders, within management, reveal their incentives and private information to external shareholders. This information may modify the value of share if the announcement of dividends contains relevant information concerning the company's expectation which has not already been discounted by the market. External shareholders reflect in the price of shares the value they attribute to the new information available and express through these variations their degree of conformity with the company's financial policy and the behaviour of management.

In an efficient capital market, a variation in the payout ratio is generally followed by changes in the price of shares. This situation deserves a reflection of the information content of dividends: when a company adopts a stable dividend through time; that is, when it sets a target payout ratio, there is an isolation of dividends such that, consistent with signaling hypothesis, the dividend paid depends on the profits earned and on the dividend paid the previous year.

In those countries where the dividend paid are more sensitive to profits earned and less to dividend paid the previous year – due to the effect of institutional factors of the financial system which follows a market model or a bank model – then the policy of distribution of profits moves more quickly to its objective level and, therefore, the decision as to dividends is used less as a mechanism to transmit information to capital markets.

b. The Free Cash Flow Theory

The starting point for this theory, which proposes an argument based on agency costs that relate dividends paid by the company to its investment opportunity, is that managers cannot be controlled perfectly so they can seek to satisfy their own interests instead of the interest of shareholders. Managers, once they have satisfied all the obligation contracted by the company with fund generated by operations, can use the remaining flows from the treasury for their own benefit (Jensen, 1986) in Jose (2001:7)

In a study which examined dividend policy and the level of financial leverages of the company, Jensen, Solbery and Zorm (1992) in Jose (2001: 7) obtain the empirical evidence that the dividends paid by the company are negatively related to its financial leverage.

Agrawall and Jayaranan (1994) in Jose (2001:7) compared the dividend policy of companies in debt and of companies not in debt. These authors' result show companies in debt have higher target payout ratios.

The use of dividend policy as a way of reducing free cash flow is conditioned by the existence of alternatives for the control of managers' behaviour. Companies with big investment opportunities have less resources for dividends since flow which remain free are necessary for the financing of future investment projects. In countries whose financial system is oriented to the market, the control of managerial behaviour is done through capital market. Whiles in those countries where the financial system is oriented towards a bank model, the bank debt contracted by the company serves as an alternative mechanism to dividend policy to reduce the conflict of interest between managers and shareholders.

c. The Monitoring Hypothesis

This hypothesis, which began with the work of Easterbrook (1984) in Jose (2001:8) suggests that dividend, can help to reduce the agency costs associated with the separation of ownership and control which occurs in companies. When the ownership of the company is highly diversified, individual investors have few

incentives to control the actions of managers and if they do, the result is high costs for the company. The dividend policy forces the managers to go increasingly to the capital market, submitting their behavior to the evaluation made by the market.

In countries whose financial system is market oriented, managers have incentives to align their interests with those of shareholders in order to maintain a good reputation in the capital market which will be reflected positively in the price of its shares. For this reason, management, to ensure its position in the company, will try to avoid dividend payout decisions which they think will be unpopular amongst the company's shareholders- as La Porta et al (2000a) in Jose (2001: 8) suggest.

In the countries whose model is bank oriented, managers seek to be on good terms with the company's creditors to be able to obtain future financing. To do this they will avoid policies of dividends payments which cause a transfer of wealth from bondholders to shareholder without exceeding – or even reaching the maximum limit – the possible clauses established in debt contracts and which restricts the distribution of dividends.

2.4 INSTITUTIONAL FRAMEWORK AND DIVIDEND POLICY

In the last few years, researchers have tried to discover whether the model of dividend payout in companies is the same in different countries or whether, on the contrary, different institutional frameworks have an influence on the policy of benefit distribution.

Dewenter and warther (1998) in Jose (2001:4) affirm that the fewer agency conflicts which occur in Japanese companies compared with North American companies mean that differences exist between their respective dividend policies; that is, that the differences between organizational structures of the companies in these two countries determine their dividend policies.

In a study carried out of the dividend policies of 4,000 companies in 33 countries, La Porta et al (1998) in Jose (2001:4) observe that companies operating in countries whose legislation gives greater protection to minority shareholders pay more dividends, which would back the validity of the agency model in which dividends are the result of the legal protection of investors, contrary to the agency model which states that dividends are substitute for legal protection and where managers seek to establish the good reputation of their company via dividend policies. The results obtained by these authors are inconsistent with the

tax theory of dividends and do not provide information about dividends as a mechanism for the transmission of signals to capital markets.

Aidvaizain, Booth and Clearly (1998) in Jose (2001: 4) compare the lintner model for 300 companies in developing countries with an amplified model in which other additional variables are introduced. The results they obtain provide evidence that dividends are more sensitive to the companies' profit than to delayed dividends and that they are less used as signaling mechanisms in institutional structures oriented towards the bank than in those oriented to the market. These authors consider that the relationship between debt, investment and dividends are similar in all the countries and that the theory of financial signaling is more suitable for those countries in which companies are financed through capital markets, since these alleviate problems of asymmetric information, thus reducing the need for them to have recourse to dividend policies.

The possible conflict of interests between the shareholders and creditors of a company is used by Luez Deller and Stuberdader (1997) in Jose (2001: 4) as a starting point for the comparison of restrictions in dividend payments to shareholders in Germany, USA, and the United Kingdom. Their results confirm

that the restrictions to payment of dividends are similar in the three countries despite their institutional differences. However, the origin of these restrictions is different: in USA established by regulations. Agency theory would justify these results in such a way that we can affirm that restrictive clauses in contracts, established by the company with its creditors, influence the payout of dividends and the conflicts of interests which arise from agency relationships between its shareholders and bondholders.

These studies show that different institutional frameworks have an influence on policies of distribution of benefits and that the theoretical justifications applied are different according to the financial system in which the company is operating. As a result of these studies and of the analysis done by Rajan and Zingales (1995) in Jose (2001:5) for the structure of capital in G-7 countries, the institutional effects which may be relevant for a company's decisions on dividends are:

1. Orientation of companies to the capital market vs. orientation to the bank.
2. Restrictions to dividends payouts as a result of the debt contracts established by the company.
3. The separation of ownership and control in organizations which determines the government of the company.

4. The existence of laws which protect the minority shareholders of a company.

The first institutional differences we have alluded to which weigh up the greater or lesser importance of the bank as against the capital market in the financing of companies implies such a vast different element that two principal models of financing systems are usually contrasted: the Anglo-Saxon model based on the market-common to countries such as USA, Canada and the United Kingdom- and the continental European model-which also include countries like Japan- based on banks.

La Porta et al (1998, 2000a, 2000b) in Jose (2001: 5) distinguish four institutional systems: three systems which come from the civil law tradition and are French, German, and Scandinavia and one which comes from the common law tradition. The evidence shows that each country belongs to one system due to dominating tradition of that country and that is the reason of the orientation of companies towards the bank or towards the capital markets for financing their operations. The countries which come from the common law tradition more often use capital markets.

Jose (2001: 5) grouped countries into two groups based on companies' orientation towards the bank or towards the capital market for financing their operations. These groups are:

(1) A system oriented to the bank that comes from the civil law tradition and

(2) A system oriented to the capital market that comes from the common law tradition.

2.5 REVIEW OF EMPIRICAL STUDIES ON DIVIDED PAYOUT

The earliest major attempt to explain dividend behavior of companies has been credited to John Lintner (1956) who conducted his study on American Companies in the middle of 1950s. Since then there has been an ongoing debate on dividend policy in the developed markets resulting in mixed, controversial and inconclusive results.

Bhattacharyya et al (2004:13) performed tobit analyses of managerial compensation and dividend payout in US firms over the period 1992-2001, and found that executive compensation is positively associated with earnings retention and negatively related to dividend payout. White (1996) in Bhattacharyya et al (2004:4) finds that dividends declared and the natural logarithms of income are both negatively associated with earnings retention. The market-to-book ratio (MKT/BOOK), capital expenditures (CAPEXP), are all negatively associated with

dividend payout as expected and are statistically significant in all three regressions. The coefficient on the debt-to-equity ratio (DEBTEQ), on the other hand, is negative.

In a study which examined dividend policy and the level of financial leverage of the company, Jensen, Solberg and Zorm (1992) in Jose (2001:7) obtain the empirical evidence that the dividends paid by a company are negatively related to its financial leverage.

Jose (2001:16) with data from between 1991- 1998 of 484 European banks belonging to 22 countries found a positive relationship between earnings and dividends such that an increase in profit enables higher payments. In market oriented countries, financial entities will try to increase their market presence through their dividend policy in order to have a good company reputation, while in bank oriented countries, the most profitable entities pay higher dividends to reduce managerial discretionality in the use of funds. He also found that companies with a higher level of debt pay out lower dividends. In this case, the good reputation the company seeks is with its creditors to ensure the attainment of debt in the future. It will therefore fulfill the restrictions to dividends proposed by the debt contracts - principally in market oriented countries or by legal regulation more common to bank oriented countries. He didn't find a significant dependence between growth opportunities and dividends, contrary to research that a company with future

investment projects obtains higher values of the variables, require great quantities of financing which will lead them to put the breaks on dividend payments. Lastly, he found a negative influence of size with respect to the dividend decision and highlights that the greater size of companies brings about a global reduction in problems of asymmetric information.

Brittain (1996) in Ayub Mehar (2003:7) verified a positive relationship between dividend and net profit after tax. Ayub Mehar (2003:8) observed a negative relationship between dividend and liquidity position of a firm. That is, if a firm has a good liquidity position, it does not mean that it will pay higher dividend.

Ayub Mehar (2003:9) investigated the long-term return behaviour of dividend-changing firms and concluded that about 23 percent additional profit is only transformed into dividend while the remaining profit of about 77% are utilized for additional investment. The higher retention shows that firms adopt a self-financing way for growth and expansion.

Ayub Mehar (2003:9) finds that a large number of shares held by the board lead to high dividends or low retention, which leads to low reserves funds. He concluded that if a company has a large concentrated ownership then chances of dividend would be higher, because by such a manner dividend will go into the pockets of directors and that the chances of dividend payment will be low if a significant large amount is paid as dividend to outsiders. In this case, directors will

compensate themselves through the executive compensatory benefits. The directors compare that how can they maximize their earnings either through dividend or through the executive salaries.

This issue of dividend did not receive any serious attention among academic scholars in Nigeria until 1974 when Uzoaga and Alozienwa attempted to highlight the pattern of dividend policy pursued by Nigerian firms particularly since and during the period of indigenization and participation programme defined in the decree. Their study covered 52 companies - years of dividend action (13 companies for four years). They claimed that they "checked but found very little evidence" to support the classical influence that determine dividend policies in Nigeria during this period. They concluded that fear and resentment seem to have taken over from the classical forces.

However, Inanga (1978) and Soyode (1975) commented on the work of Uzoaga and Alozienwa. Inanga concluded that the problem arising from the change in dividend policy can be attributed to the share pricing policy of the Capital Issue Commission (CIC) which seemed to have ignored the classical factors that should govern the pricing of equity shares issues. This in turn made companies to abandon "all the classical forces that determine dividend policy". Soyode criticised Uzoaga and Alozienwa's work on the ground that it glossed over

some important determinants of optimal dividend policy and questioned certain conclusions made in the study because they are inadequate or a mistaken evaluation.

Furthermore, Oyejide (1976) empirically tested for company dividend policy in Nigeria using lintner's model as modified by Brittain (1964). He disagreed with previous studies and concluded that “the available evidence provides a strong and unequivocal support for the conventional devices for explaining the dividend behavior of Nigerian limited liability business organizations" However, Odife (1977) criticized Oyejide's study for failing to adjust for stock dividend. He seemed to agree with Uzoaga and Aloziewa's conclusion.

Nyong (1990) conducted a study on dividend policy of quoted companies in Nigeria. He observed among others that the conventional Lintner’s model performs creditably well.

Adelegan (2001) in a more recent study of the impact of growth prospect, leverage and firm size on dividend behaviour of corporate firms in Nigeria between 1984 and 1997; observed that the conventional Lintner’s model does not perform quite creditably in explaining the dividend behaviour of corporate firms for the period under review, supports that factors that mainly influenced

the dividend policy of quoted firms are after tax earnings, economic policy changes (due to the partial liberation of the indigenization decree in 1989 and the subsequent simultaneous abolition of the indigenization decree of 1995), firm growth potentials and long term debts. A study carried out by Mainoma (2001) revealed a significant relationship between the dividend policy and the value of firms in Nigeria.

Musa (2005), criticizes both Lintner's and Rozeff's model with their modifications on the basis of the fact that the models are predicated on the assumption of constant response coefficient implying that investors react identically to the explanatory of all firms.

However, Adesola (2004) in his study of dividend policy behaviour in Nigeria using Lintner's model as modified by Brittan between 1996 – 2000 appears to agree with Oyejide and Nyong's view that there is substantial and unequivocal support for the Lintner's model.

2.6 THEORETICAL FRAMEWORK AND MODEL SPECIFICATION

The framework adopted in this study is greatly influenced by John Lintner's [1956] "partial adjustment model" as modified by Brittain [1964] and Charitou and Vafeas [1998].

According to the model, the target dividend [Dit] for any year t and firm i is related to the firms earnings [Pit] as follows:

$$\mathbf{Dit = rPit} \qquad [1]$$

Where r is the firm's target payout ratio of dividend to profits.

However, the year to year changes in dividend payments are explained by a partial adjustment of the form:

$$\mathbf{\Delta Dit = ait + cit\,[Dit - Dit_{-1}]} \qquad [2]$$

Where : $\mathbf{\Delta Dit = [Dit - Dit_{-1}]}$ which is change in dividend payments, **ait** is the constant term, **cit** is the speed of adjustment factor normally assumed to lie between zero and unity.

According to Lintner 's model, dividend policy of corporate firms are supposed to be governed by a target payout ratio[r] that would be paid if earnings after tax remained relatively constant from year to year, a speed of adjustment factor[c] which determines the rate at which dividends are to be adjusted towards a new target dividend [rp] , given changing earnings.

From equation [1] and [2], Lintner derives the following dividend model:

$$\Delta D_{it} = a_i + c_i [r_i P_{it} - D_{it-1}] \quad [3]$$

or

$$D_{it} = b_{1i} P_{it} + b_{2i} D_{it-1} + a_{it} \quad [4]$$

Where $b_{1i} = c_i r_i$ = constant x target payout ratio

and $b_{2i} = [1 - c_i]$ = one x constant

Equation [4] implies that current dividend is a function of current earnings and immediate past dividend payments.

A number of other authors have proposed other alternative hypothesis. Darling [1957] proposed an alternative hypothesis using a slightly different partial adjustment model, he relates current dividend to current and preceding measures of the firms' earnings performance. This has been specified as:

$$D_{it} = a_{it} + c_i P_{it-1} + f_i P_{it-1} \quad [5]$$

Fama and Babiak [1968] also proposed an adaptive expectation model in the following form:

$$D_{it} = r_i P_{it} \quad [6]$$

$$P_{it}^* - P_{it-1} = \Delta D I [P_{it} - P_{it-1}] \quad [7]$$

Where: * indicate expected values of earnings and Δ is the adaptation factor which has a numerical value lying between zero and one. The formulation relates current dividend to expected earnings whose realized values are determined by an adaptive expectation scheme.

From equations [6] and [7],

$$D_{it} = \Delta i r_i P_{it} + [1 - \Delta i] D_{it-1} \quad [8]$$

Equation [8] implies that current dividend is a function of current earnings and preceding dividend levels. This is consistent with equation [4], which is Lintner's model.

Furthermore, several authors have grafted in new explanatory variables into the basic Lintner's model. Darling [1957] adds an index of liquidity and a measure of sales fluctuations. Pogue [1971] brought in variables measuring each

firm's income variability and indebtedness, while McDonald et al [1975], Dhyrmes and Kurn [1967], Higgin [1972], Fama [1974], McCabe [1979], Peterson and Benesh [1983] and Odedokun [1995] among others in a series of interlocking equations studied the relationship between companies dividend decisions, investment decisions and financing policy.

Moreover, recent studies such as Charitou and Vifeas [1998], Simon [1994], Crum, et al [1988], Heaufner [1980], have grafted in cash flows into the basic Lintner's model as an explanatory variable of dividend changes.

Nevertheless, the validity and reliability of the Lintner's model have been enhanced by its superiority over competing models in explaining the dividend policy of corporate firms in both pooled and cross sectional studies [Fama and Babiak ,1968; Fama, 1974;Oyejide, 1976; Ariyo, 1983; Charitou and Vafeas ,1998].

The model specification for the study is presented below:

$$DPO_t = \alpha_o + \alpha_1 PAT_t + \alpha_2 \partial_t + e_t \quad (1)$$

$$DPO_t = \beta_o + \beta_1 SHF_t + \beta_2 \partial_t + e_t \quad (2)$$

$$DPO_t = \delta_o + \delta_1 LIQ_t + \delta_2 \partial_t + e_t \quad (3)$$

$DPO_t = \phi_o + \phi_1 RSK_t + \phi_2 \partial_t + e_t$ (4)

$DPO_t = \Psi_o + \Psi_1 LEV_t + \Psi_2 \partial_t + e_t$ (5)

Where:

DPO_t = Dividend Payout

PAT_t= Profit After Tax

SHF_t = Shareholders Fund

LIQ_t = Liquidity (represented by cash and bank balances with central bank)

RSK_t = Risk (represented by loan loss provision)

LEV_t = Financial Leverage (represented by long term borrowing)

$\alpha_o, \beta_o, \delta_o, \phi_o$ & Ψ_o = Intercept

$\alpha_1, \beta_1, \delta_1, \phi_1$ & Ψ_1 = Slope coefficients

e_t = error term

∂_t is the dummy variable

∂_t = 0: From year 2001 - 2005 (Pre-consolidation)

∂_t = 1: From year 2006 – 2008 (Post-consolidation)

2.7 SUMMARY

The chapter reviewed relevant literature related to the study. The concept and forms of dividend were outlined. Dividend policy as well as the various types of dividend policy was established. The factors determining dividend policy by Jose (2001:6) were also examined.

Furthermore, the dividend payout of firms in Nigeria and other empirical studies on dividend payout were extensively reviewed. From the review, there is no consensus on the factors determining dividend payout.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 INTRODUCTION

Research method involves a systematic and orderly approach employed towards the collection and analysis of the data used in the study so that useful information and meaning can be derived from the data (Jankowicz, 2000). The methodology is subjugated into the following sections:

a) The Design of the Study

b) The Population and Sample of the Study

c) The Nature, Sources of data and method of Data Collection

d) Data Analysis Procedure/ Technique and Justification

3.2 RESEARCH DESIGN

The research is both qualitative and quantitative in its approach. The qualitative approach adopts descriptive and inductive forms of research. Statistical models are used in analyzing data obtained in the study. The method of analysis is correlation as it employs statistical tools in analyzing data obtained for the study.

Data obtained from the financial statements of the sampled banks and the Nigeria Stock Exchange Fact books were used in the analyses of the study.

In considering a descriptive research, well-detailed information on the nature of the problem was carried out. In this case, dividend payout, profit after tax, shareholders fund, liquidity, risk and financial leverage are correlated. This involves analytical interpretation and the application of some econometrics models. As with descriptive research, it is a fact-finding mission with interpretation and analysis of trends in dividend payout and facts in terms of the commonality of dividend, profit after tax, shareholders fund, liquidity, risk and financial leverage; and the potential of making predictions and generalizations (Smith,1997).

3.3 POPULATION OF STUDY

The population of this study comprises of all the banks quoted on the Nigerian Stock Exchange (NSE). The Nigerian Stock Exchange comprises of firms listed either in the first-tier securities market or the second-tier securities market. Firms in the first-tier securities market are those that fully satisfy the NSE listing requirement and have significant regular dividend payment, earnings and shareholders fund records that constitute data for this study. Therefore, all the

twenty five (25) banks in the first-tier securities market on the Nigerian Stock Exchange listing as at 31st December, 2008 serve as the population of the study

3.4 SAMPLING TECHNIQUE

Studying the whole population is time consuming, very tedious, economically unviable and practically impossible. It is therefore imperative to choose from the population a representative sample. A sample is a subset of the population from which inferences can be made on the whole.

Therefore, in this study a non-probability method in the form of purposive sampling technique is employed in selecting banks into the sample using the following criteria:

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

b. Banks with positive earnings throughout the period of the study 2001 to 2008

c. Banks with dividend payout history throughout the period of the study 2001 - 2008.

d. Banks with more than twenty years of incorporation.

e. Banks with more than fifteen years of listing on the Nigerian Stock Exchange.

The rationale behind adopting criteria a, b and c is that it will provide the variables to be regressed to ascertain the significance of the determinants of dividend payout in the banking industry. Criteria d and e are adopted because it provides reliability and consistency in the data to be used for the regression analysis.

After the application of the above filter, five banks were selected as samples for the study. In this study only banks listed on the NSE with data for the periods of 2001 - 2008 are included in the sample and comprises of the following banks:

1. Afribank Plc
2. First Bank Nigeria Plc.
3. Guarantee Trust Bank Plc.
4. United bank for Africa Plc.
5. Union bank of Nigeria Plc.

3.5 SOURCES OF DATA

Data is independent happening or event that conveys no meaning in itself. Data are classified as either primary or secondary. Secondary data are data collected by others for other purposes than for the research in question. Primary data, on the other hand, is data collected by the researcher for the specific research problem at hand.

3.5.1 SECONDARY SOURCES

Secondary sources refer to the publications of other agencies or bodies that collected data for purposes different from which the researcher intend to use it for. The sources consist of published documents such as annual reports and accounts, journals, magazines and periodicals.

This source is important because it warrant future researchers the opportunities to replicate the research work. However, Osuala (2001) warns that "the data collected from this source must be used with caution, because it may not give the exact kind of information needed". Therefore, the data may need to be refined after they are generated to suit the researcher's need, since it was initially collected for different purposes by others. The advantages of using secondary data are that it saves time and money. The sources used for this study were Internet sites, brochures, research publications, books and articles.

3.6 METHOD OF DATA COLLECTION

Secondary sources provide the data gathered for this study. Data collected from this source contain more information than mere guesses and expression of opinion which may not be backed with proof. The data were gathered from existing documents (publications) and comprises of the Nigerian stock Exchange (NSE) Fact Books from 2001 to 2008 and the audited financial Statement of the sampled banks for all the years covered by the study.

3.7 TECHNIQUES OF DATA ANALYSIS

The data analysis techniques employed are the descriptive statistics, correlation technique and regression analysis,.

Descriptive statistics is used in research for the purpose of bringing the data into order. It aid data preparation, tabulation and summarization. Descriptive statistics is used to summarize mass data generated in the study, so that appropriate analytical methods could be used to further discover relationship among the variables in the study. Quantitative descriptive analysis includes frequency distribution, measures of central tendency and measure of dispersion.

In this study, measure of central tendency is used to describe the distribution, or describe their profiles by condensing the data into a single figure which helps the researcher to know what is typical about the distribution. To do this, mean is selected to provide the averages of the data for this study.

The Pearson product moment correlation is used to measure the strength of association between two variables; one the dependent and the other independent variable (Lucey, 2002). The correlation coefficient can range from 1 indicating perfect positive correlation where variables change in the same direction as each other to -1 indicating perfect negative correlation where the dependent variable decrease linearly as the independent variable increases. When the value is close to (0) it implies that the linear relationship between the variables is weak. The

correlation will show the strength of association between Dividend Payout and Profit after Tax, Dividend Payout and shareholders fund, Dividend Payout and Liquidity, Dividend Payout and Risk and; Dividend Payout and Financial leverage.

Regressions are a statistical tool used in addressing variety of research hypotheses. It has the potential of predicting a particular outcome.

It provides information about the set of data and the contribution of each variable in the analysis. It is usually used as a control tool when exploring the prediction of a model (Tabachnick and Fidell, 1996). It is used in correlating the variables used in the study.

Dividend payout is regressed on Profit after tax, shareholders fund, liquidity, risk and financial leverage. The data obtained is fitted to the equation by ordinary least-square (OLS) regression method. The linear relationship between the dependent and the independent variables were determined. Multiple regressions were used for the regression analysis and inferences were drawn based on the regression analysis.

Econometricians build models as a way of simplifying the complexities of real life. Hence a model is an abstraction of reality. According to Nwokama (2000:1), two types of models are identifiable, definitional and behavoural models. Definitional models are some kind of identity D=S; while behavioural models

describe how a particular unit behaves. Definitional models will be applied in this study.

Koutsoyiannis (1977:12) recommended that the first and most important step the econometrician has to take in attempting the study of any relationship between variables is to express this relationship in mathematical form.

Thus, given that:

DPO_t = Dividend Payout

PAT_t= Profit After Tax

SHF_t = Shareholders Fund

LIQ_t = Liquidity (represented by cash and bank balances with central bank)

RSK_t = Risk (represented by loan loss provision)

LEV_t = Financial Leverage (represented by long term borrowing)

Specifically, we post the following relationship:

$DPO_t = f(PAT_t)$ (1)

$DPO_t = f(SHF_t)$ (2)

$DPO_t = f(LIQ_t)$ (3)

$DPO_t = f(RSK_t)$ (4)

$DPO_t = f(LEV_t)$ (5)

Dividend Payout (DPO_t) serves as the dependent variable while the independent variables are, Profit After Tax (PAT_t), Shareholders Fund (SHF_t), Liquidity (LIQ_t) Risk (RSK_t) and Financial leverage (LEV_t).

While the above served as the main models, the following equations in linear form were generated:

$$DPO_t = \alpha_o + \alpha_1 PAT_t + e_t \quad (6)$$

$$DPO_t = \beta_o + \beta_1 SHF_t + e_t \quad (7)$$

$$DPO_t = \delta_o + \delta_1 LIQ_t + e_t \quad (8)$$

$$DPO_t = \phi_o + \phi_1 RSK_t + e_t \quad (9)$$

$$DPO_t = \Psi_o + \Psi_1 LEV_t + e_t \quad (10)$$

Where:

$\alpha_o, \beta_o, \delta_o, \phi_o$ & Ψ_o = Intercept

$\alpha_1, \beta_1, \delta_1, \phi_1$ & Ψ_1 = Slope coefficients

e_t = error term

To make adjustment for banking policy changes (Reform/Consolidation) during the study period, one dummy variable is introduced to capture dividend payout in intercept and slopes respectively. Equation six (6) to ten (10) then becomes the following:

$$DPO_t = \alpha_o + \alpha_1 PAT_t + \alpha_2 \partial_t + e_t \quad (11)$$

$$DPO_t = \beta_o + \beta_1 SHF_t + \beta_2 \partial_t + e_t \quad (12)$$

$$DPO_t = \delta_o + \delta_1 LIQ_t + \delta_2 \partial_t + e_t \quad (13)$$

$$DPO_t = \phi_o + \phi_1 RSK_t + \phi_2 \partial_t + e_t \quad (14)$$

$$DPO_t = \Psi_o + \Psi_1 LEV_t + \Psi_2 \partial_t + e_t \quad (15)$$

Where:

∂_t is the dummy variable

∂_t = 0: From year 2001 - 2005 (Pre-consolidation)

∂_t = 1: From year 2006 – 2008 (Post-consolidation)

In equation (11), the dependent variable is dividend payout, while the independent variables are profit after tax and the dummy. The study intends to show the impact of the performance of banks as measured by profit after tax and the dummy variable on the dividend payout of banks in Nigeria.

In equation (12), Dividend payout (DPO_t) is regressed on shareholders fund (SHF_t) and the dummy variable to show the effect of shareholders fund on the dividend payout in the Nigerian banking industry.

Equation (13) will indicate the effect of Liquidity (LIQ_t) and the dummy variable on the dividend payout in the Nigerian banking industry.

Equation (14) will ascertain the influence of risk (RSK_t) as measured by loan loss provision and the dummy variable on the dividend payout in the Nigerian banking industry.

And equation (15) will show the extent to which financial leverage (LEV_t) as measured by long term borrowing and the dummy variable affects the dividend payout in the Nigerian banking industry.

3.7.1 A PRIORI EXPECTATION

PROFIT AFTER TAX

Profit after tax is expected to have a positive relationship with dividend payout. This means that increase in profit after tax will yield high dividend in the banking sector.

$$\Delta DPO_t / \Delta PAT_t > 0$$

SHAREHOLDERS FUND

This variable is expected to have a positive relationship with dividend payout. This is because increase in shareholders fund will boost the dividend payout of the bank.

$$\Delta DPO_t / \Delta SHF_t > 0$$

LIQUIDITY

The variable, liquidity is expected to have a positive relationship with dividend payout. This is because; the more liquid a bank is the better the dividend payout.

$$\Delta DPO_t / \Delta LIQ_t > 0$$

RISK

This variable is expected to have a negative relationship with dividend payout. Reason is that the more risky a bank is the fewer dividends it pays.

$\Delta DPO_t / \Delta RSK_t < 0$

FINANCIAL LEVERAGE

This variable is expected to have a negative relationship with dividend payout. This is because an increase in financial leverage (Gearing) reduces the amount paid out as dividend.

$\Delta DPO_t / \Delta LEV_t < 0$

DUMMY VARIABLE

The dummy variable is actually related to the banking policy factor that affects positively the dividend payout through the reforms and consolidation of banks in Nigeria during the study period. This variable is "dummy" because it cannot be actually valued numerically.

$\Delta DPO_t / \Delta \partial_t > 0$

On a priori, we expect:

$\alpha_1 > 0, \beta_1 > 0, \delta_1 > 0, \phi_1 < 0, \Psi_1 < 0$ & $\partial_t > 0$

3.7.2 CRITERIA FOR DECISION MAKING

If the calculated F* (F-statistics) is greater than the critical value of F obtained from the F - table at 10% level of significance with V_1 and V_2 degrees of freedom, each of the five null hypotheses will be rejected in favour of the five

alternate hypotheses, and accept that each regression is significant. If on the other hand, the calculated F* is less than the critical F, each of the five null hypotheses is accepted. Indicating that each of the regression is not significant

3.8 JUSTIFICATION OF THE TECHNIQUE

The choice of the multiple regressions for the study is justified on the merit of its strength in determining the variability of the variables in a study.

A positive (r) correlation implies that as one variable increases in value, the other variable also increases in value. The reverse is the case in a negative correlation; while one variable increases the other has the tendency to decrease in value. The closer the correlation value is to 1, the stronger the relationship between the variables (Pallant, 2002).

In a qualitative research, the issue is usually not the population size that matters or the frequency with which the action occurs but the nature and content of what is researched and the meaning that are most important. The method involves the identification of meaning, categorization, and the evaluation of their relative importance, which need be listed. Jankowicz (2000) insists that the fact in issue is not the number and meanings, but on the basic assumptions on which the research method and techniques are based. Qualitative research develops a sense of coherence in the study, which is usually dictated by

the study rather than any prior suggested structure (Meloy, 2002). Thus, the above principles justified the techniques applied.

3.9 SUMMARY

The chapter examines the various research methods, method of data collection and techniques of analysis adopted by the researcher. Quantitative and qualitative research method is to be used in the study to provide understanding of the variables in the model.

Data were collected from secondary source only, through the use of past records. Techniques chosen to analyze the data were descriptive statistics, correlation and regression. To ease computation, Statistical Package for Social Sciences (SPSS 17.0 Version) software is to be used. The choice of various techniques has been duly justified.

CHAPTER FOUR

DATA PRESENTATION AND ANALYSIS

4.1 INTRODUCTION

In this chapter all the necessary data and analysis in relation to dividend payout, profit after tax, shareholders fund, liquidity, risk, as well as financial leverage are presented. The data utilized are presented and inferences drawn on the basis of the statistical test of significance from the regression results of chosen relevant variables. The data obtained were fitted into the equations by ordinary least square (OLS) regression method. Linear relationship between the dependent and the independent variables were generated. The hypotheses stated in chapter one are tested in the chapter.

4.2 DATA PRESENTATION

Table 4.1 presents the mean data of the sampled banks used for the regression analysis. The data were condensed to suit the appropriate analytical tool. Mean as a measure of central tendency was used in averaging the data to suit the model specification of the study. The raw data of the sampled banks are available in the appendix.

In the model specification, profit after tax (PAT), shareholders fund (SHF), liquidity (LIQ), risk (RSK), and financial leverage (LEV) served as the

independent variables while dividend payout (DPO) served as the dependent variable for the five regression equations.

TABLE 4.1: DEPENDENT AND INDEPENDENT VARIABLES OF THE REGRESSION MODEL

YEAR	Dependent Variable	Independent Variables					
	DPO	PAT	SHF	LIQ	RSK	LEV	DUM
2001	978.6	2810.6	9920.6	32845.8	4824.2	0.0	0
2002	1458.8	3001.8	14910.4	37549.0	6990.0	0.0	0
2003	1887.6	5017.8	18026.6	43757.4	4848.0	384.2	0
2004	2629.8	5828.4	24022.4	50531.6	5156.2	705.0	0
2005	3320.4	6492.4	33023.8	63607.4	6287.4	1381.8	0
2006	4133.6	9569.6	55766.2	71942.8	9252.4	2074.4	1
2007	4955.4	13979.4	84617.0	73036.2	10972.4	16259.8	1
2008	3681.6	25935.0	170525.4	115017.4	10918.8	17111.2	1

Source: Computed by the Researcher from the Nigerian stock exchange fact book and annual statement of account of the sampled banks

Where:

DPO_t = Dividend Payout

PAT_t= Profit After Tax

SHF_t = Shareholders Fund

LIQ_t = Liquidity represented by cash and bank balances with central bank

RSK_t = Risk represented by loan loss provision

LEV_t = Financial Leverage represented by long term borrowing

DUM = Dummy variable

From the dividend payout variable figures, the year 2007 has the highest figure of 4955.4 followed by the year 2006 with a figure of 4133.6. The year with a least figure was the year 2001 with a figure of 978.6.

The profit after tax variable figures show that the year 2008 has the highest figure of 25935.0 followed by the year 2007 with a figure of 13979.4. The year with a least figure was the year 2001 with a figure of 2810.6.

The shareholders fund variable figures show that the year 2008 has the highest figure of 170525.4 followed by the year 2007 with a figure of 84617.0. The year with a least figure was the year 2001 with a figure of 9920.6.

The liquidity variable figures also show that the year 2008 has the highest figure of 115017.4 followed by the year 2007 with a figure of 73036.2. The year with a least figure was the year 2001 with a figure of 32845.8.

The highest figure for the risk variable figures show that the year 2007 has the highest figure of 10972.4 followed by the year 2008 with a figure of 10918.8. The year with a least figure was the year 2001 with a figure of 4824.2.

The leverage variable figures show that the year 2008 has the highest figure of 17111.2 followed by the year 2007 with a figure of 16259.8. The years with least figures were the years 2001 and 2002 with a figure of 0.0.

4.3 DATA ANALYSIS AND TEST OF HYPOTHESES

In this section, the data utilized are analyzed using descriptive, correlation and regression technique. Also, the hypotheses stated in chapter one are tested.

4.3.1 THE EFFECT OF PROFIT AFTER TAX ON DIVIDEND PAYOUT IN THE NIGERIAN BANKING INDUSTRY

This subsection analyses the effect of profit after tax on the dividend payout of banks in Nigeria. The first null hypothesis which states that bank performance as measured by profit after tax has no significant effect on the dividend payout in the Nigerian Banking Industry is also tested.

4.3.1.1 DESCRIPTIVE ANALYSIS

Table 4.2 presents the descriptive statistics of dividend Payout and profit after tax.

Table 4.2 Descriptive Statistics: Profit After Tax on Dividend Payout

	N	Minimum	Maximum	Mean	Std. Deviation
DIVIDENDPAYOUT	8	978.60	4955.40	2.8807E3	1383.468
PROFIT AFTERTAX	8	2810.60	25935.00	9.0794E3	7730.780
Valid N (listwise)	8				

Source: SPSS 17.0 Output File

The result in Table 4.2 shows that the dividend payout of the sampled banks during the study period ranges from N978 million to N4.95 billion. The profit after tax lies between N2.81 billion and N25.93 billion. The result also indicates that on average Nigerian banks pay out N2.88 billion as dividend, while the profit after tax have a mean of N9.07 billion.

4.3.1.2 CORRELATION ANALYSIS

Table 4.3 illustrates the correlation matrix of dividend Payout and profit after tax.

Table 4.3 Correlation Matrix: Profit After Tax on Dividend Payout

		DPO	PAT
DPO	Person Correlation	1	0.649***
	Sig (2 tailed)	.	0.082
	N	8	8
PAT	Pearson correlation	0.649***	1
	Sig (2-tailed)	0.082	.
	N	8	8

*, ** and *** indicate correlation values are significant at 1%, 5% and 10% level (2-tailed).
Source: SPSS 17.0 Output File

The result in table 4.3 indicates that there is a positive relationship between dividend payout and profit after tax. The correlation coefficient is 64.9% and it is statistically significant at 10% level of significance.

4.3.1.3 REGRESSION ANALYSIS

This subsection analyses the regression model summary, coefficients and collinearity diagnostics. Tables 4.4, 4.5, and 4.6 presents the model summary, coefficients and colinearity diagnostics accordingly.

Table 4.4 Model Summary[b]: Profit After Tax on Dividend Payout

Model	R	R Square	Adjusted R Square	Std error of the Estimate	Durbin-Watson
1	0.824[a]	0.679	0.550	928.079	1.320

a. Predictors: (Constant), Dummy, Profit after tax
b. Dependent Variable: Dividend Payout
Source: SPSS 17.0 Output File

The result from table 4.4 indicates that the value of the coefficient of correlation (R) is 0.824. This shows a strong positive correlation. The coefficient of determination (R^2) stood at 0.679. This indicates that only 67.9% of the total variation of dividend payout is accounted for by profit after tax, while the remaining 32.1% is accounted for by other variables. The adjusted R^2 of 0.550 compliments the high explanatory power of the R^2.

The standard error of the estimate is 928.079. This is low compared to the standard deviation of the mean of the dependent variable 1383.468 (Table 4.2). The model is therefore adequate and preferred.

The Durbin-Watson (DW) statistics is 1.320. From the Durbin-Watson table, with 5 percent level of significance, n = 8 observations and k^I = 2 independent variables, the significance points of d_L and d_u are:

$$d_L = 0.56, \quad d_u = 1.78$$

The calculated DW statistics of 1.32 lies between the lower d_L (0.56) and the upper d_u (1.78). That is $d_L < d < d_u$; $0.56 < 1.32 < 1.78$

This shows that there is inconclusive evidence regarding the presence or absence of positive first order serial correlation.

Table 4.5 Regression Coefficients[a]: Profit After Tax on Dividend Payout

Model	Unstandardized Coefficients		Standardized Coefficients			Collinearity Statistics	
	B	Std Error	Beta	T	Sig t	Tolerance	VIF
(Constant)	2067.764	540.230		3.828	0.012		
PAT	-0.003	0.075	-0.015	-0.037	0.972	0.369	2.709
DUM	2234.430	1115.593	0.836	2.003	0.102	0.369	2.709

a. Dependent Variable: Dividend Payout

Source: SPSS 17.0 Output File

The regression equation is given thus:

$$DPO_t = \alpha_o + \alpha_1 PAT_t + \alpha_2 \partial_t + e_t \qquad (11)$$

$$DPO_t = \underset{(540.230)}{2067.764} - \underset{(0.075)}{0.003PAT_t} + \underset{(1115.593)}{2234.430\partial_t}$$

In table 4.5, the unstandardized coefficients show the coefficients (B) and the standard error. The intercept shows a positive relationship with dividend payout. The coefficient for profit after tax shows a negative relationship (-0.003) with dividend payout. This doesn't conform to the a priori expectation. It is also not in line with the findings of Jose (2001:16) and Brittain (1996). The dummy variable has a positive sign and it conforms to the a priori expectation.

The standard error of the constant is 540.23 and it is less than 1033.88, which is half the numerical value of the parameter estimate of 2067.764. This implies that the estimate for the constant is statistically significant. The standard error of profit after tax is 0.075 and it is greater than -0.0015, which is half the numerical value of the parameter estimate of -0.003. This shows that the estimate

for profit after tax is statistically insignificant. The standard error of the dummy variable is 1115.59 and it is less than 1117.22, which is half the numerical value of the parameter estimate of 2234.43. This implies that the estimate for the dummy variable is statistically significant.

The standard coefficients indicate that the values of the variable have been converted to scale for ease. The beta value gives the contribution or relevance of each of the independent variables. The highest beta figure is 0.836 which indicates that the dummy variable has a strong correlation with dividend payout rather than profit after tax, which has a less beta value of -0.015.

The t statistics for the constant is 3.828; the significance is 0.012. This is less than 10% significance level (1.2% < 10%) and greater than 90% confidence interval (98.8% > 90%). It means that it is significant. The t statistics for the coefficient of profit after tax is -0.037 and the significance is 0.972. This is greater than 10% significance level (97.2% > 10%) and less than 90% confidence interval (2.83% < 90%). This indicates that it is not significant. The dummy variable has 2.003 as its t value with a significance of 0.102. This is greater than 10% significance level (10.2% > 10%) and less than 90% confidence interval (89.8 < 90%), indicating that it is not significant.

The tolerance is the percentage of the variance in a given predictor that cannot be explained by the other predictors. Thus, the small tolerances show that

about 30 percent of the variance in a given predictor can be explained by the other predictor.

When the tolerances are close to 0, there is high multicollinearity and the standard error of the regression coefficients will be inflated. A variance inflation factor greater than 2 is usually considered problematic, and the VIF in table 4.5 is 2.709.

Table 4.6 Collinearity Diagnostics[a]: Profit After Tax on Dividend Payout

Model	Dimension	Eigen value	Condition Index
1	1	2.515	1.000
	2	0.395	2.523
	3	0.090	5.283

a. Dependent Variable: Dividend Payout

The collinearity diagnostics in table 4.6 confirm that there are no problems with multicollinearity. One of the eigenvalue is close to 0, indicating that the predictors may be intercorrelated and that small changes in the data values may lead to large changes in the estimates of the coefficients.

The condition indices are computed as the square roots of the ratios of the largest eigenvalue to each successive eigenvalue. Values greater than 15 indicate a possible problem with collinearity; greater than 30, a serious problem. The three indices are less than 15, suggesting absence of collinearity.

4.3.1.4 TEST OF THE OVERALL SIGNIFICANCE OF THE REGRESSION Table 4.7 presents the analysis of variance of the model under study.

4.3.1.5

Table 4.7 Analysis of Variance (ANOVA[b]) : Profit after tax on Dividend Payout

Model	Sum of Squares	df	Mean Square	F	Sig.
1. Regression	9091242.321	2	4545621.161	5.277	0.059[a]
Residual	4306655.514	5	861331.103		
Total	1.340E7	7			

a. Predictors: (Constant), Dummy, Profit after tax
b. Dependent Variable: Dividend Payout
Source: SPSS 17.0 Output File

Testing the overall significance of the regression implies testing the null hypothesis against the alternative hypothesis. If the null hypothesis is true that all the true parameters are zero, there is no linear relationship between the dependent and independent variables. The overall significance of the regression is tested using F Statistic. In this study the F value is 5.277 with a significance of 0.059 (Table 4.7), which is less than 10% (5.9% < 10%). This means that the variation explained by the model is not due to chance. Thus the regression is significant.

It is therefore, concluded that a linear relationship exist between the endogenous and the exogenous variables of the model. Based on the research findings, the first null hypothesis which states that bank performance as measured by profit after tax has no significant effect on the dividend payout in the Nigerian banking industry is rejected. This is not in line with a study conducted by Jose (2001:16) and Brittain (1996).

4.3.2 THE IMPACT OF SHAREHOLDERS FUND ON DIVIDEND PAYOUT IN THE NIGERIAN BANKING INDUSTRY

This subsection analyses the impact of shareholders fund on the dividend payout of banks in Nigeria. The second null hypothesis which states that shareholders fund has no significant impact on the dividend payout in the Nigerian banking industry is also tested.

4.3.2.1 DESCRIPTIVE ANALYSIS

Table 4.8 presents the descriptive statistics of dividend Payout and shareholders fund.

Table 4.8 Descriptive Statistics: Shareholders Fund on Dividend Payout

	N	Minimum	Maximum	Mean	Std. Deviation
DIVIDENDPAYOUT	8	978.60	4955.40	2.8807E3	1383.468
SHAREHOLDERS FUND	8	9920.60	1.71E5	5.1352E4	54203.726
Valid N (listwise)	8				

Source: SPSS 17.0 Output File

The result in table 4.8 shows that the dividend payout of the sampled banks during the study period ranges from N978 million to N4.95 billion. The shareholders fund lies between N9.92 billion and N171 billion. The result also indicates that on average Nigerian banks pay out N2.88 billion as dividend, while the shareholders fund have a mean of N51.3 billion. This seems to suggest that there have been a significant increase in shareholders fund during the study period.

4.3.2.2 CORRELATION ANALYSIS

Table 4.9 illustrates the correlation matrix of dividend Payout and shareholders fund.

Table 4.9 Correlation Matrix: Shareholders Fund on Dividend Payout

		DPO	SHF
DPO	Person Correlation	1	0.633***
	Sig (2 tailed)	.	0.092
	N	8	8
SHF	Pearson correlation	0.633***	1
	Sig (2-tailed)	0.092	.
	N	8	8

*, ** and *** indicate correlation values are significant at 1%, 5% and 10% level (2-tailed).

Source: SPSS 17.0 Output File

The result in table 4.9 indicates that there is a positive relationship between dividend payout and shareholders fund. The correlation coefficient is 63.3% and it is statistically significant at 10% level of significance.

4.3.2.3 REGRESSION ANALYSIS

This subsection analyses the regression model summary, coefficients and collinearity diagnostics. Tables 4.10, 4.11, and 4.12 presents the model summary, coefficients and colinearity diagnostics accordingly.

Table 4.10 Model Summary[b]: Shareholders Fund on Dividend Payout

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.825[a]	.680	.552	925.80952	1.342

a. Predictors: (Constant), Dummy, Shareholders Fund

b. Dependent Variable: Dividend Pay Out

Source: SPSS 17.0 Output File

The result from table 4.10 indicates that the value of the coefficient of correlation (R) is 0.825. This shows a strong positive correlation. The coefficient of determination (R^2) stood at 0.680. This indicates that only 68% of the total variation of dividend payout is accounted for by shareholders fund, while the remaining 32% is accounted for by other variables. The adjusted R^2 of 0.552 compliments the high explanatory power of the R^2.

The standard error of the estimate is 925.809. This is low compared to the standard deviation of the mean of the dependent variable 1383.468 (Table 4.8). The model is therefore adequate and preferred.

The Durbin-Watson (DW) statistics is 1.340. From the Durbin-Watson table, with 5 percent level of significance, n = 8 observations and k^I = 2 independent variables, the significance points of d_L and d_u are:

$$d_L = 0.56, \quad d_u = 1.78$$

The calculated DW statistics of 1.34 lies between the lower d_L (0.56) and the upper d_u (1.78). That is $d_L < d < d_u$; $0.56 < 1.34 < 1.78$.

This shows that there is inconclusive evidence regarding the presence or absence of positive first order serial correlation.

Table 4.11 Regression Coefficients[a]: Shareholders Fund on Dividend Payout

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig t	Collinearity Statistics	
	B	Std Error	Beta			Tolerance	VIF
(Constant)	2089.548	466.250		4.482	0.007		
SHF	-0.002	0.011	-0.068	-0.161	0.878	0.362	2.763
DUM	2346.304	1123.771	0.878	2.088	0.091	0.362	2.763

a.Dependent Variable: Dividend Payout

Source: SPSS 17.0 Output File

The regression equation is given thus:

$$DPO_t = \beta_o + \beta_1 SHF_t + \beta_2 \partial_t + e_t \qquad (12)$$

$$DPO_t = 2089.548 - 0.002\ SHF_t + 2346.304\partial_t$$
$$(466.250) \quad (0.011) \quad (1123.771)$$

In table 4.11, the unstandardized coefficients show the coefficients (B) and the standard error. The intercept shows a positive relationship with dividend payout. The coefficient for shareholders fund shows a negative relationship (-0.002) with dividend payout. This doesn't conform to the a priori expectation. The dummy variable has a positive sign and it conforms to the a priori expectation.

The standard error of the constant is 466.25 and it is less than 1044.77, which is half the numerical value of the parameter estimate of 2089.548. This implies that the estimate for the constant is statistically significant. The standard error of shareholders fund is 0.011 and it is greater than -0.001, which is half the

numerical value of the parameter estimate of -0.002. This shows that the estimate for shareholders fund is statistically insignificant. The standard error of the dummy variable is 1123.771 and it is less than 1173.152, which is half the numerical value of the parameter estimate of 2346.304. This implies that the estimate for the dummy variable is statistically significant.

The standard coefficients indicate that the values of the variable have been converted to scale for ease. The beta value gives the contribution or relevance of each of the independent variables. The highest beta is figure 0.878 which indicates that the dummy variable has a strong correlation with dividend payout rather than shareholders fund, which has a less beta value of -0.068.

The t statistics for the constant is 4.482; the significance is 0.007. This is less than 10% significance level (0.7% < 10%) and greater than 90% confidence interval (99.3% > 90%). It means that it is significant. The t statistics for the coefficient of shareholders fund is -0.161 and the significance is 0.878. This is greater than 10% significance level (87.8% > 10%) and less than 90% confidence interval (12.2% < 90%). This indicates that it is not significant. The dummy variable has 2.088 as its t value with a significance of 0.091. This is less than 10% significance level (9.1% < 10%) and greater than 90% confidence interval (90.9 > 90%), indicating that it is significant.

The tolerance is the percentage of the variance in a given predictor that cannot be explained by the other predictors. Thus, the small tolerances show that about 30 percent of the variance in a given predictor can be explained by the other predictor.

When the tolerances are close to 0, there is high multicollinearity and the standard error of the regression coefficients will be inflated. A variance inflation factor greater than 2 is usually considered problematic, and the VIF in table 4.11 is 2.763.

Table 4.12 Collinearity Diagnostics[a]: Shareholders Fund on Dividend Payout

Model	Dimension	Eigen value	Condition Index
1	1	2.475	1.000
	2	0.417	2.435
	3	0.108	4.783

a. Dependent Variable: Dividend Payout

Source: SPSS 17.0 Output File

The collinearity diagnostics in table 4.12 confirm that there are no problems with multicollinearity. One of the eigenvalue is close to 0, indicating that the predictors may be intercorrelated and that small changes in the data values may lead to large changes in the estimates of the coefficients.

The condition indices are computed as the square roots of the ratios of the largest eigenvalue to each successive eigenvalue. Values greater than 15 indicate a possible problem with collinearity; greater than 30, a serious problem. The three indices are less than 15, suggesting absence of collinearity.

4.3.2.4 TEST OF THE OVERALL SIGNIFICANCE OF THE REGRESSION

Table 4.13 presents the analysis of variance of the model under study.

Table 4.13 Analysis of Variance (ANOVA[b]) : Shareholders Fund on Dividend Payout

Model	Sum of Squares	df	Mean Square	F	Sig.
1. Regression	9112281.460	2	4556140.730	5.316	0.058[a]
Residual	4285616.375	5	857123.275		
Total	1.340E7	7			

a. Predictors: (Constant), Dummy, Shareholders Fund
b. Dependent Variable: Dividend Payout
Source: SPSS 17.0 Output File

Testing the overall significance of the regression implies testing the null hypothesis against the alternative hypothesis. If the null hypothesis is true that all the true parameters are zero, there is no linear relationship between the dependent and independent variables. The overall significance of the regression is tested using F Statistic. In this study the F value is 5.316 with a significance of 0.058 (Table 4.13), which is less than 10% (5.8% < 10%). This means that the variation explained by the model is not due to chance. Thus the regression is significant.

It is therefore, concluded that a linear relationship exist between the endogenous and the exogenous variables of the model. Base on the research findings, the second null hypothesis which states that shareholders fund has no significant impact on the dividend payout in the Nigerian banking industry is rejected.

4.3.3 THE EFFECT OF LIQUIDITY ON THE DIVIDEND PAYOUT IN THE NIGERIAN BANKING INDUSTRY

This subsection analyses the effect of liquidity on the dividend payout of banks in Nigeria. The third null hypothesis which states that liquidity has no significant effect on the dividend payout in the Nigerian Banking Industry is also tested.

4.3.3.1 DESCRIPTIVE ANALYSIS

Table 4.14 presents the descriptive statistics of dividend Payout and liquidity as represented by cash and bank balances with central bank.

Table 4.14 Descriptive Statistics: Liquidity on Dividend Payout

	N	Minimum	Maximum	Mean	Std. Deviation
DIVIDENDPAYOUT	8	978.60	4955.40	2.8807E3	1383.468
LIQUIDITY	8	32845.80	1.15E5	6.1036E4	26562.018
Valid N (listwise)	8				

Source: SPSS 17.0 Output File

The result in table 4.14 shows that the dividend payout of the sampled banks during the study period ranges from N978 million to N4.95 billion. The liquidity lies between N32.84 billion and N115 billion. The result also indicates that on average Nigerian banks pay out N2.88 billion as dividend, while the liquidity has a mean of N61.03 billion.

4.3.3.2 CORRELATION ANALYSIS

Table 4.15 illustrates the correlation matrix of dividend Payout and liquidity.

Table 4.15 Correlation Matrix: Liquidity on Dividend Payout

		DPO	LIQ
DPO	Person Correlation	1	0.738**
	Sig (2 tailed)	.	0.037
	N	8	8
LIQ	Pearson correlation	0.738**	1
	Sig (2-tailed)	0.037	.
	N	8	8

*, ** and *** indicate correlation values are significant at 1%, 5% and 10% level (2-tailed).

Source: SPSS 17.0 Output File

The result in table 4.15 indicates that there is a strong positive relationship between dividend payout and liquidity. The correlation coefficient is 73.8% and it is statistically significant at 5% level of significance.

4.3.3.3 REGRESSION ANALYSIS

This subsection analyses the regression model summary, coefficients and collinearity diagnostics. Tables 4.16, 4.17, and 4.18 presents the model summary, coefficients and colinearity diagnostics accordingly.

Table 4.16 Model Summary[b]: Liquidity on Dividend Payout

Model	R	R Square	Adjusted R Square	Std error of the Estimate	Durbin-Watson
1	0.834[a]	0.696	0.574	902.641	1.425

a. Predictors: (Constant), Dummy, Liquidity
b. Dependent Variable: Dividend Payout
Source: SPSS 17.0 Output File

The result from table 4.16 indicates that the value of the coefficient of correlation (R) is 0.834. This shows a strong positive correlation. The coefficient of determination (R^2) stood at 0.696. This indicates that only 69.6% of the total variation of dividend payout is accounted for by liquidity, while the remaining 30.4% is accounted for by other variables. The adjusted R^2 of 0.574 compliments the high explanatory power of the R^2.

The standard error of the estimate is 902.641. This is low compared to the standard deviation of the mean of the dependent variable 1383.468 (Table 4.14). The model is therefore adequate and preferred.

The Durbin-Watson (DW) statistics is 1.425. From the Durbin-Watson table, with 5 percent level of significance, n = 8 observations and k^I = 2 independent variables, the significance points of d_L and d_u are:

$$d_L = 0.56, \quad d_u = 1.78$$

The calculated DW statistics of 1.43 lies between the lower d_L (0.56) and the upper d_u (1.78). That is $d_L < d < d_u$; $0.56 < 1.43 < 1.78$

This shows that there is inconclusive evidence regarding the presence or absence of positive first order serial correlation.

Table 4.17 Regression Coefficients[a]: Liquidity on Dividend Payout

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig t	Collinearity Statistics	
	B	Std Error	Beta			Tolerance	VIF
(Constant)	1532.373	1055.497		1.452	0.206		
LIQ	0.011	0.021	0.220	0.536	0.615	0.362	2.766
DUM	1732.402	1096.247	0.648	1.580	0.175	0.362	2.766

a.Dependent Variable: Dividend Payout

Source: SPSS 17.0 Output File

The regression equation is given thus:

$$DPO_t = \delta_o + \delta_1 LIQ_t + \delta_2 \partial_t + e_t \qquad (13)$$

$$DPO_t = 1532.373 + 0.011LIQ_t + 1732.402\partial_t$$
$$(1055.497) \quad (0.021) \quad (1096.247)$$

In table 4.17, the unstandardized coefficients show the coefficients (B) and the standard error. The intercept shows a positive relationship with dividend payout. The coefficient for liquidity shows a positive relationship (0.011) with dividend payout and it is not in line with the study of Ayub (2003:8). This conforms to the a priori expectation. The dummy variable has a positive sign and it conforms to the a priori expectation.

The standard error of the constant is 1055.497 and it is greater than 756.186, which is half the numerical value of the parameter estimate of 1532.373. This implies that the estimate for the constant is statistically insignificant. The standard

error of liquidity is 0.021 and it is greater than 0.006, which is half the numerical value of the parameter estimate of -0.01. This shows that the estimate for liquidity is statistically insignificant. The standard error of the dummy variable is 1096.247 and it is greater than 866.201, which is half the numerical value of the parameter estimate of 1732.402. This implies that the estimate for the dummy variable is statistically insignificant.

The standard coefficients indicate that the values of the variable have been converted to scale for ease. The beta value gives the contribution or relevance of each of the independent variables. The highest beta is figure 0.648 which indicates that the dummy variable has a strong correlation with dividend payout rather than liquidity, which has a less beta value of 0.220.

The t statistics for the constant is 1.452; the significance is 0.206. This is greater than 10% significance level (20.6% > 10%) and less than 90% confidence interval (79.4% < 90%). It means that it is not significant. The t statistics for the coefficient of liquidity is 0.536 and the significance is 0.615. This is greater than 10% significance level (61.5% > 10%) and less than 90% confidence interval (38.5% < 90%). This indicates that it is not significant. The dummy variable has 1.580 as its t value with a significance of 0.175. This is greater than 10% significance level (17.5% > 10%) and less than 90% confidence interval (82.5 < 90%), indicating that it is not significant.

The tolerance is the percentage of the variance in a given predictor that cannot be explained by the other predictors. Thus, the small tolerances show that about 30 percent of the variance in a given predictor can be explained by the other predictor.

When the tolerances are close to 0, there is high multicollinearity and the standard error of the regression coefficients will be inflated. A variance inflation factor greater than 2 is usually considered problematic, and the VIF in table 4.17 is 2.766.

Table 4.18 Collinearity Diagnostics[a]: Liquidity on Dividend Payout

Model	Dimension	Eigen value	Condition Index
1	1	2.570	1.000
	2	0.399	2.537
	3	0.031	9.057

a.Dependent Variable: Dividend Payout
Source: SPSS 17.0 Output File

The collinearity diagnostics in table 4.18 confirm that there are no problems with multicollinearity. One of the eigenvalue is close to 0, indicating that the predictors may be intercorrelated and that small changes in the data values may lead to large changes in the estimates of the coefficients.

The condition indices are computed as the square roots of the ratios of the largest eigenvalue to each successive eigenvalue. Values greater than 15 indicate a possible problem with collinearity; greater than 30, a serious problem. The three indices are less than 15, suggesting absence of collinearity.

4.3.3.4 TEST OF THE OVERALL SIGNIFICANCE OF THE REGRESSION

Table 4.19 presents the analysis of variance of the model under study.

Table 4.19 Analysis of Variance (ANOVA[b]) : Liquidity on Dividend Payout

Model	Sum of Squares	df	Mean Square	F	Sig.
1. Regression	9324091.526	2	4662045.763	5.722	0.051[a]
Residual	4073806.309	5	814761.262		
Total	1.340E7	7			

a. Predictors: (Constant), Dummy, Liquidity
b. Dependent Variable: Dividend Payout
Source: SPSS 17.0 Output File

Testing the overall significance of the regression implies testing the null hypothesis against the alternative hypothesis. If the null hypothesis is true that all the true parameters are zero, there is no linear relationship between the dependent and independent variables. The overall significance of the regression is tested using F Statistic. In this study the F value is 5.72 with a significance of 0.051 (Table 4.19), which is less than 10% (5.1% < 10%). This means that the variation explained by the model is not due to chance. Thus the regression is significant.

It is therefore, concluded that a linear relationship exist between the endogenous and the exogenous variables of the model. Based on the research findings, the third null hypothesis which states that liquidity has no significant effect on the dividend payout in the Nigerian banking industry is rejected. This is not in line with a study conducted by Ayub (2003:8).

4.3.4 THE INFLUENCE OF RISK ELEMENT ON DIVIDEND PAYOUT IN THE NIGERIAN BANKING INDUSTRY

This subsection analyses the effect of risk on the dividend payout of banks in Nigeria. The fourth null hypothesis which states that risk has no significant influence on the dividend payout in the Nigerian banking industry is also tested.

4.3.4.1 DESCRIPTIVE ANALYSIS

Table 4.20 presents the descriptive statistics of dividend Payout and risk proxied by loan loss provision.

Table 4.20 Descriptive Statistics: Risk on Dividend Payout

	N	Minimum	Maximum	Mean	Std. Deviation
DIVIDENDPAYOUT	8	978.60	4955.40	2.8807E3	1383.468
RISK	8	4824.20	10972.40	7.4062E3	2623.061
Valid N (listwise)	8				

Source: SPSS 17.0 Output File

The result in table 4.20 shows that the dividend payout of the sampled banks during the study period ranges from N978 million to N4.95 billion. The loan loss provision lies between N4.82 billion and 10.97 billion. The result also indicates that on average Nigerian banks pay out N2.88 billion as dividend, while the loan loss provision have a mean of N7.40 billion.

4.3.4.2 CORRELATION ANALYSIS

Table 4.21 illustrates the correlation matrix of dividend Payout and risk element.

Table 4.21 Correlation Matrix: Risk on Dividend Payout

		DPO	RSK
DPO	Person Correlation	1	0.813**
	Sig (2 tailed)	.	0.014
	N	8	8
RSK	Pearson correlation	0.813**	1
	Sig (2-tailed)	0.014	.
	N	8	8

*, ** and *** indicate correlation values are significant at 1%, 5% and 10% level (2-tailed).
Source: SPSS 17.0 Output File

The result in table 4.21 indicates that there is a strong positive relationship between dividend payout and risk. The correlation coefficient is 81.3% and it is statistically significant at 5% level of significance.

4.3.4.3 REGRESSION ANALYSIS

This subsection analyses the regression model summary, coefficients and collinearity diagnostics. Tables 4.22, 4.23, and 4.24 presents the model summary, coefficients and colinearity diagnostics accordingly.

Table 4.22 Model Summary[b]: Risk on Dividend Payout

Model	R	R Square	Adjusted R Square	Std error of the Estimate	Durbin-Watson
1	0.831[a]	0.691	0.568	909.42970	1.064

a. Predictors: (Constant), Dummy, Risk
b. Dependent Variable: Dividend Payout
Source: SPSS 17.0 Output File

The result from table 4.22 indicates that the value of the coefficient of correlation (R) is 0.831. This shows a strong positive correlation. The coefficient of determination (R^2) stood at 0.691. This indicates that only 69.1% of the total variation of dividend payout is accounted for by risk, while the remaining 30.1% is accounted for by other variables. The adjusted R^2 of 0.568 compliments the high explanatory power of the R^2.

The standard error of the estimate is 909.429. This is low compared to the standard deviation of the mean of the dependent variable 1383.468 (Table 4.20). The model is therefore adequate and preferred.

The Durbin-Watson (DW) statistics is 1.06. From the Durbin-Watson table, with 5 percent level of significance, n = 8 observations and k^I = 2 independent variables, the significance points of d_L and d_u are:

$$d_L = 0.56, \quad d_u = 1.78$$

The calculated DW statistics of 1.32 lies between the lower d_L (0.56) and the upper d_u (1.78). That is $d_L < d < d_u$; $0.56 < 1.06 < 1.78$

This shows that there is inconclusive evidence regarding the presence or absence of positive first order serial correlation.

Table 4.23 Regression Coefficients[a]: Risk on Dividend Payout

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig t	Collinearity Statistics	
	B	Std Error	Beta			Tolerance	VIF
(Constant)	1075.369	2183.292		0.493	0.643		
RISK	0.174	0.382	0.330	0.457	0.667	0.118	8.480
DUM	1372.234	1934.076	0.513	0.710	0.510	0.118	8.480

a.Dependent Variable: Dividend Payout

Source: SPSS 17.0 Output File

The regression equation is given thus:

$$DPO_t = \phi_o + \phi_1 RSK_t + \phi_2 \partial_t + e_t \quad (14)$$

$$DPO_t = 1075.369 + 0.174RSK_t + 1372.234\partial_t$$
$$(2183.292) \quad (0.382) \quad (1934.076)$$

In table 4.23, the unstandardized coefficients show the coefficients (B) and the standard error. The intercept shows a positive relationship with dividend payout. The coefficient for risk shows a positive relationship (0.174) with dividend payout. This doesn't conform to the a priori expectation. The dummy variable has a positive sign and it conforms to the a priori expectation.

The standard error of the constant is 2183.29 and it is greater than 537.68, which is half the numerical value of the parameter estimate of 1075.39. This implies that the estimate for the constant is statistically insignificant. The standard error of risk is 0.382 and it is greater than -0.087, which is half the numerical value

of the parameter estimate of 0.174. This shows that the estimate for risk is statistically insignificant. The standard error of the dummy variable is 1934.076 and it is greater than 686.12, which is half the numerical value of the parameter estimate of 1372.23. This implies that the estimate for the dummy variable is statistically insignificant.

The standard coefficients indicate that the values of the variable have been converted to scale for ease. The beta value gives the contribution or relevance of each of the independent variables. The highest beta is figure 0.513 which indicates that the dummy variable has a strong correlation with dividend payout rather than risk, which has a less beta value of 0.330.

The t statistics for the constant is 0.493; the significance is 0.643. This is greater than 10% significance level (64.3% > 10%) and less than 90% confidence interval (35.7% < 90%). It means that it is insignificant. The t statistics for the coefficient of risk is 0.457 and the significance is 0.667. This is greater than 10% significance level (66.7% > 10%) and less than 90% confidence interval (33.3 < 90%). This indicates that it is not significant. The dummy variable has 0.710 as its t value with a significance of 0.510. This is greater than 10% significance level (51% > 10%) and less than 90% confidence interval (49.8% < 90%), indicating that it is not significant.

The tolerance is the percentage of the variance in a given predictor that cannot be explained by the other predictors. Thus, the small tolerances show that about 10 percent of the variance in a given predictor can be explained by the other predictor.

When the tolerances are close to 0, there is high multicollinearity and the standard error of the regression coefficients will be inflated. A variance inflation factor greater than 2 is usually considered problematic, and the VIF in table 4.23 is 8.480.

Table 4.24 Collinearity Diagnostics[a]: Risk on Dividend Payout

Model	Dimension	Eigen value	Condition Index
1	1	2.592	1.000
	2	0.401	2.543
	3	0.007	19.222

a.Dependent Variable: Dividend Payout
Source: SPSS 17.0 Output File

The collinearity diagnostics in table 4.24 confirm that there are possible problems with multicollinearity. One of the eigenvalue is close to 0, indicating that the predictors may be intercorrelated and that small changes in the data values may lead to large changes in the estimates of the coefficients.

The condition indices are computed as the square roots of the ratios of the largest eigenvalue to each successive eigenvalue. Values greater than 15 indicate a possible problem with collinearity; greater than 30, a serious problem. One of the indices are greater than 15, suggesting presence of collinearity.

4.3.4.4 TEST OF THE OVERALL SIGNIFICANCE OF THE REGRESSION

Table 4.25 presents the analysis of variance of the model under study.

Table 4.25 Analysis of Variance (ANOVA[b]) : Risk on Dividend Payout

Model	Sum of Squares	df	Mean Square	F	Sig.
1. Regression	926285.902	2	4631292.951	5.600	0.053[a]
Residual	435311.933	5	827062.387		
Total	1.340E7	7			

a. Predictors: (Constant), Dummy, Risk
b. Dependent Variable: Dividend Payout
Source: SPSS 17.0 Output File

Testing the overall significance of the regression implies testing the null hypothesis against the alternative hypothesis. If the null hypothesis is true that all the true parameters are zero, there is no linear relationship between the dependent and independent variables. The overall significance of the regression is tested using F Statistic. In this study the F value is 5.60 with a significance of 0.053 (Table 4.25), which is less than 10% (5.6% < 10%). This means that the variation explained by the model is not due to chance. Thus the regression is significant.

It is therefore, concluded that a linear relationship exist between the endogenous and the exogenous variables of the model. Based on the research findings, the fourth null hypothesis which states that risk has no significant influence on the dividend payout in the Nigerian banking industry is rejected.

4.3.5 THE EFFECT OF FINANCIAL LEVERAGE ON DIVIDEND PAYOUT IN THE NIGERIAN BANKING INDUSTRY

This subsection analyses the effect of financial leverage on the dividend payout of banks in Nigeria. The fifth null hypothesis which states that financial leverage has no significant effect on the dividend payout in the Nigerian banking industry is also tested.

4.3.5.1 DESCRIPTIVE ANALYSIS

Table 4.26 presents the descriptive statistics of dividend Payout and financial leverage represented by long term borrowing.

Table 4.26 Descriptive Statistics: Financial Leverage on Dividend Payout

	N	Minimum	Maximum	Mean	Std. Deviation
DIVIDENDPAYOUT	8	978.60	4955.40	2.8807E3	1383.468
FINANCIAL LEVERAGE	8	0.00	17111.20	4.7396E3	7409.692
Valid N (listwise)	8				

Source: SPSS 17.0 Output File

The result in table 4.26 shows that the dividend payout of the sampled banks during the study period ranges from N978 million to N4.95 billion. The long term borrowing lies between N0.00 billion and 17.11 billion. The result also indicates that on average Nigerian banks pay out N2.88 billion as dividend, while the long term borrowing have a mean of N4.73 billion.

4.3.5.2 CORRELATION ANALYSIS

Table 4.27 illustrates the correlation matrix of dividend Payout and financial leverage.

Table 4.27 Correlation Matrix: Financial Leverage on Dividend Payout

		DPO	LEV
DPO	Person Correlation	1	0.698***
	Sig (2 tailed)	.	0.054
	N	8	8
LEV	Pearson correlation	0.698***	1
	Sig (2-tailed)	0.054	.
	N	8	8

*, ** and *** indicate correlation values are significant at 1%, 5% and 10% level (2-tailed).

Source: SPSS 17.0 Output File

The result in table 4.27 indicates that there is a positive relationship between dividend payout and financial leverage. The correlation coefficient is 69.8% and it is statistically significant at 10% level of significance.

4.3.5.3 REGRESSION ANALYSIS

This subsection analyses the regression model summary, coefficients and collinearity diagnostics. Tables 4.28, 4.29, and 4.30 presents the model summary, coefficients and colinearity diagnostics accordingly.

Table 4.28 Model Summary[b]: Financial Leverage on Dividend Payout

Model	R	R Square	Adjusted R Square	Std error of the Estimate	Durbin-Watson
1	0.827[a]	0.684	0.558	919.780	1.092

a. Predictors: (Constant), Dummy, Financial Leverage
b. Dependent Variable: Dividend Payout
Source: SPSS 17.0 Output File

The result from table 4.28 indicates that the value of the coefficient of correlation (R) is 0.827. This shows a strong positive correlation. The coefficient of determination (R^2) stood at 0.684. This indicates that only 68.4% of the total variation of dividend payout is accounted for by financial leverage, while the remaining 31.6 is accounted for by other variables. The adjusted R^2 of 0.558 compliments the high explanatory power of the R^2.

The standard error of the estimate is 919.780. This is low compared to the standard deviation of the mean of the dependent variable 1383.468 (Table 4.26). The model is therefore adequate and preferred.

The Durbin-Watson (DW) statistics is 1.092. From the Durbin-Watson table, with 5 percent level of significance, n = 8 observations and k^I = 2 independent variables, the significance points of d_L and d_u are:

$$d_L = 0.56, \quad d_u = 1.78$$

The calculated DW statistics of 1.09 lies between the lower d_L (0.56) and the upper d_u (1.78). That is $d_L < d < d_u$; $0.56 < 1.09 < 1.78$

This shows that there is inconclusive evidence regarding the presence or absence of positive first order serial correlation.

Table 4.29 Regression Coefficients[a]: Financial Leverage on Dividend Payout

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig t	Collinearity Statistics	
	B	Std Error	Beta			Tolerance	VIF
(Constant)	2043.551	413.079		4.947	0.004		
LEV	0.023	0.077	0.125	0.303	0.774	0.375	2.669
DUM	1938.638	1097.297	0.725	1.767	0.138	0.375	2.669

a.Dependent Variable: Dividend Payout

Source: SPSS 17.0 Output File

The regression equation is given thus:

$$DPO_t = \Psi_o + \Psi_1 LEV_t + \Psi_2 \partial_t + e_t \quad (15)$$

$$DPO_t = \underset{(413.079)}{2043.551} + \underset{(0.077)}{0.023\ LEV_t} + \underset{(1097.297)}{1938.638\partial_t}$$

In table 4.5, the unstandardized coefficients show the coefficients (B) and the standard error. The intercept shows a positive relationship with dividend payout. The coefficient for financial leverage shows a positive relationship (0.023) with dividend payout. This doesn't conform to the a priori expectation. This is not in line with the findings of Jensen, Solberg and Zorm (1992). The dummy variable has a positive sign and it conforms to the a priori expectation.

The standard error of the constant is 413.079 and it is less than 1021.77, which is half the numerical value of the parameter estimate of 2043.551. This implies that the estimate for the constant is statistically significant. The standard

error of financial leverage is 0.077 and it is greater than 0.0115, which is half the numerical value of the parameter estimate of 0.023. This shows that the estimate for financial leverage is statistically insignificant. The standard error of the dummy variable is 1097.297 and it is greater than 969.319, which is half the numerical value of the parameter estimate of 1938.638. This implies that the estimate for the dummy variable is statistically insignificant.

The standard coefficients indicate that the values of the variable have been converted to scale for ease. The beta value gives the contribution or relevance of each of the independent variables. The highest beta is figure 0.7256 which indicates that the dummy variable has a strong correlation with dividend payout rather than financial leverage, which has a less beta value of 0.125.

The t statistics for the constant is 4.947; the significance is 0.004. This is less than 10% significance level (0.4% < 10%) and greater than 90% confidence interval (99.6% > 90%). It means that it is significant. The t statistics for the coefficient of financial leverage is 0.303 and the significance is 0.774. This is greater than 10% significance level (77.4% > 10%) and less than 90% confidence interval (22.6% < 90%). This indicates that it is not significant. The dummy variable has 1.767 as its t value with a significance of 0.138. This is greater than 10% significance level (13.8% > 10%) and less than 90% confidence interval (86.2 < 90%), indicating that it is not significant.

The tolerance is the percentage of the variance in a given predictor that cannot be explained by the other predictors. Thus, the small tolerances show that about 30 percent of the variance in a given predictor can be explained by the other predictor.

When the tolerances are close to 0, there is high multicollinearity and the standard error of the regression coefficients will be inflated. A variance inflation factor greater than 2 is usually considered problematic, and the VIF in table 4.29 is 2.669.

Table 4.30 Collinearity Diagnostics[a]: Financial Leverage on Dividend Payout

Model	Dimension	Eigen value	Condition Index
1	1	2.368	1.000
	2	0.496	2.185
	3	0.136	4.175

a.Dependent Variable: Dividend Payout

Source: SPSS 17.0 Output File

The collinearity diagnostics in table 4.30 confirm that there are no problems with multicollinearity. One of the eigenvalue is close to 0, indicating that the predictors may be intercorrelated and that small changes in the data values may lead to large changes in the estimates of the coefficients.

The condition indices are computed as the square roots of the ratios of the largest eigenvalue to each successive eigenvalue. Values greater than 15 indicate a possible problem with collinearity; greater than 30, a serious problem. The three indices are less than 15, suggesting absence of collinearity.

4.3.5.4 TEST OF THE OVERALL SIGNIFICANCE OF THE REGRESSION

Table 4.31 presents the analysis of variance of the model under study.

Table 4.31 Analysis of Variance (ANOVA[b]) : Financial Leverage on Dividend Payout

Model	Sum of Squares	df	Mean Square	F	Sig.
1. Regression	9167914.664	2	4583957.332	5.418	0.056[a]
Residual	4229983.171	5	845996.634		
Total	1.340E7	7			

a. Predictors: (Constant), Dummy, Financial Leverage
b. Dependent Variable: Dividend Payout
Source: SPSS 17.0 Output File

Testing the overall significance of the regression implies testing the null hypothesis against the alternative hypothesis. If the null hypothesis is true that all the true parameters are zero, there is no linear relationship between the dependent and independent variables. The overall significance of the regression is tested using F Statistic. In this study the F value is 5.418 with a significance of 0.056 (Table 4.31), which is less than 10% (5.6% < 10%). This means that the variation explained by the model is not due to chance. Thus the regression is significant.

It is therefore, concluded that a linear relationship exist between the endogenous and the exogenous variables of the model. Based on the research findings, the fifth null hypothesis which states that financial leverage has no significant effect on the dividend payout in the Nigerian banking industry is rejected. This is not in line with a study conducted by Jensen, Solberg and Zorm (1992).

4.4 SUMMARY

This chapter is concerned with the regression result on the determinant of dividend payout of banks in Nigeria. Data were presented and analyzed from the sampled banks used in the study. The data were analyzed using descriptive statistics, correlation matrix and regression. The hypotheses stated in chapter one was also tested using the F statistics. All the five null hypotheses were rejected and the alternate accepted. Thus, profit after tax (PAT), shareholders fund (SHF), liquidity (LIQ), risk (RSK), and financial leverage (LEV) are determinants of dividend payout of banks in Nigeria. The correlation result reveals that liquidity (LIQ) and risk (RSK) are the major determinants of dividend payout of banks in Nigeria

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATION

5.1 SUMMARY

The purpose of this study is to ascertain the determinants of dividend payout in the Nigerian banking industry. The scope of the study was for a period of eight years (2001 – 2008) and it covers five sampled banks quoted on the banking subsector of the Nigerian Stock exchange as at December 2008. Secondary data was used for the research work and the data was obtained from Nigerian stock Exchange (NSE) Fact Books from 2001 to 2008 and the financial Statement of the sampled banks for all the years covered by the study. The data used was the dividend payout, profit after tax, shareholders fund, liquidity represented by cash and bank balances with central bank of Nigeria, risk represented by loan loss provision and financial leverage represented by long term borrowing. The dividend payout was the dependent variable while profit after tax, shareholders fund, liquidity, risk, and financial leverage served as the independent variables.

The analytical technique used was the descriptive, correlation and regression analysis. The regression results provided the estimate for the model. The estimate was used to interpret the relationship between the dependent and independent

variables. Only the liquidity variable and dummy variable conform to the a priori expectation.

The F – test was used to test the hypotheses formulated in chapter one. The hypotheses tested, which is line with the objective of the study, was to find out whether profit after tax, shareholders fund, liquidity, risk, and financial leverage have significant impact on dividend payout of banks. The findings revealed that all the five independent variables have significant effect on the dividend payout of banks in Nigeria. Therefore the five null hypotheses stated were rejected in favour of all the alternate hypotheses.

5.2 CONCLUSIONS

The following conclusions can be deduced from the findings of the study.

The dividend payout of the sampled banks is basically influenced by various factors. The factors though may be similar in most bank but they are uniquely determined by the nature of the bank.

Foremost among the determinants of the dividend payout is the liquidity position of the company. This is a function of the profitability of the bank. Banks that have investment projects will rely on their after tax profit. Thus, the availability of alternate investment opportunity shapes what the dividend payout will eventually be.

The dividend payout of banks in Nigeria is often flexible, as it is based on the present circumstance of the bank. However, most managers will shy away from adopting policies that will necessitate reduction in the dividend paid. Reduction is viewed as a signal of non-performance and eventual failure in the future. A constant policy is often, the most preferred.

The profit after tax of a business is a major variable in the dividend formation of the organisation. Where a business does not have good performance indicators, its dividend policy will be twisted and hardly stable. Profit though, does not always determine the structure of the dividend. Bank may maintain a constant dividend to impress investors. Thus, dividend is considered as a hallmark of good performance.

The financial statements of some of banks used in the study indicate that profit after tax is not ultimately the crucial factor in the dividend payout of the banks.

The dividend paid out does not consistently vary with the profit after tax of the banks. Thus, changes in profit do not necessarily warrant increase in dividend.

Shareholders fund have a significant impact on the dividend payout of banks. The implication is that reduction or increase in the shareholders fund will make for a different dividend payout.

The loan loss provision and the long term borrowing by banks also influence the dividend payout. A bank that is highly geared will reduce it dividend or not pay dividend.

5.3 LIMITATIONS OF THE STUDY

A major limitation of this study is that the model used, has the tendency of omitting other important variables. Another limitation is that the study is made up of quoted banks with more than 20 years of incorporation.

Future research might fruitfully consider –

1. Modeling the dividend payout of bank in Nigeria using the sequential search approach, and
2. Examining the application of the model in this study on "quoted banks with less than 15 years of listing".

Either of these two approaches will help confirm or disconfirm the utility of the model of this study in explaining the determinant of dividend payout of banks in Nigeria.

5.4 RECOMMENDATIONS

The following recommendations are made based on the results of the study.

Adoption of a dividend payout policy by banks in Nigeria should be strictly considered based on the unique circumstances of the firm and not necessarily

based on age long traditional factors often formulated by authors. This is essential in order to maintain a steady and reasonably policy that will maximize the wealth of shareholders.

Banks should try all their possible best in improving their liquidity and avoid risk from each transaction year, since it has greater impact than any other factor in determining the dividend payout from year 2001 till date.

The model in the study can be used to forecast the dividend payout of banks in Nigeria and as well the stability of dividend payment over time.

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APPENDIX I

TIME SERIES DATA ON DIVIDEND PAYOUT (DPO) OF THE SAMPLED BANKS AND THEIR AVERAGE IN MILLIONS OF NAIRA (DEPENDENT VARIABLE)

Year/Firms	Afribank Plc	First Bank Plc	GTB Plc	UBA Plc	Union Bank Plc	Sum	Average
2001	166.0	2114.0	300.0	425.0	1888.0	4893.0	978.6
2002	166.0	2642.0	830.0	510.0	3146.0	7294.0	1458.8
2003	331.0	3811.0	750.0	1148.0	3398.0	9438.0	1887.6
2004	442.0	5429.0	1050.0	1530.0	4698.0	13149.0	2629.8
2005	0.0	6325.0	2183.0	1830.0	6264.0	16602.0	3320.4
2006	0.0	5238.0	2100.0	7060.0	6270.0	20668.0	4133.6
2007	1532.0	9431.0	4120.0	42.0	9652.0	24777.0	4955.4
2008	0.0	12928.0	5129.0	42.0	309.0	18408.0	3681.6

Source: Nigerian Stock Exchange Fact book and Annual Report and Account of the sampled banks 2001-2008

TIME SERIES DATA ON PROFIT AFTER TAX (PAT) OF THE SAMPLED BANKS AND THEIR AVERAGE IN MILLIONS OF NAIRA (INDEPENDENT VARIABLE)

Year/Firms	Afribank Plc	First Bank Plc	GTB Plc	UBA Plc	Union Bank Plc	Sum	Average
2001	1180.0	5066.0	1503.0	1269.0	5035.0	14053.0	2810.6
2002	1801.0	4776.0	2140.0	1566.0	4726.0	15009.0	3001.8
2003	988.0	11010.0	3211.0	3280.0	6600.0	25089.0	5017.8
2004	1328.0	11483.0	4056.0	4525.0	7750.0	29142.0	5828.4
2005	652.0	12184.0	5330.0	4921.0	9375.0	32462.0	6492.4
2006	2684.0	14069.0	8677.0	11550.0	10868.0	47848.0	9569.6
2007	5196.0	16371.0	13013.0	21441.0	13876.0	69897.0	13979.4
2008	10033.0	30473.0	21489.0	40825.0	26855.0	129675.0	25935.0

Source: Nigerian Stock Exchange Fact book and Annual Report and Account of the sampled banks 2001-2008

APPENDIX II

TIME SERIES DATA ON SHAREHOLDERS FUND (SHF) OF THE SAMPLED BANKS AND THEIR AVERAGE IN MILLIONS OF NAIRA (INDEPENDENT VARIABLE)

Year/Firms	Afribank Plc	First Bank Plc	GTB Plc	UBA Plc	Union Bank Plc	Sum	Average
2001	4554.0	18170.0	4026.0	9067.0	13786.0	49603.0	9920.6
2002	6268.0	19406.0	7949.0	10627.0	30302.0	74552.0	14910.4
2003	6969.0	27006.0	9661.0	13767.0	32730.0	90133.0	18026.6
2004	7749.0	41605.0	12967.0	18059.0	39732.0	120112.0	24022.4
2005	23362.0	44672.0	36168.0	17702.0	43215.0	165119.0	33023.8
2006	29085.0	60980.0	40645.0	47621.0	100500.0	278831.0	55766.2
2007	30774.0	77351.0	47433.0	164821.0	102706.0	423085.0	84617.0
2008	39526.0	339847.0	161053.0	193041.0	119160.0	852627.0	170525.4

Source: Nigerian Stock Exchange Fact book and Annual Report and Account of the sampled banks 2001-2008

TIME SERIES DATA ON LIQUIDITY (LIQ) OF THE SAMPLED BANKS AND THEIR AVERAGE IN MILLIONS OF NAIRA (INDEPENDENT VARIABLE)

Year/Firms	Afribank Plc	First Bank Plc	GTB Plc	UBA Plc	Union Bank Plc	Sum	Average
2001	32259.0	12275.0	16683.0	87721.0	15291.0	164229.0	32845.8
2002	31148.0	15457.0	16456.0	103870.0	20814.0	187745.0	37549.0
2003	44381.0	21445.0	31256.0	92615.0	29090.0	218787.0	43757.4
2004	30790.0	24098.0	30861.0	89820.0	77089.0	252658.0	50531.6
2005	40649.0	30220.0	46293.0	109716.0	91159.0	318037.0	63607.4
2006	56426.0	49444.0	72305.0	72920.0	108619.0	359714.0	71942.8
2007	49501.0	60881.0	122228.0	102724.0	29847.0	365181.0	73036.2
2008	135490.0	88302.0	103519.0	200820.0	46956.0	575087.0	115017.4

Liquidity represented by cash and bank balances with central bank
Source: Nigerian Stock Exchange Fact book and Annual Report and Account of the sampled Banks 2001-2 008

APPENDIX III

TIME SERIES DATA ON RISK ELEMENT (RSK) OF THE SAMPLED BANKS AND THEIR AVERAGE IN MILLIONS OF NAIRA (INDEPENDENT VARIABLE)

Year/Firms	Afribank Plc	First Bank Plc	GTB Plc	UBA Plc	Union Bank Plc	Sum	Average
2001	727.0	10629.0	225.0	3630.0	8910.0	24121.0	4824.2
2002	760.0	16396.0	300.0	1016.0	16478.0	34950.0	6990.0
2003	890.0	2358.0	491.0	4102.0	16399.0	24240.0	4848.0
2004	1230.0	1628.0	899.0	2719.0	19305.0	25781.0	5156.2
2005	9191.0	1739.0	1359.0	2476.0	16672.0	31437.0	6287.4
2006	10940.0	3838.0	2911.0	9769.0	18804.0	46262.0	9252.4
2007	12437.0	7003.0	2289.0	14690.0	18443.0	54862.0	10972.4
2008	12027.0	9293.0	3845.0	1307.0	28122.0	54594.0	10918.8

Risk represented by loan loss provision
Source: Nigerian Stock Exchange Fact book and Annual Report and Account of the sampled banks 2001-2008

TIME SERIES DATA ON FINANCIAL LEVERAGE (LEV) OF THE SAMPLED BANKS AND THEIR AVERAGE IN MILLIONS OF NAIRA (INDEPENDENT VARIABLE)

Year/Firms	Afribank Plc	First Bank Plc	GTB Plc	UBA Plc	Union Bank Plc	Sum	Average
2001	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2002	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2003	0.0	0.0	1921.0	0.0	0.0	1921.0	384.2
2004	0.0	0.0	3525.0	0.0	0.0	3525.0	705.0
2005	0.0	0.0	6909.0	0.0	0.0	6909.0	1381.8
2006	0.0	0.0	9237.0	1135.0	0.0	10372.0	2074.4
2007	0.0	22101.0	58063.0	1135.0	0.0	81299.0	16259.8
2008	0.0	29414.0	56142.0	0.0	0.0	85556.0	17111.2

Financial Leverage represented by long term borrowing
Source: Nigerian Stock Exchange Fact book and Annual Report and Account of the sampled banks 2001-2008

APPENDIX IV

DEPENDENT AND INDEPENDENT VARIABLES OF THE REGRESSION MODEL

YEAR	Dependent Variable	Independent Variables					
	DPO	PAT	SHF	LIQ	RSK	LEV	DUM
2001	978.6	2810.6	9920.6	32845.8	4824.2	0.0	0
2002	1458.8	3001.8	14910.4	37549.0	6990.0	0.0	0
2003	1887.6	5017.8	18026.6	43757.4	4848.0	384.2	0
2004	2629.8	5828.4	24022.4	50531.6	5156.2	705.0	0
2005	3320.4	6492.4	33023.8	63607.4	6287.4	1381.8	0
2006	4133.6	9569.6	55766.2	71942.8	9252.4	2074.4	1
2007	4955.4	13979.4	84617.0	73036.2	10972.4	16259.8	1
2008	3681.6	25935.0	170525.4	115017.4	10918.8	17111.2	1

Source: Computed by the Researcher from the Nigerian stock exchange fact book and annual statement of account of the sampled banks