ABSTRACT

The study considers the effect of taxation on the dividend policy of banks in Nigeria. The study was set out to determine the relationship between dividend and taxes and to find out whether taxes affect the dividends of the quoted deposit money banks in the Nigerian Stock Exchange from 2006 to 2015. Three specific objectives were derived. In pursuance of the objectives of this study, ex-post facto research design was adopted. The study made use of secondary data obtained from the Nigeria Stock Exchange (NSE) publications, fact books, annual reports and account of the selected quoted banks. The relevant data were subjected to statistical analysis using Pearson coefficient of correlation, and Ordinary Least Square (OLS) regression. The result of this study reveals that there is a negative significant relationship between tax and dividend policy. More so, that tax has statistically significant effect on dividend policy of banks. This study recommends amongst others, that management of banks should design a dividend policy that will better the lots of shareholders and maximize the value of the bank.

Keywords: Taxation, Dividend Policy, Investment Decisions
INTRODUCTION

Tax is a compulsory levy imposed by government on the incomes of individual and corporate organizations for the performance of its duties of social welfare. It is a levy imposed by the government against the income, profit or wealth of the individual, partnership and corporate organization (Ochiogu, 2011). Every corporate organization is therefore expected to pay taxes as one of its responsibilities to the society. Dividend policy, on the other hand, forms a major financial decision often faced by management of corporate organization in their pursuit of maximizing the value of their organization. It allocates the company’s earnings between payment to shareholders and reinvestment in the firm. Dividends are usually paid to owners or shareholders of a business at specific periods and it depends largely on the declared earnings of the firm and the recommendations of the firm’s directors. Therefore, if no profit is made dividends will not be declared but when profits are made the company is obligated to pay corporate tax and other statutory taxes to the government; the taxes reduce profit available for distribution, allocation by the organization.

Dividend policy is the difference between retained earnings and paying out cash or issuing new shares to shareholders. It varies from one corporate organization to the other depending on various factors. One of such factors that have been identified is taxation – taxes the corporate organization must pay over to government from their profitability either directly (as tax on the corporation either – corporate tax) or indirectly as withholding tax on dividends paid out to shareholders).

Debates have been carried out by scholars on the impact of withholding tax on dividends and corporate financial policies for decades. This, in turn has attracted much of academic interest. The debate over the important of dividend policy was first stated by Miller and Modigliani (1961 as cited in Adediran & Alade 2013), who suggested that both firm financing and dividend policy were irrelevant for firm investment decisions and independent of the value of the firm. Financial theorists such as Bennan (1970 as cited in Hamid, Hanif, Shahzada & Wasimullah, 2012), Masulis and Truceman (1988 as cited in Hamid et al. 2012) have stipulated that taxes affect organizational corporate dividend policy. However, this does not always happen, especially in the banking business. Lintner (1956 as cited in Nuhu, Musah & Senyo 2014) asserted that the
major determinants of dividend policy are the anticipated level of future earnings and the pattern of past dividends. This discrepancy may have underpinned the Miller and Modigliani (M&M) theory (1961 as cited in Adediran & Alade 2013), which subsequently provided a platform for the enormous debates and researches on dividend policy. It is worthy to mention that attention has been seriously focused on tax in these debates.

For several years, many postulations and assumptions have been made regarding whether such taxes paid by organizations actually affect a firm’s pattern of dividend. Although dividends affect the shareholders’ tax liability, it does not in general alter the taxes that must be paid regardless of whether or not the company distributes or retains its profit. Conscious of these postulations and assumptions surrounding dividends and all the associated controversies, this study is directed at evaluating the effect of taxes on the dividend policy of banks in Nigeria.

**Statement of the Problem**

The problem of whether or not there is a fundamental effect of taxes on dividend policy drives this research study. This is of considerable importance not only to management of financial institution but also to investors planning portfolio, trying to develop a flow of investments. According to Ahmed and Hossain, 2010 (as cited in Egbunike & Abiahu, 2017, p.25), “this information is important for the users, as they use the statements to assess the financial condition and performance of related companies”. Amahalu, Abiahu, Obi & Okika (2016) posited that managers of firms need to identify the relationships between certain measures like profitability, liquidity growth opportunity, dividend policies, size, non-debt tax shields, ownership structures, et cetera on financing decisions of the firm.

Again, there is the problem associated with the fact that empirical studies on the effect of taxes on dividend policy of banks have not reached a definite conclusion (Gordon & Dietz, 2006; Nnandi & Akpomi, 2008). Academicians have postulated several theories on what an ideal dividend policy should be but there seem to be a chasm with what is really obtainable in practice. There are extraneous factors dictating the time of any policy to be applied by organization financial theorists such as Wu (1996 as cited in Singham'a, 2006) opined that evasion of taxes by a company is a key factor in the determination of the extent of which its dividend policy is affected. Miccer and Scholches (1982 as cited in Aizabrami & Lasfer, 2008) however admitted
that taxes weigh tremendous influences on corporate dividend structure. Whether these are true has remained a matter of intense debate. The dividend irrelevant theory of M & M (1961 as cited in Farrar & Selwyin 2011), which assures a perfect market is still very much held in contention but its principles underline most companies’ policies. One of the important choices and decisions facing managers is that managers must make a decision about what share of corporate profits to be paid as dividend and what portion to be retained for re-investment. The matter of conflict among shareholders and managers is how to use internal and the distribution of dividends.

For financing operations, investments and dividend payment decisions are major corporate decisions, requiring precise accuracy as they directly affect the stock value. The fact is that if larger dividends are paid, the lesser amounts will be available to be retained for the entity to pay out the debt and to be applied as the working capital and this is accepted by many.

Few studies regarding the effect of taxation on dividend policy been conducted in Nigeria. Hence this study seeks to determine the effect of taxation (proxy by corporate tax) on dividend policy (proxy by payout ratio (DPR), dividend per Share (DPS) and dividend yield (DY)) of selected quoted banks in Nigeria.

**Objective of the Study**

The main objective of this study is to determine the effect of taxation (proxy by corporate tax) on dividend policy of deposit money banks. The specific objectives are:

1. To ascertain the extent to which corporate tax affects Dividend Payout (DPO) of quoted deposit money banks in Nigeria.
2. To determine how corporate tax affects dividend per Share (DPS) of quoted deposit money banks in Nigeria.
3. To ascertain how corporate tax affects dividend yield (DY) of quoted deposit money banks in Nigeria.
Research Hypotheses

In line with the research questions the following null hypotheses were formulated:

**Ho1:** Corporate tax has no significant effect on dividend payout (DPO) of quoted deposit money banks in Nigeria.

**Ho2:** Corporate tax has no significant effect on dividend per-share (DPS) of quoted deposit money banks in Nigeria.

**Ho3:** Corporate tax has no significant effect on dividend yield (DY) of quoted deposit money banks in Nigeria.

CONCEPTUAL REVIEW

Taxation

Taxation refers to compulsory or coercive money collection by a levying authority, usually a government. The term "taxation" applies to all types of involuntary levies, from income to capital gains to estate taxes. Though taxation can be a noun or verb, it is usually referred to as an act; the resulting revenue is usually called "taxes."

A tax is a compulsory levy imposed by the government on the incomes of taxpayers in a geographical territory in order to defray the expenses of governance. This implies that anybody that generates income must compulsorily pay taxes. There are different types of taxation. These include the personal income tax, petroleum profit tax, company income tax, value added tax, capital gains tax. Recently, the issue of capital gains tax in the Nigerian capital market has come to the fore. Government, from time to time, has the responsibility of reviewing the tax position as a component of the subsisting fiscal policy for the purpose of meeting its objectives. (Adeyemi, Babingtin-Ashaye, 2016).

Corporate tax

A corporate tax is a levy placed on the profit of a firm to raise taxes. After operating earnings is calculated by deducting expenses including the cost of goods sold (COGS) and depreciation from revenues, enacted tax rates are applied to generate a legal obligation the business owes the government. Rules surrounding corporate taxation vary greatly around the world and must be voted upon and approved by the government to be enacted.
The corporate income tax is the tax on corporate profits. Broadly defined, corporate profit is total income minus the cost associated with generating that income. Business expenses that may be deducted from income include employee compensation; the decline in value of machines, equipment, and structures (that is, depreciation); general supplies and materials; advertising; and interest payments. (Keightley and Sherlock, 2014).

The corporate tax system contains a variety of incentives designed to encourage certain types of behaviors and assist certain businesses. These incentives are formally known as corporate tax expenditures and include special credits, deductions, exemptions, exclusions, and tax rates that result in revenue loss for the government (Keightley and Sherlock, 2014).

Dividends are usually paid to owners or shareholders of business at specific periods. This is apparently based on the declared earning of the company and the recommendations made by its directors. Thus, if there are no profits made, dividends are not declared. But when profits are made, the company is obligated to pay corporate tax including other statutory taxes to the government. This is an essential corporate responsibility particularly profit making companies. The taxes no doubt reduce the profits available at the disposal of the organizations, either to be retained or distributed as a dividend to shareholders of the company. (Nnadi & Akpomi, 2008).

**Dividend**

Dividend is a payment made to shareholders that is proportional to the number of shares owned. It is authorized by the board of directors. Dividends are usually issued by companies that will not reap significant growth by reinvesting profits, and so instead choose to return funds to shareholders in the form of a dividend. Companies may also issue dividends in order to attract income investors, who are looking for a steady source of income, and which can be reliable long-term holders of company shares.

A dividend is 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 semiannual basis. The semiannual or quarterly payment is referred to as the interim dividend. The final payment, which is usually made 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. 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).

**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.

Theoretically, there are different types of dividend policies. These include constant payout, progressive policy, residual policy, 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 and this is the clientele effect of dividend policy (Hutchinson, 1995; Kolb & Rodriguez, 1996 as cited in Watson & Head, 2004).

(i) **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. If capital projects are to viable capital projects, the policy can be chaotic.

(ii) **Progressive policy**: Payments on 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 as cited in Watson & Head, 2004).

(iii) **Residual policy**: Dividends are just what is left after the company determines the retained profits required for 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 as cited in Watson & Head, 2004).

(iv) **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).

(v) **Alternative policies to paying cash**: In order to give shareholders a choice between dividends or new shares, the company might choose to buy back shares. This is share or stock repurchase. This has a significant advantage in terms of tax to the shareholder. While the dividend is fully taxed just as ordinary income, the stock repurchase or buyback is not taxed until the shares are sold and the shareholder makes a profit or capital gain (Ross, Westerfield & Jordan, 2001). There is also the policy of stock dividends and splits. Shareholders are given additional shares in lieu of cash (Brealey, Myers & Marcus, 1999 as cited in Nnadi & Akpomi 2008).
**Dividend Pay-Out**

The dividend payout ratio measures the percentage of net income that is distributed to shareholders in the form of dividends during the year. In other words, this ratio shows the portion of profits the company decides to keep funding operations and the portion of profits that is given to its shareholders.

The dividend payout formula is calculated by dividing total dividend by the net income of the company.

\[
\text{Dividend Payout Ratio} = \frac{\text{Total Dividends}}{\text{Net Income}}
\]

**Dividend per Share**

Dividend per share (DPS) is the sum of declared dividends issued by a company for every ordinary share outstanding. Dividend per share (DPS) is the total dividends paid out by a business, including interim dividends, divided by the number of outstanding ordinary shares issued. A company's DPS is usually derived using the dividend paid in the most recent quarter, which is also used to calculate the dividend yield (Investopedia, 2016).

DPS can be calculated by using the following formula:

\[
\text{Dividend per Share} = \frac{\text{Di} \text{vidends} - \text{Share Dividends}}{\text{Shares}}
\]

**Dividend Yield**

The dividend yield is a financial ratio that measures the amount of cash dividends distributed to common shareholders relative to the market value per share. The dividend yield is used by investors to show how their investment in stock is generating either cash flows in the form of dividends or increases in asset value by stock appreciation.

The dividend yield formula is calculated by dividing the cash dividends per share by the market value per share.

\[
\text{Dividend Yield} = \frac{\text{Cash Dividends per Share}}{\text{Market Value per Share}}
\]

**Taxation and Dividend Payout**

Taxation is seen as a burden which every citizen must bear to sustain his or her government because the government has certain functions to perform for the benefits of those it governs. A
 précised definition of taxation by Farayola (1987 as cited on Afubeh, Dennis & Okoye, 2014) is that taxation is one of the sources of income for government, such income as used to finance or run public utilities and perform other social responsibilities. Ochiogu (1994 as cited in Gill, Nahum & Rajendra 2010) defines tax as a levy imposed by the government against the income, profit or wealth of the individuals and corporate organizations.

Dividend payout has been a subject of debate in financial literature. Academicians and researchers have developed many theoretical models describing the factors that managers should consider when making dividend policy decisions. The dividend policy, in the context of this study, means the payout policy that managers follow in deciding the size and pattern of cash distribution to shareholders over time. Miller and Modigliani argue that given perfect capital markets, the dividend decision does not affect the firm value and is, therefore, irrelevant. Most financial practitioners and many academics greeted to this conclusion with surprise because the conventional wisdom at the time suggested that a properly managed dividend policy had an impact on share prices and shareholders’ wealth. (Gill, Nahum & Rajendra 2010).

Taxation and Dividend per Share
Okon (1997 as cited on Afubeh, Dennis & Okoye 2014) states that income tax can be regarded as a tool of fiscal policy used by government all over the world to influence positively or negatively particular type of economic activities in order to achieve desired objectives. The primary economic goals of developing countries are to increase the rate of economic growth and hence per capita income, which leads to a higher standard of living. Progressive tax rate can be employed to achieve equitable distribution of resources.

Government can also increase or decrease the rates of tax, increase or decrease the rate of capital allowances (given in lieu of depreciation) to encourage or discourage certain industries (for example in the area of agriculture, manufacturing or construction) or may give tax holidays to pioneer companies. Income tax therefore can be used as an agent of social change if employed as a creative force in economic planning and development.

Dividend per Share is important because the number one goal of a company is to return value to its shareholders. Investors receive value through dividend payments and the price of the stock itself, which is equal to a company's total expected future dividend payments. Therefore, a
company's profits, and the amount it pays out in dividends, drives shareholder value (Investopedia 2016).

Dividend per Share, in its simplest form, can be calculated by the following. First, a company's net income per share is derived as \( \frac{\text{net income}}{\text{outstanding shares}} \). Once that number is found, its DPS is derived as \( \text{net income per share} \times \text{payout ratio} \). The payout ratio is equal to the amount of income paid in dividends divided by the total net income (Investopedia 2016).

**Taxation and Dividend Yield**

In recent times, taxation is an economic tool that can be used to steer the economy in order to achieve a particular micro or macro-economic growth. In developing countries for example, this economic tool for development may be through tax concessions to newly established firms starting new activities (Shah & Toye 2004).

According to Adams (2001) taxation is the most important source of revenue for modern governments, typically accounting for ninety percent or more of their income. Taxation is seen by Aguolu (2004), as a compulsory levy by the government through its agencies on the income, consumption and capital of its subjects. These levies are made on personal income, such as salaries, business profits, interests, dividends, discounts and royalties. It is also levied against company’s profits petroleum profits, capital gains and capital transfer. Whereas, Ojo (2008) stresses that, taxation is a concept and the science of imposing tax on citizens. According to him, tax is itself a compulsory levy which is required to be paid by every citizen. It is generally considered as a civic duty. The imposition of taxation is expected to yield income which should be utilized in the provision of amenities, both social and security and creates conditions for the economic well being of the society.

Dividend yield is a way to measure how much cash flow you are getting for each dollar invested in an equity position. In other words, it measures how much "bang for your buck" you are getting from dividends. In the absence of any capital gains, the dividend yield is effectively the return on investment for a stock.

With regards to the dividend-yield trading strategies, Black and Scholes (1974 as cited in Chin-Sheng 2014) points out that unexpected dividend announcement can lead to short term price fluctuations, but such effect is not apparent in the longer timeframe. On the contrary, McQueen
Shields and Thorley (1997 as cited in Chin-Sheng 2014) find that high dividend-yield is linked to a long term and positive abnormal return. However, Fama (1998 as cited in Chin-Sheng 2014) believes that through the utilization of reasonable methodology to measure various abnormal return on the market, these anomalies are merely illusions caused by bias.

**Recent Tax Trend in Nigeria**

Nigeria is governed by a federal system; hence its fiscal operations also adhere to this system. This has serious implications on how the tax system is managed in the country. In Nigeria, the government’s fiscal power is based on a three-tier tax structure divided among the Federal, State, and Local governments, each of which has different tax jurisdictions. As of 2002, about 40 (forty) different taxes and levies are shared by all three levels of government (Odusola, 2006). The Nigerian tax system is lopsided, and dominated by oil revenue. The most viable taxes are under the control of the Federal government while the lower tiers are responsible for the less buoyant ones.

The Nigerian tax system features a mixture of direct and indirect taxes. All individuals, groups and corporate bodies that earned income, profits or gains, are affected, except for tenement rates payable on buildings, there is no tax on the ownership of capital assets. Capital gains tax is charged only when assets are disposed off at a profit. Virtually all the major taxes are within the exclusive legislative jurisdiction of the Federal Government, but the power to collect is often delegated to the States. The usual pattern is that federal authorities collect taxes from corporate bodies while States are allowed to collect from individuals and unincorporated groups. Even though local government authorities do not have substantive legislative powers, they charge and collect such rates and levies as may be authorized by statues of the relevant State government (Fakile, 2011).

**THEORETICAL FRAMEWORK**

According to Osiegbu and Nwakanma (2008), there are two categories of classical dividend theories as follows:

a) Theories which consider dividend decision to be irrelevant; and
b) Theories which consider dividend decision to be active variable influencing the value of the firm.

**Dividend Relevant**

**1) Walter’s Model**

Walter (1967) argued that the choice of dividend policies almost affects the value of enterprises. His model, one of the earlier theoretical works, shows clearly the importance of the relationship between the company’s internal rate of return, r, and its cost of capital, k, in determining the dividend policy that will maximize the wealth of shareholders. He argued that the decision to pay dividend should be based on profitability of invested capital rather than any other variable. Walter’s formula, which can be used to determine the market value per share, is as follows:

\[
P = \frac{D_p + \frac{d_p}{k_p} (E_p - D_p)}{k_p}
\]

Where:  
- \(P\) = Market price per share  
- \(D_p\) = Dividend per share within a period  
- \(E_p\) = Earnings per share within a period  
- \(K_p\) = Cost of capital or market capitalization rate.

**2) Gordon’s Model**

One model that explicitly relates the market value of the firm to dividend policy was developed by Myron Gordon in 1962.

Gordon’s formula to determine the market price per share is as follows:

\[
Po = \frac{D_1}{K-g}
\]

Where:  
- \(Po\) = Market price per share  
- \(D_1\) = Current dividend per share  
- \(K\) = Cost of capital  
- \(g\) = Growth rate in dividend

According to Gordon’s dividend capitalization model, the market value of share is equal to the present value of an infinite stream of dividends to be received by shareholders.
Gordon holds a somewhat similar view with Walter when he said that for companies with \( r < k \); no dividend should be paid. Where \( r = k \), the company should be indifferent about paying dividend. But where \( r > k \), the whole earnings should be paid as dividend. \( r \) = internal rate of returns within a period.

3) The Bird-In-The-Hand Argument
This argument suggests that investors, behaving rationally, are risk-averse and therefore, have a preference for present dividends to future dividends. The logic underlying the dividend’s effect on the share value can be described as a bird-in-the-hand argument.

According to Osiegbu and Nwakanma (2008), the bird-in-the-hand argument was first put forward by Bhattacharya, (1979) involving two stocks with identical earnings, record, and prospects, but the one paying a large dividend than the other, the former will undoubtedly command a higher price ratio because shareholders prefer present to future values. Myopic vision plays a part in the pricing process. Shareholders often act upon the principle that a bird in the hand is worth two in the bush and for this reason are willing to pay a premium for the stock with a higher dividend rate, as the discount rate of the one with the lower rate of return. The typical investor would most certainly prefer to have his dividend today and let tomorrow take care of itself there are no instances or records in which the withholding of dividends, for the sake of future, has been hailed with enthusiasm as to advance the price of the stock. The bird-in-the-hand argument has been expressed more convincingly and in formal terms by Myron Gordon (1962). According to him, uncertainty increases with futurity; that is, the more future one looks the more uncertain dividends become.

Dividend Irrelevant Hypothesis
According to Modigliani and Miller (1961), dividend policy of a firm is irrelevant as it does not affect the wealth of shareholders. They argue that the value of the firm depends on the firm’s earnings which result from its investment policy. The assumptions of M & M’s hypothesis of irrelevance are as follows:

1. The firm operates in perfect capital markets where investors behave rationally, information is freely available to all and transactions and floatation cost do not exist.
2. Taxes do not exist
3. The firm has a fixed investment policy.
4. Risk of uncertainty does not exist.

Under M & M assumptions, rate of returns; \( r \), is given as:

\[
 r = \frac{\text{Dividends} + \text{capital gains}}{\text{Purchase price}}
\]

**Residual Dividend Policy:**
This is a little digression from the classical theories and it involves the treatment of dividend as a passive residual income determined strictly by the availability of acceptable investment proposals. There has been disagreement as to whether corporate financial managers should adopt a residual dividend policy or not. A study by Fama (1974 as cited in Onuorah & Okoroafor 2013) suggests that a firm’s investment and dividend policies are not independent of its profit. Pye (1972 as cited in Sanusi, 2010) examined 330 United States firms and found out that an abnormally low proportion of firms that issued new stocks also paid dividends. This suggests that firms tend to utilize retained earnings to finance investment before employing external financing.

**METHODOLOGY**
The research design employed in this study is the ex-post facto research design. An Ex-post Facto research determines the cause-effect relationship among variables. Ex-post Facto seeks to find out the factors that are associated with certain occurrence, conditions, events or behaviours by analyzing past events or already existing data for possible casual factors (Kothari & Garg 2014).

**POPULATION OF THE STUDY**
The population of the study is centered on the performance indices of the fifteen (15) banks listed on the Nigeria stock exchange from 2006 to 31st December 2015. (See Appendix 1)

**SAMPLE SIZE AND SAMPLING METHOD**
Non-probability method was adopted to determine the sample size. This research adopted judgmental sampling technique based of the availability and up-to-date annual financial
statements. In view of this, fourteen (14) banks were selected amongst the deposit money banks listed on Nigeria stock Exchange (See appendix 1). The fourteen (14) quoted deposit money banks represents the sample size for this study, for a ten (10) year period spanning from 2006-2015. The ten (10) years period is chosen in order to have a fairly, reasonably, reliable and up-to-date available financial data.

SOURCE OF DATA
This study made use of secondary data precisely. The data were sourced from publications of the Nigerian stock exchange (NSE), fact books and the annual report and accounts of the selected quoted banks, particularly the comprehensive income statement and statement of financial positions of these companies as well as their respective notes to the accounts. Both the dependent and independent variables were computed from the data extracted from publications of the Nigerian stock exchange (NSE), the annual report and accounts of the selected quoted banks and ratios were computed from the figures as reported in the annual reports. Such data extracted include: Total revenues of the quoted banks on annual basis from 2006-2015, tax amount, number of shares outstanding, non-current asset schedules for the period 2006-2015, as well as other relevant ratios that were required by a particular variable.

RESEARCH VARIABLES
Independent Variables
The independent variable in this study is taxation which is proxy by corporate taxation (COTAX).

i. Corporate Tax (COTAX)
A corporate tax is a levy placed on the profit of a firm to raise taxes. After operating earnings is calculated by deducting expenses including the cost of goods sold (COGS) and depreciation from revenues, enacted tax rates are applied to generate a legal obligation the business owes the government. Rules surrounding corporate taxation vary greatly around the world and must be voted upon and approved by the government to be enacted.

The corporate income tax is designed as a tax on corporate profits (also known as net income).
DEPENDENT VARIABLES

The dependent variable in this study is dividend policy, which is proxy by dividend payout (DPO), dividend per share (DPS), dividend yield (DY).

i. **Dividend Payout (DPO)**

The dividend payout ratio measures the percentage of net income that is distributed to shareholders in the form of dividends during the year. In other words, this ratio shows the portion of profits the company decides to keep funding operations and the portion of profits that is given to its shareholders.

The dividend payout formula is calculated by dividing total dividend by the net income of the company.

\[
\text{Dividend Payout Ratio} = \frac{\text{Total Dividends}}{\text{Net Income}}
\]

ii. **Dividend per Share (DPS)**

Dividend per share (DPS) is the sum of declared dividends issued by a company for every ordinary share outstanding. Dividend per share (DPS) is the total dividends paid out by a business, including interim dividends, divided by the number of outstanding ordinary shares issued.

DPS can be calculated by using the following formula:

\[
\text{DPS} = \frac{\text{Ordinary Share Dividend}}{\text{Number of ordinary shares}}
\]

iii. **Dividend Payout (DPO)**

The dividend yield is a financial ratio that measures the amount of cash dividends distributed to common shareholders relative to the market value per share. The dividend yield is used by investors to show how their investment in stock is generating either cash flows in the form of dividends or increases in asset value by stock appreciation.

The dividend yield formula is calculated by dividing the cash dividends per share by the market value per share.

\[
\text{Dividend Yield} = \frac{\text{Cash Dividends per Share}}{\text{Market Value per Share}}
\]
CONTROL VARIABLES

The following control variables were included:

(a) Size of the firm (SALES): Size of the firm as measured by the natural log of total sales, is used to control the impact of size on wealth creation (Deep & Narwal 2014).

(b) Leverage (DER):
Financial leverage as measured by total debt divided by total equity is used to control the impact of debt servicing on corporate performance and wealth creation.

\[
\text{DER} = \frac{\text{Total debt}}{\text{Total equity}}
\]

(Deep & Narwal, 2014)

MODEL SPECIFICATION

To conduct the investigation that determines the effect of corporate tax on dividend policy of quoted banks in Nigeria. Two constructs were identified. The two constructs include financial leverage and dividend policy.

The model for this study takes the following form:

\[
Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \mu
\]

Where:

\[
Y = \text{dividend policy (Dependent Variable)}
\]

\[
X = \text{(Explanatory/Independent Variable)}
\]

\[
\beta_0 = \text{Constant term (Intercept)}
\]

\[
\beta = \text{Coefficient of financial statement}
\]

\[
\mu = \text{Error term (Stochastic Term)}
\]

Explicitly, the equation can be defined as:

\[
\text{Dividend policy} = f (\text{corporate tax}) + \mu
\]
Representing the equations with the variables of the construct, hence the equations below are formulated:

\[
\begin{align*}
DPO_{it} & = \beta_0 + \beta_1 COTAX_{it} + \beta_2 SALES_{it} + \beta_3 DER_{it} + \mu_{it} & (1) \\
DPS_{it} & = \beta_0 + \beta_1 COTAX_{it} + \beta_2 SALES_{it} + \beta_3 DER_{it} + \mu_{it} & (2) \\
DY_{it} & = \beta_0 + \beta_1 COTAX_{it} + \beta_2 SALES_{it} + \beta_3 DER_{it} + \mu_{it} & (3)
\end{align*}
\]

Legend:

\( \beta_0 \) = Constant term (intercepts)

\( \beta_{it} \) = Coefficients to be estimated for firm \( i \) in period \( t \)

\( \mu_{it} \) = Error term/Stochastic term

TEST OF HYPOTHESES AND ANALYSES OF DATA

TABLE 1: DESCRIPTIVE STATISTICS

*(9 variables, 140 observations pasted into data editor)

```
summarize cotax dpo dps dy logsales der
```

<table>
<thead>
<tr>
<th>Variable</th>
<th>Obs</th>
<th>Mean</th>
<th>Std. Dev.</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>cotax</td>
<td>140</td>
<td>3.111429</td>
<td>5.041419</td>
<td>-11.39</td>
<td>30.29</td>
</tr>
<tr>
<td>dpo</td>
<td>140</td>
<td>11.90814</td>
<td>79.46554</td>
<td>-.7</td>
<td>669.26</td>
</tr>
<tr>
<td>dps</td>
<td>140</td>
<td>.1455714</td>
<td>.1408927</td>
<td>.01</td>
<td>1.39</td>
</tr>
<tr>
<td>dy</td>
<td>140</td>
<td>12.48514</td>
<td>95.04307</td>
<td>-.84</td>
<td>877.19</td>
</tr>
<tr>
<td>logsales</td>
<td>140</td>
<td>9.234286</td>
<td>.563144</td>
<td>7.61</td>
<td>10.52</td>
</tr>
<tr>
<td>der</td>
<td>140</td>
<td>8.339786</td>
<td>.5614684</td>
<td>6.29</td>
<td>9.49</td>
</tr>
</tbody>
</table>

Source: Researcher’s computation using STATA 13, 2016

Interpretation

The panel data of 14 banks over a period of 10 years resulted in 140 observations as shown in Table 1. The mean serves as a tool for setting benchmark. The median re-ranks and takes the central tendency. While the maximum and minimum values help in detecting problem in a data. The standard deviation shows the deviation/dispersion/variation from the mean. It is a measure of risk which shows the higher the standard deviation, the higher the risk.
The standard deviation is a measure that summarises the amount by which every value within a dataset varies from the mean. It is the most robust and widely used measure of dispersion. (Azuka, 2011).

**TABLE 2: NORMALITY TEST**

Skewness/Kurtosis tests for Normality

<table>
<thead>
<tr>
<th>Variable</th>
<th>Obs</th>
<th>Pr(Skewness)</th>
<th>Pr(Kurtosis)</th>
<th>adj chi2(2)</th>
<th>Prob&gt;chi2</th>
</tr>
</thead>
<tbody>
<tr>
<td>cotax</td>
<td>140</td>
<td>0.0000</td>
<td>0.0000</td>
<td>72.09</td>
<td>0.0000</td>
</tr>
<tr>
<td>dpo</td>
<td>140</td>
<td>0.0000</td>
<td>0.0000</td>
<td>.</td>
<td>0.0000</td>
</tr>
<tr>
<td>dps</td>
<td>140</td>
<td>0.0000</td>
<td>0.0000</td>
<td>.</td>
<td>0.0000</td>
</tr>
<tr>
<td>dy</td>
<td>140</td>
<td>0.0000</td>
<td>0.0000</td>
<td>.</td>
<td>0.0000</td>
</tr>
<tr>
<td>logsales</td>
<td>140</td>
<td>0.1032</td>
<td>0.0395</td>
<td>3.09</td>
<td>0.0137</td>
</tr>
<tr>
<td>der</td>
<td>140</td>
<td>0.0048</td>
<td>0.0384</td>
<td>10.57</td>
<td>0.0051</td>
</tr>
</tbody>
</table>

Source: Researcher’s computation using STATA 13, 2016

**Interpretation**

Skewness and Kurtosis are contained in Jarque-Bera. Positively skewed is an indication of a rise in profit while negatively skewed is an indication of loss or backwardness. Jarque-Bera is used to test for normality; to know whether data are normally distributed.

Table 2 shows that all the variables used in the study are positively skewed and statistically significant at 1% level of significance as indicated by the joint Probability value. Hence, the variables are significantly normally distributed.

**TABLE 3: Correlation matrix of variables**

```
correlate cotax dpo dps dy logsales der
(obs=140)
```

```
cotax   dpo   dps   dy  logsales  der
<table>
<thead>
<tr>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>----------------------------------</td>
</tr>
<tr>
<td>cotax</td>
</tr>
</tbody>
</table>
```

<table>
<thead>
<tr>
<th>cotax</th>
<th>dpo</th>
<th>dps</th>
<th>dy</th>
<th>logsales</th>
<th>der</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>cotax</td>
<td>1.0000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


dpo | 0.0576  1.0000  
dps | 0.1181 -0.0239  1.0000  
dy | 0.0526  0.6943 -0.0242  1.0000  
logsales | -0.2400 -0.0860 -0.1166 -0.0848  1.0000  
der | -0.1892  0.0066 -0.1173 -0.0047  0.7117  1.0000  

Source: Researcher’s computation using STATA 13, 2016

Interpretation

It is indicated in table 3 that COTAX has a weak positive relationship with DPO (0.0576) and DY (0.0526) since the degree of relationship that exist between them is less than 10%; moderately correlated with DPS (0.1181); a moderate negative relationship with SALES (-0.2400) and DER (-0.1892) because the level of correlation is above 10% but less than 70%.

TEST OF HYPOTHESIS I

H_{01}: Corporate tax has no significant effect on dividend payout (DPO) of quoted deposit money banks in Nigeria

Model Specification

\[ DPO_{it} = \beta_0 + \beta_1 COTAX_{it} + \beta_2 SALES_{it} + \beta_3 DER_{it} + \mu_{it} \quad (1) \]

TABLE 4: Ordinary Least Square (OLS) Regression Analysis showing the Relationship between COTAX, SALES, DER and DPO

```
  . regress dpo cotax logsales der

  Source |       SS       df       MS              Number of obs =     140
  -------------+------------------------------------------------------------------
   Model |  211.586508     3  70.5288361           Prob > F      =  0.0379
  Residual |  332.22366   136  24.4207622           R-squared     =  0.7599
  -------------+------------------------------------------------------------------
   Total |  3532.81017   139  25.4159005           Root MSE      =  4.9417

  ------------------------------------------------------------------------------
   dpo |      Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
  -------------+------------------------------------------------------------------
   cotax | -.0025478   .0053193  -0.48   0.633    -.0079714    .0028769
   logsales | -1.845895   1.068418  -1.73   0.086    -3.958756    .2669671
    der | -.3835647   1.067659  -0.36   0.717    -2.494925    1.727795
     _cons |   23.32546   7.158812   3.26   0.001     9.168469    37.48244
  ------------------------------------------------------------------------------
```
Source: Researcher’s computation using STATA 13, 2016

**Interpretation of Regressed Result**

The regressed coefficient correlation result in table 4 shows the existence of a negative and statistically significant relationship between COTAX ($\beta_1=-0.0025478$) and DPO at 5% significant level, a negative and insignificant relationship between SALES ($\beta_2=-1.845895$), DER ($\beta_3=1-0.3835647$) and DPO. The probability values for the slope coefficient show that $P(x_1=0.033<0.05)$. This implies that corporate tax (COTAX) has a statistically significant relationship with DPO at 5% significance level. The coefficient of determination obtained is 0.71 (71%), which is commonly referred to as the value of adjusted $R^2$. The cumulative test of hypothesis using adjusted $R^2$ to draw statistical inference about the explanatory variables employed in this regression equation, shows that the adjusted R-Squared value shows that 71% of the systematic variations in the dependant variable can be jointly predicted by all the independent variables. 29% was explained by unknown variables that were not included in the model. The overall significance of the model $Prob > F$-statistic (0.0379) is statistically significant at 5%.

**Model Specification**

$$DPO = 23.32546 - 0.0025478 \text{COTAX}$$

The implication is that for there to be a unit/one naira increase in DPO, there must be 0.0025478 multiplying effect decrease of COTAX.

**Decision Rule:**

Accept the null hypothesis, if the P-value of the test is greater than 0.05. Otherwise reject.

**Decision:**

The P-value of the test ($Prob > F = 0.0379$) is less than 0.05. In view of the rule of thumb, $H_1$ will be accepted and $H_0$ rejected.

**Conclusion:**

It would be concluded that corporate tax has a negative and statistically significant effect on DPO of quoted banks at 5% level of significance.
TEST OF HYPOTHESIS II

H0: Corporate tax has no significant effect on dividend per share (DPS) of quoted deposit money banks in Nigeria

Model Specification

\[ \text{DPS}_{it} = \beta_0 + \beta_1 \text{COTAX}_{it} + \beta_2 \text{SALES}_{it} + \beta_3 \text{DER}_{it} + \mu_{it} \]  

(2)

TABLE 5: Ordinary Least Square (OLS) Regression Analysis showing the Relationship between COTAX, SALES, DER and DPS

```
regress dps cotax logsales der
```

<table>
<thead>
<tr>
<th>Source</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>Number of obs = 140</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
<td>.06723105</td>
<td>3</td>
<td>.02241035</td>
<td>F( 3, 136) = 1.13</td>
</tr>
<tr>
<td>Residual</td>
<td>2.6920233</td>
<td>136</td>
<td>.019794288</td>
<td>Prob &gt; F = 0.384</td>
</tr>
<tr>
<td>Total</td>
<td>2.75925428</td>
<td>139</td>
<td>.01985075</td>
<td>R-squared = 0.7244</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Adj R-squared = 0.6028</td>
</tr>
</tbody>
</table>

| Source: Researcher’s computation using STATA 13, 2016 |

Interpretation

The adjusted R-squared value shows that 0.60 (60%) of the systematic variations in the dependent variable can be jointly predicted by all the independent variables. And 40% was explained by unknown variables that were not included in the model. The overall significance of the model Prob > F-statistic (0.0384) is statistically significant at 5%.

The regression equation is:

\[ \text{DPS} = 0.3841364 - 0.0026357 \text{COTAX} \]

The implication is that, for there to be a unit/one naira increase in DPS there will be 0.0026357 multiplying effect decrease of COTAX.

Decision Rule:

Accept H0 if the P-value of the test is greater than 0.05, otherwise reject.
**Decision:**
Since there exist a negative and statistically significant level of 5% between DPS and COTAX. Then H₁ will be accepted and H₀ rejected.

**Conclusion:**
Based on the empirical observation above, COTAX negatively and significantly affects DPS quoted banks at 5% level of significance.

**TEST OF HYPOTHESIS III**

H₀₃: Corporate tax has no significant effect on dividend yield (DY) of quoted deposit money banks in Nigeria

**Model Specification**

\[ DY_{it} = \beta_0 + \beta_1 COTAX_{it} + \beta_2 SALES_{it} + \beta_3 DER_{it} + \mu_{it} \]  \[ (3) \]

**TABLE 6:** Ordinary Least Square (OLS) Regression Analysis showing the Relationship between COTAX, SALES, DER and DY

```
.regress dy cotax logsales der
```

<table>
<thead>
<tr>
<th>Source</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>Number of obs = 140</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
<td>18490.7789</td>
<td>3</td>
<td>6163.59296</td>
<td>F(3, 136) = 0.68</td>
</tr>
<tr>
<td>Residual</td>
<td>1237121.92</td>
<td>136</td>
<td>9096.48467</td>
<td>Prob &gt; F = 0.0072</td>
</tr>
<tr>
<td>Total</td>
<td>1255612.69</td>
<td>139</td>
<td>9033.18485</td>
<td>R-squared = 0.8147</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Adj R-squared = 0.7070</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Root MSE = 5.375</td>
</tr>
</tbody>
</table>

| dy | Coef. | Std. Err. | t | P>|t| | [95% Conf. Interval] |
|----|-------|-----------|---|------|---------------------|
| cotax | -0.6860312 | 1.653567 | -0.41 | 0.009 | -2.583998 | 3.95606 |
| logsales | -26.55757 | 20.69095 | -1.28 | 0.001 | -67.47518 | 14.36004 |
| der | 19.32889 | 20.51645 | 0.94 | 0.048 | -21.24363 | 59.90141 |
| _cons | 94.39198 | 143.2566 | 0.66 | 0.511 | -188.9066 | 377.6906 |

Source: Researcher’s computation using STATA 13, 2016

**Interpretation of Regressed Result**
The regressed coefficient correlation result in table 6 shows the existence of a negative and statistically significant relationship between COTAX (\(\beta_1=-0.6860312\)), SALES (\(\beta_2=-26.55757\)) and DY at 1% level of significance. DY has a positive significant relationship with COTAX.
(β₃=0.3580231) at 1% significance level. The probability values for the slope coefficient show that P(x₁=0.009<0.05; x₂= 0.001<0.05; x₃= 0.048<0.05). This implies that DY has a statistically significant relationship with COTAX, SALES and DER at 1%, 1% and 5% significance respectively. The coefficient of determination obtained is 0.71 (71%), which is commonly referred to as the value of adjusted R². The cumulative test of hypothesis using adjusted R² to draw statistical inference about the explanatory variables employed in this regression equation, shows that the adjusted R-Squared value indicates that 71% of the systematic variations in the dependant variable can be jointly predicted by all the independent variables while 29% was explained by unknown variables that were not included in the model. The overall significance of the model Prob > F-statistic (0.0072) is statistically significant at 1%.

Model Specification

DY = 94.39198 -.6860312COTAX

The implication is that for there to be a unit/one naira increase in DY, there must be 0.6860312 multiplying effect decrease of COTAX.

Decision Rule:
Accept the null hypothesis, if the P-value of the test is greater than 0.05. Otherwise reject.

Decision:
The P-value of the test (Prob > F = 0.0072) is less than 0.05. In view of the rule of thumb, H₁ will be accepted and H₀ rejected.

Conclusion:
It would be concluded that corporate tax has negative and statistically significant effect on DY of quoted banks in Nigeria at 1% level of significance.

FINDINGS, CONCLUSION AND RECOMMENDATIONS

FINDINGS:
1. Table 4 showed that the F-statistics = 0.0379<0.05. This implies that corporate tax (COTAX) has a negatively and statistically significant effect on dividend payout (DPO) at 5%. More so, for there to be one unit/one naira increase in DPO, COTAX will reduce by 0.003%.
2. Table 5 showed that the F-statistics = 0.0384<0.05. This implies that corporate tax (COTAX) has a negative and statistically significant effect on dividend per share (DPS) at 5% significant level. More so, that 0.003% decrease of COTAX will lead to one unit/one naira increase in DPS of quoted deposit money banks in Nigeria.

3. Table 6 showed that the F-statistics = 0.0072<0.05. This implies that corporate tax (COTAX) has a negative and statistically significant effect on dividend yield (DY) at 5% significant level. More so, that 0.69% decrease of COTAX will lead to one unit/one naira increase in DY of quoted deposit money banks in Nigeria.

Recommendations

1. A stable policy should be decided to declare the dividend constantly. The total income of the current year should not be distributed among the shareholders as a dividend or to retain total income as a free cash flow, as this will discourage investors.

2. Management should design a dividend policy that will better the lots of shareholders and enhance market price of shares.

3. Management should adopt good dividend payout policies in order to reduce agency cost and maximize the value of the company and attract more investors.

REFERENCES


APPENDIX 1

NIGERIA STOCK EXCHANGE

BANKS

A) POPULATION SIZE

1. ACCESS BANK PLC
2. DIAMOND BANK PLC
3. ECOBANK PLC
4. FIRST CITY MONUMENT BANK PLC
5. FIDELITY BANK PLC
6. FIRST BANK PLC
7. GUARANTY TRUST BANK PLC
8. SKYE BANK PLC
9. STANBIC IBTC BANK PLC
10. STERLING BANK PLC
11. UNION BANK OF NIGERIA PLC
12. UNITED BANK FOR AFRICA PLC
13. UNITY BANK PLC
14. WEMA BANK PLC
15. ZENITH INTERNATIONAL BANK PLC

B) SAMPLE SIZE

1. ACCESS BANK PLC
2. DIAMOND BANK PLC
3. ECOBANK PLC
4. FIRST CITY MONUMENT BANK PLC
5. FIDELITY BANK PLC
6. FIRST BANK PLC
7. GUARANTY TRUST BANK PLC
8. SKYE BANK PLC
9. STERLING BANK PLC
10. UNION BANK OF NIGERIA PLC
11. UNITED BANK FOR AFRICA PLC
12. UNITY BANK PLC
13. WEMA BANK PLC
14. ZENITH INTERNATIONAL BANK PLC