

Adelegan, Olatundun

Conference Paper

Effects of taxes financing decisions and firm value in Nigeria

Proceedings of the German Development Economics Conference, Berlin 2006, No. 1

Provided in Cooperation with:

Research Committee on Development Economics (AEL), German Economic Association

Suggested Citation: Adelegan, Olatundun (2006) : Effects of taxes financing decisions and firm value in Nigeria, Proceedings of the German Development Economics Conference, Berlin 2006, No. 1, Verein für Socialpolitik, Ausschuss für Entwicklungsländer, Hannover

This Version is available at:

<https://hdl.handle.net/10419/19829>

Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.

**EFFECT OF TAXES ON BUSINESS FINANCING DECISIONS AND FIRM
VALUE IN NIGERIA**

by

**Olatundun Adelegan
Lecturer in Accounting and Finance,**

Department of Economics
University of Ibadan, Ibadan.

E-mail: olatundunja@hotmail.com
copy: adelegan@skannet.com

Telephone number: 234-02-8106202/
234-0803-7219555

EFFECT OF TAXES ON CORPORATE FINANCING DECISIONS AND FIRM VALUE IN NIGERIA¹

BY

Olatundun Adelegan²

Abstract

The study sets out to measure how the taxation of dividend and debt affects firm value. Tax hypothesis predicts that firm value is negatively related to dividends and positively related to debt. The study covered 1197 firm-year observations of manufacturing firms in Nigeria from 1984 to 2000. To achieve the objective, the study estimated the model on the average values for each firm and tested for industry effects using the ordinary least square (OLS) method. We found the opposite of tax hypotheses predictions from the regression results. We hypothesized that the relationship between dividends, debt and firm value will be affected by the size of the firm. We therefore partitioned the firms into two on the basis of size measured as market capitalization. We estimated separate equations for each sub-sample and found positive relationship between dividend and firm value and negative relationship between debt and firm value in both small-sized firms and big firms' sub-sample.

The study concludes that dividend and debt convey information about profitability of firms. This information about firms' profitability obscures any tax effect of financing decisions. However, we found that earnings and investment are key determinants of firm value in Nigeria.

1.1 The Problem

Tax constitutes a potentially important consideration in firms' financing decisions. If a company is financed by debt capital, there will be tax relief available on interest payments. Alternatively, if the company is financed with shareholders' fund (that is equity capital), then dividend will be paid on the equity from the profit after tax, which will in turn give rise to a liability for personal income tax.

¹ The author acknowledges the comments and supervision of the work by Prof. Ademola Ariyo as well as financial support from The Institute of Chartered Accountants of Nigeria (ICAN). The finding, interpretations, views, conclusions and policy suggestions are those of the author. Any flaws in the study remain the author's express responsibility.

² Lecturer in Accounting and Finance, Dept. of Economics, University of Ibadan. All correspondence to Dept. of Economics, University of Ibadan. Ibadan. Nigeria. e-mail:olatundunja@hotmail.com

In Nigeria, capital gains on common stock have been tax-free since 1998³, but the marginal personal tax rate built into the pricing of dividend is about 19.38%⁴. Therefore, the cost of capital of an all-equity firm that does not pay dividend will be less than that of a similar firm that pays dividend⁵. Companies on the other hand pay 40%⁶ average tax rate during the sample period. Since, corporate interest payments are deductible before tax; 40% corporate tax savings on interest deductions can lower the cost of debt to 60%, even when equity pays no dividends. In general, how tax treatment of dividends and debt affect the overall cost of capital and firm value is a high priority for research in corporate finance.

Over the years, researchers have examined the differential impact of the tax treatment of debt and dividends on corporate financial policy in developed countries. However, existing studies devoted to examining the impact of taxes on financing decisions and firm value is scanty in Nigeria. This is a gap this study attempts to fill. The objectives of the study are stated in section 1.2 below.

1.2. Objectives of Study

This study evaluates the impact of taxes on corporate financing decisions and firm value in Nigeria. Specifically, the study sets out to:

1. analyze the effect of tax changes on corporate financing decisions,
2. assess how the differential tax treatment of dividends and debt affects the overall cost of capital and firm value.

1.3. Justification and Relevance of Study

³ See Table II.2

⁴ This rate is obtained from personal income tax rates from lowest rate to highest bracket from 1999 to 2001. The rates are 5% and 10% on first and second 30000 naira respectively, 15% and 20% on the next first and second 50000 naira respectively and 25% on the next 160000 naira. Personal tax payable on 320000 naira is 62000 naira and the average rate is 19.38%.

⁵ This is because of the withholding tax on dividend.

⁶ See table II.3 in section II.2

Over the years, economists have devoted considerable effort to understanding the incidence of company income tax and its impact on financing decisions of firms in developed countries, with different political environment, especially in the United States. However, some of the factors identified by these studies may not be considered applicable to the Nigerian environment (Ariyo (1988)). Hence this research constitutes an attempt at a cross-cultural study of a phenomenon that may impact the financing decisions of corporate firms, recognized in developed countries, but not previously observed in a developing country's environment. These findings should provide information in developing a positive theory of the link between corporate finance and taxation for developing countries especially Nigeria.

1.4. Scope of Study

The sample contain 85 out of the 102 manufacturing companies quoted on the first and second tiers of the Nigerian Stock Exchange (NSE) between 1984 and 2000. This represents a sample size of 83%; covering 14 manufacturing sectors according to NSE's classification⁷.

The choice of the quoted corporate firms is justified by their financial statements and information on capital market activities being publicly available.

1984 was chosen as the base year because it was the year in which stock market indexing was first introduced in Nigeria. The study period of 1984 to 2000 also witnessed some changes in tax structure, as well as major capital market policy changes in Nigeria's corporate history. The company income tax rate was amended in 1987, revised downwards in 1993 and 1996. Capital gains tax

⁷They are automobile and tyre, agriculture, breweries, building materials, chemical and paints, conglomerates, computer and office equipments, engineering technology, food, beverage and tobacco, footwear, healthcare, industrial/domestic products, packaging, publishing and textiles, excluding companies in banking, commercial services, construction, insurance, investment companies, machinery (marketing) and petroleum (marketing) which are not involved in manufacturing and therefore have limited investment in plant and machinery and productive equipments.

rate was reduced in 1996 and cancelled on stock returns in 1998, while personal income tax rate bracket was reduced in 1989, 1997, 1998 and 2001⁸.

The Nigerian Enterprises Promotion Decree No. 54 of 1989 which amended the earlier "indigenization decrees of 1972 and 1977 reduced the number of enterprises exclusively reserved for Nigerians. The 1989 Decree, however, allowed foreign participation of not more than 40% equity share capital in the 40 scheduled enterprises exclusively reserved for Nigerians where the capitalization involved is not less than 20 million naira. This was eventually abolished in January 1995. The Nigeria Investment Promotion Commission Decree 16, 1995 and the Foreign Exchange (Miscellaneous Provision) Decree 17, 1995 replaced the Nigerian Enterprises Promotion Decree No. 54 of 1989 and The Exchange Control Act of 1962. Foreigners can now participate in the Nigerian Capital market both as operators and investors and there is no limit anymore to the percentage of foreign holding in any company registered in any Nigerian registered company.

1.5. Plan of Study

The rest of the study is organized as follows. Section II presents the study background comprising of an overview of Capital Structure of Nigerian firms and tax schedules of Companies and individuals. The review of theoretical and empirical literatures is presented in section III, while in section IV, the research methodology is discussed, the model used specified and the variables defined. Analysis and interpretation of findings are presented in Section V, while summary of major findings, conclusions and recommendations are discussed in section VI.

II. Study Background

II.1. Financing Pattern of Nigerian Manufacturing Sector

⁸ See table II.2 and II.3 in section II.2 below.

Manufacturing firms listed on the Nigerian Stock Exchange are financed by equity and debt as shown in Table 2.1. The table shows that, on average, the capital structure of 86 corporate manufacturing firms 17 years from 1984 to 2000 consisted of 99.27 per cent equity and 0.73 per cent debt. The positive bias towards equity financing may be due to financial regulations making equity financing more accessible to firms than debt, or firms preferring equity to debt financing as a result of lower cost of capital.⁹

Table 4.5 Financial Structure of Manufacturing Firms in Nigeria (86 Firms from 1984-2000 in %)

Year	Equity/CE	Std/CE	Ltd/CE	Tdebt/CE	Inflat_rate	CB Lrate (max)	MB Lrate* (max)	Industrial Loan Coupon rate (max)
1984	98.92	0.83	0.24	1.08	39.60	13.00		9.00
1985	98.53	1.18	0.29	1.47	5.50	11.75		9.50
1986	99.17	0.61	0.22	0.83	5.40	12.00		9.50
1987	99.04	0.72	0.24	0.96	10.20	19.20		11.75
1988	98.96	0.79	0.25	1.04	38.30	17.60	17.63	13.00
1989	99.13	0.53	0.34	0.87	40.90	24.60	29.15	12.00
1990	99.43	0.29	0.28	0.57	7.50	27.70	28.67	19.00
1991	99.43	0.31	0.26	0.57	13.00	20.80	20.94	18.00
1992	99.39	0.36	0.25	0.61	44.50	31.20	36.10	19.00
1993	99.34	0.43	0.23	0.66	57.20	18.32	62.70	22.00
1994	99.40	0.42	0.18	0.60	57.00	21.00	21.40	25.00
1995	99.42	0.44	0.13	0.58	72.80	20.79	21.00	24.00
1996	99.75	0.20	0.05	0.25	29.30	20.86	20.72	27.00
1997	99.81	0.16	0.03	0.19	8.50	23.32	21.35	28.00
1998	99.46	0.50	0.03	0.54	10.00	25.51	23.81	28.00
1999	99.28	0.65	0.07	0.72	6.60	26.12	33.15	27.00
2000	99.10	0.82	0.08	0.90	6.90	21.82	26.20	26.00
Average	99.27	0.54	0.19	0.73	26.66	20.92	27.91	19.28

Note:

CE is capital employed, std is short term debt, ltd is long term debt, tdebt is total debt, infl_rate is inflation rate, CBL is commercial bank lending rate, MBL is lending rate and Industrial loan coupon rate (max) is interest rate on

⁹ Shareholders fund comprises of equity and reserves. Reserves are made up of capital and revenue reserves. Retained earnings form part of revenue reserves and it has the same cost as equity. With reduction in the transaction cost of new issue, the cost of shareholders' fund is lower than the cost of debt capital.

Industrial loans, debentures or bonds.

*computation of deposit and lending rates for merchant banks started in 1988.

Source: Computed from the Annual Reports and Accounts of Companies and Nigerian Stock Exchange Fact Books, 1984-2003, Central Bank of Nigeria: Statistical Bulletin and Nigerian Stock Exchange Daily Official price List, Closing Price List (1984-2000)

Table 2.1 shows that as inflation and interest rates in both commercial bank and industrial loans increase, the proportion of equity in the financial structure reveals a high trend consistently. The lending rate in Nigerian banks¹⁰ ranged from 11.75% to 62.70 % per annum between 1984 and 2000, while that of community banks was 84 % per annum (7% per month) as at 2000¹¹. Borrowers are expected to provide adequate collateral in order to obtain loan from the financial market, and many may be unable to do so.

However, there is the general illusion of costlessness associated with retained earnings and internal funds in Nigeria. Particularly, long-term debt exhibits a low trend even with rising inflation and interest rates. Rising trend in interest on long-term debt reflects an increase in market perception of financial risk. Increase in inflation and tax shield associated with tax deductibility of interest rates is expected to make debt a more attractive source of financing than equity as it pays companies to borrow during inflation. Unwillingness on the part of many firms to dilute ownership and make their financial and non-financial information available to the public should also result in increase in the use of debt to finance investments. Despite an increase in inflation and interest rates,

¹⁰ With the introduction of universal banking in 2000, there is no distinction between commercial and merchant banks.

the proportion of debt is very low. The financing structure of the firms remains positively biased towards equity despite the tax advantage of debt.

Removal of restrictions on repatriation of dividends, profits and loan in 1995 and removal, imposition and modification of interest rate control between 1984 and 2000 has contributed to the jumps in interest rates during the period, with the attendant effect of making debt (external fund) to be more costly than equity.

II.2 Tax Rates and Dividend Pattern of Nigerian Firms

Table 2.2 presents the personal income tax rates; capital gains tax rates, company income tax rates and dividend pay out of Nigerian firms. The average dividend pay out ratio (adjusted for cash and stock dividend) as a percentage of profit after tax is about 47 percent while the pay out ratio as a percentage of total distributable earnings¹² are about 15 percent. In Nigeria the capital gains tax is lower than personal tax rate on dividend.

Table 2.2 Tax Rates and Dividend Behaviour

Year	PIT rate	Capital gains tax rate	CIT rates(non-oil)	Pay out ratio(% of PAT)	Pay out ratio(% of TDE)
1984	10%-70%	20%	45%	43.25	15.04
1985	10%-70%	20%	45%	43.13	17.34
1986	10%-70%	20%	45%	47.28	15.16
1987	10%-55%	20%	40%	40.21	15.01
1988	10%-55%	20%	40%	49.82	18.30
1989	10%-55%	20%	40%	41.89	18.06
1990	10%-55%	20%	40%	44.49	13.95
1991	10%-55%	20%	40%	41.38	16.04
1992	10%-55%	20%	40%	45.23	14.42

¹¹ Information was obtained from discussions with different bank managers in Ibadan, Nigeria

¹² Total distributable earnings is the sum of profit after tax and revenue reserve. Revenue reserves consist of retained profit from previous years. Dividend can be paid out of present profit after tax and revenue reserves, which has been accumulated overtime.

1993	10%-55%	20%	35%	46.93	14.98
1994	10%-55%	20%	35%	49.48	16.21
1995	10%-55%	20%	35%	36.98	13.51
1996	10%-55%	10%	30%	69.32	14.31
1997	10%-55%	10%	30%	38.85	14.14
1998	10%-55%	0%	30%	58%	15.49
1999-2001	5%-25%	0%	30%	52%	15.45
Average				47.20	15.42

Small Companies: Concessionary company income tax rate of 20%

Note: PIT is personal income tax, CGT is capital gains tax, and CIT is company income tax.

Source: Adelegan (2000), Federal Inland Revenue Services (2000), Ariyo (1997), Ikokwu (2002).

Company income tax rate was 45% in 1984, 35% from 1993 to 1995 and 30% from 1996 to date. The reduction of the average tax rate is expected to have a positive effect on business financing and leverage.

III. Literature Review

In the literature, factors such as taxes, bankruptcy costs, agency costs, proxy effects and asymmetric information are suggested as playing a role in the relation between firm value and financing decisions. However, with the exception of taxes, factors linking value and financing decisions operate through pre-tax profitability.

In agency-cost models, financing decisions affect value because they produce behaviour that affects profitability. Jensen and Meckling (1976) submit that higher leverage allows manager to hold a larger part of its common stock and this reduces agency problems by closely aligning the interest of the manager and other stockholders. According to Jensen (1986) leverage also enhances value by forcing the firm to pay out resources that might otherwise be wasted on bad investments by managers. Fama and Miller (1972) and Jensen and Meckling (1976) argue that leverage can also increase the incentive of the stockholders to make risky investment that shift wealth from bondholders but do not maximize the combined wealth of security holders. Myers (1977) argue that leverage can make firms to under invest because the gains from investments are shared with the existing risky bonds of the firm. The agency effects of financing decision

work through profitability and they can make firms to take better or worse investments and to use assets more or less efficiently. In the pecking order model and asymmetric information problems that arise when issuing debt and equity cause firms to prefer internal financing. External financing is seen as bad news about earnings (Myers (1984), Myers and Majluf (1984)). The proxy effect of Modigliani and Miller (MM, 1961) suggest that dividends convey information about expected earnings beyond that in measured earnings and are related to value.

Brennan (1970) suggests that higher dividend pay out policies lower stock prices because dividends are taxed at a higher rate than capital gains and predicts that dividend slopes in cross-section regression will be negative. Miller and Scholes (1978), on the other hand, argued that taxes on dividends could be avoided by investing in stocks through retirement plans or by offsetting deductions of personal interest payments. Firm value is not affected in their model because dividend and capital gains are priced as if they are tax-free. Miller and Scholes (1982) also hypothesized that firm value is unaffected by dividend policy because pricing is dominated by investors subject to symmetric taxation of dividends and capital gains and they predict that dividend slopes will be zero.

On the tax effects of debt, Miller (1977) argue that common stock is priced as if it is tax-free, but the personal tax rate built into the pricing of corporate interest payments is the corporation tax rate. Here, the debt tax shield at the corporate level is offset by taxes on interest at the personal level, and debt does not affect firm value. Miller and Scholes (1978) consider a situation in which investors avoid personal taxes on all returns on investment, and all corporate securities are priced as if they are tax-free. Modigliani and Miller (1963) argue that corporate debt tax shield will increase firm value by the market value of the corporate tax savings on expected interest payments. The predictions of these hypotheses for the debt slopes will depend on whether or not we control for profit before or after tax. Miller (1977) submits that if there

are two firms with the same earnings before interest and taxes, the more levered firm's higher after-tax earnings are just offset by the higher personal taxes paid by its bondholders. Given pre-tax earnings, there is no relation between debt and value. But the more levered firm has lower value because its investors pay more taxes, if two-firms have the same earnings after tax. Therefore, the relationship between debt and value is negative when after tax earnings is controlled for. In contrast, Modigliani and Miller (1963) predict a positive relation between debt and value in regressions that control for earnings before tax because earnings before tax do not capture the debt tax shield. Profit after tax captures the benefit of interest deductions. Thus there is no relation between debt and value when controlling for earnings after tax.

Despite the importance of the link between taxes, financing decisions and firm value, the available empirical evidences are not really convincing on how taxes affect the pricing of dividends and debt. Elton and Gruber (1970) find that personal taxes make dividends less valuable than capital gains, stock prices fall by less than the full amount of the dividend on ex-dividend days. Their findings support the predictions of the hypothesis. However, Eades, Hess and Kim (1984) argue that taxes do not explain this result. They find that ex-day price drop for stock dividend is also less than the amount of dividend, though stock dividends have no tax consequences.

A negative tax effect in the pricing of dividend predicts a positive relation between expected stock return and the proportion of the expected return received as dividend, usually proxied by the dividend/price ratio. Black and Scholes (1974), Blume (1980) and Miller and Scholes (1982) tested this prediction and no consensus emerges. The results are sensitive to the way dividend/price ratio is measured.

Exchange offers produce evidence that corporate debt may have large tax benefit that increase firm value. Masulis (1980) discovered that exchanges of debt for equity produce higher stock prices, while exchanges of equity for debt lower prices of stock. Masulis and Korwar (1986) claimed that new equity issues

lower stock prices while Vermaelen (1981) assert that equity repurchases raise stock prices. These results are explained in term of Myers and Majluf (1984) hypothesis at firms end to issue equity when it is over-valued, so new issues meet with price discounts. Eckbo (1986) concluded that the information effects of changes in equity, rather than the tax effects of changes in debt, explain Masulis' findings on exchange offers and is reinforced by the evidence that increases in debt rather that do not involve reductions in equity produce weak stock price responses.

Miller (1977) hypothesis that there is a personal tax discount in the pricing of corporate interest payments that can eliminate the corporate tax benefit of debt. This is supported by the fact that yields on corporate bonds are higher than yields on nontaxable bond. The taxable-nontaxable yield spread does not provide much evidence about the effects of personal taxes on the prices of corporate bond. Arbitrage by banks in the United States ensured that short-term interest rates on municipal bond differed from short-term taxable rates by the company tax rate (Skelton (1983)). The arbitrage relation operates irrespective of the tax bracket built into the pricing of taxable interest and investors in high tax bracket can rationally hold tax-free bonds at lower yields than taxable bonds, whatever the tax bracket implicit in the pricing of taxable interest. Modigliani and Miller (1963), in contrast argue that debt has net tax benefits because in their world, there is a positive relation between debt and value when we control for after-tax earnings.

Mackie-Mason (1990) and Graham (1996) find that companies with high marginal tax rates are more likely to issue debt than firms with low marginal tax rates, although this does not imply that debt increases firm value. Miller (1977) asserts that where there is no relation between debt and firm value, firms issue debt only when they expect to use the interest deductions to offset taxes.

Fama and French (1998) measured tax effect in the pricing of debts and dividends using cross-section regression of firm value on earnings, investment and financing variable. Their approach is based on the observation that the

market value of a firm is the market value of an all-equity no-dividends firm with the same pre-tax expected net cash flows, plus the value of the tax effect of the firm's expected dividend and interest payments. Other variables in their regressions were meant to capture all the information about expected net cash flow in financing decisions, and the slopes on dividend and debt variables is to isolate tax effects. However, Fama and French's (1998) results do not produce reliable evidence of tax effects. The marginal relation between firm value and dividends is positive. Since there is no reason to expect a positive tax effect in the pricing of dividends, they infer that dividends convey information about profitability missed by the control variables. Their findings on the tax benefit of leverage meet similar identification problems. The marginal relation between leverage and value is negative, rather than positive. Their result is linked with Miller's hypothesis that leverage has no net tax benefits because personal taxes on interest offset the corporate tax saving. The result shows that leverage conveys information about profitability that is missed by the control variables. The relations between financing decision and value they observed are unidentified mixes of tax effect and factors that affect profitability.

The impact of differential treatment of debt and dividends on corporate financial decision has been the subject of considerable research and scrutiny by financial economists in developed nations; the available empirical studies are scanty in Nigeria. However, corporate studies in Nigeria has been concentrated on estimation of corporate cost of capital (Akintola-Bello and Adedipe, 1983, Inanga, 1987 and Adelegan, 2001), financing decisions (Soyode, 1978, Oyejide, 1987, Soyibo, 1996, Ariyo, 1999, Salami, 2000 and Adenikinju, 2002) and determinants of dividend decisions (Uzoaga and Alozieuwa, 1974; Inanga, 1975,1978; Soyode, 1975; Oyejide, 1976; Odife, 1977, Ariyo, 1984, Odedokun, 1995, Izedonmi and Eriki, 1996, Adelegan, 2000, 2001b, 2002, 2003a & b, Adelegan and Inanga, 2001).

Studies on estimation of corporate cost of capital obtained estimates of 42% and 37% for returns on investment in Cocoa research between 1978 and 1982 and estimates of 13.5% and 25.75 cost of equity for corporate firms between 1977 and 1981.

Studies on financing decisions provide evidence that Nigerian firms relied heavily on internal funds or retained earnings in financing their activities, followed by equity and then debt. The argument advanced for this was the illusion of costlessness usually associated with retained earnings.

The issues that drive dividend policy decisions of companies did not receive any serious attention among academic scholars in Nigeria until 1974 when Uzoaga and Alozieuwa attempted to highlight the pattern of dividend policy pursued by Nigerian firms particularly during the period of indegenization decree. Their study covered 52 company - year 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 these period. They concluded that fear and resentment seem to have taken over from the classical forces.

However, Inanga (1975) and Soyode (1975) commented on the work of Uzoaga and Alozieuwa. Inanga concluded that the problem arising from the change in dividend policy could 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 criticized Uzoaga and Alozieuwa'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. He concluded among other things that "constant cash needs and simultaneous cash inflow from

Nigerianised shares would suggest a reduced need for retained earnings and a good reason to want to pay higher dividends".

Moreover, Inanga (1978) also studied the dividend behavior of corporate firms in Nigeria around the indigenization period. Using data from 27 Nigerian quoted companies, he analyzed the size of the companies by examining their paid-up capital and discovered that there was a gradual decline in the number of small companies over the five-year period and an increase in the number of medium and large companies in the same period. According to him, this general trend is explained by the compliance of the affected companies with the requirements of the indigenization decree, which resulted in increase in the number in their issued share capital. "Thus, even if each of the companies were to have continued to pay the same rate of dividend during the period (1969-1973) as before, one would expect an increase in the absolute amount distributed to shareholders. He also examined the pattern of dividend distribution. According to him "in 1969 well over 50 per cent of the companies were paying dividends of 20 per cent of nominal capital or less, but by 1973, the number paying dividend at this rate had declined drastically. Besides, prior to 1972, no company paid over 10 per cent dividend, but shortly after the decree, 18 per cent were paying dividends at rate ranging between 130 and 260 per cent". The drastic change in dividend policy could not have been dictated by a corresponding improvement in earnings performance because this would normally have a lagged rather than sudden effect on corresponding increase in dividends. He concluded that the major contributory factor were the prices set by the Capital Issue Commissions for the shares offered by the companies concerned. The fear of under-subscription from past experience of the Nigerian market to absorb large offering of shares, the consequent problem of some governmental agency or financial intermediaries to underwrite the shares under-subscribed by the public made Capital Issue Commissions to price shares low to avoid a repeat of it. The affected companies then distributed what already legally belong to the owner since the proceeds from the issue could not adequately have compensated them for the impending loss in earnings and some control.

Furthermore, Oyejide (1976) empirically tested for company dividend policy in Nigeria using Lintner's model as modified by Brittain on 19 quoted companies from 1969-1976. He disagreed with previous studies and concluded "the available evidence provides a strong and unequivocal support for the conventional devices for explaining the dividend behavior of Nigerian limited liability business organization". Odife (1977) criticized Oyejide's study for failing to adjust for stock dividend. According to him "nearly all the companies had at least one major bonus issue or stock dividend during the period. The incidence of the bonus issues increased rapidly after the first indigenization decree. The relevance of the bonus issues is that for any analysis, whose aim is to explain dividend policy, adjustments must be made for stock dividend. ...Indeed the incidence and size of the stock dividends during the later part of the period suggest that the real rate of dividend payments may indeed have been quite high and would only have been revealed by proper adjustments". He seemed to agree with Uzoaga and Alozieuwa's conclusion that the high earnings payment ratio on the wake of indegenization policy might have introduced an element of uncertainty which may have motivated many foreign investors to seek to realize a good proportion of their investment and hence reduce their risk.

The inconclusive controversy seems to have come to a temporary halt in late 70s. Ariyo, 1984 evaluate the implication of corporate dividend policy behaviour explainable by the conventional Lintner model on economic growth with reference to Nigeria. He argued that Lintner model is biased in favour of downward-inflexible, high dividend payout behaviour by management. His study also indicates that institutional and environmental factors, and or the self-interest motives of management dictate such behaviour. Given the assumptions underlying his analysis, such behaviour is considered not conducive to economic growth.

In 1996, Izedonmi and Eriki studied the payout ratio, dividend per share and earnings per share of 13 Nigerian quoted companies for 6 years (1984-1989). They concluded that "Nigerian quoted companies are interested in maintaining the level of their dividend and they hardly reduce dividend even in the face of declining

earnings per share". Nigerian companies Chief Executive Officers (CEO) pay more attention to liquidity and legal provisions in their dividend decisions. They observed that the companies do not maintain a target payment ratio. Nevertheless, they also discovered that in an attempt to maintain stability in the amount of dividend paid, where a company experienced high earnings, it kept dividend paid constant or increased slightly. They observed that variations in the pay-out ratio across sample and also even within a particular company from year to year and they agree with Lintner's (1956) that dividend payment may be influenced by long-term earnings because the pattern of earnings of the company will tend to influence the board of directors' decision of dividend matters.

Adelegan, 2000, 2002, 2003a & b and Adelegan and Inanga, 2001 empirically estimate the extent to which the received theory about the conventional determinants of dividend behavior of corporate firms explains the dividend behaviour of quoted firms in Nigeria. The study conclude that dividend policy of corporate firms in Nigeria seems to be significantly influenced by a number of factors which differs substantially from what is common in developed countries. Nigerian government through its economic policy also plays a major role in dividend decision making process. Factors that mainly influenced the dividend policy of quoted firms in Nigeria are after tax earnings, economic policy changes (due to the partial liberalization of the indigenization decree in 1989 and the subsequent simultaneous abolition of the indigenization decree and promulgation of the Investment promotion decree of 1995), firm growth potentials and long term debt. The empirical result reveals that the relationship between the conventional Lintner model and dividend behaviour of corporate firms in Nigeria, although remote, depends partly on the growth opportunities, firm size and the level of gearing of corporate firms.

However, there are lots of questions left unanswered by previous studies on financing decisions and dividend behaviour in the Nigerian context in particular. They are silent on the questions: Do tax changes affect corporate financing decisions? How does the taxation of dividends and debt affect

corporate financing decisions and firm value? Does firm size influence the effect of taxes on financing decisions? The study attempts to provide empirical evidence on the effects of taxes on business financing decisions and firm value in Nigeria.

IV. Research Methodology

IV.1 Model Specifications

Factors such as taxes, bankruptcy costs, agency costs and asymmetric information are suggested in the literatures as playing a role in the relationship between firm value and financing decisions. With the exception of taxes all other factors linking firm value and financing decisions operate through profit before tax¹³. The dependent variable in equation 1 is the spread of value over cost, while the explanatory variables include past, current and future values of dividends, interests, earnings and investment expenditures.

Equation 1 is given as:

$$VCA_t = a + a_1ETA_t + a_2dETA_t + a_3dETA_{t+2} + a_4dA_t + a_5dA_{t+2} + b_1INTA_t + b_2dINTA_t + b_3dINTA_{t+2} + b_4TDIV_t + b_5dTDIV + b_6dTDIV_{t+2} + c_1dVA_{t+2} + \varepsilon_t \dots (1)$$

where: VCA_t is $V_t - A_t$

VCA_t is the spread of value over cost, V_t is the total market value of a firm, A_t is the book value of its assets, ETA_t is current earnings before interest and extraordinary items but before depreciation and taxes, $INTA_t$ is the interest expense for fiscal year t , $TDIV_t$ is the dividend pay out ratio which is the total dividend paid divided by the total distributable earnings. Total assets A_t deflator defined as the sum of fixed and current assets was used to deflate all the variables in equation 1. If absolute values are used the results are likely to be dominated by the largest firms and heteroscedasticity is likely to cloud

¹³ Our approach influenced by Fama and French (1998) and it is based on the assumption that the market value of a firm is the market value of an all-equity no-dividends firm with expected net cash flows before tax plus the value of the tax effects of the firm's expected net cash flows in financing decisions. The slopes on dividend and debt variable isolate tax effects.

inferences. Scaling the dependent and independent variable down by total assets will help to address these problems. However, only $TDIV_t$ is not scaled by A_t because it is the ratio of dividend to total distributable earnings.

To measure the tax effects of financing decisions, we control the equation for profitability, which is measured as expected net cash flows. Cash flow is earnings before tax plus adjustments for items that does not involve the movement of cash such as provision for depreciation. The current (ETA_t), past ($dETA_t$) and future earnings variables ($dETA_{t+2}$) in equation (1) are meant to capture the profit part of expected net cash flows. ETA_t is as defined earlier measuring the current level of profit. Fama (1990) has provided evidence that two years is about as far ahead as the market can predict. We therefore used a two-year future change in earnings. $dETA_t$ and $dETA_{t+2}$ proxy for the expected growth of profits, where $dETA_t$ is change in earnings and $dETA_{t+2}$ is two-year future change in earnings. dA_t and dA_{t+2} which is defined as one year and two-year change in fixed assets respectively proxy for the net investment component of expected net cash flow.

In measuring the effect of tax policy on financing decisions, the level of expected future dividends and interest payments are expected to affect firm value. The tax disadvantage of dividends and the tax advantage of debt depend on the amount of expected dividends and interest (Fama and French, 1998). $TDIV_t$, $dTDIV_t$ and $dTDIV_{t+2}$ capture current, past and expected growth of dividend pay out ratio while $INTA_t$, $dINTA_t$ and $dINTA_{t+2}$ are meant to proxy for the current, past and expected growth of interest.

Changes in dividend pay out ratio and leverage policy is expected to convey information about expected dividend and interest payments. According to Lintner (1956) the usual proxy for a firm's dividend policy is its target ratio of dividends to earning. However, the ratio of dividend to earnings becomes meaningless when earnings are negative or close to zero. Since dividend can actually be paid out of total distributable earning which includes current earning

plus revenue reserves, we use the ratio of dividend to total distributable earnings (TDE) to measure dividend policy. Therefore, $TDIV_t$ is DIV_t/TDE_t .

The equation that incorporates the leverage and dividend policy is equation (2):

$$VCA_t = a + a_1ETA_t + a_2dETA_t + a_3dETA_{t+2} + a_4dA_t + a_5dA_{t+2} + b_1INTA_t + b_2dINTA_t + b_3dINTA_{t+2} + b_4TDIV_t + b_5dTDIV_t + b_6dTDIV_{t+2} + c_1dVA_{t+2} + \varepsilon_t \dots \dots \dots (2)$$

where:

$dINTA_t$ is $d(INT_t / A_t)$ and $dINTA_{t+2}$ is $D(INT_{t+2} / A_{t+2})$ which are the change in the ratio of interest to book value of asset,

$dTDIV_{t+2}$ is $d(DIV_t / TDE_t)$ and $dTDIV_{t+2}$ is $d(DIV_{t+2} / TDE_{t+2})$ which are the change in the ratio of dividend to total distributable earnings.

$INTA_t$ is a direct measure of book leverage. If the agency cost of debt are high for intangible assets like future growth opportunities, then target leverage may be closely related to book leverage (Myer (1977), Fama and French (1998)), therefore book leverage is probably informative about leverage policy. Following Kothari and Shanken (1992) and Fama and French (1998), we used the two-year change in market value dV (dV_{t+2}) which is $(V_{t+2} - V_t)$ to purge other future change of their unexpected components.

The dependent variable in equations 3 and 4 below is the two-year change in the spread of value over cost, $D(V_t - A_t) = [(V_t - A_t) - (V_{t+2} - A_{t+2})]$, all explanatory variables are also changes. The change equations are similar to the level equations. Equations (3) and (4) are stated below:

$$dVC_t = a + a_1dETA_t + a_2dETA_{t+2} + a_3dA_t + a_4dA_{t+2} + b_1dINTA_t + b_2dINTA_{t+2} + b_3dTDIV + b_4dTDIV_{t+2} + c_1dVA_{t+2} + \varepsilon_t \dots \dots \dots (3)$$

where: $dVC = d(V_t - A_t) / A_t$

and

$$dVC_t = a + a_1dETA_t + a_2dETA_{t+2} + a_3dA_t + a_4dA_{t+2} + b_1d(INTA_t) + b_2d(INTA_{t+2}) + b_3d(TDIV) + b_4d(TDIV_{t+2}) + c_1dVA_{t+2} + \varepsilon_t \dots \dots (4)$$

where:

$$d(\text{INTA}_t) = d(\text{INT}_t / \mathbf{A}_t), \quad d(\text{INTA}_{t+2}) = d(\text{INT}_{t+2} / \mathbf{A}_t),$$

$$d(\text{TDIV}_t) = d(\text{TDIV}_t / \mathbf{A}_t), \quad d(\text{TDIV}_{t+2}) = d(\text{TDIV}_{t+2} / \mathbf{A}_t).$$

Equations (3) and (4) are expected to largely identify unexpected effects, that is, information about earnings, investment and financing decisions available at t that was not available at $t-2$. This explains why equations (3) and (4) do not include lagged explanatory variables. The change regressions in equations (3) and (4) are similar to the event studies that dominate the literature on the response of value to unexpected earning, investment and financing decisions. The change equations measure the cumulative effects of unexpected events over a long (two-year) horizon, whereas event studies focus on specific announcement at a point-in-time (Fama and French (1998)).

IV.2 Estimation Procedure

The models presented in the preceding sections was estimated and analyzed for the entire study period using ordinary least square. A firm is included in the sample only if its relevant financial and market information are available both in its year end annual reports and the Nigerian Stock Exchange daily official lists for the period 1984 to 2000 and its month of fiscal year end must not have changed from $t-2$ and $t+2$.

Fama and French (1992) and (1998) argue that two variables, firm size and the ratio of book equity to market equity (BE/ME), captures the cross-section of expected stock returns fairly. Motivated by this evidence, we therefore divide the sample of firms into groups with our sorting criteria focusing on market and firms characteristics. We broke the firm into two groups on the basis of firm size (measured as stock price multiplied by shares outstanding). We estimate separate equations for each sub sample.

We estimate equation (1) to (4) using ordinary least square. The data sources are discussed in section IV.3 below.

IV.3. Data Sources

Data used in this study are mainly from secondary sources, which include the Nigerian Stock Exchange fact books, annual reports of companies; Nigerian Stock Exchange daily official lists for the first and the last day of trading in each of the months covered in the study. Nigerian Stock Exchange is a reliable source of data of quoted companies because the companies are mandatorily required to submit their financial reports to the Nigerian Stock Exchange quarterly and biannually. Company annual reports are also reliable because they are statutorily required to be audited by recognized auditing firms before publications.

V. Results and Discussions

V.1 Sample Summary Statistics

The summary statistics of the 85 firms from 1984 to 2000 covering 1197 firm-year study are in table 5.1. The unbalanced sample of 85 firms was averaged over the entire study period. The table indicates that on average earnings is about 10% of the book value of assets, investment is about 18%, dividend pay-out is about 29%, the excess of value over cost is about 10% and interest is about 13% of book value of assets.

Variable	Mean	Std. Dev	Min	Max
VCA	0.10	0.12	0.03	0.78
ETA	0.10	0.51	0.03	2.07
dETA	0.02	0.09	0.02	0.73
dET2A	0.00	0.09	0.03	0.2
dA	0.18	0.12	0.19	0.87
d2A	0.40	0.58	0.27	2.2
INTA	0.13	0.47	0.01	4.35
TDIV	0.29	0.18	0.25	0.91
dINTA	0.02	0.03	0.00	0.15
dTDIV	0.05	0.03	0.01	5.78
dTDI2V	0.31	1.78	0.08	16.21
dINT2A	0.04	0.06	0.00	0.28

dV2A	0.49	0.43	0.55	1.86
dDINTA	0.00	0.03	0.00	0.06
dDINT2A	0.00	0.03	0.00	0.28
dTDIV	0.01	0.1	0.01	0.29
dTDIV2	0.01	0.12	0.02	0.72
dVC	0.15	0.3	0.22	1.78
dD2INT	0.00	0.06	0.00	0.21
dDIVI	0.03	0.24	0.00	1.09

Source: Author's computations based on samples.

The estimates reported here are obtained by using Limdep 7.0 (1997 version).

V.2 Regression Results

V.2. 1 Earning, Investment and Industry Effect.

Table 5.2 presents the regression results of the four equations previously specified.

Dependant variable	VCA	VCA	DVC	DVC
Variables	Eq. 1	Eq.2	Eq.3	Eq.4
Intercept	0.15	0.13	0.17	0.19
	1.08	0.78	1.72*	2.09**
ETA	2.87	2.66		
	3.77***	3.51***		
dETA	-4.89	-6.48	-2.7	-3.01
	-4.18***	-5.14***	-3.83***	-3.86***
dET2A	0.22	0.11	0.35	-0.02
	0.34	0.15	0.75	-0.004
dA	-1.61	1.62	-0.28	-0.31
	-2.94***	-2.57**	-0.65	-0.7
d2A	-0.44	-0.56	-0.31	-0.46
	-2.49***	-3.26***	-2.35**	-3.84***
INTA	-0.14	-0.18		
	-0.93	-1.83*		
dINTA	-2.57		-0.86	
	-1.01		-0.64	
dINT2A	-1.12		-0.86	
	-1.04		-1.21	
TDIV	0.18	0.28		
	0.59	0.72		
dTDIV	0.14		0.017	
	2.16**		0.031	
dTDI2V	0.01			
	0.56			
dTDIV2		0.97	0.27	

		1.87	0.72	
dDTDIV		1.41		0.97
		2.34**		2.18**
dDIVI				0.31
				1.77*
dDINTA		-5.35		2.08
		-1.35		0.72
dDINT2A		-1		
		-0.73		
dD2INT				-1.44
				-1.51
dV2A	0.58	0.65	0.54	0.59
	3.31***	3.71***	4.48***	4.9***
Adj. R2	38.71%	41.01%	28.41%	33.32%
Dur-Wat.	2.04	1.95	1.91	1.73

Source: Author's computations based on samples.

The estimates reported here are obtained by using OLS procedure in Limdep 7.0 (1997 version).

***, **, * represent significance at 1%, 5% and 10% levels respectively.

In equation 1 and 2 in table 5.2, the spread of value over cost (VCA) is regressed with past, current and future values of earnings, investment (that is change in the book value of assets), dividends and interest on debt. In equations 3 and 4, we regressed the change in the spread of value over cost with changes in earnings, investment, dividend and interest.

The regression results of equations 1 and 2 presented in columns 2 and 3 shows that past and current earnings and investments are strongly related to the spread of value over cost. The change regression 3 and 4 also show a strong relationship between value and unexpected earnings and investment. The strong relations between earnings and investment show that these variables provide a control for profitability that allows us to identify tax effects in the relationship between value and financing decisions. Investment captures the information about expected profits missed by measuring earnings. While the coefficients of earnings are positive and significant at 1%, those of measured and expected investments are negative and significant too. This means that increase in earning will lead to an increase in the spread of value over cost, while an increase in assets implies a decline in the spread. Fama and French (1998)

submits that firms are expected to invest when future prospects are good and expected profits are high and the forward looking change in assets is expected to have information about profits after $t+2$ that is missed by other variables. However, in reality, the lower the level of investment, the more the fund that will be available for distribution as dividend and favourable dividend and earnings announcements will increase the value of the firm and ultimately the spread of value over cost. The intercepts of equations 3 and 4 are also highly significant.

The adjusted R^2 are 38.71%, 41.01%, 28.41% and 33.32% for the results of equations 1 to 4 respectively. On the basis of low adjusted R^2 values one may be tempted to conclude that the models are not suitable in terms of the explanatory power. This temptation should be resisted since it is not unusual for the R^2 values which results from regression equations dealing with the differences in variables (rather than level of variables) to be generally low. A reason advanced for this is that by using change rather than level data, we omit the variance to be explained by trend, thus reducing R^2 leaving only the cyclical and random components. The random component is actually magnified, because the change data add the random elements in two adjacent level observations. As the equation is not expected to explain random movement, this further reduces the R^2 (Keran and Riordan (1976), Oyejide (1976)).

We also introduced dummy variables for the 14 industrial sectors covered in the study and also re-estimated equations 1 to 4 to test for industry effects (only the equation with significant industry dummies were reported in table V.3, others are not reported). Most of the parameter estimates for the industry dummies were not significant.

Table V.3 Cross Section OLS Regression Results with Industry Effects for 85 firms from 1984-2000

Variables	Dependant variable			
	VCA Eq.1	VCA Eq.2	DVC Eq. 3	DVC Eq.4
Intercept	0.17	0.18	0.22	0.19
	1.23	1.16	2.15**	2.06
ETA	2.9	2.73		
	3.91***	3.73***		

dETA	-4.92	-6.44	-2.81	-3.04
	-3.91***	-5.30***	-4.03***	-3.95***
dET2A	0.01	-0.21	0.54	-1.61
	0.08	-0.31	1.13	-0.32
dA	-1.58	-1.57	-0.34	-0.4
	-2.95***	-2.59**	-0.79	-0.89
d2A	-0.42	-0.56	-0.34	-0.44
	-2.42**	-3.38***	-2.59**	-3.68***
INTA	-0.15	-0.18		
	-1.01	-1.90*		
dINTA	-2.23		-1.3	
	-0.89		-0.97	
dINT2A	-1.12		-0.65	
	-1.07		-0.9	
TDIV	0.11	0.01		
	0.39	0.22		
dTDIV	0.14		0.001	
	2.18**		0.26	
dTDI2V	0.001			
	0.54			
dTDIV2		0.8	0.26	
		1.59	0.71	
dDTDIV		1.67		1.11
		2.82***		2.50**
dDIVI				0.34
				1.96*
dDINTA		-4.36		1.66
		-1.14		0.58
dDINT2A		-1.01		
		-0.76		
dD2INT				-1.52
				-1.62
dV2A	0.57	0.66	0.52	0.58
	3.33***	3.91***	4.37	4.88***
D3			-0.23	
			-1.71*	
D8		0.28		0.2
		1.91*		1.86*
D9	-0.63	-0.72		
	-2.19**	-2.53**		
Adj. R2	41.79%	45.14%	30.21%	35.46%
Dur-Wat.	2.05	1.96	1.89	1.78

Source: Author's computations based on samples.

The estimates reported here are obtained by using OLS procedure in Limdep 7.0 (1997 version).

***, **, * represent significance at 1%, 5% and 10% levels respectively.

The coefficients for breweries industry (D3) in equation 3 was negative and significant at 10%, Food, Beverages and Tobacco (D8) also have estimates

that are significant at 10%, but positive in equations 2 and 4, while Footwear industry (D9) has negative coefficients in equation 1 and 2 that are significant at 5% level. These results indicate that there are some peculiarities of the breweries and footwear industries that have negative impact on their value, whereas there are some characteristics of food, beverages and tobacco industry that have positive impact over their value. However, the parameter estimates of dividend pay out and change in dividend pay out are positive while the parameter estimates of debt and change in leverage are negative. These implies that there are no tax disadvantage of dividend and tax advantage of debt at the industry level for breweries, footwear and food, beverages and tobacco sectors.

V.3 Taxes and Financing Decisions

The regression results in equations 1-4 of table 5.4 show that earnings and investment are strongly related to the spread of value over cost. These variables are expected to provide the control for profitability for the regression result to be able to capture tax effects in the relation between value and financing decisions.

V.3.1 Dividends and Taxes

The parameter estimates of dividend and change in dividend in equations 1-4 of table 5.4 are all positive. This is contrary to (Brennan (1970) predictions of negative relations between dividends and value because of the tax disadvantage of dividends. The positive parameter estimates for dividend in this study reveals the positive relationship between the dividend pay out level and earning. The positive relationship between dividend and value imply that dividend convey information about expected profitability. The coefficients of the lagged and future two year changes in dividends also have strong positive relationship with value, therefore our regression result fails to produce any negative tax effect in the pricing of dividend. Other variables do not pick up all the positive information about expected profitability in dividends; therefore the regression cannot identify

tax effects in the pricing of dividend. This is similar to findings in Fama and French (1998). However, previous studies have shown that negative tax effect in the pricing of dividends may be empirically weak or non-existent. A negative tax effect in the pricing of dividends predicts a positive relation between expected stock return and the proportion of the expected stock returns received as a dividend, usually proxied by the dividend/price ratio. Black and Scholes (1974), Litzenberger and Ramaswamy (1979), Blume (1980), Miller and Scholes (1984), Long (1978), Poterba (1986), Hubbard and Michaely (1997) and Fama and French (1998) find no evidence for a negative tax effect in the pricing of dividend.

Rather, positive relationship between value and dividend in equations 1 and 2 and between the change in value and lagged and future change in dividend level in equation 3 and 4 supports the notion that increase in dividend pay out level will also bring about a positive change in value because of the information content of dividend. Our findings seem to be more consistent with the non-tax stories about dividends. Easterbrook (1984) argued that dividend increase value by leaving managers with fewer resources to waste on bad investments. Lintner (1956) dividend model says that firm targets dividend to permanent or expected earnings and past level of dividend. This findings was confirmed by Oyejide and Ariyo, 1984. Adelegan (2000, 2003 and 2004) concluded that dividend policy of quoted firms in Nigeria are influenced by after tax earnings, cash flow, economic policy changes, firm growth potentials and long term debt. Therefore, dividends have information about expected profitability beyond that contained in measured earnings.

Results of our change regression in equation 3 and 4 of table 5.2 also confirm event study evidence that changes in dividends produce changes in stock prices of the same sign (Charest (1978), Aharony and Swary (1980, Asquith and Mullins (1983) and Adelegan (2001). Notwithstanding the fact that the study examines longer-term (two-year) changes in dividends than event studies, the value responses observed are similar. For example in Adelegan

(2001), the response of the stock price to announcement of an increase in dividend is 0.29 percent.

V.3.2 Taxes and Debt

The relationship between value and debt are negative, although the coefficients are insignificant in equations 1 to 4 of table 5.2. This shows that value does not respond in the same way to changes in debt, $dINT_t/A_t$ (the change in interest expense scaled down by the level of assets), and changes in leverage, $d(INT_t/A_t)$ (the change in the ratio of interest to assets). Leverage and change in leverage are also negatively correlated with earning and investment variables used to control for the information in debt about profitability. Furthermore, because dividends seem to have information about expected profitability missed by the control variable, the dividend variable may also help to isolate the tax effect of debt. Our finding is partly in support of Miller (1977) hypothesis that debt has no net tax benefits. In Miller's world, there is no relation between debt and value when we control for pretax earnings, controlling for after tax earnings, the relation is negative. Modigliani and Miller (1963), in contrast argue that debt has net tax benefits because in their world, there is a positive relation between debt and value after controlling for after-tax earnings. The regression results of equations 1 to 4 in table 5.2 produce little or no evidence that debt has tax benefits that enhance firm value. Changes in leverage, $DDINTA$ (that is $D(INT/A_t)$) is positively related with changes in value in regression result of equation 4 of table 5.2.

However, there is a preponderance of negative relationship between debt and value in the regression results in table 5.2. Many models predict that in the absence of a perfect control for profitability, debt variables are likely to have negative slopes in regressions to explain value and change in value. According to Fama and Miller (1972), Jensen and Meckling (1976) and Myers (1977), risky debts lead to agency problems that can distort investment decisions. To avoid these agency problems, profitable firm with strong growth opportunities, and

thus high spread of value over cost are likely to choose lower leverage. Another potential explanation for negative relation between debt and value is the asymmetric information model of Myers (1984) and Myers and Majluf (1984). In this model, investors know that firms tend to issue risky securities when they are overvalued. As a result, new issues meet with price discounts. The prospect of such discounts causes firms to follow the pecking order to finance investment, first with retained earnings, followed by debt and only as a last resort with issue of stock. Adelegan (2004) found that the pecking order of financing is applicable to financing decision and dividend pay out of large firms in Nigeria. Other previous evidences such as Jung et al (1996) and Fama and French (1998) were also unable to establish evidence of tax effect of debt. Findings in event studies by Eckbo (1986) revealed that changes in debt cause opposite changes in stock prices and this is consistent with our findings of a negative relationship between value and change in value and debt.

V. 4 Earnings, Investment and Size Effect

This study partitions the firms into two on the basis of size measured as market capitalization (stock price multiplied by shares outstanding). There are 54 firms in the small –size sub-sample and 31 firms in the big sized sub-sample. Table 5.3 panel A and B present the sample summary statistics for the small-sized and big firms from 1984-2000 respectively. Firms with market capitalization less than 500 million naira are regarded as small firms while those with 500 million naira and above are regarded as big firms.

Table 5.3 Sample Summary Statistics

Panel A Sample Summary Statistics for 54 Small-sized firms

Variable	Mean	Std. Dev	Min	Max
VCA	0.013	0.47	0.03	1.75
ETA	0.09	0.14	0.03	0.78
DETA	0.02	0.11	0.02	0.73
dET2A	-0.01	0.14	0.07	0.2
DA	0.18	0.14	0.13	0.87
d2A	0.38	0.71	0.27	2.2
INTA	0.15	0.59	0.01	4.36

TDIV	0.28	0.17	0.25	0.91
DINTA	0.19	0.04	0.002	0.15
DTDIV	-0.06	0.59	0.01	0.3
dTDI2V	0.41	2.23	0.08	16.21
dINT2A	0.04	0.07	0.14	0.28
dV2A	0.48	0.47	0.55	1.86
DDINTA	-0.004	0.04	0.002	0.06
dDINT2A	0.001	0.01	0.06	0.04
DDTDIV	-0.021	0.01	0.07	0.29
dTDIV2	-0.02	0.11	0.04	0.45
DVC	0.11	0.03	0.12	1.38
dD2INT	-0.003	0.05	0.02	0.21
DDIVI	-0.023	0.23	0.08	1.09

Panel B Sample Summary Statistics for 31 Big-sized firms

Variable	Mean	Std. Dev	Min	Max
VCA	0.26	0.56	0.05	2.07
ETA	0.12	0.08	0.08	0.27
DETA	0.02	0.08	0.03	0.06
dET2A	0.02	0.05	0.11	0.12
DA	0.19	0.06	0.06	0.28
d2A	0.45	0.03	0.05	0.94
DNTA	0.08	0.07	0.01	0.32
TDIV	0.30	0.18	0.42	0.62
INTA	0.02	0.02	0.14	0.08
DTDIV	0.24	0.01	0.07	0.58
dTDI2V	0.12	0.17	0.09	0.63
dINT2A	0.05	0.06	0.13	0.2.4
dV2A	0.52	0.37	0.12	0.13
DDINTA	0.002	0.01	0.03	0.03
dDINT2A	0.01	0.05	0.02	0.28
DDTDIV	0.003	0.03	0.07	0.07
dTDIV2	0.02	0.14	0.11	0.72
DVC	0.23	0.39	0.18	0.18
dD2INT	0.002	0.06	0.03	0.21
DDIVI	0.52	0.26	0.14	0.39

Source: Author's computations based on samples.

The estimates reported here are obtained by using OLS procedure in Limdep 7.0 (1997 version).

***, **, * represent significance at 1%, 5% and 10% levels respectively.

The average excess of value over cost and earnings after tax for small-sized firms are 1.3% and 9% respectively, while the mean investment and dividend pay out for small-sized firm are 18% and 28% respectively. Mean interest on debt scaled by the level of asset for small-sized firms is 15%.

The mean excess of value over cost and earnings after tax for big firms are 26% and 12% respectively, while the mean investment and dividend pay out

for big firms are 19% and 30% respectively. Mean interest on debt scaled by the level of asset for big-sized firms is about 8%. This implies that bigger firms have greater growth potential and they have access to cheaper source of debt, which brings about more investment, more profit and more dividends with enhanced market values.

Equations 1-4 was estimated for the small size firms and the big firms separately and the regression results are presented below in table 5. 4 panel A and B.

Table 5.4 Cross Section OLS Regression Results for Small and Large-sized firms				
Panel A Cross Section OLS Regression Results for 54 Small-sized firms average for 1984-2000				
Dependant variable	VCA	VCA	DVC	DVC
Variables	Eq.1	Eq.2	Eq.3	Eq.4
Intercept	0.002 (0.02)	0.14 (0.76)	0.04 (0.37)	0.15 (0.17)
ETA	0.33 (0.32)	(0.81) (0.92)		
dETA	-2.05 (-1.37)	-5.49 (-3.91)***	-2.44 (-3.86)**	-2.85 (-4.24)***
dET2A	0.02 (0.01)	0.32 (0.41)	-0.10 (-0.2)	-0.32 (-0.72)
dA	-0.64 (-1.01)	-1.16 (-1.66)	-0.01 (-0.03)	-0.1 (-0.26)
d2A	-0.26 (-1.26)	-5.62 (-3.11)***	-0.17 (-1.36)	-0.3 (-2.83)***
INTA	-0.24 (-1.41)	-0.13 (-1.37)		
dINTA	0.16 (0.96)		-0.21 (-0.16)	
dINT2A	-3.02 (-1.83)*		-1.31 (-1.62)	
TDIV	0.019 (0.05)	-0.056 (-0.13)		
dTDIV	-0.023 (-0.14)		0.02 (0.02)	
dTDI2V	-0.55 (-0.17)			
dTDIV2		0.45 (0.67)	0.35 (0.94)	
dDTDIV		1.7 (2.41)**		0.75 (2.01)**
dDIVI				0.50 (2.60)**
DDINTA		-6.63		4.66

		(-1.48)		(1.60)
dDINT2A		-10.82		
		(-2.04)**		
dD2INT				-4.43
				(-2.85)***
dV2A	0.79	0.83	0.51	0.64
	(3.67)***	(4.10)***	(4.32)***	(5.61)***
Adj. R2	27.09%	34.94%	43.24%	53.07%
Dur-Wat.	2.07	2.2	2.09	2.43

Panel B Cross Section OLS Regression Results for 31 Big-sized firms average for 1984-2000

Dependant variable	VCA	VCA	DVC	DVC
Variables	Eq.1	Eq.2	Eq.3	Eq.4
Intercept	0.83	0.21	0.41	0.15
	(0.20)	(0.62)	(1.16)	(0.46)
ETA	7.14	6.40		
	(5.90)***	(5.28)***		
dETA	-6.65	-4.04	-3.26	-5.58
	(-1.66)	(-1.24)	(-0.79)	(1.42)
dET2A	-3.51	-4.98	0.54	-0.053
	(-1.16)	(-1.80)*	(0.16)	(-0.002)
dA	-2.42	-2.89	-0.57	0.38
	(-1.77)*	(2.31)**	(-0.33)	(0.24)
d2A	-0.76E-01	-0.24	-0.85	-0.4
	(-0.16)	(-0.53)	(-1.57)	(-1.31)
INTA	1.81	-2.04		
	(0.64)	(-1.72)		
dINTA	-17.89		-1.73	
	(-1.65)		(-0.32)	
dINT2A	-0.92		-1.39	
	(-0.64)		(-0.70)	
TDIV	-0.53	(-0.58)		
	(-0.09)	(-0.08)		
dTDIV	-0.74		0.16	
	(0.63)		(0.46)	
dTDI2V	0.12			
	(0.23)			
dTDIV2		0.35	-1.15	
		(0.42)	(-0.43)	
dDTDIV		2.05		6.91
		(0.88)		(2.45)**
dDIVI				-0.19
				(-0.42)
dDINTA		-19.87		-10.45
		(-1.72)		(-0.87)
dDINT2A		-0.23		
		(-0.18)		
dD2INT				0.22
				(0.13)
dV2A	0.58	0.80	0.87	0.80
	(1.66)	(2.12)**	(1.99)*	(1.84)*

Adj. R2	71.53%	72.08%	0%	15%
Dur-Wat.	1.97	1.53	1.78	1.85

Source: Author's computations based on samples.
The estimates reported here are obtained by using OLS procedure in Limdep 7.0 (1997 version).
***, **, * represent significance at 1%, 5% and 10% levels respectively.

Table 5.4 shows that lagged / past earnings (DETA) and future two-year investment have strong negative relationship with the spread of value over cost and future change in value. These variables are expected to provide a control for profitability that allows us to identify tax effects in the relationship between value and financing. Table 5.4 on the other hand revealed a strong positive relationship between value and earnings and a strong negative relationship between the spread of value over cost and investment.

V. 5 Taxes, Financing Decision and Size Effects

V.5.1 Taxes, Dividend and Size Effect

The parameter estimates for change in dividend pay out (dTDIV) and future dividend variable (dTDI2V) in small-firm sub-sample in table 5.4 are negative in equation 1. However, the coefficient of dividend-pay out (TDIV) which is current dividend level is positive in equation 1 but negative in equation 2. The negative coefficient of the lagged dividend and future two-year changes in dividend from small-sized firms identify the negative personal tax effect. A negative tax effect in the pricing of dividend predicts that the firms' cash dividends are less valuable than its equivalent stock dividends. However, the estimates of dividend changes (dDTDIV, dDIVI) are positive and statistically significant in equations 2 and 4. On the other hand, the coefficients of dividend changes are negative but statistically insignificant in all the equation in table 5.4.

In table 5.4 panel B, the big firm sub sample result, the coefficients of dividend pay out (TDIV) are negative but insignificant in equation 1 and 2, but the coefficient of dividend changes (dDTDIV) are positive and significant in the change equation 4.

V.5.2 Taxes, Debt and Size Effect

The relationship between debt and value in both the small –sized and big firms regression results are negative. However, the coefficients of debt and change in leverage (dINT2A, dDINT2A, and dD2INT) are negative and significant in both equations 1, 2 and 4 of table 5.4 panel A (Small –sized firms), while they are negative but insignificant in panel B (the big firms). This upholds Miller’s hypothesis. Miller (1977) argued that debt has no net tax benefits because the personal tax costs of debt just offset corporate tax benefits. In his world there is no relation between debt and value when we control for pretax earnings, controlling for after tax earnings, the relation is negative.

For debt to have net tax benefit, Modigliani and Miller (1963) argued that the relationship between debt and value should be positive when we control for pretax earnings, but there is no relationship when they control for after-tax earnings. Fama and French (1998) argued that imperfect controls for profitability probably may drive the negative relations between debt and value and prevent the regression from revealing the tax benefit of debt. The negative relationship between the spread of value over cost and changes in value and debt has been explained in the literature as normal occurrence in the absence of a perfect control for profitability, for example, risky debts can lead to agency problems between shareholders and bondholders that can distort investment decisions. To prevent this, firms that are profitable and that have strong opportunities for growth and high spread of value over cost are likely to chose lower leverage. This is evidenced in the summary statistics in table 5.3 panels A and B.

VI. Summary, Conclusion and Policy Recommendations

The study use cross-section regressions of firm value on earnings, investment and financing variables to measure tax effects in the pricing of dividend and debt. Variables such as past, present and future earnings and investment expenditure are used to proxy for expected net cash flows. The dividend coefficients in our cross-sectional regression are expected to isolate tax

effects if we could control for information about profitability in dividend. We found that the relationship between dividend and firm value is positive when we pooled all the companies together. The positive relationship between dividend and value imply that dividend convey information about expected profitability that is also in earnings and investment. Our pooled regression result fails to produce any negative tax effect in the pricing of dividend. However, when we partitioned the data on the basis of size, the estimates of dividend change of small-sized firms are positive and statistically significant, while that of big firms are negative but statistically insignificant. Therefore our partitioned regression produced mixed results that is both negative and positive tax effect in the pricing of dividend. However, it points more to the fact that there is no tax advantage in the pricing of dividend for small-sized firms in Nigeria.

If we control for the information about profitability in debt, the debt slopes in our pooled cross sectional regressions should identify tax effects. However, we found negative insignificant relations between values and leverage in our pooled regression and negative significant relations between debt and change in leverage in our small-sized sample. This is consistent with Miller (1977) hypothesis that debt has no net tax benefit because personal taxes on interest affect the corporate tax savings. The negative debt slopes are also consistent with the general implications of Myers (1984), Myers and Majluf (1984), Miller and Rock (1985). Increases in debt and high level of leverage are bad news about value. At high level of leverage, the stockholders- bondholder agency problems that arise when debt is risky also predict negative relations between leverage and profitability (Fama and Miller (1972), Jensen and Meckling (1976)). The debt slopes are mixes of tax, agency, asymmetric-information and bankruptcy proxy effects and the negative information in debt overwhelm any tax benefit of debt. However, earnings and investment key determinants of firm value in Nigeria.

There is need for government to reduce the level of personal income tax and company income tax. The prevailing interest rate on debt is high and it

discourages firms from seeking debt financing. Government should pursue policy handle that will lower the interest rates. There is need for sectoral allocation of credit in favour of small-sized manufacturing firms. This will enable them to take advantage of the tax benefit from debt financing. Further research in this area should also be encouraged.

References

Adelegan, O.J (2003b): 'Capital Market Efficiency and the Effects of Dividend Announcement on Share Prices in Nigeria', **African Development Review**, Blackwell publishers, vol. 15(2&3), Dec, pp.218-236.

Adelegan, O.J. (2003a): "An Empirical Analysis of the Relationship between Cash Flow and Dividend Changes in Nigeria", **African Development Review**, vol. 15. No.1, pp 35-49.

Adelegan, O.J. (2002): "The Pecking Order Hypothesis and Corporate Dividend Pay-out: Nigerian Evidence", **African Review of Money Finance and Banking**, pp. 75-93.

Adelegan, O.J (2001): The Cost of Capital and Return on Investment of Conglomerates in Nigeria: 1984-1999", A paper presented at the 4th Annual conference of The **Centre for the Study of African Economies** between 29th and 31st March, 2001 at University of Oxford.

Adelegan, O.J (2000): "Corporate Dividend Policy in Nigeria: 1984-1997, M.Sc (Econ) Dissertation submitted to the Department of Economics, University of Ibadan, Feb, 2000.

Adelegan, O.J and Inanga E.L (2001): A contextual Analysis of the Determinants of Dividend Patterns of Commercial Banks in Nigeria, A paper presented at the **24th Annual European Accounting Association Congress** in Athens, Greece between April 18-20, 2001.

Adenikinju, O.O (2002): **Capital Structure and The Risk of Corporate Failure: The Case of Nigerian Quoted Companies**, an unpublished Ph.D. Thesis submitted to the Department of Economics, University of Ibadan.

Aharony, J and I. Swary (1980): "Quarterly Dividend and Earning Announcements and Stockholders' Returns: An Empirical Analysis", **Journal of Finance**, vol. 35, pp. 1-12.

Akintola-Bello, O and A. Adedipe (1983): "Estimating the Cost of Equity Capital on Nigerian Firms", **Nigerian Journal of Economics and Social Studies**, Vol. 25, No 1, pp. 99-106

Ariyo, A (2005): **Liquidity Management in Nigeria**, Lagos, Nigeria, West African Book Publishers).

Ariyo, A (1999): "Appropriateness of Development Financing Mix of Sub-Saharan African Economies: Evidence from Nigeria", **Nigerian Journal of Economics and Social Studies**, Vol. 41, No 1, pp. 159-173

Ariyo, A (1997): **Productivity of the Nigerian Tax System**, AERC Research Paper 67.

Ariyo, A (1988): "Economic Consideration in the Choice of Depreciation Methods: Some Additional Evidence from Nigeria", **Advances in International Accounting**, Vol. 2, pp. 87-97

Ariyo, A (1983): "Lintner-Type Dividend Model and Economic Growth: A Preliminary Appraisal", in Osayimwese, I. ed. **Development Economics and Planning Essays in honour of Ojetunji Aboyade**, Unibadan Publishing Consultants, p.203-217.

Asquith, P and D. Mullins (1983) "The Impact of Initiating Dividend payments on Shareholders' wealth" **Journal of Business**, vol. 5, pp. 77-96.

Black, F and M. Scholes (1974): the Effect of Dividend yield and Dividend policy on Common Stock Prices and Returns", **Journal of Financial Economics**, vol. 2, pp. 1-22.

Blume, M (1980): "Stocks Return and dividend Yields: Some More Evidence", **Review of Economics and Statistics**, vol. 62, pp. 567-577.

Brennan, M (1970): "Taxes, Market Valuation and Corporate Financial Policy", **National Tax Journal**, vol. 23, pp. 417-427.

Central bank of Nigeria (2000): **Statistical Bulletin**, CBN.

Charest, G (1978): "Dividend Information, Stock Returns and Market Efficiency II", **Journal of Financial Economics**, vol. 6, pp. 297-330.

Federal Inland Revenue Services (2000): **Highlights of Nigerian Taxes**, FIRS.

Graham, J (1996): "Debt and the Marginal Tax Rate", **Journal of Financial Economics**, vol. 41, pp. 41-73.

Ikokwu, B.C (2002): "**Increasing Revenue Generation by All Tiers of Government and Inter-Relationship of Revenue Authorities; What Role for the Joint Tax Board**", paper delivered at the Joint Workshop of JTB, FIRS held at Sheraton Hotel, Abuja, Nov.

Jensen, M and W. Meckling (1976): "Theory of the Firm: managerial Behaviour, Agency Costs and Ownership Structure", **Journal of financial Economics**, Vol. 1, pp. 305-360.

Eades, K, P. Hess and E. Han Kin (1984): "On Interpreting Security Return During the Ex-dividend Period", **Journal of Financial Economics**, vol. 1313, pp. 3-34.

Easterbrook, F.H (1984): 'Two agency-cost explanations of dividend', **American Economic Review**, vol. 74, pp. 650-659.

Eckbo, B (1986): "Valuation Effects and Corporate Bond Offerings", **Journal of Financial Economics**, vol. 15, pp. 119-152.

Elton, E and M. Gruber (1970): "Marginal stockholders Tax Rates and The Clientele Effect", **Review of Economics and Statistics**, vol. 52, pp. 68-74.

Federal Inland Revenue Services (2000), **Highlights of Nigerian Taxes**, FIRS.

Fama, E and K. French (1998): "Taxes, Financing Decisions, and Firm Value", **The Journal of Finance**, vol. LIII, No. 3, June.

Fama, E and K. French (1992): "The Cross-Section of Expected Stock Returns", **Journal of Finance**, vol. 47, pp. 427-465.

Fama, E and J. MacBeth (1973): "Risk, return and Equilibrium: Empirical Tests", **Journal of Political Economy**, vol. 81, pp. 607-636.

Fama, E and M. Miller (1972): "**The Theory of Finance**", Dryden Press, Hinsdale, III.

Hubbard, J and R. Michaely (1997): "Do Investors Ignore Dividend Taxation? A Re-examination of the Citizen's Utilities case", **Journal of Financial and Quantitative Analysis**, vol. 32, pp. 117-135.

Inanga, E.L (1987): "The Cost of Capital and the Capital Asset Pricing Model: A theoretical Analysis, **Nigerian Journal of Economics and Social Studies**, Vol. 29, No 1

Inanga E.L (1978) "The First "Indigenization Decree" and the Dividend Policy of Nigerian Quoted Companies" **The Journal of Modern African Studies**, vol. 16(2)

Inanga E.L (1975): "Dividend Policy in an era of Indigenization: A comment" **Nigerian Journal of Economic and Social Studies**, vol.17, no.2 (July), pp. 133-147.

Izedonmi, O.I.F and O.P. Eriki (1996): "Determinants of Dividend Policy in Publicly Quoted Companies" **ICAN News** October/December, (Nigeria) pp.15-19

Jensen, M (1986): 'Agency Cost of Free Cash-flow, Corporate Finance and takeovers, *American Economic Review*, vol. 76, pp. 323-329.

Jensen, M and Meckling, W (1976): "Theory of the Firm: managerial Behaviour, Agency Costs and Ownership Structure", **Journal of financial Economics**, Vol. 1, pp. 305-360.

Jung, K, Y. Kim and R. Stulz (1996): "Timing, Investment Opportunities, Managerial Discretion, and Security Issue Decision", **Journal of financial Economics**, vol. 42, pp. 159-185.

Keran, M and Riordan, M (1976): "Stabilization Policy in World Context", **Federal Reserve Bank of San Francisco Economic Review**, (fall 1976), pp. 7.

Kothari, S and J. Shanken (1992): "Stock Return Variation and Expected Dividends: A Time Series and cross-sectional Analysis", **Journal of Financial Economics**, vol. 31, pp. 177-210.

Lintner, J (1956): "The Valuation of Risk assets and the selection of Risky investments in Stock Portfolio and Capital Budgets", **The Review of Economics and Statistics**, February, pp. 13-37.

Litzenberger, R and K. Ramaswamy (1979): "The Effects of Personal Taxes and Dividends on Capital Asset Prices: Theory and Empirical Evidence", **Journal of Financial Economics**, vol., pp. 163-195.

Long, J (1978): "The Market Valuation of Cash Dividends: A Case to Consider", **Journal of Financial Economics**, vol. 6, pp. 235-264.

Mackie-Mason, J (1990): "Do Taxes affect corporate financing decisions?" **Journal of Financial Economics**, vol. 45, pp. 1471-1493.

Masulis, R (1980): "The effects of Capital Structure Changes on Security Prices: A Study of the Exchange Offers", **Journal of Financial Economics**, vol. 8, pp. 139-177.

Masuli, R and A. Korwar (1986): "Seasoned Equity Offerings: An Empirical Investigation", **Journal of Financial Economics**, vol. 15, pp. 91-118.

Miller, M (1977): "Debt and Taxes", **Journal of Finance**, vol. 32, pp. 261-275.

Miller, M and K. Rock (1985): 'Dividend Policy under Asymmetric Information', **Journal of Finance**, vol. 40, pp. 1031-1051.

Miller, M and M. Scholes (1982): "Dividend and Taxes: Some Empirical Evidence", **Journal of Political Economy**, vol. 90, pp. 1118-1141.

Miller, M and M. Scholes (1978): 'Dividends and Taxes', **Journal of Financial Economics**, vol. 6, pp. 333-364.

Modigliani, F and Miller, M.H (1963): "Corporate Income Taxes and the cost of Capital: A Correction", **American Economic Review**, Vol. 53, pp. 433-443, June.

Myers, S (1984): "The Capital Structure Puzzle", **Journal of Finance**, vol. 39, pp. 575-592.

Myers, S.C (1977): "Determinants of Corporate Borrowing", **Journal of Finance**, vol. 5, pp. 147-175.

Myers, S. and N. Majluf (1984): "Corporate Financing and Investment Decisions when Firms have Information that Investors do not have", **Journal of Financial Economics**, Vol. 13, pp. 187-221.

Odedokun, M.O (1995): "Dividend Policy, Investment Spending and Financing Decisions: Evidence from Nigerian Quoted Non-Financial Firms", **Nigerian Journal of Economic and Social Studies**, Vol. 37, No 3, pp.185-202.

Odife, D.O. (1977): Dividend Policy in an era of Indegenization: A comment", **Nigerian Journal of Economic and Social Studies**, (July).

Oyejide, T.A (1987): "The Impact of Equity Capital, Retained Earnings and Debt on Corporate Profits in Nigeria", **The Nigerian Journal of Economic and Social Studies**, Vol. 29(1).

Oyejide, T.A (1976): "Company Dividend Policy in Nigeria: An Empirical Analysis", **The Nigerian Journal of Economic and Social Studies**, July, 1976, Vol. 18 (2), PP 179-195.

Poterba, J (1986): "The Market Valuation of Cash Dividends: The Citizens Utilities Case Reconsidered", **Journal of Financial Economics**, vol. 15, pp. 395-406.

Skelton, J (1983): "Banks, Firms and the Relative Pricing of Tax-Exempt and Taxable Bonds", **Journal of Financial Economics**, vol. 12, pp. 342-355.

Salami, A (2000): "How are Nigerian Companies funded", Centre for Research in Economics and Finance, **Discussion Paper Series No 1, Lagos Business School, Nigeria.**

Soyibo, A (1996): "Determinants of Choice of Investment Finance by Nigerian Firms", **African Journal of Economic Policy**, vol. 3, No 1.

Soyode A. (1978): "Financing Industrial Growth in Nigeria: A study of the place of Debt and Retained Earnings", **Journal of Management**, Ghana, Vol. 10(1), pp. 26-31.

Soyode A. (1975): "Dividend Policy in an era of Indigenization: Comment", **The Nigerian Journal of Economics and Social Studies**, vol.17 no.2, (July) pp. 149-154.

Uzoaga W.O. and Alozieuwa J.U: (1974):"Dividend policy in an era of Indegenization", **The Nigerian Journal of Economics and Social Studies**, vol.16. (Nov).

Vermaelen, T (1981): "Common Stock Repurchases and Market Signaling: An Empirical Study", **Journal of Financial Economics**, vol. 9, pp. 139-183.

Appendix 1

Table A1 Sectoral Classification and list of Firms

1AGRICULTURE SECTOR

1GROMMAC

2LIVESTOCK FEEDS

3OKITIPUPA OIL PALM

4OKOMU OIL PALM

AUTOMOBILE &TYRE SECTOR

5DUNLOP

6INCAR
7INTRA MOTORS
8R.T.BRISCOE
 BREWERIES SECTOR
9INTERNATIONAL BREWERIES
10GOLDEN GUINEA BREWERIES
11GUINNESS NIG.
12JOS INTERNATIONAL BREWERIES
13NIGERIA BREWERIES PLC.
14PREMIER BREWERIES
 BUILDING MATERIALS SECTOR
15ASHAKA CEMENT
16BENUE CEMENT
17CEMENT OF NORTHERN NIG.
18NIG.ROPES
19NIG. WIRE IND.
20WAPC
 CHEMICAL & PAINTS SECTOR
21AFRICAN PAINTS
22PREMIER PAINTS
23BERGER PAINTS
24CAP
25D N MEYER
26IPWA
27NIG-GER. CHEMICALS
 COMPUTER/OFFICE EQUIPMENT SECTOR
28NCR
29HALLMARK PAPER PRODUCT
30THOMAS WYATT
31TRIPPLE GEE
32WTN
 CONGLOMERATES SECTOR
33A. LEVENTIS
34CFAO
35JOHNHOLT
36P.Z. INDUSTRIES
37SCOA NIG.
38UAC NIG.
39UTC NIG.
40UNILEVER NIG.
 FOOD, BEVERAGES & TOBACCO SECTOR
417-UP BOTTLING CO.
42CADBURY NIG.
43FLOUR MILLS NIG.
44NORTHERN NIG. FLOUR MILLS
45NATIONAL SALT CO. NIG.
46UNION DICON SALT
47NESTLE NIG.
48NIG. BOTTLING CO.
49P.S. MANDRIDES

FOOTWEAR SECTOR
 50FOOTWEAR & ACCESSORIES
 51LENNARDS NIG.
 HEALTHCARE SECTOR
 52ABOSELDEHYDE LAB.
 53EKOCORP
 54BCN
 55EVANS MEDICAL
 56MAY & BAKER NIG
 57MORISON IND.
 58NEIMETH INT'L PHARM
 59PHARMA-DEKO
 60SMITHKLINE BEECHAM NIG.
 INDUSTRIAL PRODUCT SECTOR
 61ALUMINIUM EXTRUSION IND.
 62ALUMINIUM MAN. CO (NIG)
 63BOC GASES NIG.
 64FIRST ALUMINIUM NIG.
 65NIG. ENAMELWARE
 66NIG. YEAST & ALCOHOL (MAN)
 67VITAFOAM (NIG)
 68VONO PRODUCTS
 PACKAGING SECTOR
 69ABPLAST PRODUCTS
 70AVON CROWNCAPS &CONTAINERS (NIG)
 71DELTA GLASS
 72CARNAUD METAL BOX NIG.
 73POLY PRODUCTS NIG
 74STUDIO PRESS NIG.
 75VANLEER CONTAINERS NIG.
 76W.A. GLASS IND.
 PUBLISHING & PRINTING SECTOR
 77ACADEMY PRESS
 78LONGMAN NIG.
 79UNIVERSITY PRESS
 TEXTILE SECTOR
 80ABA TEXTILES MILLS
 81ASABA TEXTILES MILLS
 82AFPRINT NIG.
 83ENPEE IND.
 84NIG. TEXTILES MILLS
 85UNITED NIG. TEXTILES

Source: Nigerian Stock Exchange: Fact book, various issues.