CORPORATE NATIONALITY, FOREIGN CONTROL AND CAPITAL STRUCTURE DECISIONS IN NIGERIA

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Abstract

The main objective of this study is to investigate whether corporate nationality and degree of foreign control influence capital structure decisions in a developing economy. The study makes use of eighteen-year time series data from 70 non-financial quoted firms in Nigeria. Using fixed effects panel regression models, it is found that though firm nationality and the degree of foreign control are significant determinants of corporate financing decisions in the country, they are not as important as acclaimed by local corporate stakeholders who champion discriminatory polcies in favour of indigenous firms. Thus, there is need for the Nigerian government to devote more attention in improving policy frameworks on areas such as corporate tax, corporate governance and bankruptcy practices, which are found by previous studies to be very important determinants of firm's access to long-term investment capital.

Keywords: corporate governance, control, Nigeria

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1.Introduction

The composition and nationality of corporate ownership remains one of the critical issues in the corporate governance debate, and more generally in corporate politics around the world (La Porta et al., 1999:472). Foreign interests, for instance, influence the flow of capital, corporate governance statures and corporate citizenship of affected firms. In some cases also, stiff competitions for material resources and capital are recorded between firms with foreign ownership dominance and those with local ownership dominance. This trend explains why in most developing economies (especially in Africa), post independence economic policies were targeted largely at realinging corporate ownership of resources in favour of local investors and governments. One of the areas with wide allegation foreign threats and competition is the scope and access to business finance.

Essentially, the nature and characteristics of corporate nationality remains the most dynamic of all the major determinants of corporate capital structure decisions. This is especially so in Africa where there is significant dearth of investible funds, and where competition for business finance is more noticeable between local firms and their foreign counterparts. In the African economies, the question of who owns a firm remains of both public and private concerns, especially as governments continue to make policies that favour indigenous participation in key economic activities. Major examples of such policies are the indigenization and nationalization policies promoted in most parts of Africa since the early 1970s. Ironically, government policy efforts aimed at making long-term investible funds accessible to indigenous firms seem not to be yielding fruits. This trend, in the case of Nigeria for example, has no doubt caused some distortions in the financial intermediation processes, and has contributed tremendously to the lingering shortage of long-term investment capital (Ezeoha and Uche, 2006:109). This situation is alleged to cause uneven competition for the few available funds amongst various economic sectors and amongst foreign versus locally owned firms. Thus, the main essence of this paper is to investigate whether corporate nationality and degree of foreign control influence capital structure decisions in a developing economy.

Some related studies have shown that in the case of Nigeria (Ezeoha, *forthcoming*; Ezeoha, 2008), firm's national identity is a significant determinant of financial leverage. Local firms is observed to carry more total debts than foreign firms; and against the principles the trade-off theory, the issue of whether a firm has diversified or concentrated ownership structure does not seem to be as important as its nationality. Though indigenous firms are found to be more levered, in terms of total debt and short-term debt financing, foreign firms are financed more with long-term debt and internal capital. This, studies reveal, is due to the claim that foreign firms may have more collateral values, be more profitable and may have less bankruptcy possibilities. Recent studies also

reveal similarly that most local firms in Africa rely more on short-term financing mainly because of the very inefficient nature of the local financial systems. Examples of such studies are Abor (2006) in case of Ghana; Buferna and Co. (2005) in the case of Libya; Booth et al. (2001) and Agarwal and Mohtadi (2004) in the cases of some selected developing countries cutting across Africa, Asia and Latin America. In the main, foreign firms are seen to be competitively better placed to attract funds from both the internal and the external capital markets. How this trend affects the capital structures of indigenous firms remains open for research. Again, since the concept of corporation entails separation of ownership from control (Cheffins, 2001), it is still not tool clear how the dominance of foreign board membership in a firm may affect the firm's capital structure decisions.

2. The Politics of Corporate Nationality in Nigeria

In Africa generally, literature domains on corporate ownership focus on indigenous versus foreign ownership (Radman and Gullet, 1998; and Campbell, 2001), as well as public versus private ownership (Dewneter and Malatesta, 2001). While ownership structures in the developed countries are very stable over time, experiences in most developing economies show that within the last two decades, there have been several shifts and changes in corporate ownership.

In the case of Nigeria, swings in corporate ownership have more been motivated by government programmes such as privatization, indigenization and general economic reforms. The privatization policy, initiated by the Nigerian government in the late 1980s, is targeted largely at repositioning the domestic economy for global integration and development. Over these years, companies formerly owned by government have been sold to private investors, either through direct sale of government shares to core/strategic investors (mainly foreign firms), asset sale on competitive basis, share floatation, among other methods. Overall, the impact of the privatization exercise is more on corporate ownership and control, with increased consequences of both agency and cash flow problems. While in the 80s and 90s, sale of public enterprises was restrictively available only to indigenous investors, the present strategy focuses on selling such companies to experienced foreign investors.

On its part, the Indigenisation Policy, adopted in the region since the early 70s, is radically targeted at transferring businesses from foreign to indigenous control. According to Okafor (1983:51), for instance, the main intent of the indigenization policy was to ensure deeper involvement of Nigerians in the ownership and control of Nigerian enterprises without necessarily discouraging the inflow of foreign investments. The policy was also alleged to have been adopted by some African governments to limit the level of foreign control in their respective economies (Ejiofor, 1981:15). In the case of Nigeria, for example, the Sixth Progress Report on the Implementation of the 1977 Act showed that the Nigerian Enterprises Promotion Board (the implementer of the Decree) did not just stop at regulating equity ownership. As reported by the Board, apart from insisting on compliance with the share equity participation provisions of the Decree, it started to ask companies to have a certain minimum number of Nigerian executive directors in their board (Nigerian Enterprises Promotion Board, 1982, para 5). Another interesting issue arising from the implementation of the policy was that government utilized the opportunity created by the indigenisation exercise to launch itself into ownership and control of banks in Nigeria (Brownbridge, 1996). It was for instance during the period of the implementation that government took over controlling shares in the three largest foreign owned banks in the country – namely First Bank of Nigeria Plc., Union Bank of Nigeria Plc. and the United Bank for Africa Plc. The same trends have also been recorded in other parts of Africa, including Ghana, Tanzania, Kenya and of recent Zimbabwe. In these countries, the politics of indigenous ownership of factors and means of production was at the center of their post independence nationalistic movements, and has continued to attract local patronage.

Considering the importance of ownership characteristics on key corporate decisions, therefore, this study is aimed primarily at investigating the role of firm control on the financing decisions of quoted firms. By using Nigeria as the case study, the study is expected to contribute significantly in the scope of corporate capital structure and corporate governance studies around the world. This the study does this by first bringing into focus the impact of foreign ownership and control on financial leverage decisions; and secondly, by using comprehensive local panel data from a developing third world country to test foreign theories and empirical findings that may have been misapplied by most corporate players in the region.

3. Literature Review

Empirical studies on the relationship between corporate ownership and capital structure mostly center on the agency theory propounded by Jensen and Meckling in 1976 and reinforced by Jensen and Smith in 1984. According to Jensen and Meckling (1976), costs associated with agency relationship between managers and shareholders play an important role in financing decisions, given the conflict that may arise between shareholders and debtholders. In the words of Jensen and Smith (1984), the agency theory is amplified by the fact that corporate decisions that increase the welfare of the shareholders of a firm often reduce the welfare of other stakeholders such as mangers and creditors. In some corporate environments, agency relationship has wider

socioeconomic implications, including public concerns for the welfare of the local economy and that of key local economic agents. In Nigeria, particularly, these concerns are more emotional and tend to focus on the need to protect and guarantee the growth of indigenous business enterprises. This issue influences virtually all aspects of corporate stakeholdership; and has brought some form of financial competition between local firms and their foreign counterparts in the region.

The debate on the influence of corporate nationality is therefore heightened by the fact that in most parts of the world, corporate shareholding is concentrated in few hands (Frank et al., 2003; Becht and Mayor, 2001; and Schulze and Dino, 1998). Even when the equity ownership of large corporations is widely dispersed, the composition of boards of directors may remain heavily biased toward home-country nationals (Jones, 2006). The influence of such block shareholders in major corporate decisions has been widely researched on. Both theoretical and empirical literatures, for instance, have tried to establish how ownership characteristics influence corporate decisions. In the main, corporate capital remains one area where there are persistent queries on the efficacy and relevance of ownership and control on corporate decisions (Holderness, 2003; Ang et al., 2000; Coleman and Cohn, 1999; Schulze and Dino, 1998; Moh'd et al., 1998; Friend and Lang, 1988).

Theoretically, the means by which control over funds is exercised influences the method by which real investment is financed – be it through private individuals or institutional investors (King, 1977:87). In the same vein, sources of corporate funds equally constitute strong basis for the allocation/distribution of realized earnings and returns. Glen and Pinto (1994:4) argue along this line that in the emerging markets where the tradition of family ownership is strong, control can dominate the financial decisions of firms – a tendency according to them, that can force affected firms to defer public issues of equity which dilute control, but which would also permit the firm to invest in growth opportunities. Thus in the view of Mello and Parsons (1998:83), ownership structure is important for both the value of a corporation and its future performance.

It is also possible that the presence of certain categories of ownerships influence in some particular manner, the financing patterns of the affected firms. According to Li et al. (2006), for instance, on aggregate, the combination of ownership and institutional factors explains up to two to seven percent of the total variation in firms' leverage decisions. In the same vein, Demirguc-Kunt and Maksimovic (1996:47) provide empirical evidence that support that differences in the capital structures of firms in industrial and developing countries can be attributed to the potentials for a firm's owners or mangers to engage in opportunistic behaviours.

Among the most sterilized ownership-leverage arguments is the discrimination of ownership along local and foreign firms. This is especially the case in most developing economies, where foreign firms are usually seen as using their overbearing influences in competing against local firms for the few available credits (Ezeoha, 2007). There are at present some documented arguments on the impact of indigenous versus foreign ownership on financial leverage decisions. Explaining their findings that foreign firms are not as highly levered as domestic firms and have longer debt maturity than other firms, Li et al. (2006) argue that foreign ownership brings in not only capital and technology but also modern management and better governance practices. In most cases, foreign firms would have more diversified access to capital than indigenous firms. Due to certain legal restrictions in most African countries, for instance, foreign firms operating therein are expeted to have a good degree of ownership diversification, with dominant privately held equity structure. At the same time, the extent of family or ultimate owners' influence corporate activities is more remote in the case of foreign firms than it is for local firms.

In some other instances, the guarantee and support accorded to indigenous firms by their home governments may give such firms reasonable access to domestic markets for capital (Ezeoha and Uche, 2006). Supporting this position, Deesomsak et al, (2004) argue that government involvement in such firms gives them more access to the capital market and an opportunity to borrow at favourable and government guaranteed rates. Hence, it remains very inconclusive how the swings in local and foreign shareholdings actually influence leverage decisions in firms.

In the case of multinational corporations (MNCs), the dimension of the ownership-financing debate is distinctive because such firms where they exist face differing tax systems and incentives, legal regimes around the world, and differing levels of capital market development (Desai et al., 2004:2451). The results of the work of Desai et al. (2004) suggest that the prevailing conditions of the local environment of an affiliate of a multinational play significant role in its leverage choice. They find, for instance, that affiliates in countries with high local corporate tax are likely to face the strongest incentives to go by debt as against equity financing (p.2462). Alternatively, also, they argue that multinational affiliates may face low leverage if affiliates substitute parent-provided debt for external debt where creditors rights are weak and where locally provided debt is scarce or expensive (p.2457). This study confirms generally the existence of a strong substitution effects in the leverage behaviour of multinational firms as the local capital market conditions changes. Similarly, there is a widely aclaimed literature stance that MNCs should be able to support more debt in their capital structures than the domestic firms because the former enjoy lower earnings volatility and lower probabilty of bankruptcy (Burgman, 1996).

Notwithstanding the financing strength of the foreign firms against their local counterparts, previous empirical works have suggested that the leverage ratios of such firms are usually lower than those of their domestic counterparts (Ezeoha, *forthcoming*; and Burgman, 1996). The contradictions between theoretical standpoints and practical evidence makes it difficult to explain how the alleged competitive tendencies inherent across local and foreign firms operating in developing countries constrain basic decisions such as corporate financing, investment, and income distribution.

4. Data and Methodology

4.1. The Data

This paper is aimed at investigating whether foreign ownership and control influence capital structure decisions in a developing economy. Data used in the analysis are sourced from financial reports of quoted Nigerian companies between 1990 and 2007. Considering that financial characteristics and use of leverage in the financial institutions are substantially different from what obtains in other economic sectors, the dataset used excludes firms in the financial and second tier sectors of the Nigerian stock market. The reasons for isolating the financial sectors from most capital structure studies are more vividly offered by Pandey (2004). Also excluded are non-performing firms – defined here as those whose annual reports and accounts are in arrears since 2003; and firms quoted in the Nigerian Stock Exchange after 1990. This latter treatment is to enable us achieve reasonable degree of homogenous time effects characteristics amongst the companies used in the sample frame. Consistent with the fixed effects hypothesis also, the study adopts a panel fixed effects regression technique, with financial leverage serving as the dependent variable, while the independent variables include two sets of firm specific determinants – that is, ownership related variables and other controlled variables. On the whole, after adjusting for the factors mentioned above, 70 quoted firms are selected for inclusion in the study sample frame – giving a total observations of 1,278 over an eighteen-year time frame (1990-2007).

4.2. The Regression Models

Our panel regression estimation technique makes consecutive use of three book value measures of financial leverage (debt ratio), as the dependent variable. They include: total debts measure – ratio of total debt to total assets; short-term debt measure – ratio of short-term debts to total assets; long-term debt measure – ratio of long-term debts to total assets. The first set of exogenous variables include: a proxy of firm nationality (made up of binary value 1 in years firm is locally owned and 0 in years firm is foreign owned); corporate governance proxy (board size – defined as the logarithm of the number of directors in the board); and degree of foreign control - defined as the ratio of foreign board members to total number of directors in the board). With a slight modification of the definition offered by La Porta et al. (1999:475), a firm is defined as an affiliate of a foreign company if at least 50 percent of its votes are directly controlled by foreign corporate owners. The inclusion of corporate governance proxies can be justified by the fact that corporate governance models and practices are influenced by such country-specific determinants like culture, legal system and the level of political openness (Bris and Cabolis 2006; Cohen, 1990). Other exogenous variables include firm profitability – ratio of earnings before interest and tax to total assets; asset tangibility represented as the ratio of fixed assets to total assets; firm size – measured as the natural logarithm of annual turnover value; and earnings volatility – represented as percentage change in earnings before interest and tax.. Reasons for the choice of the above variable definitions are clearly demonstrated by previous researchers, including Lemon et al. (2008), Ezeoha (2008), Padron (2005), Booth et al. (2001), Huang and Song (2002), Titman and Wessels (1988), among others.

A similar approach with that of Booth et al. (2001:103) and Lemon et al. (2008:1585) is adopted to measure the impact of the degree of foreign control and ownership on firm's financing leverage decisions. An estimation of the underlying relationship is expressed as follows:

$$\frac{D_{it}}{T_{it}} = \alpha_i + \beta N_{it} + \gamma X_{it} + \nu_t + \varepsilon_{it} \qquad \text{------- (1)}$$

Where N_{it} is a vector of the ownership related exogenous variables, with β as a vector of their respective coefficients. X_{it} is a vector of the other controlled determinants of financial leverage, with γ as a vector of their respective coefficients. Finally, ν_t and ε_{it} are year fixed effect and random error heteroskedastic term, respectively. The essence of incorporate other determinants, as inferred by previous researchers, is to compare the relative importance of foreign ownership and control in corporate financing decisions in Nigeria.

Given that the results of previous studies seem to suggest that the kind of data set used in this study usually exhibits both fixed and random effects characteristics, a Hausman tests (Hauseman, 1978) is used to compare the two estimation models. The fixed-effects model, according to Booth et al. (2001:104), allows for the use of all the data, while the intercept is allowed to vary across firms and/or time. Its usefulness lies in the fact that it can be applied to capture the effects of omitted explanatory variables in the changing intercept. The standard estimation for the fixed effects regression model is as follows:

$$y_{ij} - \tilde{y}_i = \beta^1(X_{ij} - 0_i) + \varepsilon_{ij} - \varepsilon_i \qquad \text{---------- (2)}$$

where: $\tilde{y}_i = \frac{1}{T_i} \sum y_{ij}$; $x_i = \frac{1}{T_i} \sum x_{ij}$; $\varepsilon_i = \frac{1}{T_i} \sum \varepsilon_{ij}$

On the other hand, the random effects model, according to Kennedy (2003:304) is similar to the fixed effects model in that it postulates a different intercept for each individual, but it interprets the arising intercepts as random that are treated as though they were a part of the error term. Thus, the effects of the individual intercepts are incorporated on the resultant error term. The original constant is treated as a random variable independent of the exogenous variables or the regressors. The general equation for the random effects regression is thus:

$y_{ij} = \alpha + \beta^1 x_{ij} + \mu_i + \varepsilon_{ij}$ i = 1990, - - -, 2006; and j = Firm 1 --- n ------ (3)

The operational definitions of the dependent variable and the exogenous determinants are represented in table 1 as follows:

Table 1. Operational Definitions of the Explanatory Variables

Explanatory Variable	Operational Definition	Proxy
Financial Leverage Measure:		
Total Debt Measure	Total Debt Ratio = Ratio of Total Liabilities to Total Assets	TDR
Short-term Debt Measure	Short-term Debt Ratio = Ratio of Short-term Liabilities to Total Assets	STDR
Long-term Debt Measure	Long-term Debt Ratio = Ratio of Long-term Debt to Total Assets	LTDR
Ownership-Related Variables:		
Corporate Nationality	Foreign Ownership Local Ownership	OWN_1
	Diversified Ownership Concentrated Ownership	OWN_2
Degree of Foreign Control	Board Compositon: Number of Board Members Board Composition: Ratio of Number of Foreign Directors to the Total Number of Directors	*Bcom.*
Corporate Governance	Board Size: Number of Board Members	LogNDR
Other Controlled Variables:		
Asset Tangibility	Ratio of Fixed Assets to Total Assets	*FA/TA*
Firm Size	Natural Logarithm of Sales Value	*LogSales*
Profitability	Ratio of Profit Before Interest and Tax to Total Assets.	*PBIT/TA*
Business Risks	Earnings Volatility = Percentage change in Annual Profit Before Interest and Tax	*%CPBIT*

5. Discussion of Results

5.1. Results on Descriptive Statistics

Table 2 reports selected descriptive statistics on the basic variables used in the study. As shown in the table, the average ratio of total debts to total assets of quoted non-financial firms in Nigeria stands at 62.5 percent. This is made up of 57.1 percent (or about 91.4 percent) of short-term debts and 5.4 percent of long-term debt. The result is consistent with results of previous studies that reported that due to certain financial frictions in the financial systems of most developing economies, corporate operations are mostly financed with short-term capital (Booth et al., 2001). The descriptive results on some of the controlled variables show that about 62.2 percent of listed non-financial companies in Nigeria have dominant local ownership, whereas about 37.8 percent have dominance foreign ownership. Also, as revealed, up to 67.1 percent of the firms have concentrated ownership structure, while the ownership structures of about 32.4 percent of the firms are diversified. The results on local ownership dominance confirm the

allegation that past government policies such as privatization and indigenization diffused corporate ownership in the country in favour of indigenous entrepreneurs. In the same vein, the results on the prevalence of ownership concentration confirm earlier claims by Franks et al. (2003) that in most countries of the world, corporate ownerships seem to be concentrated in few hands. Our findings further reveal that about 30.2 percent of the quoted non-financial firms have dominant foreign board membership. This represents the extent of foreign control in the quoted non-financial firms. Among the other controlled variables, our study reveals that the average ratio of earnings to total assets within the period stood is 9.5 percent; that only about 36.4 percent of the total assets is made up of fixed assets; and that the level of earnings volatility stands at a record high of about 1,548.2 percent.

Table 2. Summaries of Basic Descriptive Statistics on the Whole Sample

Variable	No. Of Observation	Mean	Standard Deviation	Min.	Max.
Total Debt Measure (TDR)	1152	0.652	0.347	0.034	4.077
Short-term Debt Measure (STDR)	1148	0.571	0.326	0.000	4.077
Long-term Debt Measure (LTDR)	1151	0.054	0.120	0.000	1.722
Firm Nationality (OWN1)	1260	0.622	0.485	0.000	1.000
Ownership Diversification (OWN2)	1260	0.671	0.469	0.000	1.000
Foreign Control (%FDR/NDR)	1260	30.245	20.026	0.000	100.0
Board Size (LogNDR)	1260	0.931	0.132	0.477	1.820
Asset Tangibility (FA/TA)	1156	0.364	0.410	0.00	9.405
Profitability (PBIT/TA)	1159	0.095	0.201	-1.880	1.875
Firm Size (LogSales)	1176	3.050	0.909	-0.523	5.138
Earnings Volatility (%CPBIT)	1112	15.482	678.407	-7520.0	13859.1

Variable definitions are as contained in table one of this report.

Table 3 presents results of the paired correlation coefficients of the variables used in the study. As expected, both short-term and long-term debt measures of financial leverage are positively and significant correlated with total debt measure. There are also noticeable cases of joint correlation amongst the exogenous variables. Interestingly, the significant positive correlation between asset tangibility (and between firm size) and total debt ratio supports the tenets of the tradeoff theory; whereas the significant negative correlation with profitability and each of the three debt ratios strongly confirms the presence of the pecking order theory in the financing behaviour of Nigerian quoted firms. Results with both firm nationality and degree of foreign control indicate significant positive correlation with long-term debt ratio. In the case of firm nationality, the result can be interpreted to mean that higher number of foreign shareholders leads to decreasing trend in debt financing; and vice versa. For the proxy on the degree of foreign control, the result implies that firms with dominant foreign board membership make more use of debt financing. Contradiction in the results for both corporate nationality and foreign control here is explainable considering the fact that even among firms with majority foreign interests, the dominance of country nationals in the board still remains very visible (Jones, 1996).

5.2. Empirical Results

Non-financial firms that made up the sample of this study involve firms of differing sizes, industrial and structural characteristics. This makes panel estimation techniques more relevant and consistent in the study. In line with observations made in previous studies, most panel estimation models have significant likelihood of fixed and random variants in the data used. Given that the two models usually differ in terms of whether the effects of most of the unobservable factors are captured by the constant factor or the error term, there is need to first test for consistent and efficiency between the two. To do this, the Hausman's test is applied.

The results, as reported in table 4 below, show that the test value at 4.86 is not significant. Based on this, we reject the null hypothesis and conclude that difference in coefficients of the variables are not systematic; and that our model could be consistent under either fixed effects or random effects estimations. We however choose to make use of the fixed effects panel regression technique as basis for

assessing the impact of foreign ownership and control on financial leverage practices in Nigerian quoted firms. The choice, though, makes little difference since the significance and nature of the variables' coefficients are the same under both the fixed and the random effect models (see table 4).

Table 3. Correlation Results on the Relationship among the Estimation Variables

Variable	TDR	STDR	LTDR	OWN1	OWN2	%FDR/NDR	LogNDR	FA/TA	PBIT/TA	LogSales	%CPBIT
TDR	1.000										
STDR	0.941*	1.000									
LTDR	0.341*	0.001	1.000								
OWN1	0.054	0.033	0.073*	1.000							
OWN2	0.038	0.049	0.014	-0.075*	1.000						
%FDR/NDR	0.033	0.008	0.068*	-0.463*	0.063*	1.000					
LogNDR	-0.024	-0.032	0.013	-0.102*	-0.003	0.109*	1.000				
FA/TA	0.120*	0.006	0.323*	-0.017	0.025	-0.042	0.010	1.000			
PBIT/TA	-0.335*	-0.343*	-0.049	-0.042	-0.070*	0.162*	0.109*	-0.053	1.000		
LogSales	0.082*	0.069*	0.051	-0.396*	-0.093*	0.354	0.336	0.016	0.083*	1.000	
%CPBIT	-0.027	-0.043	0.038	-0.027	0.010	0.026	0.038	-0.-14	0.159*	0.012	1.000

Correlation coefficients with a star are significant at 5 percent level.

Table 4. Estimated Coefficients for Both the Fixed and the Random Effects Models

	Within-Groups (Fixed Effects Model) (1)	Generalized Least Square (Random Effects Model) (2)	Difference (1) – (2)	Sqrt(diag(v_b_v_B)) S.E.
OWN1	0.1028	0.1054	-0.0026	0.0126
OWN2	0.0145	0.0152	-0.006	0.0053
%FDR/NDR	0.0021	0.0023	-0.0002	0.0003
LogNDR	-0.0346	-0.0736	0.0391	0.0254
FA/TA	0.0787	0.0796	-0.0008	0.0058
PBIT/TA	-0.7496	-0.7066	-0.0429	0.0247
LogSales	0.0523	0.0532	-0.0009	0.0077
%CPBIT	0.0000	0.0000	0.0000	0.0000
Chi-Square				13.18
Prob>Chi-Square				0.1057

- Significant at 5 percent level of significant
- $H = Chi^2(5) = (b\text{-}B)`[(V\_b - V\_B)\Lambda(-1)](b\text{-}B)$, where H is a constant vector; b and B is respectively the fixed effect and the random parameter estimates.

Table 5 reports the results of the fixed effects panel regression. Among the major exogenous variables, corporate nationality (used as a dummy variable to indicate whether a firm is locally or foreign owned) shows a positive and significant relationship with the three measures of financial leverage. This can be interpreted to mean that Nigerian firms with majority indigenous ownership are more inclined to debt financing than those with majority foreign ownership structure. This confirms popular literature claim that local firms ought to be more financially leveraged. The result runs in consonance with the findings of Li et al. (2006) that foreign firms may not be as highly levered as local firms since they (foreign firms) normally bring in capital, technology, modern management and better governance practices. Again, in a country like Nigeria where the financial system is still evolving, foreign firms may prefer to rely less on domestic markets for funds. The results with Nigerian data clearly fit into

the context of the earlier findings by Desai et al. (2004) that foreign multinationals may face low leverage where creditors rights are weak and where locally provided debts are scarce and expensive.

In like manners, the results of the study reveal very significant and positive relationship between the degree of foreign control (%FDR/NDR) and each of the three debt ratios. This implies that the number of foreign directors in the board of a quoted firm has a direct relationship with the level of its financial leverage. Though this result appears contradictory, its explanation lies in the fact that most of the firms have indigenous board chairmen and dominance indigenous managers – resulting to a situation where cash flow rights are separated from control rights. The result can further be supported with the hypothesis proffered by Du and Dai (2004:35), which emphasizes that the separation of cash flow rights from control rights induces excess borrowing. In line with the agency theory therefore, foreign directors in a firm's board may vote in favour of decisions that can help checkmate managerial excesses – example of which is the free cash flow behaviours of managers (Claessens et al., 2002). This is also amplified by the fact that, in the case of Nigeria, even firms with sitting foreign board members may have dominant indigenous management teams. The non-significant coefficients associated with the level of ownership diversification (OWN2) and board size (LogNDR) can be interpreted to mean that the variables are not important determinants of financial leverage in the Nigerian corporate environment. Nevertheless, the positive coefficients agree consistently with a popular view that an important ingredient of corporate ownership concentration is the quest to protect the firm from ownership dilution (Du and Dai, 2004; Lemon and Lins, 2003; Lins, 2003; and La Porta et al., 1999). Therefore, to continue to protect the firm from such diffusion, firms may choose to rely more on debt financing. The result is also consistent with the agency theory and the empirical results of Friend and Lang (1988), Kim (2005) and Bris and Welch (2005) – which consider that ownership structure that widens the gap between managers and shareholders exposes firms to using more debt capital.

The results on the other controlled variables confirm the existence of tradeoff theory in the financing behaviour of Nigerian firms – by revealing that firm size is very significantly and positively related with each of the three measures of financial leverage. Similarly, the results on firm profitability show that the relationship is negative and significant across the three measures of financial leverage. This is very consistent with the pecking-order theory, and implies that more profitable firms are likely to rely less on debt financing than less profitable firms. This can also be interpreted to mean that firms that are more profitable may have higher internal finances to peck on; and may not find debt financing a relatively cheaper source.

The results on firm size confirm earlier findings of researchers that the relationship between size and leverage is positively significant (examples of such studies are: Padron et al., 2005; Rajan and Zingales, 1995; Ferri and Jones, 1979; and among others). The findings, however, contradict the empirical findings of Cooley and Guadrini (2001), Gupta (1969), Faulkender and Petersen (2006), Graham (2000), as well as Titman and Wessels (1988) who conclude alike that firm size and financial leverage have negative relationship. The reason, according to this latter group, is that larger firms have more access to the equity market and may have more accumulated internal finances than smaller firms.

Coefficients with star are significant at 5 percent level, whereas the t-values are included in parentices. The exogenous variables used in the regression estimation are the proxies for firm nationality (OWN1), ownership diversification (OWN2),degree of foreign control (%FDR/NDR), board size (Log of number of directors in the board), asset tangibility (FA/TA), firm profitability (PBIT/TA), firm size (log of sales), and earnings volatility (% change in PBIT).

Given the noticeable cases of multicolinearity, as revealed in table 3, and the likely influence of such incidence on the above results, we run another fixed effects regression, eliminating those variables that are more jointly correlated – namely: OWN2, LogNDR and %CPBIT. The arising results, as presented in table 6 below, show significant improvements in the nature of the relationship and the R^2 values. The results of the OLS fixed effects regression adjusted against multicolinearity reveal that firm nationality, degree of foreign control, asset tangibility and firm size still remain positively and significantly related with total debt and long-term debt financing; and that firm profitability remains negatively and significantly related with each of the two measures of financial leverage. Again, the relsults confirm popular applicability of both the tradeoff theory and the pecking order theory in the financial behaviours of quoted firms in Nigeria.

Excluding variables with multicolinearity leads to significant improvement in the explanatory powers of the degree of foreign control and firm nationality (and other variables – such as profitability, firm size and asset tangibility). This is so with both short-term and total debt measures, where the overall changes accounted for by the variables (the R^2 value) improve from 15.7 percent to 16.2 percent for total debt ratio, and from 14.1 percent to 14.7 percent for short-term debt ratio. However, the overall R^2 for the equation with long-term debt ratio as the dependent variable decreases from 14.1 percent to 13.1 percent – indicating that there are other omitted factors that are key determinants of corporate long-term financing in the country. This conclusion is re-enforced by the resulting value of rho, which indicates that as much as 10.7 percent of the changes in the long-term debt finances of firms can be explained by such omitted factors.

Table 5. Results with the OLS Fixed Effects Model

	Endogenous Variable: TDR Case 1	Endogenous Variable: STDR Case 2	Endogenous Variable: LTDR Case 3
Constant	0.396*	0.440*	-0.040
	(4.830)	(5.680)	(-1.480)
OWN1	0.103*	0.067*	0.034*
	(3.820)	(2.620)	(3.810)
OWN2	0.015	0.021	-0.005
	(0.670)	(0.990)	(-0.650)
%FDR/NDR	0.002*	0.001*	0.001*
	(3.290)	(1.930)	(4.150)
LogNDR	-0.035	-0.025	-0.017
	(-0.400)	(-0.310)	(-0.620)
FA/TA	0.079*	-0.022	0.100*
	(3.210)	(-0.960)	(12.380)
PBIT/TA	-0.750*	-0.701*	-0.054*
	(-11.900)	(-11.770)	(-2.630)
LogSales	0.052*	0.043*	0.011*
	(3.430)	(3.010)	(2.220
—%CPBIT	0.000	0.000	0.000
	(0.890)	(0.410)	(1.320)
R-Square:			
Within	0.160	0.139	0.166
Between	0.044	0.199	0.052
Overall	0.157	0.141	0.141
F-test	23.43	19.76	24.43
Prob>F	0.000	0.000	0.000
Rho	0.090	0.046	0.628
No of Observations	1059	1055	1056

Table 6. Results of OLS Fixed Effects (Adjusted Against Multicolinearity)

	Endogenous Variable: TDR Case 1	Endogenous Variable: STDR Case 2	Endogenous Variable: LTDR Case 3
Constant	0.374*	0.430*	-0.057
	(7.880)	(9.550)	(-3.610)
OWN1	0.109*	0.072*	0.036*
	(4.190)	(2.910)	(4.030)
%FDR/NDR	0.002*	0.001*	0.001*
	(3.320)	(1.990)	(3.930)
FA/TA	0.078*	-0.022	0.097*
	(3.210)	(-0.960)	(11.670)
PBIT/TA	-0.756*	-0.710*	-0.057*
	(-12.630)	(-12.510)	(-2.920)
LogSales	0.053*	0.043*	0.012*
	(3.880)	(3.340)	(2.570
R-Square:			
Within	0.165	0.143	0.145
Between	0.151	0.230	0.020
Overall	0.162	0.147	0.131
F-test	41.67	34.99	35.91
Prob>F	0.000	0.000	0.000
Rho	0.048	0.042	0.107
No of Observations	1059	1055	1056

Coefficients with star are significant at 5 percent level, whereas the t-values are included in parentices. The exogenous variables used in the regression estimation are the proxies for firm nationality (OWN1), degree of foreign control (%FDR/NDR), asset tangibility (FA/TA), firm profitability (PBIT/TA), and firm size (log of sales).

6. Conclusion

This paper contributes in both subject and geographical scope by - empirically examining the impact of corporate nationality and the degree of foreign control on financial leverage, and by using local data from a developing country (Nigeria) with emerging financial markets and unstable corporate environment to balance some theoretical and empirical debates on corporate governance and corporate financing. Using panel data from quoted non-financial firms, the study reveals an exceptional relaince on short-term debt finances by all the firms, irrespective of their nationalities.

The results confirm that financial leverage decisions of non-financial firms in the country are influenced more by the national identity of firm owners than by the level of ownership diversification. This arises from the finding that firm nationality (whether firm is locally owned or foreign owned) is positively and significantly related to financial leverage; and interpreted to mean that locally owned firms rely more on debt financing than foreign firms. It is also revealed that the degree of foreign control in a firm (via the proportion of foreigners in the board) is a positive and significant determinant of firm's financial leverage position. The result reflects the fact that, in some cases, foreign board dominance does not prevent local management; and so, increasing the debt components in the capital structure may be read as a strategy for controlling the free cash flow behaviour of management. While this trend confirms the existence of the agency theory in the financing practice of the foreign controlled firms, results with firm size and firm profitability confirm the tradeoff theory and the pecking order theory, respectively, in the corporate financing decisions of most of the quoted firms in Nigeria.

As show in table 6, all the variables are significantly related with long-term debt ratio, but with very small regression coefficients. Particularly in the case of the degree of foreign control, the coefficient is as small as 0.1 percent – implying that such factor is not very influential as a determinant of capital structure decisions among Nigerian firms. Similarly, the regression coefficient for firm nationality stands at just 3.6 percent. As expected, the coefficient for asset tangibility, which is a measure of firm's collateral value, is the strongest at 9.1 percent. This simply confirms previous literature stance that firm's capacity to attract long-term capital depend largely on the size and worth of its collateral value (Um, 2001; Rajan and Zingales, 1995; and Titman and Wessels, 1988). Finally, the study reveals that though firm nationality and foreign control are part of the significant determinants of long-term corporate financing behaviour in Nigeria, they are not as important as acclaimed by local agents and government. Thus, there is need for the Nigerian government to devote more attention in improving policy frameworks on areas such as corporate tax, corporate governance and bankruptcy practices, which are found by previous studies to be very important determinants of firm's access to long-term finances.

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