

Corporate Financing and Efficiency of Indigenous Energy Firms in Nigeria: A Literature Review

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ABSTRACT: This paper reviews the theoretical as well as the empirics of corporate financing as it relates to the efficiency of indigenous energy firms in Nigeria. It begins with an appraisal of the sources of corporate finance and their impacts on firms operations. The study delves into the evolution of oil in Nigeria when foreigners were the sole players due to expertise and technological relevancy. The indigenisation policy of the 1970s expanded Nigerian government's involvement in the oil sector; in 1990, following a policy statement of the then military government, oil concessions were granted to Nigerian oil companies whose ownership was truly Nigerian and whose managing directors were Nigerian citizens. Further, key analytical issues towards efficiency of the local energy firms were considered.

Keywords: Corporate financing; Efficiency; Indigenous; Trade-off theory; Pecking order theory

JEL Classifications: H21; Q32; Q38

1. Introduction

The role of corporate finance in ensuring optimal efficiency of indigenous energy firms in Nigeria cannot be over-emphasised. Every organisation needs funding for its operations, investments, major projects and expansion into new markets. Cash generated from operating profits might not be sufficient to cover funding needs because entities might invest in many projects at once. Unlike in advanced economies, indigenous energy firms in Nigeria find it difficult to source for funds in financial institutions. As a result, their efficiency is hampered and by implication, the nation's gross domestic product is negatively affected.

The inadequacy, non-availability of funds, cost of domestic and external fund to these indigenous firms are major constraints to their performance. Energy industry is a large capital intensive one that requires enormous resources for its finance, management and operations. The inability of local banks in Nigeria to finance massive oil and gas projects are not news anymore. The capitalization of banks in Africa is quite low to engage in large capital financing of oil and gas. Also, Nigerian banks lack the financial base to make any meaningful impact on local content development. The biggest Nigerian banks are tiny banks when it comes to energy financing. Most Nigerian banks operate in dilemma-laden territory as most indigenous contractors have no proper business structure. In addition, it has been discovered that indigenous energy firms in Nigeria typically have less access to international financing and hence rely more upon domestic sources of capital which may be inadequate for technical risks and opportunities. Given Nigeria's unenviable status, it is often considered a high risk market by international commercial lenders to extend credit facilities to her indigenous energy firms.

Some of them engage in onshore and offshore activities, examples are Forte Oil Plc, (formerly AP Nigeria Plc) Oando Nigeria plc, Global Energy Group, Obango Energy Group etc, their firms could not really march their multinational counterparts in terms of efficiency and finances. Many of them did not operate during the advent of military administration, they became pronounced during civilian era as political power brokers issued many oil producing licences to placate their political apologists; hence, not many of them really care about corporate governance and effective management. Some of them came into being to share dividend of democracy as politicians described it. Many of them were really involved in the recent celebrated case of Nigerian National Petroleum Corporation (NNPC) subsidy scam. A number of them went into extinction as the ruling powers that brought them into existence changed.

Looking at the oil and gas sector in the daily official list of the Nigerian Stock Exchange, it is easy to discern that the indigenous energy firms among them are not doing well in terms of global performance and pricing. In fact they are the least priced. And the reasons for these inadequacies are obvious. In 2007, African Petroleum (AP, now Forte Oil) came to the market to raise money through public offers and rights issues at #250 and #230 per share respectively, it is sad to note that the price of the same company came down to a ridiculous low price of #5.00 per share in 2012, the same happened to Oando Nigeria plc which came to capital market in 2011 to raise fund at #73 per share but recently it raised another right issue at #12 (Punch, Feb.20th 2013). Board room fights, inefficiencies are the order of the day, and these affect their credit worthiness to the extent that few banks want to do business of credit financing with them.

The structure became worse with those energy firms not listed on the exchange such as Obango Oil and Hardy Oil. With their pedigree in terms of management capabilities and credit ratings no bank would want to grant them any kind of liquidity. Also, it is quite obvious that corporate governance is absent in the way most indigenous energy firms are being run and that makes banks, prospective business partners, international organisations etc to be skeptical about their operations and intensions, They are perceived as not focused in their business modelling and practice and those are rare quality financiers want to see in granting credit financing to needy firms.

In spite of the downward share prices in the indigenous energy firms as earlier mentioned, many of them still posted into their accounts; bogus management expenses that eroded the little profit they made. The net effect is losses and inability to reward shareholders with any form of dividend. Some indigenous energy firms are not really in the business because more often than not the person who gets the contract is not the one looking for finance. In addition, it has been discovered that indigenous energy firms in Nigeria typically have less access to international financing and hence they rely on domestic sources of capital. Given Nigeria's unenviable status, it is often considered a high risk market by international commercial lenders to extend credit facilities to her indigenous energy firms. Generally, these firms lack high level of management expertise, technical skills and capital in their operations.

Scholars in financial economics parlance have used different theoretical assumptions, methods and a variety of empirical observations to illuminate the options available to fund a firm (financial optimal mix). It is interesting to explore the existing and expanding body of literature on the appropriate financing as it relates to efficiency of indigenous energy firms in Nigeria.

This paper therefore presents a survey of literature on the subject matter but it is limited to issues that are particularly relevant to its setting due to the fact that literature on corporate financing is too comprehensive. The rest of the paper is as follows: section two focuses on the background and context of indigenous energy firms in Nigeria; theoretical issues on corporate finance are considered in section three; section four reviews empirical literature on the roles of corporate financing on efficiency of firms, while section five concludes the paper.

2. Background

Petroleum plays crucial role in the Nigerian economy as it accounts for about 54% of her gross domestic product (CBN, 2010). Nigeria is the 12th largest oil producer, the 8th largest exporter that has the 10th largest proven reserves in the world. The country is also a member of Organisation of Petroleum Exporting Countries (OPEC). Oil was discovered in 1956 at Oloibiiri near Port Harcourt, Nigeria through the effort of the British government (the then colonial master of Nigeria). Exploration in large quantity began in 1958 as the British Petroleum Company and Dutch Oil Company (British Petroleum and Shell Petroleum Development Company respectively) were solely in charge of exploration, mining, and operations etc of oil business in Nigeria. As time went on, Nigeria sought more control over its oil industry. The military government took some steps toward nationalisation of oil before the oil boom of 1970s. To gain more control, Nigeria formed a state oil company, joined OPEC, and seized British Petroleum's (BP) assets. Part of the move toward nationalisation included the transfer of technology, skilled and unskilled jobs to Nigerians (Quialan, 1980; Genova and Falola, 2003).

The trend toward greater government regulation started in 1968, when OPEC obligated its members to acquire 51 percent of their oil and participate in all aspects of the oil industry. Nigeria, which joined OPEC in 1970, formed the Nigerian National Oil Company (NNOC) in 1971 to act as a

state-owned oil company. NNOC was granted exploration concessions, commanded to take over concessions of foreign oil companies over time, train technicians and geologists, and indigenise sectors related to oil production, such as roads, refineries, transport, and pipelines. NNOC was to run as a corporation or holding company, which could enter into partnerships and have subsidiaries. The state would have some control over NNOC by appointing the general manager and requiring it to abide by federal laws and decrees. In an effort to reduce the number of restrictions and exercise more power, the Nigerian National Petroleum Company (NNPC) took over NNOC in 1977. The NNPC included a larger research component, as well as ability to grant larger contracts. The Federal Government's decision to nationalise the British Petroleum Companies was preceded by criticism of the operations of oil companies in Nigeria prior to the formation of the NNPC. Reasons for nationalisation of oil industry included a concern for the transfer of technology and employment. The Nigerian government hoped for nothing short of economic growth and an increase in oil revenue following its policies on nationalisation (Genova and Falola, 2003).

Beginning in 1977, the Nigerian government introduced a whole range of financial incentives to encourage new developments in the oil industry. At first, this involved mostly reductions of petroleum tax, which included a reduction in the company tax rate from the standard 85 % to 65.7 % on companies engaged in exploration but not yet producing. The dismal economic conditions of the 1980s compelled the government to introduce additional financial incentives which included the cancellation in 1982 of the requirement that oil companies provide on a pro-rata base 30 % of the 250 000 b p/d needed for the domestic market and the introduction of a Memorandum of Understanding (MOU) in 1986. The MOU set out the financial agreements between the government and multinational oil companies that guaranteed the latter a minimum fiscal margin of \$2 per barrel (after royalties and tax payments; in 1977 the rate was \$0.80 and in 1982 US \$1.60 (Ibid).

An important new development in Nigerian oil policy in the 1990s was the return to indigenisation. Unlike the previous policies of the 1970s that aimed at expanding governmental participation in the oil sector, privatisation in the 1990s aimed at increasing Nigerian participation in the oil industry through indigenous oil companies. Following a policy statement by the Babangida government in 1990, oil concessions were granted to Nigerian oil companies whose ownership was truly Nigerian and whose managing directors were Nigerian citizens.

Indigenous oil companies were allowed to have foreign technical partners with a maximum share of 40 %. This policy was initiated to establish a strategic national production capacity, to increase the Nigerianisation of the upstream oil sector and to establish a complementary group of small size producers. Privatisation proved popular with local business interests and seventeen indigenous oil companies were awarded concessions on onshore and in the shallower offshore blocks in the first round of concessions in 1992. Privatisation was further promoted by the Petroleum (Amendment) Decree no 23 of 1996 (also known as the Marginal Fields Decree). In terms of the Decree, the government could recover abandoned and underexploited marginal oil fields from joint venture partners, which would then be reallocated to indigenous oil companies at much-reduced tax and royalty rates but by 2003, this Decree had not been implemented. Despite the laudable merits of the indigenisation policy, only two indigenous oil companies, namely Amni International oil and Consolidated Oil, managed to make a small impact on the Nigerian oil sector. By April 1997, these two oil companies accounted for 1.4 % of the country's total oil production. While the six major non indigenous oil firms in the country (Shell Nigeria, Mobil, Chevron, Elf, Agip and Texaco), on the other hand, produced 97 % of Nigeria's total output in 1997 (Avuru, 2003).

The history of indigenous participation in oil and gas can be traced to the emergence of Dubri Oil, Nigeria's oldest independent producer in 1987. In 2004 alone, 24 Nigerian companies were licensed to operate 24 marginal fields, but the landmark take-off of the indigenous programme did not occur until 1990/1991. The emergence, growth and development of indigenous oil producers in Nigeria were stifled for many years, largely because of the dominance of foreign oil investment interests coupled with capacity and financial shortcomings. During the 1990s, however, indigenous producers became a growing presence and their role in the industry was promoted and facilitated by the Nigerian Association of Indigenous Producing and Exploration Companies (NAIPEC), formed in 1992. Indigenous oil companies were sole risk operators and generally formed coalitions of commercial interest or entered into partnership and joint venture relationships with foreign petroleum companies. The NNPC imposed a production capacity of 25,000 b/d on indigenous producers in

September 2000 to ensure the OPEC quota was not exceeded it was clear that such operators were much more at risk than the larger companies as a result of the OPEC quota effects, a situation that was articulated on several occasions by NAIPEC (Avuru, 2003).

Based on the background knowledge of indigenous energy firms and following enormous investment in human capital by the Nigerian National Petroleum Corporation (NNPC) and some of its joint venture partners over the years, a new crop of highly competent and experienced Nigerian engineers, geologists and geophysicists emerged. Today, some of them have established private oil prospecting and oil services firms, which are classified as indigenous contracting firms. However, their inability to get a share of the action at the upstream may not necessarily be due to incompetence, but rather due to a dearth of funds (BGL, 2010).

Presently, there are about 100 indigenous energy firms in Nigeria but their major challenge is access to adequate funding which consequently, hampers their efficiency. According to Avuru (2013), over 52 Nigerian companies have been awarded blocks in the past 20 years without any growth in indigenous production. He said apart from NNPC, the key game changer, is the ability of the new generation of independents to build operational capacity and raise substantial funds to finance their growth. "If this is done, the result will be a new dawn for Nigerian independents underlined by accelerated growth, renewed onshore exploration, appraisal and development campaigns as well as accelerated gas development".

**Table 1. Sources of Finance of Oil and Gas Firms in Nigeria
(Local & Multinationals)**

	Retained earnings	Shares	Debentures	Bank loans	Joint ventures
MULTINATIONAL:					
SHELL	*	*	*	*	*
CHEVRON	*	*	*	*	*
EXXON MOBIL	*	*	*	*	*
AGIP	*	*	*	*	*
TOTAL ELF FINA	*	*	*	*	*
LOCAL:					
FORTE OIL	*	*	-	*	*
OANDO OIL	*	*	-	*	*
CAPITAL OIL & GAS	*	-	-	*	-
SAHARA ENERGY	*	-	-	*	-
RAMANYAH OIL	*	-	-	*	-

Note: (*) Access to fund, (-) No access to fund

Table 1 presents sources of finance to both multinational and local oil & gas firms in Nigeria as at 2012. It depicts that multinational firms had adequate access to the five (retained earnings, shares, debentures, bank loans and joint venture) sources based on the survey carried out by the author. Only two local firms, Forte Oil and Oando Oil could assess fund from Nigerian capital market in contrast to the foreign firms which got fund via capital market. They also had partnership with other foreign oil firms to boost their operations. Although, the survey showed they could source fund from banks, local but not international ones. It was also discovered that local banks were weary of granting them loans due to their non-challant attitude in honouring terms of repayment. It can be deduced that the major source of finance to indigenous oil firms in Nigeria was retained earnings. It is then clear that multinational and indigenous Oil & Gas firms are not on the same pedestal in terms of operations, innovations, research & development, performance and productivity; consequently they could not compete favourably with their foreign counterparts.

3. Theoretical Discussions

Corporate finance can be described as the funding provided to support the operations of a venture. The two main sources of corporate finance are debt and equity.

- Debt is the amount of money borrowed from a lender and secured against certain assets of the company in return for a promise to pay interest on the outstanding amount and to repay the principal of the loan on or before an agreed date. The rate of interest charged usually depends upon the term of the loan and whether the principal is to be repaid instalmentally throughout the moratorium of the loan or in a lump sum payment at the agreed maturity date.
- Equity on the other hand is the block of shares in the ownership of a firm acquired at the risk of the purchaser and not secured on the firm's assets.

Each of these sources of fund has a different risk and return profile. The greater the risk carried by the financier, the higher the return that they receive for committing their funds. Equity investors seek a greater return than lenders because of the greater risk that they carry.

The theory of business finance in a modern sense started with the Modigliani and Miller (1958) capital structure irrelevance proposition. Before then, there was no generally acceptable theory of capital structure. Modigliani and Miller started by assuming that the firm had a particular set of expected cash flows. When the firm chose a certain proportion of debt and equity to finance its assets, all that it did was to divide the cash flows among investors. Investors and firms were assumed to have equal access to financial markets, which allowed for homemade leverage. The investor could create any leverage that he wanted but not offered, or the investor could get rid of any leverage that the firm took but did not need. As a result, the leverage of the firm had no effect on the market value of the firm.

The 1958 paper stimulated serious research devoted to disproving irrelevance as a matter of theory or as an empirical matter. Literature (Myers, 1984; Frank and Goyal, 2004) had shown that the Modigliani-Miller theorem fail under a variety of circumstances. The most commonly used elements included consideration of taxes, transaction costs, bankruptcy costs, agency conflicts, adverse selection, lack of separation between financing and operations, time-varying financial market opportunities, and investor clientele effects.

As an empirical proposition, the Modigliani-Miller irrelevance proposition is not easy to test. With debt and firm value both plausibly endogenous and driven by other factors such as profits, collateral, and growth opportunities, a structural test of the theory by regressing value on debt could not be established. 'While the Modigliani-Miller theorem (1958) does not provide a realistic description of how firms finance their operations, it provides a means of finding reasons why financing may matter' (Myers, 1984). However, the M&M irrelevance proposition (1958) provides a reasonable interpretation of much of the theory of corporate finance up to perhaps the 1980s. Accordingly, it influenced the early development of both the trade-off theory and the pecking order theory.

The trade-off theory of capital structure refers to the idea that a company chooses how much debt finance and how much equity finance to use by balancing the costs and benefits. The original version of the trade-off theory grew out of the debate over the Modigliani-Miller theorem's fallacy. When corporate income tax was added to the original irrelevance proposition (see Modigliani and Miller, 1963), this created a benefit for debt in that it served to shield earnings from taxes. Since the firm's objective function is linear, and there is no offsetting cost of debt, this implied 100% debt financing.

The classical version of the hypothesis dates back to Kraus and Litzenberger (1973) who considered a balance between the dead-weight costs of bankruptcy and the tax saving benefits of debt. An important purpose of the theory is to explain the fact that corporations usually are financed partly with debt and partly with equity. It states that there is an advantage to financing with debt, the tax benefits of debt and there is also a cost of financing with debt, the costs of financial distress including bankruptcy costs of debt and non-bankruptcy costs. The marginal benefit of further increases in debt declines as debt increases, while the marginal cost increases, so that a firm that is optimizing its overall value will focus on this trade-off when choosing how much debt and equity to use for financing.

According to Myers (1984), the key implication of the trade-off theory is that leverage exhibits target adjustment so that deviations from the target are gradually eliminated. He later criticized the theory in his presidential address to the American Finance Association meetings in which he proposed what he called "the pecking order theory".

The pecking order theory stems from Myers (1984) who in turn was influenced by the earlier institutional literature including the book by Donaldson (1961). Myers (1984) argues that adverse selection implies that retained earnings are better than debt and debt is better than equity. This ranking was motivated with reference to the adverse selection model in Myers and Majluf (1984). The ordering, however, stems from a variety of sources including agency conflicts and taxes. The pecking order theory predicts that firms with more investments holding profitability tax should accumulate more debt over time. The pecking order theory argues that firms prefer internal finance over external funds. Thus, according to the pecking order theory, with investments and dividends taxed, more profitable firms should become less levered over time.

Fama and French (2002) criticised both the trade-off theory and the pecking order theory in different ways. Despite such criticisms, the trade-off theory remains the dominant theory of corporate capital structure in corporate finance parlance. Dynamic version of the model generally seem to offer enough flexibility in matching data so, contrary to Miller's (1977) verbal argument, dynamic trade-off models are very hard to reject empirically.

In sum, the trade-off theory focuses on taxes and bankruptcy costs. Until quite recently, this theory has had the honour of being the dominant theory in corporate finance textbooks; while, at the same time, the theory was in serious disrepute among most finance scholars. Recently that has changed somewhat. Some of the most prominent objections to the trade-off theory have become less compelling in light of more recent evidence and an improved understanding of some aspects of the dynamic environment (Myers, 1977).

4. Empirical Literature

How does corporate financing affect efficiency of firms? An attempt to provide satisfactory answer to this question has got responses from some researchers; although the dearth of empirical studies on Nigerian management practices, particularly on entrepreneurship development has been a major constraint.

The relative importance of internal and external finance is subject to discussion in the literature. The seminal work by Myers (1984) states that firms prefer internal to external finance and when external funds are necessary, firms prefer debt to equity finance (this has been called the pecking order theory). However, there seems to be no conclusive evidence on the validity of this theory. For example, looking at the link between the source of finance and a firm's decision to innovate, Leiponen and Zhang (2010) used a large sample of Asian emerging economies (including South Asian countries) to find that both equity finance and funding from family and friends are significant enablers of innovation activities, whereas they do not find a significant relationship between debt finance and innovation.

External finance also is essential for firm growth. Caprio jr. and Demircuc-Kunt (1998) review investment climate surveys for 71 developing countries to identify the main sources of external finance for firms. They found that more than 40 per cent of large firms, around 35 per cent of medium firms and only over 20 per cent of small firms used some type of external finance for new investments. But among the firms that used external finance, only a reduced percentage of their total investment needs is covered by external sources. Large firms only get 30 per cent of their new investment from external sources of finance, whilst small firms only finance 15 per cent externally. They concluded that bank debt is the most common source of external finance, particularly for large firms.

UNEP (2008) submitted that African development Bank (ADB) analysed the basket of issues arising in efforts to mainstream energy financing in developing countries. It identified that energy projects were often characterised by small scale projects within a \$200,000 to \$2 million range, which had one to three year payback periods, and often only required local currency financing and credit support; high transaction costs in terms of processing time including requirements on social and environmental safeguards; due to lack of institutional, technical capabilities and experience. It also identified some barriers associated with local financing such as the cost reductions generated from energy savings which were not a source of profit or an 'asset' that banks understood or were comfortable to lend against.

A study of the California cement industry found that many energy efficiency opportunities involved large capital investments and that most customers cite limited capital availability as a key reason why this had not been taken up (Coito and Allen, 2007). Similarly, a survey of 30 Swedish

foundries found that 'access to capital' was the most important barrier to energy efficiency while a survey of 187 Norwegian food and drink companies found that 'lack of investment capital or capital needed for other priorities' was the second most cited barrier to energy sector (Helgerud and Sandbakk, 2009).

Studies regarding both large and small firms in developing countries underscored the importance of access to capital to implement energy efficiency projects and the frequent difficulties in doing so. The problem can be particularly pronounced for developing countries where access to capital is frequently limited owing to factors such as the higher risk of lending, the costs to the lender of establishing credit-worthiness, the lack of adequate securities for loans or the deficiencies of the domestic financial sector. In addition, the high inflation rates, political instability and corruption in many developing countries can increase the risks for domestic and foreign investors while national trade and investment policies can limit the inflow of foreign capital and technology (Worrell *et al.*, 2001b).

In addition, there is a set of factors that limit the opportunities for the financial sector profitably to lend to, or invest equity in firms. These include poor business and financial management skills and weaknesses in corporate governance that make firms unattractive to the financial sector because of the high risks they pose. In addition, attitudes of entrepreneurs towards risk or retaining complete control over their firms may make them unwilling to borrow or to allow third party equity into their businesses. In countries where the financial sector may have sufficient access to savings to increase lending, such demand side factors can represent a binding constraint to increasing access to finance (Worrell *et al.*, 2001b).

Taggart (1985) suggested that stock issues were more important before the Second World War relative to those of the 1960s and 1970s. He also reports that, during the 1930s, aggregate total corporate debt declined, as internal funds exceeded the uses of funds. Presumably, this reflects the struggle of firms to stay afloat during the depression. Graham and Narasimhan (2004) provide an interesting study of the depression period.

The bulk of literature is concerned with determining which factors are correlated with leverage. This literature was fairly extensive and included contributions by Bradley *et al.* (1984); Long and Malitz (1985); Titman and Wessels (1988); Crutchley and Hansen (1989), Smith and Watts (1982), Rajan and Zingales (2003) and Frank and Goyal (2007a). A second strand of this part of the literature is concerned with the debt conservatism puzzle. This puzzle came from the allegation that many (or all) firms had lower leverage than would maximize firm value from a static trade-off perspective. Contributions included Miller (1977), Graham (2000) and Ju *et al.* (2005).

Maksimovic and Phillips (1998) find that assets were often rescheduled between firms and so direct bankruptcy costs might not be very high. Indirect bankruptcy costs (Titman, 1984) were likely to be much larger but they had been difficult to quantify. An attempt at estimating bankruptcy costs by Andrade and Kaplan (1998) find that, for a sample of 31 highly leveraged transactions, bankruptcy costs were between 10 and 23 percent of firm value.

Graham (2000) estimated tax rate functions to determine how aggressively firms used debt. He finds that a significant number of Compustat firms were surprisingly conservative in their use of debt. These were generally large, profitable, and liquid firms, the very firms that were expected to face lower costs of distress could have levered more. He concludes that the capital structures of a significant number of U.S. publicly traded firms were leaving significant sums of money on the table. However, as Almeida and Philippon (2007) pointed out, most debt conservatism calculations focussed on expected costs of financial distress rather than the risk-adjusted costs of financial distress. They are of the opinion that bankruptcy happened more commonly in bad times than in good times.

Frank and Goyal (2003) examined the broad applicability of the pecking order theory. Their evidence based on a large cross-section of U.S. publicly traded firms over long time periods, shows that external financing was heavily used by some firms. On average, net equity issues track the financing deficit more closely than did net debt issues. These facts did not match the claims of the pecking order theory, greater support for pecking order was found among large firms, which might be expected to face the least severe adverse selection problem since they received much better coverage by equity analysts. They conclude that the pecking order theory does not explain broad patterns in the data.

Lemmon and Zender (2004) operationalise the concept of debt capacity by focusing on firms with rated debt. They argue that firms with debt ratings are unconstrained by debt capacity while firms without debt ratings are constrained. They find as expected, that the coefficient on financing deficit in net debt regressions was significantly larger for firms with rated debt and smaller for firms with no debt rating. They also show that firms with no debt rating are small, high-growth firms and they use equity to finance their deficits. These results are consistent with those in Fama and French (2002); and Frank and Goyal (2003). The interpretation, however, is different, while Frank and Goyal suggest that these firms face more asymmetric information problems and thus the pecking order predicts that they should issue equity. According to them, the idea of debt capacity is important in understanding the rejections of the pecking order theory. Consideration of debt capacity then suggested that, when unconstrained by debt capacity, firms issued debt, but that, when constrained, they issued equity.

Another attempt to reconcile the evidence in Frank and Goyal (2003) with the predictions of adverse selection arguments was described in Halov and Heider (2005). The paper argues that when there was greater asymmetric information about risk, debt had a more severe adverse selection problem and firms would only issue equity. To test these arguments, they used asset volatility as a proxy for asymmetric information about risk and divide firms into deciles based on asset volatility. They show that as asset volatility increases, firms used more equity to finance their deficits. The interpretation of these results rests on the assumption that differences in asset volatility deciles captured differences in asymmetric information about cash flow variance. Thus, small, young, high-growth firms would issue equity to finance their deficits if these firms had more asymmetric information about risk and less asymmetric information about value.

Helwege and Liang (1996) find that the use of external financing by firms that undertook IPOs (Initial Public Offers) in 1983 did not match the pecking order prediction that financing deficit was the critical factor. Leary and Roberts (2007) find that when firms used external finance, less than 40% match the pecking order's predictions. The pecking order accurately identified less than 20% of the observed equity issuances. As they studied whether those rejections were due to debt capacity or time-varying adverse selection; they conclude that those suggestions do not account for the evidence.

Fama and French (2005) considered equity issuances. They observed that most firms actually issued and/or retired equity in most years and that there were many mechanisms by which equity was issued. According to them, violations of the pecking order were routine and more than half of the firms violated the pecking order when issuing equity. On the other hand, Gomes and Phillips (2005) find that half the equity issues were in the public market while half were private issues but that the pecking order provided a better account of the public issues and had difficulty accounting for the private issues.

From the reviewed empirics, it was observed that there is no consensus as to the best source of corporate financing that could guarantee efficiency; rather an optimal mix of capital structure is the ideal.

5. Concluding Remarks

The foregoing review had drawn attention to pertinent issues on the corporate financing of firms. The evolution of oil industry and consequently indigenous energy firms in Nigeria were elucidated. Empirical analysis on the subject matter could not be carried out due to the fact that relevant information and data on the economic activities of the indigenous firms could not be assessed. Knowing the significance and status of Nigerian indigenous oil companies, the following therefore, are suggested:

Transparency should be the hallmark of local energy firms in Nigeria. The local oil firms need to strengthen their capacity, competence and significantly improve their public image so as to have more access to funds and motivate potential investors to subscribe to their offers. Some of them should merge so they could reap the benefits of economies of scale.

The ongoing economic reform, public private participation (PPP) should be allowed to come into play in the energy sector, whereby the government partners with the local firms in all their segments of operations for higher productivity. In addition, the government in her on-going privatisation programme should build local investors' confidence in the Nigerian economy so that more indigenous firms can come on board.

Also, the onus of responsibility lies on the Federal Government of Nigeria; to encourage local energy firms in her integrated economic planning; to diversify from oil exploration to production towards value adding manufacturing for sound and sustainable economy. In developing the energy sector; she needs as a matter of urgency; to provide support in terms of fund for the operations of those firms for efficiency and high productivity as Chinese government is doing in her economy.

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