

# COMPLEMENTARITY OF OIL DRILLING BUSINESS FINANCING IN NIGERIA'S NIGER DELTA REGION

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## Abstract

The contribution of the oil drilling sub-sector to the gross domestic product (GDP) of Nigeria has risen over the years, to over 80%, thus boosting the industrial base and creating more employment opportunities for the teeming graduates of the nation's educational system. However, genuine efforts of indigenous industrialists in this regard are seriously hampered by inadequate funding. This was the fundamental concern of the study. Data were collected from primary and secondary sources, the latter being textbooks, journals, and other academic/professional materials. The primary data on the other hand were gathered from 14 indigent corporate executives of three randomly selected oil drilling firms indigenous doing business in the Niger Delta region of Nigeria. Questionnaire was the main data collection instrument while chi-square ( $X^2$ ) was applied in analysis. It was established that most indigenous oil drilling companies experience difficulties in obtaining bank facilities due to the long-term nature of the business and the general negative impression about local industrialists. Government incentives are also paltry and of little/no effect. Strategic options to be explored are mega-partnerships, consortium financing, collective backward integration, and corporate capacity/credibility re-engineering for auspicious multi-public impression management.

## Introduction

The business of oil drilling is highly capital intensive. Enormous resources are needed in terms of finance to set-up and engage in oil drilling operations in any part of the world. The Niger Delta region of Nigeria is highly oil bearing and as such, large-scale drilling activities are going on regular basis. Unfortunately, the huge capital outlay required for business operations cannot be easily raised by local investors/industrialists. Financial limitations generally hinder many desirous indigenes from embarking on undertaking oil drilling business in a land where the enterprise keeps attracting foreign investors and multinational companies (MNCS). This is in deed perturbing to most national economy movers and watchers. Against this back-drop, the pertinent research questions were:

- i. What are the sources of finance of indigenous oil drilling companies?
- ii. What are the problems associated with financing oil drilling business in Nigeria?
- iii. Has government provided meaningful incentives to alleviate the financial burdens of local oil drilling companies?
- iv. Do external oil drilling financial facilities reasonably augment internal outlay?

Thus, the comprehensive hypothetical proposition (HP), in null context, was: **HP:** Internal financing of indigenous oil drilling businesses in Nigeria is not adequately complemented by external facilities.

## Historical Development of Oil Drilling in Nigeria

Many developing countries richly endowed with crude oil see drilling and production as a sure way to enhance growth and development. In order to facilitate oil prospecting in the face of limited indigenous capital, they resort to giving several incentives to foreign investors in that sector. This largely accounts for the foreign hegemony of the oil drilling sub-sector and the entire Nigerian economy. At the time when Nigeria began the indigenization crusade, about 90% of drilling operations were carried out by foreigners. In fact, records have it that oil prospecting and drilling in Nigeria started for back in 1908 when the German firm, Nigeria Bitumen corporation began oil drilling in Araromi area of present day Ondo State.

That pioneer effort, however, was truncated by the First World War in 1914. In 1937, oil drilling resumed in Nigeria with the operations of Shell D'Arcy (the fore-runner of Shell Petroleum Development Company of Nigeria). It was again interrupted by the Second War, but latter reactivated



in 1947. It was not until 1956 that oil was struck in commercial quantity at Oloibiri in the present Baysa State of Nigeria, after several years of search and investment of over N30 million. Shell started oil production and exported from its Oloibiri field in 1958 (Ajie, 1999; Ndiomu, 1992). By 1961, other oil companies such as Mobil, Gulf (Chevron), Agip, Safrap (Elf), and Tenneco and Amoseas (Texaco) also began to explore the on-shore areas of Nigeria.

The exploration rights which had earlier been the exclusive preserve of Shell extended to the new comers in line with government intention to accelerate drilling activities in the country. It is noteworthy that oil drilling and export from the field first recorded a production rate of 5,100 barrels per day (bpd). It doubled in the following year, hit 2.4 millions bpd in 1979 and has been soaring since then. The sub-sector has progressed fairly rapidly in the Nigerian economy after independence. While the contribution of the oil sector to the GDP rose from 20% in 1957 (pre-independence) to about 64% in 1988, indicating a growth rate of 20% per annum; that of the oil drilling sub-sector was estimated at over 80%. These have remained as impressive till the present time. Other nations including Algeria, Gabon, Libya, and South Africa equally have pleasant experiences in this light (Odigidawu, 2000).

With this high profile, the Federal Government of Nigeria (FGN) since the time of the Third National Development Plan (NDP) of 1975-1980, began to explore ways of facing the challenges of creating a strategic industrial base for self-sustaining growth of the Nigerian economy through oil drilling operations. The heavy emphasis on oil drilling in the country was also informed by the need to create more jobs that could absorb the labour released from the agricultural sector. Furthermore, it is widely held that with a rapidly expanding oil drilling sector, the industrial sector will expand to boost capacity, productivity, and general supply materials to that sector, with other numerous merits.

### **Mechanics/Logistics of Oil Drilling**

The drilling technology most commonly used in the oil/gas industry is *rotary drilling*. It employs a *drill bit*, rotated by means of a *drill string* suspended from a *derrick*. This approach still prevails particularly in shallow water well operations. The drill bit and length of drill pipe suspended by a cable are raised and dropped repeatedly into the well. Essentially, the drilling system consists of *drill string*, *drill collars*, and *drill bit* (Ajie, 1999). The *drill string* which consists of 30 feet section of hollow drill-pipe., performs three functions, such as:

- i. Transmitting rotary signal from the drill floor,
- ii. Conveying the drilling fluid down the well, and
- iii. Giving balance to the drilling system.

Drill collars are heavier than drill pipes. They are used at the bottom of the string to put weight on the bit. In using the drill collars, it is necessary to establish the total weight which is the aggregation of elongation due to changes, elongation due to tension, and elongation due to force (Pearce, 1981). Drill bit is used to pierce rocks and enhance access to the minerals of interest in the soil. Operating with the drill bit involves the following three steps:

- i. Scrapping action of the teeth as the bit rotates,
- ii. Crushing action of the teeth as the weight of the drill string rests on them, and
- iii. Hydraulic jetting action of the drilling fluid as it is pumped through the nozzles.

However, for the technical process to be effective, operatives are expected to appreciate *well's five-point recipe*, as enumerated by Odigidawu (2000), by:

- a) Keeping the hole free of cutting,
- b) Over-coming gas, oil and water flows,
- c) Preventing the wall from caving in,
- d) Cooling the bit and lubricating the string, and
- e) Extracting proper information from the well. Where the operations facilitate the securing of relevant systemic data, it will promote and sustain production efficiency and effectiveness.

### **Contemporary Financing Perspectives**

Generally, many economies are witnessing the emergence of an array of institutions, instruments, methods and processes that concern the professional task of corporate financial

engineering. However, since the end of World War II, it has been observed that more emphasis is on

working capital management than on long-term financing. There is also a glaring shift from external funding to internal mechanisms as necessitated by unfavourable macroeconomic policy regimes. Contemporary finance is therefore concerned with a broader horizon whose critical perspectives encompass personal finance, corporate finance, public finance, international finance, investment/portfolios, insurance/risk management, and financial institutions network. Their characteristic features are highlighted as follows:

**a) Personal Finance:** This relate to the efficient management of personal income, with particular reference to how one should administer his estates, buy home insurance, select real/financial investment options, and generally plan/work towards a self-actualizing retirement. It also exemplifies how to manage educational costs and domestic expenses so as to enhance saving (Agundu, 2001; Burda, 1975).

**b) Corporate Finance:** This concerns the management of organizational funds which technically defines its assets, liabilities, and over-all capital structure. Poised to maximize the value of the firms, the role of modern finance then becomes the determination of efficient investments, financing/realizing the investments, and earning/appropriating returns (benefits) there from. These indulgences are influenced by corporate financing, investment, and divided policies, where they are formal and functional (Agundu, 2002; Pandey, 1995).

**c) Public Finance:** This deals with the planning, acquisition, utilization, and distribution of government funds. It seeks to promote the efficient and effective allocation of a nation's resources (which Nigerians chose to call national cake) towards the enhancement of the standard of living of the citizenry. This is shaped by various macroeconomic stabilization instruments represented by monetary, fiscal, and structural adjustment policies (Pandey, 1995). The crucial tasking specifics include budgeting, taxation, and debt management.

**International Finance:** This addresses issues relating to the international flow of goods and capital (Van Home, 1999; Goff, 1975). International trade involves the flow of goods, services, and capital among nations. In determining the terms and modes of payment, the trading nations are faced with the dynamics of exchange rates, which reflects the value of their respective currencies.

**e) Investment/Portfolios:** These are generally classified into real and financial assets option. Prior to selection, institutionalization, operationalization, and realization, the critical features to be considered of any option are risk, return, as well as over-all safety, maturity and negotiability in the case of financial assets; while for the real assets, the pre-requisites are technological/engineering feasibility, marketing/economic viability, commercial/financial profitability, and social/environmental desirability (Agundu, 2002; Fubara, 1998; Ezirim, 1996).

**f) Insurance/Risk Management:** While risk underscores the possibilities of experiencing adverse contingencies/exigencies and volatility/variability, insurance emphasizes disability prevention through a contracted indemnity hedge. It is imperative, therefore, for the insured to ensure that the insurance plan would afford him maximum protection at minimum cost (Agundu, 2001; Ezirim; 1996; Umoh, 1993).

**g) Finance Institutions Networking:** In modern economies, the financial system represents a complex of financial institutions, financial markets, financial instruments, and rules/norms that enhance the flow of funds. The concern of professionals in this regard is to strategically plan, organize, direct, co-ordinate, and control all financial institutions and markets in line with macroeconomic policies, to the end that general prosperity and stability are achieved (Umoh, 1993).

Taking these components together, presents the finance phenomenon as reasonably iterative in the mechanisms and total business of oil drilling. The management of logistics definitely traverses the ontologies/methodologies of personal, corporate, public, and international finance as well as insurance credibility, financial system sensitivity, and macroeconomic capacity.

## Methodology

In line with the assertion of Baridam (1995) that the outcome of *convenience sampling* is as valid as the result obtained from *probability sampling* techniques, the former was adopted in this study. Essentially, copies of research questionnaire were administered on 15 senior executives working in three accessible indigenous oil drilling firms, based and doing business in the Niger Delta region of the Federal Republic of Nigeria. Eventually, completed questionnaire were retrieved from 14 (93.3%) of the respondents. They, however, preferred their corporate identities to be held in confidence. With respect to research design, the case study strategy was deemed appropriate for the study, in view of the sub-sectoral focus.

According to Ahiauzu (1999), the *case study* approach involves the study of a specific group or unit at a time and drawing concluding based on the circumstances of the elements studies, the prime advantage being the consideration of the pertinent details of the affected phenomenon. There is also the *survey method*, which involves a careful selection of the population of a study, large enough to guarantee adequate representation and meaningful generalization of results. The data used in the study were obtained from primary and secondary sources. Secondary data refer to those existing in print, having been previously gathered for some other exercises. They provide background information as well as areas requiring further attention. In this study, textbooks, journals, and academic theses were consulted for this purpose. Primary data, on the other hand are original informational inputs usually gathered for a research project at hand. These were harnessed in this work through the questionnaire administration.

Tables, percentages, and chi-square ( $X^2$ ) statistical techniques were applied in data analysis and test of hypothetical proposition (IIP). This was informed by the conviction that in dealing with sets of data, users are more interested in simple meaningful results. For instance, the percentage of cases that fall into a given class is more revealing than the mere actual frequency (Odigidawu, 2000; Ahiauzu, 1999).

## Data Analysis/Results

The disclosures made by the respondents are generally presented in Table 1 below:

**Table 1: Database/Percentage Highlights for HP Test**

Focus/Response Options	No. of Respondents	Percentage (%)
<b>A. Nature of Machinery:</b>	<b>12</b>	7.14
Simple power-driven types	11	14.29
Simple hand types	<b>14</b>	78.57
Heavy-duty types <b>Total</b>		<b>100</b>
<b>B. Sources of Machinery:</b>	<b>1</b>	7.14
Local markets Foreign	<b>10</b>	71.43
markets Local & Foreign	<b>3</b>	21.43
markets <b>Total</b>	<b>14</b>	<b>100</b>
<b>C. Components of Fund:</b>	<b>10</b>	71.43
Promoters' equity Equity/Little bank	<b>1</b>	7.14
loans Equity/Little government	<b>1</b>	7.14
incentives All of the above <b>Total</b>	14	29
	<b>14</b>	<b>100</b>
<b>D. Financing Problems:</b>	<b>0</b>	0
Promoters' limitations only		
Littler/ no government incentives only	<b>0</b>	0
Loan sourcing difficulties only All of	<b>0</b>	0
the above None of the <b>Total</b>	14	100
	<b>0</b>	0
	<b>14</b>	<b>100</b>

<b>E. Banks' Complaints:</b>	10	71.5
Inadequate collateral	4	28.5
Local business credibility	0	0
Others		
<b>Total</b>	<b>14</b>	<b>100</b>
<b>F. Government Assistance:</b>		
Tax relief	9	57.14
Grants	4	35.71
Infrastructure	1	7.14
<b>Total</b>	<b>14</b>	<b>100</b>

**Source:** Research Data (2000) Drawn From Responses to the Focal Sections of the research

From Table 1 above, it was deduced *inter alia* that the dominant source of funds open to indigenous oil drilling businesses is promoter' equity. Attempts to access external facilities are usually hampered by inadequate collaterals. Government has been supportive mainly in terms of tax relief and not the much desired grants.

**Table 2: Chi-square (X<sup>2</sup>) Computation for HP Decision**

Level of internal-external finance	Observed frequency (o)	Expected frequency (e)	(o-e)	(o-e) <sup>2</sup>	(o-e) <sup>2</sup> /e
Highly adequate	0	2.8	-2.8	7.84	2.80
Fairly adequate	3	2.8	0.2	0.04	0.14
Fairly inadequate	5	2.8	2.2	4.84	1.73
Grossly inadequate	4	2.8	1.2	1.44	0.51
Indifferent	2	2.8	-0.8	0.64	0.23
<b>Total</b>	<b>14</b>	<b>14</b>	<b>NA</b>	<b>NA</b>	<b>X<sup>2</sup>=5.41</b>

**Source:** Research Data (2002) (Responses to the Question on How External Funding Complements Internal Outlay).

The calculated statistical results and critical equivalent were: X<sup>2</sup><sub>cal</sub> =5.41 (Table 2); X<sup>2</sup> Tab (0.01,1) = 6.64 (Contingency Table in X<sup>2</sup>caKX2Tab; Accept null HP. Levin, 1990)

Accordingly, it was established, at 99% confidence level, that internal financing of indigenous oil drilling business in Nigeria is not adequately complemented by external facilities.

### Discussion

The information in Table 1 clearly showed that oil drilling companies require a lot of heavy-duty machines for operations. Most of the hardware have to be sourced from foreign markets. This accounts for their expensiveness, even as the entire procurement process is cumbersome. At present, the indigenous promoters shoulder the financing burden almost all alone. The respondents disclosed that their firms rely relatively exclusively on the personal contributions of promoters to fund industrial operations, as there are meagre government incentives and banks' facilities direction.

The banks, on their part, are reluctant to grant colossal long-term loans for the advancement of the courses of indigenous oil drilling firms, for reasons bordering mainly on promoters' inability to provide acceptable collateral security as well as the financial institutions' general negative perception/impression of indigenous business enterprises in the country. All these, working together, have aggravated the financing problems of the local oil drilling companies in the Nigerian economy.

### Conclusion

Based on the outcome of data analysis, the study came up with the following conclusions:

- i. Inadequate funding still constitute a nagging problem to the indigenous promoters of oil drilling business in the Niger Delta region of Nigeria, particularly for the huge financial outlay required for industrial infrastructure,
- ii. Indigenous oil firms encounter difficulties in obtaining loans from financial institutions, due to lack of acceptable collateral security, long-term nature of their business, and general negative impression of local entrepreneurships in the country,
- iii. Indigenous promoters oil drilling business, for quite sometime now, have been struggling to ensure that they provide the bulk, if not all, of the fixed capital required for operations, after which working capital management becomes almost impracticable,
- iv. Oil drilling firms source their machinery and spares mainly from foreign markets as most of the hardware are hardly manufactured locally, and this compelled and informed the inclusion of machines provided by foreign partners as indirect financial (capital) contributions, and
- v. Government incentives to indigenous oil companies in the form of tax relief and special grants are grossly inadequate.

Albeit, the major problem in the financing indigenous oil drilling business remains the perennial difficulty in obtaining complementary facilities from banks and allied financial institutions.

#### Recommendations

- In the light of the conclusion, the following recommendations are expedient:
- i. Indigenous oil drilling business promoters should jettison pride, selfishness, and other egocentric tendencies associated with sole-proprietorships and embrace the strategic option of mega-partnership in order to harness the economics of the big pool;
  - ii. Institutional facilities and capacities of indigenous oil drilling companies should be vigorously developed over time to prepare them for listing on the Nigerian Stock Exchange (NSE), which will strategically position them for greater financial access;
  - iii. Indigenous oil drilling firms should, in corporate coalitions, set up industries that could undertake to produce some machinery and spares that are technologically feasible, as this will conserve scarce foreign exchange and create savings for other purposes;
  - iv. Shareholders of indigenous oil drilling firms should be willing to make more sacrifices in their initial operating years by plowing back greater proportions of earnings in order to cushion working capital inadequacies; and
  - v. Corporate affairs and public/customer relations managers of indigenous oil drilling companies should individually/collectively commence a pragmatic credibility building crusade which will form the concrete basis of all impression management strategies, geared towards securing the financial blessings of banks and allied financial institutions, as well as the goodwill of all associated public.

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