

## Oil, Product Price Deregulation and National Development in Nigeria

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**Abstract:** Through the decades, the determination of the appropriate pricing mechanics of petroleum products has remained a thorny issue in Nigeria. Two schools of thought, producing robust debates have emerged over the issue. Pro-deregulation or liberalization theorists champion the cause for the determination of retail prices by market forces. They argue that public sector subsidies are unsustainable, wasteful and lead to graft in the downstream sub-industry. There is an abundance of demonstrable credit in this standpoint; institutional and infrastructural decay in the distribution chain have for long, remained the hallmark of government monopoly. But market forces do not always produce optimal outcomes. These concerns are fueled by skepticisms about wages, labour and the scope of distribution markets. There is also evidence showing a disconnect between the petroleum economy and other sectors of the national economy. The study finds that the just distribution of economic benefits derived from petroleum production has proven elusive.

**Key words:** Petroleum, deregulation, down stream sector, development, externalities, Nigeria

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### INTRODUCTION

Nigeria is one of the few countries in sub-Saharan Africa that is endowed with petroleum resources. Nigeria's economic reform program (NEEDS, 2004) asserts that the country is endowed with an estimated proven oil reserve of 32 billion barrels which are sufficient to last about 37 years. Furthermore, proven natural gas reserves are estimated at 174 trillion cubic feet. No doubt, these resources have the capacity to attract foreign direct investments into the country. Since, its first production in Oloibiri in 1958, oil has provided huge financial resources for national development (Ehwarieme, 1999). Crude oil exports have provided substantial revenue in the form of foreign exchange receipts since the late 1950s (Adewuyi, 2001). Thus, the need to maximize returns from the sector has dominated national policy for long (Gidado, 1999).

The history of the oil industry is lost in antiquity (Atsegbua, 2004). Allusions have been made in literature to its onset in Peru in 1863 and to the Chinese and the Burmese around 200 BC (Omogrebe, 2001). However, the foundation for the modern oil industry was laid in 1859 when Edwin L. Drake a retired railway conductor used an old steam engine to drill a well 23 m deep in a region near Titusville. Crude oil has been used for thousands of years by the Sumerians, Assyrians and Babylonians who collected it from natural surface seepages and shallow pits mainly for medicinal purposes, water proofing, lighting as a lubricant and as asphalt. However, the extreme

versatility and utility of this product was only recently discovered with the rise of industrialization and the development of the modern petroleum industry. Locally, oil exploration began in 1908 when a German company, the Nigerian Bitumen Corporation was granted a license by the colonial government to explore for oil (Omogrebe, 2001). Exploration activities were abruptly suspended following the outbreak of the First World War in 1914. The search for oil was revived in 1937 with the establishment of Shell/D'Arcy Exploration company (Dominic, 2009) and in 1938 the Aglo-Dutch consortium, Shell D'Arcy was granted a license to solely explore for oil throughout the country.

Exploration activities were again suspended on account of the Second World War. In 1946, Shell D'Arcy Petroleum Development company of Nigeria was incorporated. One feature of the colonial era was that only companies of British origin were allowed to explore for oil. To increase oil exploration and introduce competition into the market, non-British companies such as Mobil, Gulf, Agip, Safrap, Teneco and Amoseas were granted licenses to explore for oil. The open door policy which began in 1959 engendered a spirit of healthy rivalry form which the industry benefitted tremendously.

The Nigerian National Oil Corporation (NNOC) was established in 1971 to engage in prospecting for mining and marketing of oil and all other activities within the petroleum oil industry. However because it lacked finance and technology its activities were limited to the upstream

sector of the economy. The distribution of petroleum products through pipelines enables the Nigerian National Petroleum Corporation (NNPC) to re-direct supply from surplus units to deficit units in the country. But this lofty objective has been hampered by rampant cases of vandalization of oil pipelines. In July of the same year, Nigeria joined the Organization of Petroleum Exporting Countries. By 1968, OPEC had advocated a policy of public sector participation which required each state to acquire at least 51% of participating interest in oil companies operating in its territory as a prerequisite for membership. In 1977, the NNOC and the Federal Ministry of Mines and Power were merged to create the NNPC.

### **SECTORS OF THE NIGERIAN OIL INDUSTRY**

It is important to distinguish between two activity sectors of the industry in order to appreciate the extent of public sector involvement and the challenges of institutional change. Traditionally, these are the upstream sector and the downstream sector. The exploration and production of oil and gas make up the upstream sector. Bafor (2001) states as follows:

A company may concentrate on exploration and production only. Such a company is said to have an upstream interest. On the other hand, a company may be involved in only refining and marketing. Such a company is said to be in the downstream sector. Companies which operate in both sectors are said to be fully integrated

Avuru (2006) uses a construction plan analogy to describe the upstream sector. This can be visualized in the mould of a property developer who conceptualizes what he wants, picks his site, draws up his schedule and then picks different contractors and consultants to effect the construction. The most important tasks undertaken at this stage are seismic acquisition and processing designs, seismic interpretation and well programming, engineering design and planning. The downstream sector is responsible for refining, storage, marketing, sale and distribution of oil, kerosene, asphalt, lubricating oils and petrochemicals such as plastics, carbon black and solvents (Omorgbe, 2004).

These consist of activities carried out in the post-production stage of operations until the derived products get to the consumer. The downstream sector is regulated and controlled by the federal government which solely refines petroleum and regulates the prices and distribution of such products. This might account for the bottlenecks in refining, marketing and distribution capacity. Before 1960, government interest in both sectors of the industry

was limited to regulation and administrative control. This was followed by institutional reforms in the early 1970s. The active participation of the NNPC in the marketing of crude oil started in 1973 following its acquisition of participatory interests in the major oil companies (Gidado, 1999). Moreover, OPEC resolution XV/90 of 1968 designated as the Declaratory Statement of Petroleum Policy in member countries encouraged members to explore or develop their petroleum resources directly and to acquire reasonable participatory interests in petroleum development. Consequently, the government acquired 33% participation in Agip oil and 35% participation in Elf in 1971.

This was shortly shadowed in 1973 by 35% participation in Shell and Mobil and 55% in Texaco. With the expropriation of the shareholding of British petroleum in 1979, government's interest in the consortium rose to 80%. However, today the state has a standard of 60% interest in all joint venture agreements. Faced with calls for the deregulation of the downstream sector of the industry and the fact that the upstream sector is still dominated by a few majors and independents, government vigilance and control over the upstream sector is still relevant in order to forestall monopolies or trade conspiracies in the event of deregulation. However, the NNPC appears to have overreached its role in this area, leading to confusion, interference and undergrowth in the performance of the economy. Bafor (2001) made the following observation.

The NNPC operates both as a regulatory body (through the Inspectorate or Department of Petroleum Resources) as an operator through its upstream subsidiaries, the Nigerian Petroleum Development Company (NPDC), Integrated Data Services Limited (IDSL) and Nigerian Gas Company (NGC) and as a vehicle for government's investments in the industry through the National Petroleum Investments and Management Services (NAPIMS)

### **REFINING AND DISTRIBUTION OF PETROLEUM PRODUCTS**

The first refinery in Nigeria built at Alesa-Elеме in Port Harcourt started operations in November 1965 with an initial production capacity of 38,000 barrels day<sup>-1</sup>. This was increased to 60,000 barrels day<sup>-1</sup> in the 1970s. The refinery was originally a Shell PB joint venture but by December, 1978 government had bought all of its shares. Rising demand for petroleum products and the dilapidated state of the refinery led to the construction of the Warri refinery in 1978 with an initial capacity of

100,000 barrels day<sup>-1</sup>. On account of low output at the Warri refinery, the Kaduna refinery was commissioned in 1988 with an initial capacity of about 100,000 barrels day<sup>-1</sup>. However, the Kaduna refinery has experienced frequent shut down and fire outbreak which damaged a part of the refinery. The second refinery in Port Harcourt was built in 1989 with an initial capacity of 150,000 barrels day<sup>-1</sup>. It was significantly more efficient and sophisticated than the previous three. Nevertheless, the refineries suffer from capacity underutilization and produce less than an average of 240,000 barrels day<sup>-1</sup> for local consumption (Oduah, 2006).

The context of refinery efficiency was captured by Mankabady (1990) when he said that their survival and competitiveness depend on factors such as location, transport costs, manpower costs, investments, grants, taxation and environmental constraints. The federal government is the major owner of the decaying infrastructure comprising of the refineries, 22 storage deposits with 2.66 billion litre, 5000 km of pipelines, four jetties, two import terminals, 32 mega stations and 12 floating stations. These facilities require significant funding to upgrade and operate at sustainable levels. Much criticism has trailed the operation of the downstream sector of the industry. In the 1990s, the sector was bedeviled by product supply constraints, inadequate local refining and distribution capacity.

Oduah (2006) further extends this catalogue to include the smuggling of petroleum products into neighbouring countries, escalating local demand and the frequent shut down of refineries due to faulty equipment and for Turn Around Maintenance (TAM). But because TAM has not produced the desired results, the NNPC has had to import heavily from abroad thereby cutting actual revenue derived from oil exports. Nevertheless, since August 2001, gasoline lines have disappeared throughout much of the country. Since, 1978 the Pipeline and Products Marketing Company (PPMC) has taken over the distribution of petroleum products to all parts of the country. Distribution is done through an impressive network of pipelines and depots linking the four refineries to the PPMC.

### **THE PRESENT PRICING STRUCTURE**

**The petroleum products pricing regulatory agency:** On 14th August 2000, the Federal government set up a committee on the review of petroleum products supply and distribution to consider the problems of the downstream sector. In its reports submitted to the government in October 2000, the committee observed inter alia:

Stakeholders (marketers, transporters, dealers, industrial converters and others) are unhappy because of shortages and the prevailing cost and price structure which lead to low returns on capital investment and encourage malpractices which in turn hamper an efficient supply and distribution system. Government should deregulate and liberalize the import of petroleum products by other parties and that prices should be based on import parity to enhance and encourage the participation of players other than the NNPC (PPPRA, 2011)

It also recommended the establishment of a Petroleum Products Pricing Regulatory Agency (PPPRA) with sufficient autonomy to superintend the liberalization of the downstream sector. In 2003, the National Assembly passed the Act establishing the PPPRA and empowered it to determine the pricing policy of petroleum products, regulate the supply and distribution of such products and to moderate price volatility while ensuring reasonable returns to operators. Since, government actively controls the downstream sector it also fixes the pump price of fuel, kerosene or petroleum products generally. Perhaps, this is due to the fact that gas prices have macroeconomic implications they affect all sectors of the economy, all Nigerians whether rich or poor and secondly to ensure that petroleum products supplies reach even the remotest areas of the country.

The PPPRA estimates government subsidy on petroleum products to be ₦621.5 billion in 2010. Khan (1994) notes that disruptions in the Nigerian downstream sector have deeper and more immediate domestic political implications for the country than those that may occur in the upstream sector. Elumelu vividly captured the pricing system. The NNPC supplies petroleum products to the refineries at a fixed cost. The refined products are sold at controlled prices through the PPMC to marketers who distribute them to dealers, retailers and consumers. Occasionally, prices are adjusted to reflect inflationary trends but they never truly reflect the free market prices. Fetus examines the issue with PPPRA statistics. The PPPRA pricing template for June, 2011 shows that a litre of petroleum product is subsidized by approximately ₦81 a litre. Although, the landing cost per litre of imported petrol is ₦135.52, the total amount per litre is ₦148.72 after the addition of distribution margins as follows: retailers (₦4.60); transporters (₦2.75); dealers (₦1.75); bridging fund plus Marine transport average rates (₦3.95) and administrative charge (₦15). Petrol, however is sold at ₦65 litre while daily consumption of the product is currently estimated at 35 million litre. Kerosene is

subsidized to the tune of ₦111.01 litre while daily consumption is 8 million litre. The pump price of Kerosene is ₦50 litre but it costs ₦161.01 litre to get it to fuel stations. The landing cost of kerosene is ₦147.81. Added to this is the distribution margin which is broken down as follows: retailers ₦4.60; transporters ₦2.75; dealers margin ₦1.75; bridging fund plus marine transport average ₦3.95 and administrative charge of ₦0.15. This brings the total cost per litre to ₦161.01.

**The petroleum equalization fund:** Let us now consider how the government maintains a uniform pump price. Ordinarily, the retail price of petroleum products should be related to transportation costs and differentials that is the distance traveled between the depots and the points of sale. However, through the petroleum equalization fund government provides the stabilizing mechanism for off-setting the bridging or transportation cost. The fund derived chiefly from the net surplus revenue recovered from oil marketing companies, reimburses a marketer's transportation differentials for petroleum products movement from depots to their sales gas stations in order to ensure that products are sold at uniform pump prices nation wide.

#### **DEREGULATION OF PRODUCT PRICING**

Several factors underscore the need to deregulate the downstream sector of the industry. Firstly, economic liberalism and open market theories as opposed to state protectionism, underpin markets today. Popular belief is that the adoption of deregulation policy is necessary to foster competition and optimal capacity utilization. Before the setting up of the SCRPPSD, the downstream sector was distinguished by scarcity of petroleum products, long queues at service stations, product adulteration, oil theft, pipeline vandalization, dysfunctional refineries, low investment opportunities and large scale smuggling due to unfavourable prices in comparison with neighbouring countries.

In the light of this experience, critics have advocated a deregulated regime. Braide (2003) examined the impact of government involvement in the sector. Researchers found that the large-scale cross-border smuggling of petroleum products and the seemingly intractable severe fuel crises that have bedeviled the country relentlessly for close to a decade are all predictable outcomes of government involvement in the downstream sector over the past quarter of a century. Deregulation is necessary in order to boost the interest of private sector investors in the subsector. Petroleum product prices are determined by

variables such as the international crude oil price and refining and distribution costs which affect the profit margins of marketers (Adisa, 2007). The SCRPPSD report recommended that government should privatize all four public refineries and encourage the establishment of private substitutes.

So far government's effort to deregulate the sector has been viewed as a harmful policy. Human rights advocacy groups, NGO activists, analysts and the Nigerian Labour Congress have been in the vanguard of resistance. To this group, the belief in efficient markets is faulty. It is sometimes necessary for government to improve upon market allocations. Deregulation has an inflationary effect on the economy it will decrease the real income of the worker and has drastic short-term effects. Divestiture of government ownership will lead to job losses in the industry as investors tend to maximize profit and efficiency. Ibanga (2011) argues that a sudden removal of subsidy may cause dislocation to the gas price level because with high demand and inadequate supply, the price would sky rocket. Local workers, already living in abject poverty have low purchasing power and need to be hedged against international market prices.

Alternatives to deregulation include improvements in the transportation system, probity in the industry and overhauling of refineries. But can government apply the full package of reforms without a change in ownership structure? Braide (2003) claims that the business as usual approach is inexpedient. It represents the worst case scenario but it is the most probable step the government would take. The best solution therefore is to look forward to and preserve the gains from deregulation. The opposition notwithstanding, deregulation remains a long-term objective of the federal government and its net result is positive economic growth. Yet, it would seem upon a closer inquiry that the state is the source of the problem it seeks to cure. Government's undue interference in the affairs of the NNPC and the near total neglect of the industry have increased the clamour for the privatization of the downstream subsector (Bafor, 2001).

Although, oil revenues grew, the opportunities they offered were sub-optimally utilized. The development of the downstream sector for instance, gained attention fairly recently (Akper, 2001). Presently, the NNPC incurs a great loss importing petroleum products only to sell them at highly subsidized rates with severe implications for the economy.

Akanbi points out that importation is significantly responsible for the depletion of Nigeria's foreign reserves due to high demand by importers of oil products at the Central Bank of Nigeria's weekly auctions. Furthermore, fuel subsidies will account for ₦1.3 trillion of federal

revenues between 2011 and 2012. However, government has failed in its effort to stimulate investment and competition in the refining sector because of its overbearing influence on the determination of retail pump prices.

The existing refineries also remain unattractive for privatization due to their poor condition and investors do not find it profitable yet to build new ones.

Only recently, state governors under the auspices of the Nigeria Governors' Forum have demanded for the withdrawal of the ₦500 billion annual petroleum subsidy and its distribution to states as a precondition for the payment of the ₦18,000,00 monthly minimum wage.

They argue that such shared funds could also be used to finance infrastructure, education and agriculture. This is conceptually real but the absence of any meaningful safeguard for transparency and accountability trumps concerns on the standing of such funds: corruption exacerbates the unemployment situation and skews decisions away from labour-intensive activities more likely to benefit the poor (Adebayo, 1999).

**IMPROVING OUTCOMES FROM DEREGULATION**

Nevertheless, it seems that government policy direction is inconsistent. Every now and then the pendulum swings back towards increased public sector engagement. Recently, three private banks (Bank PHB Plc, Afribank Plc and Springbank Plc) were nationalized on account of poor performance and to forestall the loss of depositor funds and to preserve the stability of the financial system (Olajide, 2011). Sunita and John in their commentary highlight the danger in hasty privatization or deregulation in weak environments:

Requires development of regulatory frameworks and institutions that are independent, accountable and resistant to capture by the private provider or the state. Such frameworks are essential to protect consumers against abuses of monopoly power, assure investors that they will be fairly treated and address broader equity concerns

If government decides to proceed with deregulation the processes and institutions must be combined with proper competition policies and regulatory frameworks. The gains from deregulation can be easily eroded by losses imposed on consumers and the overall economy from inadequate access to petroleum products, suboptimal supply or excessively high product pricing (Kikeri and Nellis, 2004).

**PETROLEUM AND NATIONAL DEVELOPMENT**

Although, the argument on subsidies might appear logical, barring the diversion or misappropriation of liberated funds, it is however a paradox of international trade that Nigeria imports from abroad, the same petroleum products which it can produce and refine at comparatively cheaper rates. But first what is development? Development is a process of societal advancement wherein improvements in the wellbeing of the people are generated through strong partnerships between all sections of the population (Chinsman, 1998). Ihonvbere and Shaw (1988) offer an interestingly apt description of the illusion of development created by oil wealth:

Oil wealth creates a mirage for the casual observer. Gigantic buildings, beautiful universities, well equipped armies, wide tarred roads a booming business or commercial sector and a big voice in foreign affairs all tend to give the impression that things are going well. Beneath these surfaces, however are very tense pressures and contradictions arising from the neglect of the vast majority of the people

Extreme poverty coexists with huge oil revenues, a phenomenon known as the resource curse. Data reveals that about two-thirds of Nigerians live in poverty (Ekpo, 2009). Over time, oil production has disproportionately assumed greater importance to the economy, to the detriment of other sectors and its main impact is through its income effect rather than inter-linkages with other sectors of the economy (Karshenas, 1990). The trend of dominance of oil exports is shown in the appendix (Table 1). The contributions of the environment to economic development are rarely captured by traditional measures of growth such as GDP (NEEDS, 2004). Oil production externalities need to be considered as

Table 1: Oil contribution to export: 1984-1994

Years	Oil	Total value of export	Oil as percentage of total export
1984	8,685.4	9,138.8	95.0
1985	11,335.8	11,717.9	96.7
1986	8,425.8	9,047.4	92.1
1987	28,208.6	29,598.1	95.1
1988	21,540.2	23,903.0	90.1
1989	54,087.1	57,971.2	93.3
1990	105,710.3	109,886.1	96.2
1991	117,766.2	121,533.7	96.9
1992	199,856.1	205,613.1	97.2
1993	210,182.1	218,765.2	96.0
1994	102,011.0	105,492.3	96.7

Central Bank of Nigeria, Statistical Bulletin, Vol. 7, No. 1, June 1996, pp: 171

assessments of oil contribution to development do not appear to take into account all the benefits and costs associated with transactions in the industry.

Robust literature suggests that >3000 cases of oil spill incidents have been reported in the Niger-Delta with immeasurable damage to aquatic life, agriculture, the environment and human wellbeing (Egwaikhide and Aregbeyen, 1999). The UNDP/World Bank Strategic Gas Plan for Nigeria estimates that 75% of the gas it produces is flared, thereby releasing huge tons of carbon dioxide and methane which are the major greenhouse gasses contributing to climate change (Okorodudu-Fubara, 2007). The discovery of oil and its large scale exploitation have altered the investment profile from an agriculture-based economy to an oil-reliant economy (Akper, 2001). In the early 1960s, agriculture was the major foreign exchange earner for the country, accounting for 71% of total exports between 1962 and 1964. But by 1984, the economy had become heavily dependent on crude oil exports (Okuneye *et al.*, 2001). Long-term stabilization policies, including a shift to agriculture are required given the downward trends in oil revenue its exhaustibility and the vulnerability of the economy to fluctuations in the international crude oil market. Furthermore, the global political economy of agro-fuels emerging since 2007 appears set to displace fossil fuels for alternative energy sources.

### CONCLUSION

Determining the appropriate retail price of petroleum products is critical for development and sustainable revenue generation. Understanding why there is resistance to the deregulation of the downstream sector is a critical first step towards the institution of consumer protection systems and effective regulatory safeguards. While the upstream sector of the industry has been opened to private investor participations, the downstream sub-sector has enjoyed a government near-monopoly status for decades, resulting in supply constraints, infrastructural decay and graft. Government subsidies have also suffered from underhand dealings. Nigerians see regular access to sufficient and affordable petroleum products as a non-negotiable birthright and therefore, resist government's desire to deregulate the downstream industry. Much of the fears and resistance over deregulation stem from the country's history of institutional malfunctioning, a large chunk of the blame for whose emergence, the government bears. It is therefore, reasoned that market forces cannot guarantee the best results for the average citizen who has not yet derived any tangible social benefit from oil wealth.

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