

EFFECT OF PETROLEUM MOTOR SPIRIT SUBSIDY REMOVAL ON ECONOMIC GROWTH IN NIGERIA.

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ABSTRACT

This paper addressed the effect of Petroleum Motor-Spirit (PMS) subsidy removal on the Nigeria economy. The methodology used in this work is that which gives dept analysis and understanding of how removal of subsidy on petroleum motor spirit will affect the economy of Nigeria by considering the direct impact, number of the population that will be affected, the benefits attached, and the economic advantage it will bring to the country, having reviewed some documents, analyze some records, group interview, case studies and life histories. After careful study of circumstances affecting countries that were granting subsidy and eventually removed it, this paper shows a clear understanding that subsidy removal without transparent spending of savings attributable would have a negative effect on the economy. It equally emphasized that subsidy removal without putting in place necessary palliative measures would have an adverse effect on the disposable income of the households. While the buttressed that retention of subsidy in Nigeria economy will be beneficial to the rich class more than the average and poor class as the later consumes more of the product than the former, thereby depriving the benefits of the subsidy to a greater percentage of the populace. The implication of the findings is that economy of Nigeria will be better-off if savings from subsidy removal on petroleum motor-spirit (PMS) is adequately harnessed, managed and redirected to other sub-sectors of the economy. Petroleum subsidy is found to be a strain on public finance, distort markets, and provides only a real tool in the fight against poverty. Recommendations were made that an active and workable palliative measures be provided to cushion the effect of the removal and ensure transparent spending of the savings there to.

Keywords:

INTRODUCTION

The removal of fuel subsidy as it generally called in recent times is increasingly becoming a topic of discussion in a every public place in the country. In no doubt, many countries and nations have attempted to reform their fuel subsidy policies and programmes with various degrees of success (Tara, et al, 2010). The driving forces behind these reforms can include among other things a desire to reduce urban pollution and Green House Gas (GAG) emission. However, if proper plan is not in place and executed, social or environmental repercussions will be as a

result of high fuel prices (Tara et al, 2010).

Fuel subsidy is defined as any government action that lowers the cost of fuel production, raises the revenue of fuel producers or lowers the price paid by fuel consumers (IEA, OECD and World Bank Joint Report, 2010). It is on this premise that the most Calamai (1997) cited in Kwang *at e/(2011)* states that subsidies compromises all measures that keep prices for producers above market level or that reduces cost for consumers and producers by giving direct or indirect support. It is on the concern of subsidies reducing cost for consumers and producers through direct or indirect

support that Nigeria is measured in. However, fuel subsidy reforms and economic policy interventions in most cases take two dimensions. On the hand, government accelerates consumption by regulating domestic consumption and enhanced demand of the subsidized product(s). On another perspective, production may be subsidized by government by setting minimum prices exhaustion while public budgets are used to pay the surpluses. Sometimes, both subsidy reform policies are maintained at the same time and that of cause, may have unfavourable implications on the fiscal balance.

Conversely, in some countries, subsidies are usually given openly without targeting the consumers who are eligible to receive it and thus, consumption and demand differ when a product is subsidized with a product that is not subsidized Kwang *et al* (2011). It was on this light that World Bank (2008) argues that petroleum subsidies strain public finances, distort markets, and provides only a blunt tool in the fight against poverty. In many countries such as Azerbaijan, Bolivia, Ecuador, Egypt, Indonesia, Malaysia, Jordan, etc, petroleum subsidies account for more than 3% of their GDP and are comparable in size to public spending on health and education put together (World Bank, 2008). Of course, one may start to wonder if these policies (subsidy reforms) will not lead to diverting resources away from more productive uses and as lead to fuel adulteration and inefficiency petroleum processing sector given the scenarios involved in the regulating market. In Nigeria, there have been a series of policy reforms on the subsidy which include, direct budgetary transfer, tax exemptions, and price controls. Starting from 1999 when democratic government was re-installed in Nigeria. Starting from June year 2000, there has been series of fluctuations in the pump prices of Petrol Motor Spirit in Nigeria. The pump price being N20 at then continued to go and down till N145 as it is obtained today.

In a study by Von Mckee and Morgan (2004)

cited in Jennifer (2010), petroleum subsidy is said to alter fuel prices leading to market distortions with consequences that go well beyond the specific policy objectives that the subsidy is intended to achieve. These distortions have wide economic impacts. In many cases, they include increasing petroleum consumption, straining government budgets, diverting funding that could have other wise been spent on social priorities such as health care or education, accumulation of debts of existing national refineries, and reducing the profitability of alternative resources sector.

Against this background, and in the view of the above arguments, it is not yet established clearly on the likely effects, economics and other wise the effects Petroleum Motor-Spirit Subsidy removal will have on Nigeria economy, considering its peculiar factors, hence the paper.

STATEMENT OF PROBLEM

Removing petroleum subsidies is considered by economists to be a win-win policy measure that would benefit both the global economy and the environment (Burniaux, 2009). However, PMS subsidy reform is likely to prove challenging for many countries, Nigeria inclusive given the numerous economic and social changes the reform could precipitate. Estimating the nature and scale of those changes is therefore critical to assessing the costs and benefits of subsidy removal and to identifying what measures may be needed to ensure that negative impacts are minimized. Nigeria government during a public debate and awareness campaign on deregulation of petroleum downstream sub-sector in Nigeria, was of the opinion that removal of subsidy on PMS will open up the market for investment, pave way for establishment of new refineries, revenue enhancement, and create more employment. (Okonju-Iwuala, 2012). Some argued that retention of fuel subsidy in Nigeria's petroleum downstream sector leads to budget deficit, smuggling and waste of fuel resources to neighboring countries, increase in demand and consumption of petrol, and general

reduction in development in other sectors of the economy as such discourages economic growth.

However, consumers on their parts see fuel subsidy removal as a calculated attempt to subject them to economic hardship as that will not only lead to reduction in household's disposable income and real income but also increase inflation in the country. This study was necessitated by the need to have a common perception of both the government and the consumers of Petroleum Motor-Spirit on the likely economic effects of the subsidy removal on the products in the Nigerian market.

OBJECTIVE OF STUDY

The broad objective of this study is to examine the effects of PMS subsidy removal on Nigeria Economy. Specifically, the study focused on:

1. Reviewing whether the removal of PMS subsidy leads to increase in government revenue.
2. Determining to what extent the removal of PMS subsidy will reduce debts of existing refineries and encourage establishment of new refineries in Nigeria
3. Assessing whether removal of PMS subsidy enhances households' disposable income and real income.
4. Assessing whether removal of PMS subsidy reduces smuggling, waste, and consumption of products and subsequently to economic growth.

REVIEW OF RELATED LITERATURE

Nigeria was a traditional primary commodities supplier of cocoa, palm oil, cotton, etc. during 1960s and therefore, emphasis was laid on diversification and modernization of Agriculture, Mineral resources and Manufacturing sector of the economy. Following oil Exploration, Nigeria grew into a net oil-exporting country at middle of 1970s which accounts for about 80% of her export earnings. However, Nigeria like some other countries introduced fuel subsidies in the economy. This was known as energy subsidy as at that time. Energy subsidies

came in two forms: Those designed to reduce the cost of consuming fuels, and those aimed at supporting domestic fuel production. Burniaux *et al*(2009). Subsidies can be regarded as any government intervention that lowers the price of fuel below its economic opportunity cost (African Development Bank, 2009). "The reverse or removal of subsidy leads to deregulation". Akinwumi, *at el* (2005), opine that deregulation is the removal of government interference in the running of a system. This means that government rules and regulations governing the operations of the system are relaxed or held constant in order for the system to decide its own optimum level through forces of demand and supply (Ekundayo and Agayi, 2008).

Impact of the increment of petroleum prices in industrial sectors depends on the share of petroleum in the production cost, the elasticity of output demand in each sector and the substitution possibilities among the energy source Hope and Singh(1995). The impact on industrial output would be small if the share of diesel was low in the production cost. In February 2001, the Ghanaian government attempted to liberalize its fuel prices as part of an international Monetary Fund (IMF) Poverty Reduction and Growth facility programme. Ex-refinery petroleum prices were raised by 91%, followed in June, 2001, by the introduction of an automatic price-setting mechanism. This was designed to ensure full cost recovery for Ghana's already heavily indebted Tema oil Refinery (TOR), Tara *at el*(2010). By the end of 2002, in the face of rising world oil prices, the supposedly automatic pricing mechanisms had fallen entirely into disuse and TOR's debt had continued to rise until 2005 when necessary palliatives measures were put in place in addition to public sensitization on the need for deregulation.

Discussion on literature review:

From the study of Hope and Singh (1995), it is clear that the effect of subsidy removal on industrial sectors depends largely on the elasticity of output demand in each sector. Secondly, meaningful effects will not be made towards reducing debt and

establishment of new refineries necessary if palliative measures were not put in place. Magnitude of global fossil fuel subsidies would be on increase and as such have negative impact on other sectors unless the affected country reduces or remove the subsidies. Economic effects of subsidy removal depend very much on the type and size as well the structure of the economy. The effects also vary over time, but evidence shows that subsidies involve large economic cost in the long run. Subsidies are often intended for the poor but largely enjoyed by the rich, depriving government's money that could otherwise be used to pay for welfare programs that truly targeted the poor. In this case, the poor would benefit from the removal of subsidies especially where they consume little of the subsidized fuel. None the less, there is evidence that the structural upheavals caused by the removal of subsidies can involve economic costs in the short term as the economy adjusts to higher prices. Again, subsidy removal increases inflation and that, may require the government to tighten fiscal and monetary policies.

EMPERICAL REVIEW

Nisreen (2008) looked at the impact of the removal of the fuel subsidies on the manufacturing industries in Jordan. The objective of the study was impact assessment of the removal of fuel subsidy on the competitiveness of the manufacturing sector and rising fuel prices on products in Jordan by selecting three sub-sectors that belong to heavy, medium and low energy intensity manufacturing industries in an attempt to a general idea on the impact for each group. Survey design was employed, while correlation coefficient, regression analysis, and simple statistical tools were used to ascertain growth rates, ratio, etc. Findings showed that increase in energy costs can actually benefit the manufacturing industries if costs are willing to sustain short-term pain for long-term gain. This long term gain can be realized if the industries are driven by higher efficient methods which would all in the long term enhances its competitiveness.

Onyisi, *et al* (2012) studied the domestic and international implications of subsidy removal on the economy in general and the populace in particular. The paper was anchored on neo-liberalism theory and employed conceptual issues of subsidy and deregulation to achieve its objectives. Findings unveiled that the removal of fuel subsidy has provided a good platform for national reflections and issues on the extent of sovereignty of government and that of people.

Kwang, *et al* (2011) conducted a research on the determinant of latent income on who is eligible to receive energy subsidy. A case in Malaysia the study sought to identify the eligibility of an individual to receive subsidy based on energy resources. The study used a cross-sectional data collected from 500 respondents using structured questionnaire. Findings showed that leakage exists in the consumption of energy when subsidies are given and not given. The result went further to show that both poor and non-poor households could afford to purchase fuel when subsidy was distributed, hence, subsidy removal will enhance government revenue in Malaysia. Moreover, petrol consumption has a positive relationship with income per capita in urban households.

Dartanto (2011) carried out a study on reducing fuel subsidies and the implication and effect on fiscal balance and poverty in Indonesia. The study sought to establish the effect of fuel subsidies reduction on fiscal balance and poverty in Indonesia. Secondly, to ascertain how effective are reallocation policy in protecting low income groups from the adverse impacts of removing subsidies. The study employed comparative methodologies in order to calculate the poverty impact of removing subsidies and re-allocation budget policies. The methodologies were a combination of a macro model (a Computable General Equilibrium, CGE), a micro model (household data) and the endogenous poverty line. Findings showed that transferring subsidies from middle income class to poor household and reallocating fuel subsidies into

infrastructure projects and investment on human capital would improve income distribution and accelerate more equal economic growth. It added that reallocation budget might not effectively compensate the adverse impact of the 100% removal of fuel subsidies if the economic agents try to seek gains through mark-up pricing surpassing the increase in production costs.

Burniaux and Chateou (2011) carried out a study on mitigation potential of removing fossil-fuel subsidies: a general-equilibrium assessment. The paper sought to provide, based on simulations using the OECD general equilibrium ENV-linkage model, a quantified estimates of the emission reduction and the realgains that can be achieved by removing fossil-fuel subsidies. The concept used to assess changes in real income is the Hayekian equivalent variation income relative to the base-line scenario. The paper analyzed 37 countries, including two OECD countries. (South Korea and Mexico) and was made of price-gap technology to calculate the effect of fossil-fuel subsidy removal on economy. Findings of the study showed that the removal of fuel subsidies brings in both environmental and economic benefits it went further to show that the "oil-exporting countries" as a whole do not incur any real income loss as the GDP loss resulting from reduced oil extraction is compensated by the relatively large welfare gains from the subsidy removal.

Saunders and Schneider (2000) studied the removing energy subsidies in developing and transition economies. The study aimed at knowing the impacts of subsidy removal on energy consumption, production and trade as well as on the level of greenhouse gas emissions in developing and transition economies. Findings showed that there were complex interactions within an economy when an economic policy instrument such a subsidy on the consumptions of energy is removed. Where subsidies are removed on more than one fuel, there may be changes in the relative prices of alternative fuels that can be used in the same and use, such as electricity

generation, that lead to inter-fuel substitution and reduction in energy consumption.

Mason, *et al* (2006) carried out a study on a topic "Does subsidy removal hurt the poor". The study seeks to examine the effects of the removal of petroleum subsidies on poverty in Nigeria. The study employed a computable general-equilibrium micro-simulation analysis to assess the impacts or poverty. This enables explicit poverty assessments to be carried out by incorporating information on households from a national household survey. Findings unveiled that subsidy removal without spending of the associated savings would increase the national poverty level. This was due to the consequent rise in input costs which is consequent rise in inputs' Costs which is higher than the rise in selling prices of most firms' products. A highly expansionary policy of spending all savings from subsidy removal will favour rural and disfavor urban households.

Clements, Wilfred and Oliver (2011) studies the petroleum subsidies in Yemen: Leveraging reform for development. The paper seeks to know whether petroleum subsidy reform will give an opportunity for consolidating public finances and fostering sustainable economic development in Yemen. Findings of the paper supported a comprehensive petroleum subsidy reform in Yemen. Economic growth is projected to accelerate annually as a result of reform though the design of the reform is critically important especially for the poor. They further added that petroleum subsidy removal enhances public investments. The investment should focus on the utilities, transport, trade, and consumption sectors to integrate economic spaces and create the platform for a restructuring of agriculture, industrial, and service value claims, which should encourage private sector led Job creating growth in the medium term.

Discussion on the empirical review

Few scholars have carried out studies related to the topic of this study.

Jennifer (2010) studies the effects of fossil

fuel subsidy reform, a review of modeling and empirical studies, Naizeen (2008) studied impact of the removal of the fuel subsidy on the manufacturing industries in Jordan. On the same vein, Onyishi, *et al* (2012) studied the domestic and international implication of fuel subsidy removal crisis in Nigeria, While Kwang, *et al* (2011) conducted a research on the determinant of latent income on who is eligible to receive subsidy: A case in Malaysia. On the other hand, Mason, *et al* (2016) studied does subsidy removal hurt the poor. Clemens and Oliver (2011) looked at petroleum subsidies in Yemen Leveraging reform for development. Above all, Saunders and Schneider (2000) studied the removing energy subsidies in developing and transition economies, Burniex and Chateau (2011) carried out a study on mitigation potential of removing fossil fuel subsidies: A General Equilibrium Assessment and Datanto (2011) carried out a study on reducing fuel subsidies and the implication of fiscal balance and poverty in Indonesia.

However, it was observed from the related literature reviewed that while some scholars were recommending and supporting the removal of fuel subsidies though, with some reservations in most countries, no known researcher has conducted a research on the economic realities of PMS subsidy removal on Nigeria economy with a view to determining the objectives set out to be achieved by this study. Hence, the need to carry out this study especially at this period where people are still trying to adjust and adapted to the present realities of fuel pump price increment.

THEORETICAL FRAMEWORK

The theory adapted for this study is the neo-liberalism theory. Neo-liberalism is a contemporary form of economic liberalism that emphasizes the efficiency of private enterprise, liberalized trade and relatively open markets to promote globalization. Neoliberals therefore seek to maximize the role of the private sector in determining the political and economic priorities of the

world.

Neo-liberalism seeks to transfer control of the economy from public to the private sector, under the belief that it will produce a more efficient government and improve the economic health of the nation (Cohan, 2007) cited in Onyishi *et al* (2012). Although, the theory was coined in 1938 by a German scholar, Alexander Rustow at the colloquy, Walter Lippmann, the neo-liberalism is after taken to be John Williamson's (Williamson, 1990) "Washington Consensus", a list of policy proposals that appeared to have gained consensus approval among the Washington-based international economic Monetary Fund (IMF), and the World Bank.

The Williamson's list included ten points, which are:

1. Fiscal policy government should not run large deficits that have to be paid back by further citizens, and such deficits can only have a short term effect on the level of employment in the economy. Constant deficits will lead to higher inflation and lower productivity, and should be avoided. Deficits should only be used for occasional stabilization purposes.
2. Redirection of public spending from subsidies (especially) what neoliberals call "indiscriminate subsidies" to other spending neoliberals deem wasteful toward broad-based provision of key pro-growth, pro-poor services like primary education, primary health care and infrastructure investment.
3. Tax reform; broadening the tax base and adopting moderate marginal tax rates to encourage innovation and efficiency.
4. Interest rates that are market determined and positive (but moderate) in real terms.
5. Floating exchange rates.
6. Trade liberalization; liberalization of imports, with particular emphasis on elimination of quantitative restrictions (Licensing, etc.), any trade protection to be provided by low and relative uniform tariffs, thus

- encouraging competition and long term growth.
7. Liberalization of the “Capital Account” of the balance of payment, that is, allowing people the opportunity to invest funds overseas and allowing foreign funds to be invested in the home country.
 8. Privatization of state enterprises, promoting market provision of goods and services which the government cannot provide effectively and/or efficiently, such as telecommunications, where having many service providers promotes choice and competition.
 9. Deregulation, abolition of regulations that impede market entry or restrict competition, except for those Justified on safety, environmental and consumer protection grounds, and prudent oversight of financial institutions.
 10. Legal security for property rights, and initialization of capital (Williamson, 1990).

In other words, Neo-liberalism is a philosophy in which the existence and operation of market are valued in themselves, separately. From any previous relationship with the production of goods and services, and without any attempt to Justify them in terms of their effect on the production of goods and services, and where the operations of a market or market-like structure is seen as an ethic in itself, capable of acting as a guide to all human actions, and substituting for all previously existing ethical beliefs.

Discussion on theoretical framework

Adoption of neo-liberalism theory in this study remains indispensable considering its advocacy for liberalized trade, promotion of open market for globalization, and emphasis on the efficiency of private enterprises. These are in line with one of the reasons given by Dr. Ngozi Okonju-Iwuala at Nigerian Television Authority (NTA) nationwide broadcast, while answering questions from members of the public on January 2012, when she said that “removal of fuel subsidies will open market

for economic efficiency”. The theory had it that public spending from subsidies (especially, what the neoliberals' call indiscriminate subsidies) and other spending broad-base provision of key pro-growth, pro-poor services like primary health care, primary education, and infrastructure investment. The theory supports privatization of state enterprises, promoting market provision of goods and services which the government cannot provide effectively and/or efficiently, such as telecommunications, where having many service providers promotes choice and competition. Hence, neo-liberalism supports the removal of subsidies and abolition of regulations that impede market entry or restrict competition, except for those justified on safety, environmental and consumer protection grounds and product oversight of financial institutions. Neo-liberalism theory is in support of removal of subsidy on pricing regime and eliminates regulatory distortions, open/liberalize downstream petroleum market in a manner that allows private sector investment as well as a level playing ground for competition by industry's participants, maintaining self-sufficiency in products supply and distribution and attract foreign and domestic investment(s), (Ajumogobia, 2008) cited on Onyishi et al (2012).

Applying this theory to the Nigerian situation, we have thus witnessed the extremes of the main factor that effect products pricing and at the same time seen that the relative low price does present a window to implement a pricing policy that works without adverse social repercussions. And government knows that due to the highly inflation-sensitive nature, and the spiral effect of petroleum products, increase on the price of goods and services in the market, any little increase in the price of petroleum products will bring down the purchasing power of Naira. The consequence of this will mean that the cost of transportation will rise, the market men and women will have to increase the prices of their good and services; school fees have to jump higher to

reflect additional cost of petroleum products as experienced in Nigeria today. If government officials and appointees can afford it now because they are making better and good money using their various offices and earning Jumbo salaries, what happens to them when they leave office and what happens to the average man, majority and masses; who are not privilege as to occupy such positions and offices?

DISCUSSION

This section is concerned with the strategies towards accomplishment of the stated specific objectives and the discussion on the relevance of the theoretical framework and conclusion.

Discussion on strategies:

Discussion on whether PMS subsidy removal influences government revenue:

In achieving this objective, the study is authored on theory of neo-liberalism and in addition reviewed a number of related literatures both empirical and theoretical and subsequently adopted some of their methodologies and design as spelt out earlier in this paper. From the literatures, it was observed that removal of fuel subsidies leads to increase in government revenue. This was collaborated by the studies of Kwaug et al (2011) and Coady and Newhouse (2005). Kwang et al (2011) maintained that both poor and non-poor households could afford to purchase fuel when subsidy was removed, hence, subsidy removal will enhance government revenue. Moreover, petrol consumption has a positive relationship with income per capita in urban household. In the same vain, Coady and Newhouse (2005) had it that the main result of high oil prices in oil exporting countries is increase in export revenue and hence higher economic growth.

However, data (secondary) could as well collected from annual bulletin of National Bureau of statistics (NBS) and central Bank of Nigeria (CNB) annual bulletin (report) with particular emphasis on the data related to the government revenue for empirical analysis to determine the revenue trend accruing to Nigeria government as a result of PMS subsidy

removal. Economic effect of subsidy removal of PMS on the government revenue was calculated using "price-gap" approach as applied by Jennifer (2010) in the literature reviewed.

Discussion on PMS subsidy removal on reducing debts of existing refineries and establishment of new ones:

To achieve this objective, the study reviewed some literatures and made a documentary review of debts of existing refineries/number of refinery plants. Although, there is little literature in this area, studies of Tara et al (2010) avers that subsidy removal designed to ensure full cost recovery for Ghana's already heavily indebted Tema Oil Refinery (TOR) yield significant impact in reducing TOR's debt in 2005 when necessary palliatives were put in place in addition to public sensitization on the need for deregulation. Again, UNEP (2004) report's findings unveil that retaining subsidies will enhance reliance on obsolete technology, reduction in new investment, pave way for inefficient plant operation and investments, and consequently leads to reduction on productivity.

Meanwhile, list of the debts of existing refineries and new refineries in the Nigerian petroleum industry can also be analyzed based on the data gathered from the industrial survey and then utilize simple percentage to rate the impacts of subsidy removal on the debts existing refineries and establishment of new plants; where usage would be made of price-gap approach to calculate subsidy.

Discussion on removal of PMS subsidy on households' disposable and real income:

For effective and fair assessment/attainment of this objective (removal of PMS subsidy and households' disposable and real income), both review of related literature and empirical review were made to examine the effect of PMS subsidy removal on households disposable and real income. At this end, the study unveiled that removal of PMS subsidies enhances households' disposable and real income that collaborated by Burniaux and Chateau

(2011), Dartanto (2011), OPEC, OECD, and World Bank Joint Report (2011). Where it pointed out that the savings from fuel subsidy removal could be used to reduce other distorting taxes and in turn would increase household disposable and real income and/or reduce poverty in a more targeted and efficient way than through common subsidy fuel consumption. Again, removal of PMS subsidies would generate large budgetary savings that could be replaced by a direct and, if proper, large transfer to households (OPEC, OECD, World Bank Joint Report, 2010). It is equally noted that, how subsidy reforms affect different economic sectors and distribution of income households depends largely on how the proceeds used upon elimination (UNEP. 2004). Meanwhile, it could be deduced from literature that Buraiaux and Chateau (2011) applied general equilibrium subsidies and reallocation budget policies. In the latter, the methodologies are a combination of a macro model (a Computable General Equilibrium, CGE), a micro model (household data) and the endogenous poverty line. Therefore, to assess the effect of PMS subsidy removal on household's disposable and real income, comprehensive methodology as applied by Dartanto (2011) was adopted. However, for empirical analysis, secondary data could have been collected from the annual bulletin of CBN and NBS.

Discussion on the removal of PMS subsidy and influence on smuggling, waste and consumption of the product and subsequent economic growth:

To achieve this objective, review of related literatures and empirical studies were made in addition to the adoption of Computable General Equilibrium (CGE) model, (Dartanto, 2011) was made. Although, Saunders and Schneider (2000) applied Global Trade and Environmental Model (GTEM) to achieve the same result, adoption of CGE (Dartanto, 2011) was informed by the fact that the objective in the view does not contain environment indicator. UNEP (2004), Saunders and Schneider (2000) and Clemens et al (2011) in their separate studies collaborated that

fuel subsidy removal influences smuggling, waste and consumption of the product and subsequent economic growth. However, for empirical analysis, secondary data in respect of Nigerian PMS revenue, consumption and economic growth could have been collected from the annual publication of CBN and NBS.

CONCLUSION

The case studies and literature reviewed in this paper demonstrate that, once in place, petroleum subsidy is extremely difficult to remove as can be seen in Ghana, Indonesia, Malaysia, etc. Notwithstanding, a reform strategy as robust as the political will can remove the subsidy as witnessed in Nigeria, which entails among other things necessary palliatives, but in Nigeria no single palliative was put in place. However, subsidy removal without spending of the associated savings would increase the national poverty level. Therefore, to reduce budget deficit, reduce debt of existing refineries and enhance general economic growth in Nigeria economy, savings from subsidy removal must be transparently implemented and accounted for.

RECOMMENDATIONS

Based on the conclusions drawn from this paper, the following recommendations were made.

1. Nigeria government to ensure smooth operation of the policy should as a matter of necessity provides workable palliatives and avert resultant social negative impacts.
2. If mindful impact of the subsidy is to be felt on the economy, government should ensure effective implementation by employing all the needed political wills.
3. Nigeria government should ensure reviewing of progress and outcomes of the reform on an ongoing basis for assessing whether measures have been effective, checking whether there have been unintended consequences, and adapting policies overtime.
4. Government should upwardly

review wages of workers to reduce the effect on their disposable income and real income.

5. Government should ensure cost of imported petroleum products from importers is based on “over sea refined gate price”. The usual “middle men” scheme that was currently practiced in the recent past should be phased out.
6. In removing subsidy, government should revamp our ailing refineries to operate at optimal capacity.
7. Government should embark on construction of new refineries and petrochemical plants and promote policies that will encourage more achievements in the downstream sector.
8. Nigeria government should use budgetary savings to expand access and quality of social and infrastructure services such as education and health services, the rural road network and mass urban transportation, or access to electricity in rural areas.

To ensure hitch-free policy, government should carry out public awareness on the costs and implications of the current system and the benefits of the reform.

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