

# The Impact of Oil Sector Deregulation on the Nigerian Economy: Evaluating the Socioeconomic and Financial Implications across Key Economic Segments

Dr. Sabina Ego Ekechukwu

Dept. of Economics

Usman Danfodiyo University Sokoto Nigeria

**Abstract-** This study examines the impact of oil sector deregulation on the Nigerian economy, focusing on key economic segments such as households, finance, firms, public sector, and international trade. Utilizing a mixed-methods approach, this research combines quantitative survey data with qualitative observations to capture a comprehensive view of deregulation effects. A sample of 400 respondents, selected through stratified random sampling from relevant stakeholders in the oil industry, was surveyed to ensure representative insights across affected sectors. Anchored in the Circular Flow Model and the General Equilibrium Theory, the study explores how deregulation policies influence macroeconomic stability, cost structures, and resource allocation within Nigeria. Key findings indicate both positive and negative consequences: while deregulation contributes to fiscal savings and potential investment in infrastructure, it has also led to inflationary pressures and increased operational costs for firms. Limitations of this study include its restricted focus on short-term impacts and challenges in capturing the broader social implications of policy shifts. These insights offer policymakers a nuanced understanding to refine future economic strategies.

**Index Terms-** Oil sector deregulation, Nigerian economy, mixed methods, Circular Flow Model, fiscal policy, socioeconomic impact.

## I. INTRODUCTION

The petroleum sector, a key revenue generator for most oil-exporting nations, has long been under government regulation. Experts in the oil and gas industry—both from local perspectives and global empirical analyses—argue that this regulatory framework constrains the sector's efficiency and growth (Vogel, 2020; Boussena and Locatelli, 2019; Hooligan and Esper, 2014). According to these specialists, the optimal productivity of the sector is believed to hinge on comprehensive deregulation. A global shift towards deregulation has emerged over recent years, driven by the expectation that freeing markets from governmental constraints will lead to improved efficiency and competitive pricing (Strauss Center for International Security and Regulation, 2022).

However, persistent reports of corruption within the government have impeded the general population from fully benefiting from oil sector revenues (US Energy Data Organization, 2022). This mismanagement creates barriers to business operations, hampers foreign direct investment, and

limits economic and social growth (Aasytveit, Bjornlamd, and Gundosen, 2022). Consequently, many advocates push for market-driven policies over state-regulated approaches. For instance, India has implemented reforms to reduce domestic and foreign trade constraints, aiming to enhance efficiency across multiple economic sectors (Veysel and Canor, 2018). Over the past three years, the Organization for Economic Co-operation and Development (OECD, 2022) reports that petroleum prices in countries like India have reached record highs without government interference, allowing market forces to dictate prices.

In other regions, such as the Philippines, Canada, and Africa, similar deregulation efforts have taken place. In the Philippines, a phased deregulation approach began in 1988, ultimately lifting controls on oil prices to allow competition. Canada has established the Petroleum Product Pricing Commission (PPPC) to regulate market prices, aiming to protect consumers while promoting fairness within the sector (WTO, 2021). In Africa, countries like Ghana, Cameroon, and South Africa have adopted various degrees of deregulation, with South Africa implementing the Petroleum Pipelines Bill

to create an open-access regulatory framework (Adekomaya et al., 2016).

Nigeria, drawing from these international experiences, has attempted to emulate similar approaches in its petroleum sector. In 2012, Nigeria's Petroleum Products Pricing Regulatory Agency (PPPRA) announced the deregulation of the downstream sector, removing subsidies that previously held down fuel prices (Ogbo, 2020). However, despite these reforms, inefficiencies persist in the Nigerian petroleum sector, raising questions about whether deregulation has delivered on its promises. Observations indicate that while deregulation aims to foster competitive pricing, the Nigerian populace continues to struggle with inflation and a widening economic divide. The primary objective of this study is to assess the broader impacts of deregulation on Nigeria's economy and identify pathways for more effective implementation to achieve the intended policy outcomes (Akindynos and Lekkos, 2020; Adu, 2016).

Proclamation of the issue Endowment is pointed toward instigating maximum usage creation of items, balancing market flaw, including assimilation of externalities, accomplishment of social approach targets. Most oil producing economies like Iran, Ghana, and Venezuela sponsorships their oil based goods and simultaneously give essential requirements to their populace. Miserable to say, the way of life in Nigeria is far beneath that of the previously mentioned nations that similarly sponsor the oil based goods for their homegrown utilizations. On the other range, the guideline of fuel cost in Center East nations, for example, Qatar, Bahrain, Joined Middle Easterner Emirates, Saudi Arabia among others work since all the encompassing nations direct their costs and there is no requirement for redirection. Unarguably, information show that nations that encompass Nigeria sell petroleum at a normal of \$1-\$2 per liter and advertisers gain significant increase since swapping scale real factors (OPEC, 2022). The end of sponsorship will save extra assets for interest in programs designated at moderating neediness and prodding monetary development projects that are focused on to decrease the effect of appropriation evacuation. However actually many actually question the profit of liberation starting from the primary declaration went out on January 1, 2012, and the resulting complete evacuation on May 2023. The inspiration for this study radiates from the getting teeth challenges defying the new expulsion of the fuel endowment which has been usable for a considerable length of time in Nigeria, which denoted a defining moment in the liberation of the oil area in Nigeria. The activity a few specialists including individuals from the general population concurred was the best trap for the endurance, development and improvement of the Nigerian Economy. Be that as it may, there have been requires an inversion to the old system of paying endowments to phantom free oil based commodities shippers who introduced sketchy receipts for installment.

Given the provokes noticed Including danger to go-on-strick/fight by some segment of people in general, including the skyrocketing of expansion, swapping scale, loan fee difficulties and different issues which appear to weigh vigorously on the Nigerian people which they are likewise battling with because of the ongoing liberation strategy it becomes basic to research the effect of the liberation of the oil area such a long ways on the Nigerian Economy with the end goal of finding cures that will usher help in the economy (CBN, 2023) It is against this background that this study is ready to examine the impact of liberation of the oil area on Nigerian Economy.

### Target of the Review

The fundamental target of the review is to research impact of liberation of the oil area on the Nigerian Economy. The particular targets are to:

- Investigate impact of liberation of oil area on Family area in Nigeria;
- Ascertain the impact of liberation of oil area on Monetary fragment in Nigeria;
- Ascertain the impact of liberation of oil area on Firms fragment in Nigeria;
- Investigate the impact of liberation of oil area on Open section in Nigeria;
- Investigate the impact of liberation of oil area on Abroad portion in Nigeria.

### Exploration Questions

The accompanying examination questions were imagined to direct the acknowledgment. of the targets:

- What are the impact of liberation of oil area on Family Fragment in Nigeria?
- What are the effect of liberation of oil area on Monetary Section in Nigeria?
- What are the effect of liberation of the oil area on Firms Section in Nigeria?
- What are the effect of liberation of the oil area on the Public Area portion in Nigeria?
- What are the impact of liberation of the oil area on the Abroad Area section in Nigeria?

### Exploration Theories

One examination speculation was hypothesized to be test in this review both in the invalid and option:

- **Ho:** Liberation of the oil area significantly affects the Nigerian Economy.
- **HA:** Liberation of the oil area significantly affects the Nigerian Economy.

### Extent of the Review

The review covers government liberation of oil area in Nigeria. It tends with the impacts of the liberation on the Nigerian Economy. The review is worried about the effect of

liberation on different portion of the economy- explicitly: Family fragment, Monetary section, Firms (Assembling and Administrations), Public Area section, and Abroad portion (imports and products) of the Nigerian Economy.

### Significance of the Study

The public authority would profit from the result of the review which would perpetually benefit them data on the achievement, disappointment, difficulties and prospect of the oil area liberation strategy, and how to resolve recognized issues. They policymakers would see to present and change regulations that would give a sound climate to simplicity of carrying on with work in the oil area of the economy.

Confidential financial backers (nearby and unfamiliar direct financial backers) stand to profit from the mindfulness made by the concentrate on the speculation possibilities made by the liberation strategy in the oil area. This venture potential is flexible on account of its subject to worldwide fascination. Further, scientists stand to benefit on the grounds that the discoveries, end and suggestions would, clearly, act as a benchmark and reference for additional exploration, in the interim, it would add to existing figuring out on the examination point. Besides, information they say is influence, subsequently, the information gathered from the review would help people in general to secure understanding and the influence to contribute, influence to decipher the market and influence to channel their cash well.

### Constraint of the Review

The best test to the review is overview members failure to straightforwardly and reasonably responding to the survey inquiries because of a paranoid fear of inductment. In any case, the analyst is ready to address that by guaranteeing them of non-divulgence of their individual and association character of the worry study members. Moreover, monetary imperatives is another constraint imagine in completing the review. This is a direct result of the issue if expansion, dynamic expense of transportation and cost of exploration materials which cost is right now unpredictable. This requirement would be dealt with by restricting the quantity of center populace through testing procedures. In any case, the analyst would ensure the extravagance of the result is in no way, shape or form adjusted.

### Definition of Key Terms

**Economy:** An economy refers to the structure and processes that determine how scarce resources, both human and material, are allocated and utilized to produce goods and services for consumption.

**Financial Sector:** The financial sector comprises commercial banks and various financial institutions that operate within an economy, including insurance companies and mortgage institutions.

**Firms Sector:** The firms sector encompasses all businesses within the economy that produce goods and services, which they sell to consumers in exchange for revenue.

**Government Sector:** Often referred to as the public sector, this includes all governmental bodies at the federal, state, and local levels that generate revenue primarily through taxation of the household and firms sectors.

**Household Sector:** This sector consists of individuals and families within the economy who offer their time, skills, and labor to organizations and firms in return for monetary compensation.

**Leakages:** Leakages refer to the outflow of income from the circular flow model, representing the portion of income that households withdraw and do not use to purchase goods and services. This withdrawn income does not flow into the goods market. There are three main types of leakages:

**Savings:** The part of income that households do not spend on goods and services or taxes but instead deposit into financial institutions such as banks. These savings can be lent out by banks for business investments or capital growth.

**Taxes:** Income paid by households and firms to the government, which flows to the government instead of the goods market.

- **Imports:** Payments made to foreign entities for goods and services purchased from them, representing an outflow of income from the domestic economy.

Leakages effectively reduce the volume of income circulating within the economy.

**Injections:** Injections are inflows of income into the circular flow, increasing the overall volume of income. The three primary types of injections are:

- **Investment:** Total expenditure by businesses on capital development, which flows into the goods market.
- **Government Spending:** The government's total expenditure on goods and services, subsidies to businesses, and transfer payments to the household sector. Transfer payments include social security, pensions, retirement benefits, and temporary assistance to low-income families.
- **Exports:** Revenue earned from the sale of domestic goods to foreign buyers. This represents an inflow of income from the foreign sector into the domestic financial market.
- **Oil Sector:** The oil sector encompasses all petroleum products and their related derivatives.
- **Foreign Sector:** Also known as the overseas sector, this includes all Nigerian companies and their trade relations

with other countries, primarily involving imports and exports.

- **Resources:** Resources refer to both animate and inanimate factors such as land, labor, and raw materials that are utilized to facilitate and drive economic activities within an economy.

## II. REVIEW OF RELATED LITERATURE

This part centers around writing audit which inspects the reasonable system, idea meanings of the review factors and interceding factors Liberation, Oil area, Economy, Monetary fragment, Firms portion, Government section, Family section, and Abroad portion. It likewise embraces observational audits which center around past examinations considered pertinent to the current review; Hypothetical system moored on The Overall Harmony Hypothesis; Hole in the surveyed writings closes the part to show the areas of exclusion by past academic works which the current review is ready to fill.

### 1. Reasonable Structure

The reasonable structure took on for this study is the Round Stream Model which incorporates the different fragments of the economy both created and creating economies. The structure demonstrate a normal method for showing the progression of assets, labor and products around various fragments of the economy. Figure 2.1 The round stream model portrays the progression of cash and labor and products between various areas of the economy. The strong bolts underneath show the progression of cash through the economy demonstrates the interconnectivdness of each fragment with the remainder of the web.(Lee and \*Song, 2017; Ajibo, 2015). The roundabout stream model is a financial model that presents how cash, merchandise, and administrations move between areas in a monetary framework.

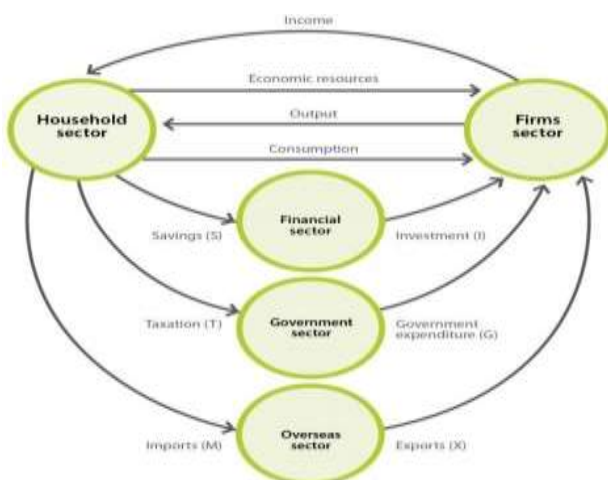


Fig. 1: Circular Flow Model- Reserve Bank of Australia 2023, and adopted for this study

The progressions of cash between the areas are likewise followed to quantify a country's public pay or Gross domestic product, so the model is otherwise called the round progression of pay. The total roundabout stream has five areas: a family area, a firm area, an administration area, an unfamiliar area, and a monetary area. The roundabout stream model exhibits how cash moves from makers to families and back again in an unending circle. In an economy, cash moves from makers to laborers as wages and afterward back from laborers to makers as laborers burn through cash on items and administrations.

As per the Model, the average method for showing the progression of assets, labor and products around various portions of the economy. Consequently, the Model is addresses the significant parts of an economy (created and creating by and large). Thus, Fig.2.1 shows the different interconnectivity of the economy:

Monetary Assets are merchandise that are utilized as contributions to creation, for example land, work and capital (the hardware, structures and gear used to create labor and products); Use - the acquisition of labor and products; Commodities (X) - labor and products delivered by Firms in Nigeria and offered to different nations; Monetary area - banks and other monetary establishments; Firms area -

organizations in the economy; Government consumption (G) - cash the public authority spends on open labor and products; Government area - the Administrative, state and nearby government; Family area - people in the economy; Imports (M) - labor and products delivered by organizations in different nations and offered to Nigeria; Pay - cash got, for example wages, lease and premium; Speculation (I) - cash the Monetary area loans to Firms to spend on hardware, structures and gear; Result - labor and products created to be sold; Abroad area - the financial exchanges of the economy with the remainder of the world, for example how assets stream among Nigeria and its exchanging accomplices; Investment funds (S) - cash saved; Tax collection (T) - cash paid to government from benefit or potentially pay procured by people and associations.

As utilized in this review, the economy is thought to be an opened economy and comprises of an all encompassing five areas as addressed in Fig. 2.1. An opened economy is an economy that partake in unfamiliar exchange. In this model, the family area, the firm area (business-to-clients (B2C) and Business-to-business (B2B)), Abroad units are the purchasers of the labor and products created by the organizations and it is additionally the providers of the variables of creation. The family area spends the whole pay on the acquisition of labor and products created by the organizations suggesting that there is no saving or interest in the economy. The organizations are the abroad shippers are ones that supply the

labor and products. The organizations and abroad's shippers, create pay by offering the labor and products to the family area and organizations that are needing their items for use as unrefined substances and the last option procures pay by offering the variables of creation to the previous. Hence, the pay of the makers is equivalent to the pay of the families and B2B are equivalent to the utilization consumption of the of both family and Business-to-business shoppers. The interest of the economy is equivalent to the stock.

## 2. Idea Definition Economy

The word economy gets from the Greek expression for family the board ("oikonomia") and the word is as yet utilized in that specific situation.

Financial matters as an area of study was addressed by rationalists in old Greece, eminently Aristotle, however the cutting edge investigation of financial aspects started in eighteenth century Europe, especially in Scotland and France. An economy is a region of the creation, conveyance and exchange, as well as utilization of labor and products. By and large, characterized as a social space underscore the practices, talks, and material articulations related with the creation, use, and the executives of scant assets (OECD, 2022; IMF, 2019) Advancement of Current Financial matters

Harsh (2019) sets that the Scottish logician and financial specialist Adam Smith, who in 1776 composed a milestone book called "The Abundance of Countries," was considered time permitting an ethical rationalist. Concurring Harsh, Smith and his counterparts followed the development of economies from ancient dealing frameworks to cash driven and ultimately credit-driven economies. During the nineteenth hundred years, the improvement of innovation and the development of global exchange made more grounded ties among nations, an interaction that advanced into the Economic crisis of the early 20s and The Second Great War. Following 50 years of the Virus War, the late twentieth and mid 21st hundreds of years have seen a restored globalization of economies (Strauss Community for Worldwide Security and Regulation, 2022)

Oladepo (2014) depicts an economy as a complicated arrangement of interrelated creation, utilization, and trade exercises that at last decides how assets are dispensed among every one of the members. Oladepo, further, sets that the creation, utilization, and conveyance of labor and products consolidate to satisfy the requirements of those living and working inside the economy. Consequently, an economy might address a country, a locale, a solitary industry, or even a family (Ogbo, 2021). Moreso, an economy envelops each of the exercises connected with the creation, utilization, and exchange of labor and products an element, whether the substance is a country or an unassuming community

(ATSWA-ICAN, 2021). In this way, no two economies are indistinguishable, as each is shaped by

its own assets, culture, regulations, history, and geology, and each advances as per the decisions and activities of the members. Thus, these choices are made through a mix of market exchanges and aggregate or various leveled navigation. By and large, there are two classes of economy: Free enterprise requires a market-based economy, and Socialism requires an order based economy.

Be that for what it's worth, in the cutting edge world, scarcely any countries are simply market-based or absolutely order based. Yet, generally incline in the direction of either of these models.

**Market-Based Economies:** Market-based or "unregulated economy" economies permit individuals and organizations to openly trade labor and products as indicated by supply and demand. The US of America for instance is generally a market economy. Consequently, Makers in that nation figure out what is sold and created, and what costs to charge. Basically assuming that they hope to succeed, they will deliver what shoppers need and charge what customers will pay. Through these choices, the laws of organic market decide costs and all out creation. On the other range on the off chance that customer interest for a particular item increments, creation will in general increment to fulfill the interest (Ogbo, 2021). The expanded interest makes costs ascend until buyers shy away and cut back on their buys. Interest for the item will then, at that point, decline and costs will decline with it. This steady pull of organic market permits a market economy an inclination to adjust itself normally. As the costs in a single area ascend with request, the cash and work expected to fill that request shift to those spots where they are required (Ogbo, 2021)

**Order Based Economies:** Order put together economies depend with respect to a focal government that controls the creation levels, valuing, and dissemination of merchandise. In such a framework, the public authority possesses enterprises considered fundamental for the benefit of the customers who use them. Rivalry among organizations is deterred or restricted. Costs are controlled. Socialism requires an order based economy. Contemporary models incorporate Cuba and North Korea. An order based economy endeavors to override the operations of organic market (Ogbo, 2021)

**Blended Economies:** Unadulterated market economies seldom exist in the advanced world since there's normally some level of government mediation or focal preparation. Indeed, even the US could be viewed as a blended economy. It may not order creation but rather it has ways of impacting it. In USA, that works an entrepreneur economy there are a few cases of government mediations in business. For instance, in

late 2021, President Joe Biden requested 50 million gallons of oil let out of the country's Essential Oil Stores with the expressed point of constraining fuel costs lower by expanding its stock. Once more, in 2022 and 2023, the Central bank forced a progression of loan cost increments on the country's banks. The object was to raise loan fees all through the economy to decrease interest for credits and in this way diminish expansion in the expenses of labor and products (Strauss Place for Worldwide Security and Regulation, 2022). In truth, the vast majority of the world's created economies blend market-based and order based models.

China had an order economy just until 1978, when it started a progression of changes that energized private venture.

All things considered, we all partake in an economy, with the conceivable exemption of a loner living on a remote location. We contribute something to the entire, by creating or assisting with delivering an item or offering a help. Consequently, we get cash that permits us to purchase the labor and products that we can't deliver for ourselves. Basically, an economy is a local area that is seen by an investigation of its portion of assets. Each person and family locally has a commitment to make. Consequently, each expects a portion of the labor and products given by different individuals from the local area. In this review, this reality makes it basic to consider Family area, firms, public, finance and abroad area which are fundamentally the space of individuals from the general public as the intervening factors for the examination.

#### Significant Parts of the Nigerian Economy

In this review, we consider a cutting edge financial economy comprising an organization of five area economy these are- 1. Household area 2. Firms or Creating area 3. Government area 4. Abroad section, 5. Monetary area. Every one of the above areas gets a few installments from the other in lieu of labor and products which makes an ordinary progression of merchandise and actual administrations. Cash works with such a trade without a hitch. A leftover of each market comes in capital market as saving which thusly is put resources into firms and government area. In fact talking, insofar as loaning is equivalent to the acquiring for example spillage is equivalent to infusions, the roundabout stream will go on endlessly. Anyway this task is finished by monetary foundations in the economy. Nonetheless, the utilization in this study is to show the different intervening factors that are affected by liberation of the oil area (Ogbo, 2021)

#### Family Area of the Nigerian Economy

This area remembers every one of the people for the economy. The essential capability of this area is to give the variables of creation. The variables of creation incorporate land, work, capital and undertaking. The family areas are the shoppers who consume the labor and products created by the organizations and consequently make installments for the

equivalent (Ogbo, 2021; Ajibo, 2015) Firms/Creation Area of the Nigerian Economy:

The organizations area of the economy is an autonomously managed specialty unit which does useful exercises like creation, development, or distributive exercises. Firms generally sort out their creation in a plant. This area incorporates all the business substances, companies and associations. The essential capability of this area is to deliver labor and products available to be purchased on the lookout and make factor installments to the family area. The plant or plant of a firm both assembling and administration enterprises is where a firm done it's useful exercises. In such plants, oil based goods and its subordinates are utilized either as an essential business assets or optional to do tasks. economy. The organizations are the main maker of the great and administrations. The organizations create pay by offering the labor and products to the family area and the last option acquires pay by offering the elements of creation to the previous. Hence, the pay of the makers is equivalent to the pay of the families is equivalent to the utilization consumption of the family. The interest of the economy is equivalent to the inventory (Adu, 2016; Appreciate and Inyan, 2014). In this manner, liberation constantly influences it functional income and costs component. Government/Public Area of the **Nigerian Economy**: This area involves two sehments-the public endeavors and the managerial sections. The public ventures are the kinds of business associations which are claimed, regulator and oversaw by the public authority whether Bureaucratic, State or Nearby legislatures. Their significant goal is to offer social types of assistance to the residents. In Nigeria public endeavors are related with so much names as companies, sheets, authority and commissions. The concerned government gives the essential capital expected to set up open endeavors, by which proprietorship has a place with the public authority. This area incorporates the middle, state, and neighborhood legislatures. The great capability of this area is to control the working of the economy. The public authority area causes both income as well as use. The public authority procures income from charge and non- charge sources and causes use for offer fundamental public types of assistance to the people. Thus, public ventures are set up by Demonstrations of Parliament and such endeavor has a place with government. In Nigeria where oil area is the prevailing benefactor of income whatever happens to the area perpetually influences these undertakings (ASTWA-iCAN, 2022).

#### Financial Sector of the Nigerian Economy

This Monetary area comprises of monetary organizations like banks and non-bank go-betweens who take part in getting (reserve funds from families) and loaning of cash. The monetary area is a segment of the economy comprised of firms and organizations that offer monetary types of assistance to business and retail clients. This area contains a wide scope

of businesses including banks, speculation organizations, insurance agency, and land firms. Monetary area draws in stores and give advances from surplus to shortfall side. The general effect of monetary area in economy is to guarantee manageable development. It assists with activating investment funds and direct assets into creation areas. In Nigeria, the monetary framework comprises of institutional units (like enterprises or government organizations) and markets that cooperate commonly in a perplexing way to prepare assets for venture and give offices (ASTWA-iCAN, 2022; Ogbo, 2021)

#### Abroad/Unfamiliar Area of the Nigerian Economy

Unfamiliar exchange incorporates two exchanges, i.e., products and imports. Labor and products are sent out from one country to different nations and imports come to a country from various nations in the merchandise market. There is inflow of pay to the organizations and government as installments for the commodities and there is surge of pay when the organizations and states make installments abroad for the imports. The import installments and product receipts exchanges are finished in the monetary market. Unfamiliar exchange incorporates two exchanges, i.e., commodities and imports. Labor and products are traded from one country to different nations and imports come to a country from various nations in the merchandise market. There is inflow of pay to the organizations and government as installments for the products and there is outpouring of pay when the organizations and state run administrations make installments abroad for the imports. The import installments and product receipts exchanges are finished in the monetary market (ASTWA-iCAN, 2022; Ogbo, 2021)

Further, the abroad area incorporates exchanges with the remainder of the world. Unfamiliar exchange suggests net products (trades less imports). Trades incorporate labor and products created locally and offered to the remainder of the world and imports incorporate labor and products delivered abroad and sold locally. The best obstacle from liberation to Abroad Area of the Economy is the debasement and deterioration of public monetary forms. Debasement which is the authority decrease of the trade worth of public money corresponding to the monetary forms of different nations. Thusly, a fall in the trade worth of a country's money comparable to the monetary forms of different nations introduces balance in the event that installment issue, increment of expansion and financing cost. In this occurrence, sends out become less expensive while imports become costly as the costs of products delivered locally fall and residents spend additional in buying of wares from different nations. It turns out to be more costly to bring labor and products into a country that degraded its money, less labor and products are imported. Moreso, there will be an increment propensity to trade labor and products when a nation depreciated its money. Generally, degrading urges entrepreneurs to trade in view of

its efficiency. This prompts an expansion in the quantity of businesses particularly Unfamiliar Direct Ventures (FDI) and subsequently manifestations of additional positions for the residents (CBN, 2022, NBS, 2020).

Be that figuratively speaking, the progression of pay in the roundabout stream model doesn't necessarily in every case stay consistent. The volume of pay stream decline because of the spillages of pay in the roundabout stream and correspondingly, it increments with the infusions of pay into the round stream. The volume of pay in the round stream increments with the infusions in the economy and diminishes with the spillages in the economy. Infusions are inflows of pay to the roundabout stream and spillages are surges of pay from the round stream. The Infusions are primarily venture, government use and commodities and spillages are for the most part saving, charges and imports (Ogbo, 2021).

Liberation of Oil Area The uneven street of Nigerian downstream Oil Area to the breeze of liberation appropriate took off during Jonathan organization. Nigeria is honored with huge amounts of oil alluded to as Brilliant oil by Olukoju (2014), and has produced billions of dollars in incomes throughout the course of recent years since oil was tracked down in Nigeria. The oil business contributes 85-95 percent of product profit, and around 73% of government income (Okwanya, Moses and Flawless, 2015). Be that as it may, the business, particularly the downstream area, has been confronted with various difficulties including shortcomings, defilement, maltreatment of normal syndication abilities, botch, pirating, regulatory bottlenecks and over the top financing (Adamu, Ajienska, Ikiensiklmama, 2015; Shapiro, 2014). The resultant impact on the economy likewise included are unending strikes by oil laborers, relentless shortage of oil based commodities, and irregular expansion in costs of oil based goods. The most recent vertical survey of the siphon cost of PMS from N197 to N700 was the ideal in the series between 1998 and 2023. Spin-off of the difficulties, government chose to copy other creating and created countries, especially OPEC nations, in changing the nation's downstream oil area which was until now overseen by the NNPC for the benefit of government. Liberation, to a typical Nigerian, just method the evacuation of appropriation. A sponsorship, as per Odehi (2011), is a type of help given by government to a business or financial area. In Nigeria's oil area, it is used for cost help - to keep the cost of oil based goods at a specific level to help people in general (Esu, 2017; Siddiq, Agular, Grethe, Minor and Walmsley, 2014). The presence of petrol endowment in Nigeria implies that the costs of oil based goods are not set by market influences. Thusly, government's endeavor to liberate downstream oil area is viewed by normal Nigerians as being inseparable from the expulsion of fuel endowment. Nonetheless, there is something else to the liberation of the downstream oil area than only expulsion of fuel sponsorship. Liberation is the evacuation or

disentanglement of government decides and guidelines that compel the activity of market influences (Adamu, Ajiinka, and Ikiensiklmama, 2015). This is upheld by Boussena and Locatelli (2019), Ajibo (2015), and Enouh and Inyan (2014) CBN (2023) reasserts that liberation focuses on least mediation by government in the administration of the economy. In this way, in a liberated economy, the public authority is the impetus of development and improvement while the confidential area is the central player of the economy (Akinwotu, 2014). Accordingly, the slow freedom of the downstream oil area is in accordance with the idea of liberation.

#### **Benefits of Deregulating the Downstream Oil Sector**

One of the greatest additions of liberating the downstream oil area will be in investment funds produced from government stripping, which will let loose government reserves, particularly in sponsoring fuel, for other formative exercises (Boussena and Locatelli (2019), Ajibo (2015), and Enouh and Inyan (2014). Harrison (2013); CBN (2012); IMF (2012); and Odehi (2011) noticed that the objectives of liberation in the downstream oil area are making of contest, empowering more organizations to reach out and ultimately providing the market at cutthroat estimating levels, among others. This is upheld by Esu (2017) and Akande, Adebayo and Adetayo (2014) who were of the view that liberation will open up the downstream oil area, through new ventures, to rivalry. At the point when serious powers are released, they will cause effective asset designation which will ultimately drive down the cost of fuel in Nigeria (Esu, 2017). Remarking on the significance of liberation, Alindynosa and Lekkoss (2020) recognized that liberation has shown to be the way forward in extending amazing open doors for monetary development and serious business sectors. Liberation: Proof from Different Nations

The objective of the Nigerian government in taking on the standards of liberation in the downstream oil area is affected by the triumphs of different nations in doing likewise (WTO, 2022; IMF, 2021). For instance, Oil based commodities are less expensive in other OPEC part nations, and a couple of different nations that are non-OPEC individuals than in Nigeria. The key to the low costs of oil based commodities in these nations, as per Oladepo (2014), is nearby refining of raw petroleum, with the contribution of privately owned businesses, regardless of the non- presence of sponsorship by the state in a portion of the nations.

#### **4. Hypothetical System**

The hypothetical groundwork of liberation is to a great extent taken from the overall harmony hypothesis, which proposes the significance of the general public's restricted assets for proficient creation of the necessities of the general public and effective dispersion of products and administrations among different buyers. French financial specialist Léon Walras is

credited with creating and growing the hypothesis in the late nineteenth 100 years. General harmony as per Harsh (2019) alludes to factors that become significant when we consider counter factuals in which enormous changes are pondered. This might actuate changes in factor costs and innovation, which are held consistent in halfway harmony condition. In an entirely serious market, what decides how much result a firm will actually want to supply is an element of such countless factors, for example, the sort of market they work in, the kind of items created, the proportion of minor expense for negligible income, which becomes an integral factor since all benefit expanding firms might want to pick the result that will liken peripheral expense with minimal income (Painter, 2014). As conceptualized in the review, the downstream petrol area in Nigeria is comprised of significant oil advertisers and free advertisers who supply homogeneous items, yet have the ability to increment costs by making fake shortage. In a model utilizing Shell and Versatile, Lipsey and Chrystal referred to in Akinwotu (2014) saw that these organizations are in rivalry however every one of them could raise cost without losing clients since they have control over thei markets. They in this manner reasoned that despite the fact that Shell and B.P contend among themselves it isn't in a completely cutthroat market. The objective of downstream oil liberation by Nigerian government is to guarantee steady stockpile of items, lessen costs through the powers of interest and supply and to guarantee productivity through contest among firms. However, the competitiveness of a still up in the air by the force of a singular firm to impact the cost of items in that market (Akinwotu, 2014).

This suggests that on the off chance that a solitary firm doesn't have ability to impact the market in which it sells its products, the market will be more serious. In any case, the commitments of liberation as per Odeh, (2011) might be a "Disneyland future" which might prompt the eliminator's "Day of atonement" on the grounds that as seen in the US power market, liberation achieved deficiencies in supply, which lead to over the top costs. He similarly takes note of that the disappointment of liberation is because of use of financial hypothesis on a critical realworld market and that regular market hypothesis has three major imperfections, which were recognized by new exploration. One of the imperfections considered applicable to this study is; the idea by the traditional market hypothesis that opposition prompts lower costs, higher result and boost the thought by the regular market result and expansion of government assistance is considered misleading in light of the fact that amended speculations demonstrate that government assistance misfortunes are undeniable even in cutthroat business sectors. While lower costs, higher result and, surprisingly, higher shopper government assistance are probably going to be accomplished under syndications as per neoclassical hypothesis, (Carter et al, 2014)

## 5. Previous Empirical Studies

The effect of the liberation of the downstream area on the Nigerian economy is certainly not another area of concentrate as numerous scientists and financial specialists have led comparative examination to legitimize the utilization of liberation as a device for monetary change.

Harrison (2013) concentrated on the effect of appropriations expulsion in Algeria, Iran and Nigeria. The exact outcome shows that the cycle will create sufficient homegrown oil investment funds which can mean higher income for the economy. In an exploration to decide the development possibilities of oil and gas bountiful economies with accentuation on Nigeria, Ibrahim (2007) saw that over dependence on exogenous innovation application for extraction and commodity of oil because of accentuation on income debilitates the absorptive limit of homegrown creation structures. This is on the grounds that as oil is delivered and traded to acquire more unfamiliar save, there is no proportionate work to create monetary exercises that will advance development utilizing the income procured from oil. Thus, the economy all in all is presented to global cost and request shocks which accompany over reliance on imports. Various analysts did concentrates on the effect of energy utilization on Gross domestic product or GNP and however concocted differing results, distinguishing either certain effect, adverse consequence or no effect by any stretch of the imagination. This irregularity in results was brought about by the utilization of OLS model of log-straight, which was utilized to gauge the factors disregarding the time series nature of the information (Chung, Nam and Ahn, 2020). Their review investigated the issue of causality between genuine oil cost and the economy. In view of their outcome, they contended that an ascent in oil value that is huge when contrasted with ongoing volatilities would sum with redistribution of assets and bringing down of total result. Despite the fact that this outcome is sensible, it in all actuality does essentially follow on the grounds that according to the Nigerian point of view, we have seen huge expansions in oil costs yet there was no asset redistribution, the poor kept on being poor, while infrastructural rot persevered. As per the examination by Lee and Melody (2017) for OECD nations in correlation with different nations, they found that expansion in oil costs dialed back financial development in the U.S regardless of the way that it is less reliant upon imported oil than nations like Germany, Japan and France.

Nonetheless, on account of Nigeria, refined oil based goods are imported because of the way that the treatment facilities are working either underneath limit or are not working. This might be a sign that changes in oil costs, which lead to increment in oil costs, will adversely affect financial development. Essentially, Jimenez-Rodriguez and Sanchez (2004) completed observational examination on oil cost stuns and its effect on genuine Gross domestic product

development. They found proof of non-direct effect of oil costs on genuine Gross domestic product however as oil cost builds it was found to affect Gross domestic product development of a bigger greatness than that of oil cost declines. Notwithstanding, among all oil bringing in countries, oil cost increments are found to adversely affect financial movement in all cases aside from Japan. The ramifications for Nigeria lies in the way that despite the fact that Nigeria is an oil creating nation practically the entirety of its oil based goods are imported; thusly increments in oil costs will influence monetary development in Nigeria. Despite the fact that the writing on the connection between energy utilization and Monetary Development is developing, the causal relationship has not yet been recognized. The connection among energy and monetary development appear to be impartial on a full scale level where there were proof of Granger causality for a lower level of collection in a portion of the examinations (Oladejo, 2014). In dissecting the Granger causality among energy and development in the U.S from 1970-2007 on a large scale level, Odeh (2011) found out in addition to other things that Granger causality between energy utilization and financial development isn't generally constrained by similar factors.

Moreover, in an exploration by Law breaker and Esper (2014), they inspected the causal connection among energy and utilization for 16 nations. They figured out that all the series are non-fixed. While in seven nations, there were straight cointegrating connections among the factors. Nations like Turkey, France, Italy, Germany and Japan have causality running from energy utilization to Gross domestic product; just Argentina has bi directional causality. This infers that for the nations with causality running from energy utilization to Gross domestic product, any lengthy run energy preservation strategy might meaningfully affect monetary development.

Akpan (2009) led a hypothetical examination on this point and noticed that an expansion in oil cost should move pay from the bringing in country to the sending out country through a change in the terms of exchange. This can occur on account of Nigeria where the reliance on imported oil and neighborhood utilization is discounted to the barest least so the proportion of expansion in refined oil based commodities won't surpass the expansion in that frame of mind of raw petroleum. An examination by Killan and Murphy (2014) affirmed that it is fundamental for strategy producers to figure out the effect of petroleum product on their public economies. This is on the grounds that a negative connection between non-renewable energy source costs might prompt misrepresentation of other monetary factors, which might be expected to create financial development. Various examinations completed by various scientists, (referred to in Akindynos and Lekkos, 2020) showed that a little expansion in oil costs yield sizeable decline in Gross domestic product Development. In rundown, the creators will generally concur with Adu (2016) that monetary

development of any nation and Nigeria specifically is to a great extent reliant upon the ability to supply different financial merchandise to its populace. Clearly there is a connection between liberation of the oil and gas downstream area (energy) and monetary development, oil cost and utilization from the exact writing investigated.

### 6. Gaps in the Reviewed Literature

The arrangement of the inspected writing demonstrates that few of the researchers center around the power area with accentuation on power liberation and its effect on economies other than Nigeria. Other people who examine about liberation divert their work in nations other than the review region, Nigeria. Once more, the topics that go through these platheora of academic works are busy with impact of liberation on financial development and advancement by utilizing unique ideas like GDP (Gross domestic product) or Gross Public Item (GNP), which are a long way from making sense of the impact of liberation as it influence the populace in straightforward and reasonable terms. The factors considered in these examinations incorporate, Ostensible Gross domestic product (GDPN), Gross Capital Development (GCF), Number of Work Utilized (LAB), Expansion Rate (INF), Swapping scale (EXR) and the liberation factors in particular; Cost of Oil based commodities (PPP), Complete Stock of Oil based commodities (TSP) and Utilization of Oil based goods (CONSP). While the objective factors in these examinations are PPP, TSP and CONSP, different factors are utilized as control factors. This study is ready to make up for this shortfall by examining the impact of liberation of the oil area in Nigeria utilizing the different essential portion of the economy which incorporated the Family, Firms, Monetary, Public Area, and Abroad Area. This is with an end goal to explore the impact as it connect with the essential variables and part of the genuine area.

## III. RESEARCH METHODOLOGY

This segment specifies approaches to efficiently take care of the examination issue, "Impact of Liberation of the Oil Area on the Nigerian Economy." It contains the different advances that are explicitly embraced by the specialist in concentrating on the exploration issue alongside the rationale behind them. There are two primary classifications of strategies which are subjective and quantitative examination techniques. The consistent and methodical plan in this philosophy would be: the examination plan (the structure and strategies decided to lead the review); concentrate on region (concerns the geographic limits chose to characterize the degree of specialist's investigation); concentrate on populace (this is a gathering considered for an investigation of measurable thinking); testing strategy (the most common way of concentrating on the populace by social event data and dissecting that information); test size (the quantity of members remembered for the review); wellsprings of

information (ways information are gathered); technique of information assortment (way and way of gathering information). Different subsets are Instrument of information assortment; Legitimacy of Instrument; Unwavering quality of Instrument; and technique for information investigations.

### 1. Exploration Plan

The review, Impact of Liberation of the Oil Area on the Nigerian Economy, used blended strategies for subjective, quantitative and perception located with narrative examination relating elements of the oil business in the review region.

In compatibility of the blended strategies I chose review plan which empowers me to request data from differed cluster of respondents and give a strong space to various factors. There are three fundamental sets of exploration classifications opened to scientists opposite: work area versus field research; Subjective versus quantitative; Nonstop versus Impromptu examinations (Birt, Scott, Cavers, Campbell and Walter, 2016). The initial two classes are opened to me in this concentrate as examined underneath:

Work area and field research-work area includes any exploration data that can be drawn from distributed sources. It has a spot in most modern exploration projects, for example, those including recognizing jobs and commitment by confounding people and dynamic issues which requires extraordinary preparation, devices and strategies to decide, and to arrive at the core of respondents. In this manner, that angle to the contention and harmony examiner must be taken care of utilizing work area research technique. All the more in this way, work area exploration can be an extremely helpful primer stage to recognize essential wellsprings of data and the region on which an examination can concentrate more detail consideration. Field research then again covers research that includes information accumulated through private visits, utilization of surveys and interview. The two techniques are taken on in the current review, Impact of Liberation of Oil Area on Nigerian Economy (Birt, Scott, Cavers, Campbell and Walter, 2016).

The other class, subjective and quantitative, is likewise embraced for this review. The later, quantitative technique is worried about mathematical estimation which is normally conceivable by association of populace, and test where numbers and factual data are required. The previous, subjective, is worried about the significant however elusive parts of the examination. It manages mentalities, sentiments, sentiments, insights, goals and assumptions for the study members. Be that as it may, subjective information are generally measured to make it significant. It is much of the time helped out through talking approach (Birt, Scott, Cavers, Campbell and Walter, 2016). Fundamentally, this study in view of its goals as specified in section 1, 1.3 would utilized the blended strategies plan in order to have the option to

accumulate data from narrative proof, perception, and connect with respondents through appropriating review poll.

## 2. Area of Study

Topographically, Nigeria is situated in the Sub-Saharan Africa locale Nigeria, country situated on the western bank of Africa. Nigeria has a different geology, with environments going from parched to damp tropical. Nigeria is arranged totally inside the equatorial area and is situated between scopes 4° and 14° North of the Equator and longitudes 3° and 15° East. Nigeria is the main nation strategically and financially in West Africa. It is more extravagant than any remaining West African countries and holds impressive power. Nigeria's most significant commodity is oil, the greater part of which is delivered to the US. An individual from the Association of Petrol Commodity Nations (OPEC), with a remarkable oil save and a populace of 206 Million with incredible development prospect Nigeria is ready to be one of the major monetary force to be reckoned with.

In Nigeria, oil was supposedly first found in Bayelsa State, in the Niger Delta, in 1956. As per the Association of the Petrol Product Nations (OPEC), Nigeria right now has the world's 10th biggest raw petroleum holds and is the world's thirteenth-biggest maker of unrefined petroleum.

Presently, Nigeria is a significant oil maker, positioning seventh among oil-creating countries on the planet (Aminu and Olawore, 2014; Oladepo, 2014). Nigeria is a main individual from the association of petrol sending out nations (OPEC), with enormous stores of oil. Nonetheless, Nigeria experiences a deficiency of refined oil based commodities (Aminu and Olawore, 2014). Nigeria is the main OPEC part that depends vigorously on importation to satisfy neighborhood need (Aminu and Olawore, 2014; Chigbu et al., 2016). Nigeria imports 80% of oil based goods to satisfy nearby need (Aminu and Olawore 2014; Oladepo, 2014). An intense deficiency of oil based goods is predictable with the Nigerian petrol industry (Aminu and Olawore, 2014; Chigbu et al., 2016). The oil based good shortage is related with low refining yield, insufficient pipeline foundation, pipeline defacement and crack, and crossing over of petrol through streets (Aminu and Olawore, 2014). Additionally, Aminu and Olayinka (2014) credited elevated degrees of oil utilization in Nigeria to expanding populace, financial development, an expansion in vehicular rush hour gridlock, deficient stock of power, low cost of fuel, and absence of petroleum charge. Besides, Alaba and Agbalajobi (2014) confirmed that the stockpile and circulation of oil based commodities in Nigeria is bothered by emergencies, unpredictable stockpile, deficiencies, accumulating, sneaking, debasement, and long lines.

The petrol business is the backbone of the Nigerian economy (Adamu, Ajiinka, and Ikiensikimama, 2015; Ambituuni et al.,

2014). Petrol commodity and promoting rules the Nigerian economy (Oladepo, 2014). Petrol represents 95% of unfamiliar trade, 65% of central government pay, and 85% of all out send out (Aminu Olawore 2014; Oladepo, 2014). The oil business gives energy and energy-related items that power the Nigerian economy (Ambituuni et al., 2014; Aminu and Olawore, 2014). The powerful running of the Nigerian economy relies upon the supportable inventory of oil based goods (Aminu and Olawore 2014; Chigbu et al., 2016). The NNPC is the significant merchant of oil based goods into Nigeria (Alaba and Agbalajobi, 2014). The foundation of the NNPC retail division, with proposed responsibility for retail outlets in the downstream, was expected to end fuel shortage in Nigeria (Oladepo, 2014). The Nigerian government additionally gave licenses to free oil advertisers to import oil based goods and set up confidential stops to reduce deficiencies (Alaba and Agbalajobi, 2014; Chigbu et al., 2016). A few confidential stops exist through the nation; nonetheless, they are not working at ideal productivity (Alaba and Agbalajobi, 2014). Additionally, Alaba and Agbalajobi (2014) noticed that the difficulties confronting the confidential stops incorporate frailty, value shakiness, and strategy flimsiness by the public authority.

Nigeria held an expected 37.1 billion barrels of demonstrated raw petroleum holds toward the start of 2023. Nigeria delivers generally light, sweet (low sulfur) raw petroleum and the vast majority of this oil is traded to worldwide business sectors.

Practically the nation's all's essential stores are amassed in around the delta of the Niger Stream, however seaward apparatuses are likewise noticeable in the exceptional waterfront locale. Nigeria is one of only a handful of exceptional significant oil-creating countries still fit for expanding its oil yield not at all like the majority of the other OPEC nations (WTO, 2023). In any case, postpone in liberation challenges improvement of that possibility.

## 3. Review Populace

The number of inhabitants in interest was the whole occupants of Nigeria, which numbered 206,969,483 individuals as at October 25, 2023 (Worldometer, 2023). To do the examination utilizing this gigantic enormous number of potential respondents ostensibly is unthinkable, and furthermore mean cash and time which the current review wouldn't have the option to make due, hence, the scientist resolved to zero in on the objective review, oil advertisers who is supposed to be 1,890,198 people.

Moreover, it was likewise difficult to include all oil area controllers in Nigeria, thus, the specialist prune the populace by utilizing just an example of the 1,890,189 individuals. Thusly, the review's populace is 1,890,189 people.

#### 4. Testing Procedure

The testing procedure utilized in this examination was by applying Kothari and Gaurav (2016) equation:

$$n = \frac{z^2 \cdot p \cdot q \cdot N}{e^2(N - 1) + z^2 \cdot p \cdot q}$$

Where:

- NNN = Population size (1,890,189 in this case)
- ppp = Sample proportion of successes (0.02)
- qqq = 1-p1 - p1-p (which equals 1 - 0.02 = 0.98)
- zzz = Value of the standard deviation at a given confidence level (2.0052)
- eee = Accepted margin of error (not explicitly provided but assumed)

$$n = \frac{2.0052^2 \cdot 0.02 \cdot 0.98 \cdot 1,890,189}{e^2(1,890,189 - 1) + 2.0052^2 \cdot 0.02 \cdot 0.98}$$

$$n = \frac{(4.0208) \cdot (0.02) \cdot (0.98) \cdot (1,890,189)}{e^2 \cdot 1,890,188 + (4.0208) \cdot (0.02) \cdot (0.98)}$$

0.02 x (1,890,189 - 1) + 2.0052 x  
 0.02 x 1  
 = 151972.1407  
 37803.8404  
 = 4.020018577} x 100  
 = 402.0018577 to three huge figure, we got 400

The example populace of the review, accordingly, is 400 members.

#### 6. Wellsprings of Information Assortment

There are three wellsprings of information assortment opened to a sociology scientist of this nature: essential, optional and tertiary sources. My center is to utilize essential and auxiliary wellsprings of information assortment. In light of my exploration plan and plan I will gather information from distributed writing sources, overviews, meetings and center gatherings, documentation and records from true government measurements. Essential information alludes to the direct information I assembled through utilization of surveys and talking, while auxiliary information comprises of the information gathered by another person before, which incorporate data from distributed works, broad communications, and official archived reports. Information for this study is obtained from both essential and auxiliary sources. Essential information is gathered the scientist through in- person organization of poll, conversation and meetings. Then again optional information is gathered from existing examinations connecting with the reliant and free factors oil area and Nigerian economy. On the optional information assembling, a few scholastics and specialists have underlined the significance of a colossal survey of existing writing proper to the subject of the examination which included: diary

articles, reading material, gathering papers, organization reports, and expositions among others (Antwi, and Hamza, 2015). This has been finished in the surveyed writing part.

#### 7. Procedure of Data Collection

In the primary stage, to add to the viability of information assortment formal audit of writing was finished to get auxiliary information from what different specialists have done on the review subject and related experimental examinations. A meaningful survey of liberation of oil area was led to get direct data from the setting in which liberation are remembered for true oil area conversations.

In the second stage which concerns essential wellspring of information assortment, a sum of 400 duplicates of poll made with a nearby finished questions and named "Liberation and Nigerian Economy Survey ", ready by the specialist will be utilized to gather data from the respondents for the review. Antwi, and Hamza, (2015) expressed that 'shut finished questions are those questions that must be answered to by browsing a compelled measure of decisions'. The survey (see Supplement 1) will be disseminated to the respondents in featured areas and they will be supposed to give their perspective in no less than 30 minutes of getting the poll. Inferable from holes in the surviving writing and existing information on the topic, a poll of the Likert scale structure is proposed for this review. The scientist will utilize the Rensis Likert summated rating framework. As per Adinoff, Conley, Taylor, and Chezem (2013) the improvement of the Rensis Likert summated rating framework involves the social event of comments concerning the boundary being assessed or surveyed as well as the arrangement of a succession of aligned answer choices. A case of a Likert scale is, Guidance: Mercifully read each question cautiously and pick the response that best depicts your perspective. Hence, to evaluate a given person's perspective regarding a matter under insightful cycle, the terms Concur (AG), Emphatically Concur (SA), Neither Concur nor Deviate (NA), Unequivocally Dissent (SD), and Dis- Concur (DA), and will be utilized (Adinoff, Conley, Taylor, and Chezem, 2013)

The scientist will impart the reason for the review to members and get their authorization keeping the rule given by Cox (2012). Prior to finishing up the poll, all members will be approached to sign an assent structure and just obediently finished surveys will be considered for this concentrate as proposed by Adapt (2014). The experimental discoveries from research when completely executed will assist better with teaching the proper specialists about the arrangements that should be carried out in the review Region to empower the populace partake in their inherent oil and gas assets.

#### 8. Instrument of Information Assortment

Information assortment instruments are the devices and strategy a specialist use to assemble and record data for the

scientist's review or assessment project. As indicated by Fusch and Ness (2015) instruments for information assortment can incorporate studies, surveys, interviews, center gathering, perception, test, and timetables. In this review, I use overview strategy poll and perception.

### 9. Legitimacy of Instrument

The legitimacy alludes to the degree to which information strategies measure what they should quantify, in other word that the information and techniques are substantial marks of the review variable and the resulting research questions. In this review, the manager's viewpoint was looked to learn legitimacy of the instruments utilized. As a specialist, he is best fit to decide the legitimacy of study research instruments. The substance approval of the examination instrument was brought out by overseeing the instrument through pilot study to chosen respondents who were excluded from the example determined to discover whether the inquiries mean same thing to the whole respondents. The organized survey device has been utilized by a few researchers leading comparative examinations (Cox, 2012) The poll instrument's substance legitimacy will be evaluated by test and estimation subject matter experts. This will be completed to completely look at the starter questions that were made and made accessible to them. The exploration will utilize a test-and-retest philosophy to decide the instrument's unwavering quality. Following fourteen days, the picked test populace will get a second organization of the gadget.

### 10. Unwavering Quality of Instrument

Unwavering quality shows the degree to which specialist's information and strategies produce steady and stable outcomes and that suggests ensuring techniques are solid and yield comparable results in various settings. In this review, The scientist will embrace a test and once again test organization since he is utilizing survey. For this situation, the specialist will manage similar survey to same gathering of respondents at various moment. All the more thus, the analyst will incorporate driving inquiries that builds the possibilities of memory backslide, disappointment or misfortune. In addition, the specialist will unambiguous inquiry, and applied clear and standard information assortments instrument to prevent blunder. The poll variable were inspected and reinforced by the bosses prior to overseeing to the review members. Cronbach Alpha will be utilized to direct the unwavering quality of the Instruments of the review. Utilizing Cronbach Alpha unwavering quality test is to determine the dependability of the survey. A dependability coefficient of 0.09 - 0.89 will be laid out to show the unwavering quality of the instruments (Adapt, 2014). The organized survey and interview as instruments for information assortment in research have been utilized throughout the long term, and have been viewed as solid since the couple are adaptable, they oblige research particulars as per a scientist's requests.

### 11. Method of Data Analysis

The scientist will use graphic factual examination instruments like recurrence dissemination, rates, tables, and bar outlines to introduce, dissect, and assess field information. These scientific procedures are expected to help the specialist to achieve a legitimate result concerning the impact of liberation of oil area on Nigerian economy from point of view of social mediation as it influences the more than 206 million Nigerians regarding financial life. This will assist with explaining whether liberation of the oil area is for sure basic in Nigeria. The inferential insights of X<sup>2</sup> set at .05 alpha levels was utilized to examine the factors under the review. Organized poll was utilized as the examination instrument. The poll comprises of four (4) sections. The parts are comprising of unassuming segment questions, check list question, and four (4) point Likert scale and is booked into four (4) sections in accordance with the examination questions which are:

Segment A tended to the segment Information of the members. In this way, inquiries on the individual data in the poll were orientation, age, training, occupation and conjugal status. The check list questions; Area B of the survey tended to the interceding factors on research question one; Segment C zeroed in on the interceding research variable for research question two (2);

Segments D and E tended to investigate questions three (3) and four (4) separately while area F tended to explore question.

Information got from the study were coordinated utilizing tables, graphs of different explicit requirements. The measurements utilized in information examination include:  
Fundamental insights

Rate for example  $P=f/N \times 100$  percent

Where:

'P;' is rate 'f' is recurrence to be changed over completely to rate, while

'N' is number of frequencies Mean =  $X^1 = (\hat{E}X)/N$

Where:

X is the mean

Ex is the summation of the scores N is number of information.

### Standard Deviation

$SD = \sqrt{E(X1-X2)^2/n-1}$

Where:

'SD' is Standard Deviation 'n-1' is worth of information 'X1' is the mean 'n' is number of information (Cox, 2012)

**Poll:** The essential information will be accumulated through observation study utilizing organized survey.

## IV. DATA PRESENTATION AND ANALYSIS

### 1. Introduction

This segment of the review manages the show, examination, trial of speculations, and translations of the different information acquired from the members who finished and returned their duplicates of survey. It started with the organization of survey, segment profile enumerating of the respondents and afterward investigation of members reactions to the factors in that. A sum of 400 duplicates of the survey were circulated while 386 duplicates were finished and returned, which was 96.5 or roughly 97% bring rate back.

The examination was finished utilizing an example of 386 members. The center information got from the respondents with respect to explore goals of the review, Impact of Liberation of Oil Area on Nigerian Economy, were at long last introduced, dissected, tried, deciphered, and measurable derivations produced using them as introduced in the tables and diagrams.

### 2. Survey Examination

#### Survey Organization

In Table 4.1, a sum of 400 (400) duplicates of the inquiry were controlled to 400 respondents from 4 chose urban communities - Abuja, Lagos, Port Harcourt and Enugu on equivalent extent of 100 duplicates. In any case, a sum of Fourteen (14) duplicates managed were not gotten back from Lagos (8), and Enugu (6).

Table 1: Questionnaire Distribution

Respondents	Administered	Returned	Not Returned%	% Used	Cumulative
Abuja	100	100 (100%)	0 (0%)	1 00	100
Lagos	100	92 (92%)	8 (8%)	9 2	192
Port Harcourt	100	100 (100%)	0 (0%)	1 00	292
Enugu	100	94 (94%)	6 (6%)	9 4	386
Total	400 (100%)	386 (92%)	14 (3.6%)	3 86	400

#### Gender Distribution of Survey Participants

Table 4.1.2 underneath shows that out of the 386 respondents who finished and returned their duplicates of the poll, 212 were guys, while 174 were female, 55% and 45% individually of the people who finished and returned their duplicates of the surveys.

Table 2: Gender Distribution of Respondents

Gender	Frequency	Percent	Valid %	Cumulative %
Male	212	55	55	55
Female	174	45	45	100
Total	386	100	100	100

#### Age Distribution of Respondents

Table 4.1.3 shows the age conveyance of the overview members. From the Table we see that the age we include more respondents inside the age group of 41-50 years which was 156 (40%) respondents, trailed by 31-40, a bunch with 98 (25%) respondents and  $\geq 51$  with 94 (25%). In any case, the energetic age group,  $\leq 30$  were 38 (10%) of the respondents.

Table 3: Age Distribution of Survey Participants

AGE	Frequency	Percent	Valid %	Cumulative %
<30 years	38	10	10	10
31-40	98	25	25	35
40-50	156	40	40	75
51+	94	25	25	100
Total	386	100	100	100

### Educational Attainment of Survey Participants

The instructive fulfillments of members are introduced on Table 4.1.4 beneath. It demonstrates that 274 (71%) of the individuals who finished and returned the poll have OND and beneath, while 64 respondents (27%) have either HND/B.Sc., 58 (10%) members have Experts, and 8 (2%) respondents have specialist of reasoning (PhD). The conveyance shows well educated member who comprehends the factors in the poll and what is expected of them as it connects with its fulfillment.

Table 4: Education Attainment of Participants

Qualification	Frequency	Percent	Valid%	Cumulative %
<OND	274	71	71	71
HND/ B.SC.	64	17	17	88
Masters	58	10	10	98
PhD	8	2	2	100
Total	386	100	100	100

### Occupation of Respondents

Table 4.1.5 beneath demonstrates the control of the overview members. From the Table we can surmise that 200 (52%) of the respondents are either polite or community workers, while 186 (48%) of the respondents are independently employed. The even circulation of the respondents worked with the equilibrium of feelings regarding the matter of study.

Table 5: Occupation of Respondents

Occupation sector	Frequency	Percent	Valid %	Cumulative %
Civil/P ublic	200	52	52	52
Self- employed	186	48	48	100
Total	386	100	100	100

### 3. Analysis of questions related to research 1-5 (Section B-F Questionnaire)

#### Exploration question 1: How much does liberation of the oil area influences Family section of the Nigeria Economy?

Examination of exploration question 1 in the survey yielded intervening factors 1-5 on "liberation and Family area connected with research objective 1. Respondents' reactions to the intervening factors are caught in Table 4.6 and in this way broke down beneath.

#### Research Question 1 (Component 1-5): Liberation and Family Area in Nigeria

Table 6: Deregulation and Household Sector in Nigeria

Variable	SA	A	D	SD	Total
Deregulation has increased inflation rate for families and individuals.	118 (31%)	172 (45%)	54 (13%)	42 (11%)	386 (100%)
Deregulation has heightened unemployment for the labor group, while government effort has been inadequate in addressing it.	150 (39%)	154 (40%)	64 (16%)	18 (5%)	386 (100%)

Deregulation has enabled constant Availability of petroleum products for consumers in Nigeria.	152 (39%)	176 (46%)	46 (12%)	12 (3%)	386 (100%)
Deregulation has contributed to improvement in livelihood for households in Nigeria.	174 (45%)	142 (37%)	48 (12%)	22 (6%)	386 (100%)
Deregulation has specific harnesses social life of the citizenry in Nigeria.	147 (38%)	162 (42%)	46 (12%)	31 (8%)	386 (100%)
Consolidated Responses Question 1	741 (38%)	806 (42%)	258 (13%)	125 (7%)	1930 (100%)

**RQ 1 (1) Deregulation has increased inflation rate for families and individuals.**

On the interceding variable, "Liberation has expanded expansion rate for families and people in Nigeria" Table 4.6.1 shows that 118 (31%) of the study members who finished and returned their duplicates of the survey emphatically concurred that liberation heightened increment of expansion for families and people; 172 (45%) of the respondents concurred, which welcomes those on the confirmed assessment to 290 (76%). In any case, 54(13%), and 42(11%) of the respondents differ and emphatically differ separately. In this manner, 96 (24%) of the members disagree that liberation influence Family portion in different ways.

Table 7: Deregulation and Inflation in Nigeria.

Responses	Frequency	Percent (%)	Cumulative (%)
Strongly Agree	118	31	31
Agree	172	45	76
Disagree	54	13	89
Strongly disagree	42	11	100
Total	386	100	100

**RQ1 (2) Deregulation has hightened unemployment for the labor group, while government effort has been inadequate in addressing it.**

On the interceding variable, "Liberation has hightened joblessness for the work bunch, while government exertion

has been lacking in tending to it", Table 4.6.2 shows that 150 (39%) of the review members who finished and returned their duplicates of the poll firmly concurred that liberation has hightened joblessness for the work bunch, while government exertion has been deficient in tending to it; 154 (40%) of the respondents concurred, which welcomes those on the confirmed assessment to 304 (79%). However, 64(16%), and 18(5%) of the respondents differ and unequivocally differ separately. In this way, 82 (21%) of the members disagree that liberation influences work which they ascribed to other potential variables.

Table 8: Deregulation and Employment sector in Nigeria.

Responses	Frequency	Percent (%)	Cumulative (%)
Strongly Agree	150	39	39
Agree	154	40	79
Disagree	64	16	95
Strongly disagree	18	5	100
Total	386	100	100

**RQ 2 (3): Liberation influences revenue and conversion scale along these lines impacting cash esteem in Nigeria.**

On the intervening variable for Exploration question 2, "Liberation influences revenue and swapping scale in this manner affecting cash esteem in Nigeria";

Table 9: Liberation influences revenue and conversion scale along these lines impacting cash esteem in Nigeria.

Responses	Frequency	Percent (%)	Cumulative (%)
Strongly Agree	128	33	33
Agree	158	41	74
Disagree	48	12	86
Strongly disagree	52	14	100
Total	386	100	100

Table 4.7.3 demonstrates that 128 (33%) of the respondents who finished and returned their duplicates of the poll emphatically concurred that liberation influences revenue and conversion standard subsequently impacting cash esteem in Nigeria; 158 (41%) of the respondents concurred, which

welcomes those on the positive to 286 (74%) respondents, while, 48(12%), and 52 (14%) of the members differ and firmly differ separately. Consequently, 100 (26%) of the members disagree that liberation influences revenue and swapping scale in this manner affecting cash esteem in Nigeria.

**RQ 2 (4): Liberation influences risk resources worth and the board in Nigeria**

On the intervening variable for Exploration question 2, "Liberation influences risk resources worth and the executives in Nigeria"; Table 4.7.4 demonstrates that 112 (29%) of the respondents who finished and returned their duplicates of the poll emphatically concurred that Liberation influences risk resources worth and the board in Nigeria; 176 (45%) of the members concurred, which welcomes those on the positive to 288 (74%) respondents, while, 64(13%), and 34 (13%) of the members differ and unequivocally differ separately. In this manner, 98 (26%) of the members disagree that Liberation influences risk resources worth and the board in Nigeria.

Table 10: Liberation influences risk resources worth and the board in Nigeria.

Responses	Frequency	Percent (%)	Cumulative (%)
Strongly Agree	112	29	29
Agree	176	45	74
Disagree	64	17	91
Strongly disagree	34	9	100
Total	386	100	100

**RQ 2 (5): Liberation influences contributors' investment funds and banks' money holding.**

On the intervening variable for Exploration question 2, "liberation influences investors' reserve funds and banks' money holding" ; Table 4.7.5 shows that out of a sum of 386 respondents,174 (45%) of the respondents who finished and returned their duplicates of the survey emphatically concurred that liberation influences contributors' reserve funds and banks' money holding; 132 (34%) of the members concurred, which welcomes those on the positive to 306 (74%) respondents, while, 42(11%), and 38 (10%) of the members differ and firmly differ separately. Subsequently, 80 (21%) of the members disagree that liberation influences contributors' reserve funds and banks' money holding of monetary foundations in Nigeria.

Table 11: Deregulation affects depositors' savings and banks' cash holding.

Responses	Frequency	Percent (%)	Cumulative (%)
Strongly Agree	174	45	45
Agree	132	34	79
Disagree	42	11	90
Strongly disagree	38	10	100
Total	386	100	100

**Exploration question 3: How much does liberation of oil area influences Firms area in Nigeria.?**

Examination of exploration question 3 in the poll yielded Tables 4.2.3 reactions on impact of liberation of the oil area on Firms area in Nigeria connected with research objective 3. Table 4.2.3: Exploration Question 3 (Component 1-5): Liberation of oil area influences Firms area in Nigeria?

Table 11: Liberation of oil area influences Firms area in Nigeria.

Variable	SA	A	D	SD	Total
Deregulation impacts costs of operations and services in manufacturing segment of the economy.	118 (31%)	212 (55%)	50 (13%)	6 (1%)	386 (100%)
Deregulation of the oil sector impacts Physical distribution and logistics in firms.	98 (25%)	104 (27%)	82 (21%)	102 (27%)	386 (100%)
Deregulation impacts ease-of-doing business in Nigeria.	124 (32%)	208 (54%)	0 (0%)	54 (14%)	386 (100%)
Deregulation impacts the demand and supply of firms' products and services in Nigeria.	110 (29%)	206 (53%)	20 (5%)	50 (13%)	386 (100%)
Deregulation of oil sector impacts fixed and variable cost of Firms in Nigeria.	166 (43%)	124 (32%)	66 (17%)	30 (8%)	386 (100%)

Consolidated Responses to RQ 3	616 (32%)	854 (44%)	218 (11%)	242 (13%)	1930 (100%)
--------------------------------	-----------	-----------	-----------	-----------	-------------

**RQ 3 (1): Liberation Influences Expenses of Tasks and Administrations in Assembling Portion of the Economy.**

On the interceding variable for Exploration question 3, "Liberation influences expenses of tasks and administrations in assembling portion of the economy"; Table 4.8.1 shows that out of a sum of 386 respondents, 118 (31%) of the respondents who finished and returned their duplicates of the poll firmly concurred that Liberation influences expenses of activities and administrations in assembling section of the economy; 212 (55%) of the members concurred, which welcomes those on the certifiable to 330 (86%) respondents, while, 50(13%), and 6 (1%) of the members differ and unequivocally differ separately. In this manner, 56 (14%) of the members disagree that Liberation influences expenses of activities and administrations in assembling fragment of the economy.

Table 12: Deregulation impacts costs of operations and services in manufacturing segment of the economy.

Responses	Frequency	Percent (%)	Cumulative (%)
Strongly Agree	118	31	31
Agree	212	55	86
Disagree	50	13	99
Strongly disagree	6	1	100
Total	386	100	100

**RQ 3 (2): Liberation of the oil area influences Actual dissemination and planned operations in firms**

On the interceding variable for Exploration question 3, "Liberation of the oil area influences Actual dissemination and coordinated factors in firms"; Table 4.8.2 demonstrates that out of a sum of 386 respondents, 98 (25%) of the respondents who finished and returned their duplicates of the survey emphatically concurred that Liberation of the oil area influences Actual dispersion and strategies in firms; 104 (27%) of the members concurred, which welcomes those on the confirmed to 202 (52%) respondents, while, 82 (21%), and 102 (27%) of the members differ and unequivocally differ separately. Accordingly, 184 (48%) of the members disagree that Liberation of the oil area influences Actual conveyance and operations in firms area of Nigerian economy.

Table 13: Liberation of the oil area influences Actual dissemination and planned operations in firms.

Responses	Frequency	Percent (%)	Cumulative (%)
Strongly Agree	98	25	25
Agree	104	27	52
Disagree	82	21	73
Strongly disagree	102	27	100
Total	386	100	100

**RQ 3 (3): Liberation influences simplicity of-carrying on with work in Nigeria.**

On the intervening variable for Exploration question 3, "Liberation influences simplicity of-carrying on with work in Nigeria"; Table 4.8.3 shows that out of a sum of 386 respondents, 124 (32%) of the respondents who partook in the review emphatically concurred that Liberation influences simplicity of-carrying on with work in Nigeria; 208 (54%) of the members concurred, which welcomes those on the positive to 332 (86%) respondents, while, 0 (0%), and 54 (14%) of the members differ and firmly differ separately. Consequently, 54 (14%) of the members disagree that Liberation influences simplicity of-carrying on with work in Nigeria.

Table 14: Deregulation impacts ease-of-doing business in Nigeria.

Responses	Frequency	Percent (%)	Cumulative (%)
Strongly Agree	124	32	32
Agree	208	54	86
Disagree	0	0	86
Strongly disagree	54	14	100
Total	386	100	100

**RQ 3 (4): Liberation influences the interest and supply of firms' items and administrations in Nigeria**

On the interceding variable for Exploration question 3, "Liberation influences the interest and supply of firms' items and administrations in Nigeria"; Table 4.8.4 shows that out of a sum of 386 respondents, 110 (29%) of the respondents who finished and returned their duplicates of the survey emphatically concurred that liberation influences the interest

and supply of firms' items and administrations in Nigeria; 206 (53%) of the members concurred, which welcomes those on the certifiable to 316 (74%) respondents, while, 20 (5%), and 50 (13%) of the members differ and unequivocally differ separately. Accordingly, 70 (18%) of the members disagree that liberation influences the interest and supply of firms' items and administrations in Nigeria.

**Table 15: Liberation influences the interest and supply of firms' items and administrations in Nigeria.**

Responses	Frequency	Percent (%)	Cumulative (%)
Strongly Agree	110	29	29
Agree	206	53	82
Disagree	20	5	87
Strongly disagree	50	13	100
Total	386	100	100

**RQ 3 (5): Liberation of oil area influences fixed and variable expense of Firms in Nigeria.**

On the intervening variable for Exploration question 2, "Liberation of oil area influences fixed and variable expense of Firms in Nigeria"; Table 4.8.5 shows that out of a sum of 386 respondents, 166 (43%) of the respondents who finished and returned their duplicates of the poll emphatically concurred that liberation of oil area influences fixed and variable expense of Firms in Nigeria; 124 (32%) of the members concurred, which welcomes those on the certifiable to 290 (75%) respondents, while, 66 (17%), and 30 (8%) of the members differ and unequivocally differ separately. Consequently, 96 (25%) of the members disagree that liberation of oil area influences fixed and variable expense of Firms in Nigeria.

**Table 16: Liberation of oil area influences fixed and variable expense of Firms in Nigeria.**

Responses	Frequency	Percent (%)	Cumulative (%)
Strongly Agree	166	43	43
Agree	124	32	75
Disagree	66	17	92
Strongly disagree	30	8	100
Total	386	100	100

**Exploration question 4: How much does liberation of the oil area influences Government area of Nigeria economy?**

Examination of exploration question 4 in the survey yielded Tables 4.2.4 reactions on How much does liberation of the oil area influences Government area of Nigeria economy as connected with research objective 4.

Table 4.2.4: Exploration Question 4 (Component 1-5): Liberation of the oil area influences Government area of Nigeria economy.

**Table 17: Liberation of the oil area influences Government area of Nigeria economy.**

Variable	SA	A	D	SD	Total
Deregulation to some extent enable government acquire the capacity to address infrastructural deficiencies.	288 (75%)	92 (24%)	6 (1%)	0 (0%)	386 (100%)
Deregulation has empowered government to address administrative challenges such as payment of civil and public servant salaries.	202 (52%)	101 (26%)	62 (16%)	21 (6%)	386 (100%)
Deregulation regime has ensured stability in governance.	150 (39%)	166 (43%)	52 (13%)	18 (5%)	386 (100%)
Deregulation enable government to handle its obligations (prompt salary payment, addressing administrative requirement) to the citizenry.	162 (42%)	164 (42%)	46 (12%)	14 (4%)	386 (100%)
Deregulation contribute to a reduction in official corruption in Nigerian public sector.	182 (47%)	128 (33%)	58 (15%)	18 (5%)	386 (100%)
Consolidated Responses to RQ 4	984 (51%)	651 (34%)	224 (12%)	71 (4%)	1930 (100%)

**RQ 4 (1): Liberation somewhat empower government procure the ability to address infrastructural inadequacies.**

On the intervening variable for Exploration question 4, "Liberation somewhat empower government obtain the ability to address infrastructural inadequacies"; Table 4.9.1 demonstrates that out of a sum of 386 respondents, 288 (75%) of the respondents who finished and returned their duplicates of the survey emphatically concurred that Liberation somewhat empower government secure the ability to address infrastructural lacks; 92 (24%) of the members concurred, which welcomes those on the positive to 380 (close to 100%)

respondents, while, 6 (1%), and 0 (0%) of the members differ and unequivocally differ individually. In this manner, 6 (1%) of the members disagree that Liberation somewhat empower government get the ability to address infrastructural lacks.

Table 18: Liberation somewhat empower government procure the ability to address infrastructural inadequacies.

Responses	Frequency	Percent (%)	Cumulative (%)
Strongly Agree	288	75	75
Agree	92	24	99
Disagree	6	1	100
Strongly disagree	0	0	100
Total	386	100	100

**RQ 4 (2): Liberation has enabled government to address regulatory difficulties like installment of common and community worker compensations.**

On the interceding variable for Exploration question 4, "Liberation has enabled government to address regulatory difficulties like installment of common and community worker pay rates"; Table 4.9.2 demonstrates that out of a sum of 386 respondents, 202 (45%) of the respondents who finished and returned their duplicates of the poll emphatically concurred that Liberation has engaged government to address managerial difficulties like installment of common and local official compensations; 101 (34%) of the members concurred, which welcomes those on the confirmed to 303 (76%) respondents, while, 62(16%), and 21 (6%) of the members differ and unequivocally differ individually. In this manner, 83 (22%) of the members disagree that Liberation has engaged government to address regulatory difficulties like installment of common and community worker compensations.

Table 19 Liberation has enabled government to address regulatory difficulties like installment of common and community worker compensations.

Responses	Frequency	Percent (%)	Cumulative (%)
Strongly Agree	202	52	52
Agree	101	26	78
Disagree	62	16	94
Strongly disagree	21	6	100
Total	386	100	100

**RQ 4 (3): Liberation system has guaranteed solidness in administration.**

On the intervening variable for Exploration question 4, "Liberation system has guaranteed security in administration," Table 4.9.3 shows that out of a sum of 386 respondents, 150 (39%) of the respondents who finished and returned their duplicates of the survey emphatically concurred that

Deregulation system has guaranteed dependability in administration; 166 (43%) of the members concurred, which welcomes those on the positive to 316 (74%) respondents, while, 52 (13%), and 18 (5%) of the members differ and firmly differ separately. Accordingly, 70 (21%) of the members disagree that Deregulation system has guaranteed solidness in administration.

Table 20 Liberation system has guaranteed solidness in administration.

Responses	Frequency	Percent (%)	Cumulative (%)
Strongly Agree	150	39	39
Agree	166	43	82
Disagree	52	13	95
Strongly disagree	18	5	100
Total	386	100	100

**RQ 4 (4): Liberation empower government to deal with its commitments (brief compensation installment, tending to managerial prerequisite) to the populace.**

On the intervening variable for Exploration question 4, "Liberation empower government to deal with its commitments (brief compensation installment, tending to regulatory necessity) to the populace," Table 4.9.4 shows that out of a sum of 386 respondents, 162 (42%) of the respondents who finished and returned their duplicates of the survey firmly concurred that Liberation empower government to deal with its commitments (brief compensation installment, tending to managerial prerequisite) to the populace; 164 (42%) of the members concurred, which welcomes those on the certifiable to 326 (84%) respondents, while, 46 (12%), and 14 (4%) of the members differ and unequivocally differ individually. In this way, 60 (16%) of the members disagree that liberation empower government to deal with its commitments (brief compensation installment, tending to managerial necessity) to the populace.

Table 21: Liberation empower government to deal with its commitments (brief compensation installment, tending to managerial prerequisite) to the populace.

Responses	Frequency	Percent (%)	Cumulative (%)
Strongly Agree	162	42	42
Agree	164	42	84
Disagree	46	12	96
Strongly disagree	14	4	100
Total	386	100	100

**RQ 4 (5): Liberation add to a decrease in true debasement in Nigerian public area.**

On the intervening variable for Exploration question 4, "Liberation add to a decrease in true debasement in Nigerian public area; Table 4.9.5 shows that out of a sum of 386 respondents, 182 (45%) of the respondents who finished and returned their duplicates of the survey unequivocally concurred that Liberation add to a decrease in true defilement in Nigerian public area; 128 (34%) of the members concurred, which welcomes those on the confirmed to 306 (74%) respondents, while, 58(15%), and 18 (5%) of the members differ and emphatically differ separately. Subsequently, 74 (20%) of the members disagree that Liberation add to a decrease in true debasement in Nigerian public area.

Table 22: Liberation add to a decrease in true debasement in Nigerian public area

Responses	Frequency	Percent (%)	Cumulative (%)
Strongly Agree	182	47	47
Agree	128	33	80
Disagree	58	15	95
Strongly disagree	18	5	100
Total	386	100	100

**Test of Hypothesis**

An exploration speculation for this review was tried with the guide of Chi- square factual equation. The accompanying advances were taken in the examination:

Rehashing of the speculations in the invalid and substitute structures, Reference to the information for examination, The choice rule, and Taking the choice.

The exploration speculation proposed to be tried in this study are examined underneath:

- **RH1 H01:** Liberation of the oil area fundamentally affects Nigerian Economy HA1: Liberation of the oil area fundamentally affects the Nigerian Economy.

Table 23: RH 1Liberation and Nigerian Economy.

X	F	F <sup>J</sup>	(F- F <sup>J</sup> )	(F- F <sup>J</sup> ) <sup>2</sup>	X <sup>2</sup> =(F- F <sup>J</sup> ) <sup>2</sup> /F <sup>J</sup>
Very significantly	710	386	324	104976	271.95

Significantly	758	386	372	138384	358.50
Undecided	0	386	-386	148996	386.00
Insignificantly	262	386	-124	15376	39.83
Very insignificantly	200	386	-186	34596	89.63
Total	1930	1930	0	442328	1145.91/1930=0.5937357

Chi-Square Examination: X2value = 0.59, Asymp. Sig = .05; X2> 0.05; df=5

The Choice Rule: We acknowledge HA1 if X2 (real) is not exactly X (hypothetical) yet from Table 4.11 genuine, 0.59, is higher than the hypothetical 0.05.

Taking the Choice: From the examination above real 0.59 > 0.05, implying that the distinction between the genuine and the hypothetical is critical, thusly liberation of the oil area meaningfully affects Nigerian Economy. Invalid theory is dismissed. This concurs with the consequence of the investigation on Table 4.7 (combined reactions for RQ 2) where a lot of the respondents, 1468 (76%) of the reactions either unequivocally concur or concur that liberation of oil area influence the Nigerian economy.

**Conversation of Discoveries Discoveries and Exploration Speculations**

The discoveries of the review demonstrated that in spite of the fact that liberation of the oil area is expected not to affect the economy, the genuine outcome show in any case. In Nigeria the case is different given that from the examination above genuine 0.59 > 0.05, implying that the distinction between the real and the hypothetical is huge, subsequently there is critical effect played by liberation in Families, Monetary, Firms, and

public area portions of the Nigerian economy. Again from Table 4.11 we notice that Family area with a mean of 1.31471 positions second on Table 4.11. As such, liberation of the oil area essentially influences Families in Nigeria.

#### Discoveries and the Exploration Goals/Questions

Research Question/objective 1: How much does liberation of oil area influences Families in Nigeria that additionally addresses the exploration objective 1 The impact on individual and family lives is impossible. issues were: Orientation expansion has 290(76%) joblessness has 328(85%) concurred reactions; vocations has 309 (80%) reactions.

Research Question/objective 2: How much does liberation of oil area affect Monetary area in Nigeria? From the discoveries the liberation of the oil area influences: cost of activity adversely, inflow from diaspora and unfamiliar direct venture finances reserve funds were likewise adversely impacted with 302 (78%); 286 (74%); 286 (74%); 306 (79) reactions insistences.

Research Question/objective 3: How much does liberation of oil area influences Firms area in Nigeria?, out of a sum of 386 members 330 (86%) reactions certifying it influence fixed and variable expense: 202 (52%) reactions said it impacted actual dispersion and strategies; 332 (86%) reactions were of the assessment that it influence conversion scale and loan cost. 316 (82%) reactions concurred that it influence simplicity of-carrying on with work; 290 (75%) reactions concurred that liberation influences request and supply of firms' items and administrations.

Research Question/objective 4: How much does liberation of the oil area influences the public area of the economy: out of 386 respondents, 380- close to 100% reactions concurred that liberation influence infrastructural); 'Liberation has engaged government to address managerial difficulties, for example, installment of common and community worker compensations' has 303 (78%) concurred reactions; 'Liberation system has guaranteed steadiness in administration' has 316(82%) confirmed reactions; 'Liberation empower government to deal with its commitments (brief compensation installment, tending to regulatory necessity) to the populace, has 326 (84%) reactions on the positive; and 'Liberation add to a decrease in true debasement in Nigerian public area' has 310 (80%) certifiable reactions.

Additionally, Junni et al., (2015); Gonzalez (2016); and Igbinovia (2014) have likewise set that liberation of the oil area has connection in decrease of true defilement, while Hillock, Wu, Corridor and Jefferson (2014) affirmed that liberation by and large effect public area of the economy with regards to spending plan and great administration.

## V. SUMMARY, CONCLUSION AND RECOMMENDATIONS

### 1. Introduction

This section reviews the impact of oil sector liberalization on the Nigerian economy. It is organized into four main parts: 5.1 Introduction, 5.2 Summary of Findings, 5.3 Conclusion, and 5.4 Recommendations for Further Research.

### 2. Summary of Findings

The study revealed that the liberalization of Nigeria's oil sector has both positive and negative effects on the economy. In the short term, liberalization has placed significant pressure on households and businesses. However, the long-term outlook suggests that the economy will benefit from these changes.

One of the primary economic benefits identified is the removal of the controversial fuel subsidy, which has been associated with official corruption and the misappropriation of trillions of naira from public funds over the years. On the negative side, the lack of functional refineries in Nigeria, largely due to poor maintenance and pervasive corruption, has hindered the potential gains of liberalization.

### 3. Conclusion

In conclusion, the liberalization of the oil sector has a profound impact on the Nigerian economy, particularly affecting households and firms, which are crucial areas requiring stable and efficient portfolio management. Although these impacts are significant, many of them can be mitigated with determined and effective strategies.

### 4. Recommendations

Based on the findings of this study on the impact of oil sector liberalization on the Nigerian economy, the following recommendations are proposed:

- The liberalization process, including the removal of the fuel subsidy, should be accompanied by transparent accountability measures to ensure that the funds saved are used prudently.
- The government should invest the savings from the subsidy removal into sustainable development projects that benefit the broader economy.

### 5. Suggestions for Further Studies

This study was conducted as a descriptive analysis of the effects of oil sector liberalization on the Nigerian economy. Further research could explore similar models in other countries to provide comparative insights. Additionally, future research could focus on different factors or specific areas not covered in this study to gain a more comprehensive understanding of the broader impacts of oil sector liberalization.

## REFERENCES

1. Aastveit K.A., Bjørnland H.C., & Gundersen T.S. (2022). The price responsiveness of shale producers: Evidence from Micro Data. CAMA Working Paper 70/2022.
2. Aastveit, K. A., Bjørnland, H. C., & Thorsrud, L. A. (2015). What drives oil prices? Emerging versus developed economies. *Journal of Applied Econometrics*, 30, 1013-1028. doi:10.1002/jae.2406
3. Abutu, O. P. (2014). Consequences of the January 2012 oil subsidy removal in Nigeria. *Journal of Business and Retail Management Research*, 8, 24-30. Retrieved from <http://www.jbrmr.com>
4. Adamu, M. A., Ajiinka, J. A., & Ikiensikimama, S. S. (2015). Evaluating the economic impact of fiscal provisions in the draft petroleum industry bill on offshore marginal oil field development. *International Journal of Science and Engineering Investigations*, 4(5), 39-46. Retrieved from [www.ijsei.com](http://www.ijsei.com)
5. Adangor, Z. (2016). Petroleum industry bill 2012 and the principle of vicarious liability of oil producing states and local government councils for sabotage of petroleum facilities: Resurrecting an old colonial policy in the Niger Delta region of Nigeria. *Journal of Law and Conflict Resolution*, 8(1), 1-14. doi:10.5897/JLCR2015.0225
6. Adekomaya, O., Jamiru, T., Sadiku, R., Huan, Z., & Sulaiman, M. (2016). Gas flaring and its impact on electricity generation in Nigeria. *Journal of Natural Gas Science and Engineering*, 29, 1-6. doi:10.1016/j.jngse.2015.12.042
7. Adelabu, N. S. (2012). The political economy of oil deregulation in Nigeria's fourth Adeniran, J. O., Yusuf, S. A., & Adeyemi, O. A. (2014). The impact of exchange rate fluctuation on the Nigerian economic growth: An empirical investigation. *International Journal of Academic Research in Business and Social Sciences*, 4, 224-231. Retrieved from [www.hrmars.com/index.php?page=abt%20ijarbss&CAT=1](http://www.hrmars.com/index.php?page=abt%20ijarbss&CAT=1)
8. Adesanya, S. A. (2014). Small and medium enterprises (SMEs) development in Nigeria: Nature, challenges and prospects. *International Journal of Management Sciences and Humanities*, 2(2), 80-90. Retrieved from [www.ijmsh.com](http://www.ijmsh.com)
9. Adinoff, B., Conley, R. R., Taylor, S. F., & Chezem, L. L. (2013). Protecting confidentiality in human research. *American Journal of Psychiatry*, 170, 466-470. doi:10.1176/appi.ajp.2012.12050595
10. Adu, C. A. (2016). Cashless policy and its effects on the Nigerian economy. *European Journal of Business, Economics and Accounting*, 4(2), 81-88. Retrieved from [www.idpublications.org](http://www.idpublications.org)
11. Agbede, M. O. (2013). The growth implication of oil price shock in Nigeria. *Journal of Emerging Trends in Economics and Management Science*, 4, 343-349. Retrieved from <http://www.jetems.scholarlinkresearch.com>
12. Ahmad, W. N., Rezaei, J., Tavasszy, L. A., & de Brito, M. P. (2016). Commitment to and Aizemberg, L., Kramer, H. H., Pessoa, A. A., & Uchoa, E. (2014). Formulations for a problem of petroleum transportation. *European Journal of Operational Research*, 237, 82-90. doi:10.1016/j.ejor.2014.01.036
13. Ajibo, K. I. (2015). Risk-based regulation: The future of Nigerian banking industry. *International Journal of Law and Management*, 57, 1-21. doi:10.1108/IJLMA-02-2014-0014
14. Akanle, O., Adebayo, K., & Adetayo, O. (2014). Fuel subsidy in Nigeria: Contexts of governance and social protest. *International Journal of Sociology and Social Policy*, 34, 88-106. doi:10.1108/IJSSP-01-2013-002
15. Akindynos, C., & Lekkos, I. (2020). Financialization and oil market volatility: The role of investor groups. *Journal of Empirical Finance*, 58, 1-19.
16. Akinwotu, S. A. (2014). A comparative study of the discursive strategies in the media interviews of participants in the January 2012 fuel subsidy removal crisis in Nigeria. *Journal of Arts and Humanities*, 3(7), 21-33. Retrieved from [www.theartsjournal.org/index.php/site/issue/view/21](http://www.theartsjournal.org/index.php/site/issue/view/21)
17. Alaba, O. C., & Agbalajobi, S. A. (2014). Evaluation of private refineries and depots in distribution of petroleum products in Nigeria. *International Journal of Engineering and Technology*, 4, 118-126. Retrieved from [www.psu.edu](http://www.psu.edu)
18. Alhajji, A. F. (2016). Long-term contracts, risk management, and oil stability. *Energy Economics*, 57, 117-124.
19. Alimi, R. S., & Fatukasi, B. (2014). The role of oil prices and real exchange rate on the output growth in Nigeria. *International Journal of Research Economic*, 3, 70-79. Retrieved from [www.researchgate.net/profile/R\\_Alimi/publication/265051311](http://www.researchgate.net/profile/R_Alimi/publication/265051311)
20. Ambituuni, A., Amezaga, J. M., & Werner, D. (2015). Risk assessment of petroleum product transportation by road: A framework for regulatory improvement. *Safety Science*, 79, 324-335. doi:10.1016/j.ssci.2015.06.022
21. Ambituuni, A., Amezaga, J., & Emeseh, E. (2014). Analysis of safety and environmental regulations for downstream petroleum industry operations in Nigeria: Problems and prospects. *Environmental Development*, 9, 43-60. doi:10.1016/j.envdev.2013.12.002
22. Ambulkar, S., Blackhurst, J. V., & Cantor, D. E. (2015). Supply chain risk mitigation competency: An individual-

- level knowledge- based perspective. *International Journal of Production Research*, 1-14. doi:10.1080/00207543.2015.1070 972
23. American Petroleum Institute. (2014). Energy: Understanding our oil supply chain. Retrieved from <http://www.api.org/>
24. Aminu, S. A. & Olayinka, K. A. (2014). Achieving petrol conservation through higher pump price in Nigeria: Evidence from the transport sector of Lagos State. *International Journal of Management Sciences and Humanities*, 2(2), 102-122. Retrieved from [www.ijmsh.com](http://www.ijmsh.com)
25. Aminu, S. A., & Olawore, O. P. (2014). Empirical investigation of challenges of distribution of premium motor spirit (PMS) in federal capital territory (FCT), Abuja and environs, Nigeria. *International Journal of Management Sciences and Humanities*, 2(2), 11-38. Retrieved from [www.ijmsh.com](http://www.ijmsh.com)
26. Aminu, S. A., Salau, T. J., & Pearse, O. E. (2013). Attracting more foreign direct investment (FDIs) to alleviate poverty in Nigeria. *International Journal of Management Sciences and Humanities*, 1, 65-79. Retrieved from [www.ijmsh.com](http://www.ijmsh.com)
27. Andersen, D. L., Luna-Reyes, L. F., Diker, V. G., Black, L., Rich, E., & Andersen, D. F. (2012). The disconfirmatory interview as a strategy for the assessment of system dynamics models. *System Dynamics Review*, 28, 255-275. doi:10.1002/sdr.1479 [www.apps.gsw.edu/atws/journal.htm](http://www.apps.gsw.edu/atws/journal.htm)
28. Ang, B. W., Choong, W. L., & Ng, T. S. (2015). Energy security: Definitions, dimensions and indexes. *Renewable and Sustainable Energy Reviews*, 42, 1077-1093. doi:10.1016/j.rser.2014.10.064
29. Anifowose, B., Lawler, D., Horst, D., & Chapman, L. (2014). Evaluating interdiction of oil pipelines at river crossings using Environmental Impact Assessments. *Area*, 46(1), 4-17. doi:10.1111/area.12065
30. Antwi, S. K., & Hamza, K. (2015). Qualitative and quantitative research paradigms in business research. *European Journal of Business and Management*, 7, 217-225. Retrieved from: <http://www.iiste.org>
31. Anyanwu, J. C., & Erhijakpor, A. E. (2014). Does oil wealth affect democracy in Africa? *African Development Review*, 26, 15-37. doi:10.1111/1467- 8268.12061
32. Arezki, R., & Nguyen, H. (2019). Oil prices and economic diversification: Policy implications for oil-dependent economies. *Energy Strategy Reviews*, 26, 100398.
33. Arjit, D., Sri Krishna, K., Angnappa, G., & Manoj, k. (2017). Sustainable maritime inventory routing problem with time window constraints. *Engineering Applications of Artificial Intelligence*, 61, 77-95. doi:10.1016/j.engappai.2017.02.0 12
34. Arouri, M. E. H., Lahiani, A., & Nguyen, D. K. (2020). Impact of natural disasters on energy prices: A comprehensive analysis. *Energy Economics*, 86, 104647.
35. Aziz, M. I., & Bakar, N. A. (2013). Oil price fluctuations and changing comparative advantage. *Sosyoekonomi*, 2, 107, 109-130, 310. Retrieved from <http://www.sosyoeconomijournal.org/journal.htm>
36. Bacon, R., Kojima, M., & Zhou, J. (2019). The Impact of Oil Prices on the Economy: A Meta- Analysis. World Bank Policy Research Working Paper No. 8776.
37. Balfaqih, H., Nopiah, Z. M., Saibani, N., & Al-Nory, M. T. (2016). Review of supply chain performance measurement systems: 1998-2015. *Computers in Industry*, 82,135-150.doi:10.1016/j.compind.2016.07.0 02
38. Barney, J. B. (2012). Purchasing, supply chain management and sustained competitive advantage: The relevance of resource-based theory. *Journal of Supply Chain Management*, 48(2), 3-6. doi:10.1111/j.1745-493X.2012.03265.X
39. Barrick, M. R., Thurgood, G. R., Smith, T. A., & Courtright, S. H. (2015). Collective organizational engagement: Linking motivational antecedents, strategic implementation, and firm performance. *Academy of Management Journal*, 58, 111- 135. doi:10.5465/amj.2013.0227
40. Barros-Bailey, M., & Saunders, J. (2012). Benchmarking the importance and use of labor market surveys by certified rehabilitation counselors. *Rehabilitation Counseling Bulletin*, 56, 160-171.doi:10.1177/00343552124
41. Becker, J. (2013). Examining relationships between hospital inpatient expectations and satisfaction for maximum medicare reimbursement (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses Database. (UMI No. 3601243)
42. Bernard, H. R. (2013). *Social research methods: Qualitative and quantitative approaches* (2nd ed.). Thousand Oaks, CA: Sage.
43. Beske, P., & Seuring, S. (2014). Putting sustainability into supply chain management. *Supply Chain Management: An International Journal*, 19, 322-331. doi.10.1108/SCM-12-2013-0432
44. Birt, L., Scott, S., Cavers, D., Campbell, C., & Walter, F. (2016). Member checking: A tool to enhance trustworthiness or merely a nod to validation? *Qualitative Health Research*, 26(13), 1802-1811. Retrieved from [www.qhr.sagepub.com](http://www.qhr.sagepub.com)
45. Blazquez, J., & Martins-Moreno, J. M. (2014). The rise of emerging markets and its impact on global energy security. *Modern Economy*, 5, 967-979. Retrieved from <http://dx.doi.org/10.4236/me.2014.59089>
46. Bloom, N., Floetotto, M., Jaimovich, N., Saporta-Eksten, I., & Terry, S. (2018, May). Really Uncertain Business Cycles. *Econometrica* (5).

47. Bölte, S. (2014). The power of words: Is qualitative research as important as quantitative research in the study of autism? *The International Journal of Research and Practice*, 18, 67-68. doi:10.1177/1362361313517367
48. Boussena, S., & Locatelli, C. (2019). The geopolitics of energy. In A. D. Ellabban, M. A. Abu-Rub, & A. Blaabjerg (Eds.), *Renewable Energy: Prospects for Implementation* (pp. 59-76). Elsevier.
49. Canales, J. I. (2015). Sources of selection in strategy making. *Journal of Management Studies*, 52(1), 1-31. doi:10.1111/joms.12101
50. Caniëls, M. C., Lenaerts, H. K., & Gelderman, C. J. (2015). Explaining the internet usage of SMEs: the impact of market orientation, behavioural norms, motivation and technology acceptance. *Internet Research*, 25, 358-377. doi:10.1108/IntR-12-2013-0266
51. Carter, N., Bryant-Lukosius, D., Dicenso, A., Blythe, J., & Alan, J. (2014). The use of triangulation in qualitative research. *Oncology Nursing Forum*, 41, 545-547. doi:10.1188/14.ONF.545-547
52. Charles, A., & Darné, O. (2014). Volatility persistence in crude oil markets. *Energy policy*, 65, 729-742. doi:10.1016/j.enpol.2013.10.042
53. Chigbu, U. S., Ubah, C. P., & Chigbu, E. E. (2016). Deregulation of the petroleum downstream sector and Nigerian economy: An econometric investigation. *International Journal of Business and Applied Social Science*, 2 (9), 16-27. Retrieved from [www.ijbassnet.com](http://www.ijbassnet.com)
54. Chigbu, U. S., Ubah, C. P., & Chigbu, E. E. (2016). Deregulation of the petroleum downstream sector and Nigerian economy: An econometric investigation. *International Journal of Business and Applied Social Science*, 2 (9), 16-27. Retrieved from [www.ijbassnet.com](http://www.ijbassnet.com)
55. Chilisa, B., & Tsheko, G. N. (2014). Mixed methods in indigenous research: Building relationships for sustainable intervention outcomes. *Journal of Mixed Methods Research*, 8, 222-233. doi:10.1177/1558689814527878
56. Chilisa, B., & Tsheko, G. N. (2014). Mixed methods in indigenous research: Building relationships for sustainable intervention outcomes. *Journal of Mixed Methods Research*, 8, 222-233. doi:10.1177/1558689814527878
57. Chung, H., Nam, K., & Ahn, Y. (2020). Evaluating energy source diversification for enhancing energy security: A case study of East Asia. *Energy Policy*, 139, 111348.
58. Clarke, V., & Braun, V. (2013). Teaching thematic analysis: Overcoming challenges and developing strategies for effective learning. *The Psychologist*, 26(2), 120-123. Retrieved from <http://www.bps.org.uk/>
59. Clarke, V., & Braun, V. (2013). Teaching thematic analysis: Overcoming challenges and developing strategies for effective learning. *The Psychologist*, 26(2), 120-123. Retrieved from <http://www.bps.org.uk/>
60. Colqan, J. D. (2014). Oil, domestic politics, and international conflict. *Energy Research and Social Sciences*, 1, 198-205. Retrieved from [www.elsevier.com/locate/erss](http://www.elsevier.com/locate/erss)
61. Conti, J., Holtberg, P., Diefenderfer, J., LaRose, A., Turnure, J. T., & Westfall, L. (2016). International Energy Outlook 2016 With Projections to 2040 (No. DOE/EIA--0484 (2016)). USDOE Energy Information Administration (EIA), Washington, DC (United States). Office of Energy Analysis. Retrieved from [www.osti.gov/servlets/purl/1296780](http://www.osti.gov/servlets/purl/1296780)
62. Cope, D. G. (2014). Methods and meanings: Credibility and trustworthiness of qualitative research. *Oncology Nursing Forum*, 41, 89-91. doi:10.1188/14.ONF.89-91
63. Cope, D. G. (2014). Methods and meanings: Credibility and trustworthiness of qualitative research. *Oncology Nursing Forum*, 41, 89-91. doi:10.1188/14.ONF.89-91
64. Cox, R. (2012). Teaching qualitative research to practitioner- researchers. *Theory into Practice*, 51, 129-139. doi:10.1080/00405841.2012.662868
65. Crook, T. R., & Esper, T. L. (2014). Do resources aid in supply chain functioning and management? Yes, but more (and more precise) research is needed. *Journal of Supply Chain Management*, 50(3), 94-97. doi:10.1111/jscm.12055
66. Cross, R., Rebele, R., & Grant, A. (2016). Collaborative overload. *Harvard Business Review*, 94, 74-79. Retrieved from [www.vedpuriswar.org/Reading/collaborative%20overload.pdf](http://www.vedpuriswar.org/Reading/collaborative%20overload.pdf)
67. David, A. C., Harrak, M. E., Mills, M., & Ocampus, L. (2014). Oil spill covers: Linkages in petroleum product pricing policies in West African countries. *The Journal of Developing Areas*, 48, 329-363. Retrieved from [www.search.blekko.com](http://www.search.blekko.com)
68. Department of Petroleum Resources (2016). Operations. Retrieved from <https://dpr.gov.ng/index>
69. Difulio, C. (2014). Oil, economic growth and strategic petroleum stocks. *Energy Strategy Reviews*, 30, 1- 11. doi:10.1016/j.esr.2014.10.004
70. Dike, S.A. (2014). Legislating security of supply of petroleum resources in Nigeria. Current practice, new direction and lessons from Brazil, Norway and the UK. (Doctoral dissertation, University of Aberdeen).
71. Doki, N. O. (2012). Redirecting removed subsidy funds in Nigeria: Reflections on the intervention strategies to sustainable development. *Journal of Emerging Trends in*

- Economic and Management Sciences, 5, 7-14. Retrieved from [www.jetems.scholalinksresearch.org](http://www.jetems.scholalinksresearch.org).
75. Doody, O., & Noonan, M. (2013). Preparing and conducting interviews to collect data. *Nurse Researcher*, 20, 5, 28-32. doi:10.7748/nr2013.05.20.5.28.e327
76. Dubey, R., & Gunasekaran, A. (2015). Supply chain talent: The missing link in supply chain strategy. *Industrial and Commercial Training*, 47, 257-264. doi:10.1108/ICT-11-2014-0073
77. Dulami, H. A. M. (2014). The collapse of crude oil prices: Cyclical evolution or market manipulation? *Economic Insight- Trends and Challenges*, 66, 89-96. Retrieved from [www.upg-bulletin-se.ro/archive\\_en.html](http://www.upg-bulletin-se.ro/archive_en.html)
78. Edo, S. E. (2013). Crude oil discovery and exploitation: The bane of manufacturing sector development in an oil-rich country, Nigeria. *OPEC Energy Review*, 37, 105-124. doi:10.1111/opec.12005
79. Enuoh, R. O., & Inyang, B. J. (2014). Effective management of Corporate Social Responsibility (CSR) for desired outcome: The Niger Delta issue in Nigeria. *International Journal of Business Administration*, 5(4), 32-38. doi:10.5430/ijba.v5n4p32
80. Esu, G. E. (2017). Assessing the resource curse question: A Case of crude oil production in Nigeria. *Journal of Economic Research*, 22(2), 153-213. Retrieved from [www.researchgate.net/publication/n319402144](http://www.researchgate.net/publication/n319402144)
81. Fathurrahman, F., Kat, B., & Soytaş, U. (2017). Simulating Indonesian fuel subsidy reform: A social accounting matrix analysis. *Annals of Operations Research*, 255, 591-615. doi:10.1007/s10479-015-1954-x
82. Fazli, S., Mavi, R. K., & Vosooghidizaji, M. (2015). Crude oil supply chain risk management with DEMATEL-ANP. *Operational Research*, 15, 453-480. doi:10.1007/s12351-015-0182-0
83. Fowowe, B. (2014). Modelling the oil price-exchange rate nexus for South Africa. *International Economics*, 140, 36-48. doi:10.1016/j.inteco.2014.06.002
84. Ginn, V. (2015). Which petroleum prices best explain retail fuel price changes?. *Midwestern Business and Economic Review*, (50), 1-10. doi:10.2139/ssrn.2434159
85. Giwa-Osagie, O., & Ehigiato, E. (2015). Financing options in the oil and gas sector in Nigeria. *Journal of Energy & Natural Resources Law*, 33(3), 218-240. doi:10.1080/02646811.2015.1043823
86. Gonzalez, A. (2016). Poverty, oil and corruption: The need for a quad-sector development partnership (QSDP) in Nigeria's Niger Delta.
87. *Development Policy Review*. 34, 509-538. doi:10.1111/dpr.12164
88. Handfield R. B., Cousins, P. D., Lawson, B., & Petersen, K. J. (2014). How can supply management really improve performance? A knowledge-based model of alignment capabilities. *Journal of Supply Chain Management*, 51(3), 3-17. doi:10.1111/jscm.12066
89. Harrison III, R. L. (2013). Using mixed methods designs in the journal of business research, 1990-2010. *Journal of Business Research*, 66, 2153-2162. doi:10.1016/j.jbusres.2012.01.006
90. Hickling, F. W. (2012). Understanding patients in multicultural settings: A personal reflection on ethnicity and culture in clinical practice. *Ethnicity & Health*, 17, 203-216. doi:10.1080/13557858.2012.655266
91. Higginbottom, G., Rivers, K., & Story, R. (2014). Health and social care needs of Somali refugees with visual impairment (VIP) living in the United Kingdom: A focused ethnography with Somali people with VIP, their caregivers, service providers, and members of the Horn of Africa Blind Society. *Journal of Transcultural Nursing*, 25, 192-201. doi:10.1177/1043659613515715
92. Hilde C. Bjørnland, Frode Martin Nordvik & Maximilian Rohrer, 2021. "Supply flexibility in the shale patch: Evidence from North Dakota," *Journal of Applied Econometrics*, John Wiley & Sons, Ltd., vol. 36(3), pages 273-292, April.
93. Hillock Jr., J. L., Wu, W., Hall, C.A., & Jefferson, M. (2014). Forecasting the limits to the availability and diversity of global conventional oil supply: Validation. *Energy*, 64, 130-163. Retrieved from [www.elsevier.com/locate/energy](http://www.elsevier.com/locate/energy)
94. Hitt, M. A., Xu, K., & Carnes, C. M. (2016). Resource based theory in operations management research. *Journal of Operations Management*, 41, 77-94. doi:10.1016/j.jom.2015.11.002
95. Hunt, S. D., & Davis, D. F. (2012). Grounding supply chain management in resource advantage theory: In defense of a resource based view of the firm. *Journal of Supply Chain Management*, 48(2), 14-20. doi:10.1111/j.1745-493X.2012.03266.x
96. Igbinovia, P. E. (2014). *Oil thefts and pipeline vandalization in Nigeria*. Ibadan, Nigeria: Safari Books Ltd
97. Ijaiya, H. (2014). Challenges of corporate social responsibility in the Niger Delta region of Nigeria. *Journal of Sustainable Development Law and Policy (The)*, 3, 60-71. Retrieved from [www.ogeesinstitute.edu.ng/journal](http://www.ogeesinstitute.edu.ng/journal)
98. Ingwe, R., Ukwayi, J. K., & Utam, E.U. (2014). Nigeria's relationship with the United Kingdom and its allies in light of oil theft in the Niger Delta and piracy in Gulf of Guinea. A geopolitical perspective. *The IUP Journal of International Relations*, 8, 24-41. Retrieved from [www.vbn.aau.dk/en/publishers/the-iup-journal-of-international-relations.html](http://www.vbn.aau.dk/en/publishers/the-iup-journal-of-international-relations.html)
99. Jaremski, M., & Mathy, G. (2017). Looking back on the age of checking in America, 1800-1960. *Munich Personal RePec Archive (MPRA)*. 1-37. Retrieved from <https://mpra.ub.uni-muenchen.de/id/eprint/>

100. Ji, Q., Geng, J. B., & Fan, Y. (2014). Separated influence of crude oil prices on regional natural gas import prices. *Energy Policy*, 70, 96-105. doi:10.1016/j.enpol.2014.03.019
101. Jiao, J. L., Han, K. Y., Wu, G., Li, L. L., & Wei, Y. M. (2014). The effect of an SPR on the oil price in China: A system dynamics approach. *Applied Energy*, 133, 363-373. Retrieved from [www.sciencedirect.com/science/article/pii/S0306261914007946](http://www.sciencedirect.com/science/article/pii/S0306261914007946)#articles
102. Johnson, B. (2014). Ethical issues in shadowing research. *Qualitative Research in Organizations and Management: An International Journal*, 9(1), 2140. doi:10.1108/QROM-09-2012-1099
103. Junni, P., Sarala, R. M., Tarba, S. Y., Liu, Y., & Cooper, C. L. (2015). Guest editors' introduction: The role of human resources and organizational factors in ambidexterity. *Human Resource Management*, 54, 1-28. doi:10.1002/hrm.21772
104. Ketokivi, M., & Choi, T. (2014). Renaissance of case research as a scientific method. *Journal of Operations Management*, 32, 232-240. doi:10.1016/j.jom.2014.03.001
105. Kilian, L., & Murphy, D. P. (2014). The role of inventories and speculative trading in the global market for crude oil. *Journal of Applied Econometrics*, 29(3), 454-478. doi:10.1002/jae.2322
106. Kisely, S. (2015). Can the next generation of clinician-scientists please step forward? *Australasian Psychiatry*, 23, 5-7. doi:10.1177/1039856214562123
107. Lan, J., Malik, A., Lenzen, M., McBain, D., & Kanemoto, K. (2016). A structural decomposition analysis of global energy footprints. *Applied Energy*, 163, 436-451. doi:10.1016/j.apenergy.2015.10.178
108. Laurila, J. K., Gatica-Perez, D., Aad, I., Bornet, O., Do, T. M. T., Dousse, O. ... & Miettinen, M. (2012). The mobile data challenge: Big data for mobile computing research. *Infoscience* (No. EPFL-CONF-192489). Retrieved from [www.infoscience.epfl.ch/rcord/192489](http://www.infoscience.epfl.ch/rcord/192489)
109. Lauring, J., & Klitmøller, A. (2015). Corporatelanguage-based communication avoidance in MNCs: A multi-sited ethnography approach. *Journal of World Business*, 50, 46-55. doi:10.1016/j.jwb.2014.01.005
110. Lee, C. Y., & Song, D. P. (2017). Ocean container transport in global supply chains: Overview and research opportunities. *Transportation Research Part B: Methodological*, 95, 442-474. doi:10.1016/j.trb.2016.05.001
111. Maniruzzaman, A. F. M., & Jasimuddin, S. M. (2016). Resource nationalism spectre hovering over the oil industry: The transnational corporate strategies to tackle resource nationalism risks. *Journal of Applied Business Research*, 32(2), 387-400. Retrieved from <http://eprints.port.ac.uk/id/eprint/20573>
112. Marbach, E. (2013). Towards a phenomenological analysis of fictional intentionality and reference. *International Journal of Philosophical Studies*, 21, 428-447. doi:10.1080/09672559.2013.801631
113. Marshall, C., & Rossman, G. (2016). *Designing qualitative research* (6th ed.). Thousand Oaks, CA: Sage.
114. Matamonasa-Bennett, A. (2015). "A disease of the outside people": Native American men's perceptions of intimate partner violence. *Psychology of Women Quarterly*, 39, 20-36. doi:10.1177/0361684314543783
115. Melikoglu, M. (2014). Shale gas: Analysis of its role in the global energy market. *Renewable and Sustainable Energy Reviews*, 37, 460-468. doi:10.1016/j.rser.2014.05.002
116. Mogaji, O. Y., Sotolu, A. O., Wilfred- Ekprikpo, P. C., & Green, B. M. (2018). The Effects of crude oil exploration on fish and fisheries of Nigerian aquatic ecosystems. In *The Political Ecology of Oil and Gas Activities in the Nigerian Aquatic Ecosystem*, 111-124. doi:10.1016/B978-0-12-809399-3.00008-2
117. Monday, J. U. (2015). Local content policy, human capital development and sustainable business performance in the Nigerian oil and gas industry. *Journal of Management and Sustainability*, 5(1), 75-83. doi:10.5539/jms.v5n1p75
118. Morali, O., & Searcy, C. (2013). A review of sustainable supply chain management practices in Canada. *Journal of Business Ethics*, 117, 635-658. doi:10.1007/s10551-012-1539-4
119. Morse, J. M., & Coulehan, J. (2015). Maintaining confidentiality in qualitative publications. *Quality Health Research*, 25, 151-152. doi:10.1177/1049732314563489
120. National Institute of Health (2014). Protecting human research participants. Retrieved from [www.nih.gov/](http://www.nih.gov/)
121. Navimipour, N. J., Rahmani, A. M., Navin, A. H., & Hosseinzadeh, M. (2015). Expert Cloud: A Cloud-based framework to share the knowledge and skills of human resources. *Computers in Human Behavior*, 46, 57-74. doi:10.1016/j.chb.2015.01.001
122. Neal, W. J., Neal, Z. P., VanDyke, E., & Kornbluh, M. (2015). Expediting the analysis of qualitative data in evaluation: A procedure for the rapid identification of themes from audio recordings (RITA). *American Journal of Evaluation*, 36, 118132. doi:10.1177/1098214014536601
123. Nicho, M., & Muamaar, S. (2016). Towards a taxonomy of challenges in an integrated IT governance framework implementation. *Journal of International Technology and Information Management*, 25(2), 1-33. Retrieved from <http://scholarworks.lib.csusb.edu/jitim/vol25/iss2/2>
124. Nigeria Extractive Industries Transparency Initiative (2013). Physical and process audit for the period 2009 to 2011. Appendix D: Fuel Subsidy. Available at [www.NEITI.com](http://www.NEITI.com)
125. Nigerian Maritime Administration and Safety Agency. (2017). Profile and services. Available at [www.nimasa.gov.ng](http://www.nimasa.gov.ng)

126. Nigerian National Petroleum Corporation. (2016). Profile / products. Retrieved from [www.nnpcgroup.com](http://www.nnpcgroup.com)
127. Noble, H., & Smith, J. (2014). Qualitative data analysis: A practical example. *Evidence Based Nursing*, 17(1), 2-3. doi:10.1136/eb-2013-101603
128. Nowiski, E., Brown, J., & Stepien, M. (2013). Children structured conceptualization of their beliefs on the causes of learning difficulties. *Journal of Mixed Method Research*, 8, 69-82. doi:10.1177/1558689813490834
129. Nqoasong, M. Z. (2014). How international oil and gas companies respond to local content policies in petroleum-producing developing countries: A narrative enquiry. *Energy Policy*, 73, 471 – 479. Retrieved from [www.elsevier.com/locate/energy](http://www.elsevier.com/locate/energy)
130. Ntabe, E. N., LeBel, L., Munson, A. D., & Santa-Eulalia, L. A. (2015). A systematic literature review of the supply chain operations reference (SCOR) model application with special attention to environmental issues. *International Journal of Production Economics*, 169, 310-332. doi:10.1016/j.ijpe.2015.08008
131. O'Lynn, C., & Krautscheid, L. (2011). Original Research: 'how should I touch you?': A qualitative study of attitudes on intimate touch in nursing care. *American Journal of Nursing*, 111, 24–31. doi:10.1097/10.1097/01.NAJ.000.0395237.83851.79
132. O'Reilly, M., & Parker, N. (2013). Unsatisfactory Saturation: A critical exploration of the notion of saturated sample sizes in qualitative research. *Qualitative Research*, 13, 190-197. doi:10.1177/1468794112446106
133. Obamuyi, T. M. (2013). Determinants of banks' profitability in a developing economy: Evidence from Nigeria. *Organizations and Markets in Emerging Economies*, 4(2), 97-111. Available at [www.cceol.com](http://www.cceol.com)
134. Obansa, S. A. J., Okoroafor, O. K. D., Aluko, O. O., & Millicent, E. (2013). Perceived relationship between exchange rate, interest rate and economic growth in Nigeria: 1970- 2010. *American Journal of Humanities and Social Sciences*: 1, 116-124. doi:10.11634/232907811604374
135. Odeh, A. M. (2011). Deregulation policy in the downstream oil and the Nigerian economy. *Journal of Social Science and Public Policy*, 3, 87-100. Retrieved at <http://www.cenrensipub.org>
136. OECD (Organisation for Economic Co- operation and Development). (2022). "Economic and Social Impacts and Policy Implications of the War in Ukraine." OECD Economic Outlook, Interim Report, Paris.
137. Ojide, M.C., Ojide, K.C., & Ogbodo, J.C. (2014). Export-led growth hypothesis in Nigeria. Application of ARDL model and co- integration analysis. *Global Journal of Emerging Economies*, 6, 5-13. doi:10.1177/10974910101351111 90
138. Okwanya, I., Moses, O., & Pristine, J. M. (2015). An Assessment of the impact of petroleum subsidy on consumer price index in Nigeria. *Global Journal of Interdisciplinary Social Sciences*, 4(1), 36-39. Retrieved from [www.gifre.org](http://www.gifre.org)
139. Oladepo, I. O. (2014). Evaluation of petroleum products marketing in a globalizing economy: Conceptual evidence from Nigeria. *British Journal of Marketing Studies*, 2 (2), 71-81. Retrieved from [www.eajournals.org](http://www.eajournals.org)
140. Olukoju, A. (2014). The challenges of sustainable development in Nigeria. *International Journal of Management Sciences and Humanities*, 2(2), 1-10. Retrieved from [www.ijmsh.com](http://www.ijmsh.com)
141. Onojake, M. C., Atako, N., & Osuji, L.C. (2013). The effect of the adulteration of premium motor spirit (PMS) on automatic engines. *Petroleum Science and Technology*, 31, 1-6. doi:10.1080/10916466.2010.5244 66
142. OPEC, 2022. Retrieved from [https://www.opec.org/opec\\_web/en/about\\_us/25.htm](https://www.opec.org/opec_web/en/about_us/25.htm)
143. OPEC. (n.d.). OPEC's Objectives. Retrieved from [https://www.opec.org/opec\\_web/en/about\\_us/25.htm](https://www.opec.org/opec_web/en/about_us/25.htm)
144. Organization of Petroleum Exporting Countries. (2016). Brief history. Retrieved from [www.opec.org/opec\\_web/en/about\\_us/125.htm](http://www.opec.org/opec_web/en/about_us/125.htm)
145. Oriakhi, D. E., & Iyoha, D. S. (2013). Oil price volatility and its consequence on the growth of the Nigerian economy: An Examination (1970-2010). *Asian Economic and Financial Review*, 3, 683-702. Retrieved from: <http://aessweb.com/journaldetail.php?id=5002>
146. Osagibovo, J. A. (2012). Developmental implications of Nigeria's oil wealth. *Journal of Research in National Development*, 10, 410-416. Retrieved from [www.transcampus.org/journals](http://www.transcampus.org/journals)
147. Osobase, A. O. & Bakare, A. T. (2014). The nexus between electricity generation, supply and manufacturing sector performance in Nigeria (1975- 2011). *International Journal of Management Sciences and Humanities*, 2(2), 123-139. Retrieved from [www.ijmsh.com](http://www.ijmsh.com)
148. Osoro, A., Muturi, W. M., & Ngugi, P. K. (2016). Determinant Affecting Performance of Supply Chain Systems in the Petroleum Industries in Kenya. *European Journal of Logistics Purchasing and Supply Chain Management*, 4(4), 446-3. Retrieved from [www.eajournals.org](http://www.eajournals.org)
149. Osuala, U. S. (2013). The sublimeness of sleaze in the NNPC in the fourth republic, 1999–2007: A historical conspectus. *Journal of Culture, Society and Development*, 2, 52-59. Retrieved from [www.iiste.org/journals/index.php/JCSD](http://www.iiste.org/journals/index.php/JCSD)
150. Otto, L. (2015). Maritime crime in Nigeria and waters beyond analyzing the period 2009-2013. *African Insight*. 45, 1529. Retrieved from <https://journals.co.za/content/afrins/45/IEJC185932>
151. Painter, D. S. (2014). Oil and geopolitics: The oil crises of the 1970s and the cold war. *Historical Social Research*, 39(4), 186-208. doi:10.12759/hsr.39.2014.4.186.2 08

152. Paulus, T. M., Lester, J. N., & Britt, V. G. (2013). Constructing hopes and fears around technology: A discourse analysis of introductory qualitative research texts. *Qualitative Inquiry*, 19, 639-651. doi:1077800413500929.
153. Paulus, T., Lester, J., & Dempster, P. (2013). Digital tools for qualitative research. L.A. Sage.
154. Peredaryenko, M. S., & Kraus, S. E. (2013). Calibrating the human instrument: Understanding the human experience in novice researcher. *The Qualitative Report*, 18(85), 1-17. Retrieved from [http://nova.edu/ssss/QR/QR18/pe\\_redaryenko85.pdf](http://nova.edu/ssss/QR/QR18/pe_redaryenko85.pdf)
155. Pereira de Carvalho, A., & Barbieri, J. C. (2012). Innovation and sustainability in the supply chain of a cosmetics company: A case study. *Journal of Technology Management & Innovation*, 7, 144-156. doi:10.4067/s0718-27242012000200012
156. Perkmann, M., & Schildt, H. (2015). Open data partnerships between firms and universities: The role of boundary organizations. *Research Policy*, 44, 1133-1143. doi:10.1016/j.respol.2014.12.006
157. Petty, N. J., Thomson, O. P., & Stew, G. (2012). Ready for a paradigm shift? Part 2: Introducing qualitative research methodologies and methods. *Manual Therapy*, 17, 378-384. doi:10.1016/j.math.2012.03.004
158. Preparedness for sustainable supply chain management in the oil and gas industry. *Journal of Environmental Management*, 180, 202-213. doi:10.1016/j.jenvman.2016.04.056
159. Punch, K. F. (2013). Introduction to social research: Quantitative and qualitative approaches. Thousand Oaks, CA: Sage. QSR International. (2014). NVivo 10. Retrieved from <http://www.qsrinternational.com/>
160. Rajaguru, R., & Matanda, M. J. (2013). Effects of inter-organizational compatibility on supply chain capabilities: Exploring the mediating role of inter-organizational information systems (IOIS) integration. *Industrial Marketing Management*, 42, 620-632. doi:10.1016/j.indmarman.2012.09.002
161. Rajhans, R. K., & Jain, A. (2015). Volatility spillover in foreign exchange markets. *Paradigm*, 19, 137-151. doi:10.1177/0971890715609846
162. Ravasi, D., & Canato, A. (2013). How do I know who you think you are? A review of research republic: Prospects and challenges. *Journal of Emerging Trends in Educational Research and Policy Studies*, 3, 193-198. Retrieved from [www.jeteraps.scholarlinkresearch.org](http://www.jeteraps.scholarlinkresearch.org)
163. Resnik, D. B., Miller, A. K., Kwok, R. K., Engel, L. S., & Sandler, D. P. (2015). Ethical issues in environmental health research related to public health emergencies: Reflections on the GuLF study. *Environmental Health Perspectives*, 123, A227- A231. doi:10.1289/ehp.1509889
164. Roberts-Holmes, G. (2011). Doing your early years research project: A step by step guide. (2nd ed.). Thousand Oaks, CA: Sage Publications, Inc.
165. Rowley, J. (2012). Conducting research interviews. *Management Research Review*, 35, 260-271. doi:10.1108/01409171211210154
166. Salisu, A. A., Isah, K. O., Oyewole, O.J., & Akanni, L. O. (2017). Modelling oil priceinflation nexus: The role of asymmetries. *Energy*, 125, 97106. doi:10.1016/j.energy.2017.02.128
167. Sancha, C., Longoni, A., & Giménez, C. (2015). Sustainable supplier development practices: Drivers and enablers in a global context. *Journal of Purchasing and Supply Management*, 21(2), 95-102. doi:10.1016/j.pursup.2014.12.004
168. Scrutton, R., & Beames, S. (2015). Measuring the unmeasurable: Upholding rigor in quantitative studies of personal and social development in outdoor adventure education. *Journal of Experiential Education*, 38, 8-25. doi:10.1177/1053825913514730
169. Shapiro, D. (2014). Doing business in Nigeria. *Journal of Corporate Accounting & Finance*, 25(6), 3-6. doi: 10.1002/jcaf.21981
170. Shuttleworth, C. C. (2014). The management accounting vocational fallacy. *South African Journal of Economic and Management Sciences*, 17, 336- 348. Retrieved from <http://www.scielo.org.za/scielo.php>
171. Siddiq, K., Agular, A., Grethe, H., Minor, P., & Walmsley, T. (2014). Impacts of removing fuel import subsidies in Nigeria on poverty. *Energy Policy*, 69, 165-178. Available at [www.elsevier.com/locate/enpol](http://www.elsevier.com/locate/enpol)
172. Siddiqui, A. W., & Verma, M. (2015). A bi-objective approach to routing and scheduling maritime transportation of crude oil. *Transportation Research Part D: Transport and Environment*, 37, 65-78. doi:10.1016/j.trd.2015.04.010
173. Siddiqui, N., & Fitzgerald, J. A. (2014). Elaborated integration of qualitative and quantitative perspectives in mixed methods research: A profound enquiry into the nursing practice environment. *International Journal of Multiple Research Approaches*, 8, 137- 147. doi:10.5172/mra.2014.8.2.137
174. Solaymani, S., & Kari, F. (2014). Impacts of energy subsidy reform on the Malaysian economy and transportation sector. *Energy Policy*, 70, 115-125. Retrieved from [www.elsevier.com/locate/enpol](http://www.elsevier.com/locate/enpol).
175. Srinivasan, S. (2014). Economic populism, partial deregulation of transport fuels and electoral outcomes in India. *Energy Policy*, 68, 465-475. doi:10.1016/j.enpol.2014.01.026
176. Stern, D. I. (2019). Understanding the dynamics of the crude oil market: An empirical analysis of volatility, speculation, and regulation. *Energy Economics*, 80, 370-383.

177. Strauss Center for International Security and Law. (2022). The U.S. Shale Revolution U.S. Energy Information Administration. (2021). Top World Oil Producers. Retrieved from <https://www.eia.gov/international/data/world/oil-producers>
178. U.S. Energy Information Administration. (2022). Top World Oil Producers. Retrieved from <https://www.eia.gov/international/data/world/oil-producers>
179. Veysel Ulusoy & Caner Ozdurak (2018). The Impact of Oil Price Volatility to Oil and Gas Company Stock Returns and Emerging Economies, International Journal of Energy Economics and Policy, Vol. 8 (1), 144-158 EJ EconJournals.
180. Vogel, G. (2020, September 23). Gulf Coast oil producers brace for another hurricane hit. EnergyWire.