

# International Institute of Social Studies

The logo for the International Institute of Social Studies, featuring the word "Erasmus" in a stylized, cursive script.

## **Rethinking the Emergence of Dutch Disease Narrative in Ghana Economy: A Necessity to Avoiding Oil Miracle Turn- ing to Debacle**

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***PHILOMENA NGISSAH***

GHANA

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Members of the Examining Committee:

Dr. Howard Nicholas (Supervisor)

Dr. Ellissaios Papyrakis (Reader)

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### ***Inquiries:***

#### **Postal address:**

Institute of Social Studies  
P.O. Box 29776  
2502 LT The Hague  
The Netherlands

#### **Location:**

Kortenaerkade 12  
2518 AX The Hague  
The Netherlands

Telephone: +31 70 426 0460

Fax: +31 70 426 0799

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## List of Acronyms

AAGDS	Accelerated Agricultural and Accountability Growth & Dev't Strategy
ABFA	Annual Budget Funding Amount
BoG	Bank of Ghana
CBOs	Community Based Organizations
DD	Dutch Disease
ECOWAS	Economic Commission of West African States
ECI	Economic Complexity Index
ERP	Economic Recovery Program
EU	European Union
FDI	Foreign Direct Investment
GHF	Ghana Heritage Fund
GSF	Ghana Stabilization Fund
GoG	Government of Ghana
GDP	Gross Domestic Product
IMF	International Monetary Fund
NES	National Export Strategy
NGOs	Non-Governmental Organizations
NTEs	Non-Traditional Exports
PRMA	Petroleum Revenue Management Act
PDD	Political Dutch Disease
PIAC	Public Interest and Accountability Committee
RER	Real Exchange Rate
RC	Resource Curse
SADA	Savannah Accelerated Development Authority
SSA	Sub-Saharan African
ToT	Terms of Trade
TTEs	Traditional Tradable Exports
UAE	United Arab Emirates
UN	United Nations
UNCTAD	United Nations Trade and Development
WB	World Bank

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## **Dedication**

I dedicate this paper to my family (my mom), Mr. William Dokyi Asare and Mr. Elvis Otoo.



## Abstract

The debate on why some countries that are blessed with mammoth natural resources such as gold, bauxite, diamond, and oil for example to have the tendency of performing woefully in their economic growth has been ongoing for decades. However, the most recent discovery of oil and natural gas in some countries in Africa including Ghana has intensified the debate around the Resource Curse thesis. As a result, there have been concerns about Ghana not becoming a victim of Resource Curse (RC) like Nigeria, Serial Leone and other resources abundant African countries that regardless of the fact that natural resources exploitation is not an alien phenomenon in Ghana. However, the competing debate on whether Ghana is already suffering, not suffering or can escape the Resource Curse make is imperative to examine the economic situation pre and post oil discovery to ascertain the possibility of Ghana not falling to victim to RC. We are asked two questions to understand the extent the variables of Resource Curse from the structuralist and institutionalist economics have effects on the Ghana economy at the advent of oil discovery in commercial quantity in Ghana and how can Ghana economy avoid becoming a victim of Resource Curse?. The findings revealed that the variables that structural economists argued that will cause Dutch Disease has not yet prevailed in Ghana, and although, the volatility of Terms of Trade, price of commodities, and Real Exchange Rate had impact on the economic growth of Ghana but did not find any correlation with hindrances in the export diversification. The study however argued that the panacea to the effect of these variables on the economy growth of Ghana is intertwined with policy response of Ghana to mitigate the effect. In conclusion, we argued that the oil discovery come at a time that Ghana seems to be better equipped, both with tools and historical know-how, to avoid past mistakes. This is something the neighbouring countries such as Nigeria and Serial Leone did not have when diamond and oil were discovered in the countries.

## Relevance to Development Studies

The recent discovery of oil in Ghana geared up numerous discussions about the country falling into the resource curse syndrome. The macroeconomic studies of this analysis is to access whether Ghana can indeed be argued be suffering from the resource curse and if so what can be argued to be the major causes of this?

Similar studies in the past have discussed the benefits of the oil to the country and its impact on economic growth. However, those studies used either the structuralist or new institutionalist approach to access these impacts. The author believes that variables from both school of thought has be used at the same time to see Ghana can be argued to be suffering from the resource curse. This will enable a better poising of the country in its structures and institutions.

## Keywords

*Resource curse, Dutch Disease, Ghana, Structuralist, Institutional-ist, Term of Trade, Volatility, Institutions, Real Exchange Rate, Oil Discovery, Export*



# Chapter 1: Introduction

## Study Background

The most recent discovery of oil and natural gas in some countries in Africa has resuscitated the global interests in the continent's economic importance. Without a doubt, Ghana is not excluded from the oil wealth jackpot after an enormous quantity of crude oil was found in 2007 (Gary et al., 2009; Obeng-Odoom, 2012; Panford, 2014). While the discovery of oil offers some fiscal space and at the same time providing the resource and prospect to deal with some structural limitation to investment development (CEPA, 2010). The debate on why some countries that are blessed with mammoth natural resources such as gold, bauxite, diamond, and oil for example to have the tendency of performing woefully in their economic growth has been ongoing for decades. In particular, when they are compared with countries that are less endowed with natural resources. [Frynas and Paulo, 2007; Sachs and Warner, 1995; Acemoglu et al., 2002; Sachs and Warner, 2001]. Researchers in the fields of international development, political science, and economics have been exploring the reasons why countries, for example, Angola and Nigeria among others with vast natural oil and gas reserves continue to experience pitiable economic performance. Apart from the classic examples of Botswana and Norway and a few countries, which are rich in diamond and oil respectively, the literature is very clear about the slow economic performance in various resource-endowed countries (Van der Ploeg, 2011; Sachs and Warner, 1995). As a result, there have been concerns about Ghana not becoming a victim of resource curse like Nigeria and Serial Leone regardless of the fact that natural resources exploitation is not an alien phenomenon in Ghana. For instance, for more than a century gold mining in Ghana has been taking place, and yet corruption and poverty coupled with the slowdown in the non-oil sector remain the major development obstacles.

The debate around the notion that resources can also be an economic curse rather than a blessing first emerges in the 1950s and 1960s about the financial difficulties of middle and low-income countries (Ross, 1999). Resource Curse (RC) as a concept was first propounded in 1993 by Richard Auty to explain how minerals resources rich countries were unable to utilize the wealth accrued from abundant mineral resources in their countries for the benefit of their economies. Most especially how, counter-intuitively, the resource-rich countries had poorer economic growth in comparison to countries lacking an abundance of natural resources. A plethora of studies have now assessed and evaluated the effects of resource riches on an extensive variety of economic consequences, and presented various accounts for why, and how, when a resource curse is likely to transpire (Venables, 2016; Frankel, 2012).

In fact, many observers have compared the RC to the complications lottery winners' encounters by struggling to manage the multifaceted side effects of new-found wealth (CGD, 2015). Early research, most notably Sachs and Warner (1995, 1999, and 2001) mostly pointed to macroeconomic transmission mechanisms, to be more precise the Dutch Disease, as the foremost mechanism responsible for the adverse effects of resource plenty on growth. Notable studies

(Robinson et al., 2006; Mehlum et al., 2006; Stevens and Dietsche, 2008; and Kolstad and Wiig, 2009) that follow Sachs and Warner have focused more on the political economy models of the RC. They contend that the RC is not necessarily about the DD and resource abundance, but the creation of economic rents through the exploitation of natural resources.

This paper will look at the impact of the oil discovery on the economic growth of Ghana, and what this development means to the sectors that drive the economy of Ghana before the emergence of oil. Analyzing the Ghana oil discovery impact on the economic growth, the structuralist and institutional economics school of thought are adopted to engage Ghana's situation critically and to determine the circumstances that Ghanaian economy can avoid falling victim of RC. The principal aim of this study is to search for different ways and policies that can be useful in promoting the non-oil sector to immune the economy from the adverse impact of RC because of the discovery of oil. This was done through collection of secondary data such as articles from reputable academic journals, international organization reports (WB, IMF, UN etc.), GoG reports both published and unpublished

However, this paper is organized into five different chapters with the first chapter covering the statement of the problem, context, objectives and research questions, justification and rationale for the study, scope and limitation for the study, and the method of data collection. In the second chapter, the focus is the literature review and the theoretical perspective that were embedded in the RC narrative from both the structuralist economics and Institutional economics line of argument. The study engage in the discussion around the importance of quality institutional framework to effectively manage the resource rent from the largesse of oil revenue which is absent in most developing countries with natural resource abundance as the primary factor responsible for the emergence of RC. Even though, the DD, volatility in term of trades and commodities prices as argued by the structuralist economics school of thought cannot be overlooked, the empirical evidence in the literature in support of the institutional economics is overwhelming. Chapter three help set the foundation for the data analysis in chapter four, in this chapter the structure of Ghana economy export is adequately dealt with to identify the drivers of economy growth before the discovery of oil as well as government policy in regards to adjustment in pre and post oil discovery. In chapter four, identify variables that best explains the perspective of both structuralist and institutional economists are used to empirically test whether Ghana is indeed suffering from a resource curse as well as identifying which of the two approaches between structuralists and institutionalist provides the more convincing explanation of RC. In chapter five, the research questions are revisited and deduced from the chapter four the significant findings that address the central research question. The chapter also draw conclusion with suggestion towards the area of future research and policy recommendation. Nonetheless, let move forward to the statement of problem

## **Statement of Problem**

Before the discovery of oil, agriculture and a minor manufacturing base anchored the economy of Ghana. The assumption of many was that the oil would boost economic growth, however, for the country to profit from the oil, profes-

sionals and experts have called for the adoption of an economic model of development that is capable of averting the RC from affecting the country (Agyemang, December 2016). It was believed that Ghana would escape the curse that had prevented countries like Angola, Nigeria, and Venezuela from the maximizing benefits of the oil to develop and improve the standard of living of their citizens. Even at that, there are those that believe Ghana is not under the threat of Dutch disease since Ghana is not an industry-led economy but an agrarian one (Dartey-Baah et al., 2012: 197). More so, Ghana's currency has not witnessed any real appreciation (Nchor et al., 2015:2040).

Others believe that Ghana stands the chance of escaping the resource curse syndrome due to its strong democratic institutions and governance practices [Gyimah-Boadi&Prempeh, 2012; Okpanachi, & Andrews, 2012). Besides, there are those that believe that the signs of the various component of RC have been persistence for years even before the emergence of oil. This was as a result of massive foreign aid inflows to Ghana that accompanied the 1983 reforms which had some RC strands effect, for example the DD (Sanusi, 2012:1) and if Ghana cannot deal with it, then the tendency of aggravating in the wake of oil discovery is unavoidable (News Ghana, 2012). Nevertheless, before one can categorically say that the discovery of oil is responsible for the decline in non-oil sector performance and if this decline is because of RC. There is a need to put to the test if the drop in the performance of the non-oil sector is not connected to fall in global price of commodities and the terms of trade effects as argued by the structural economics or the lack of quality institutions and policy as well as corruption as suggested by the institutionalist economists. Sequel to the above-competing hypothesis, this study attempt to first identify the impact of oil on the economic growth of Ghana before we can ascertain whether Ghana is already witnessing RC due to the oil discovery and explore the possible way forward to avoid the resource curse syndrome in Ghana.

## **Rationale and Justification**

The concerns of DD have been topics of substantial research, particularly concerning the agricultural production upon which numerous developing countries economy hinge on. On the contrary, there are those that maintained that the assumption of the DD on the economic growth is since largely unproven DD does not appear to explain much of the negative growth effect of resources once other mechanisms are controlled. This school of thought argued that political economy mechanisms to a large extent account for the adverse effect of resources on growth.

However, numerous studies revealed that the damaging effect of resources is subjected to the level of institutions of democracy, the rule of law and accountability (Damania and Bulte, 2003; Mehlum et al., 2006; Collier and Goderis, 2007). They argued that Rentier activities tend to occur when a resource-rich country earns large incomes to a level where citizens are subjected to lower taxes (Ross, 2001, Rosser, 2007: Ayelazuno, 2014). For Ross, "rentier activities have the potential to reduce the ability of citizens to effectively demand accountability from their governments because of the low taxation regime often put in place" (Ross, 2001: 332). Ross maintained that the consequences of the lower taxes are that citizens will be less concern about demanding accountability from their gov-

ernment, which could lead to the creation of political corruption, abuse of human rights, and incentives for authoritarian regimes, for example, Angola and Equatorial Guinea. Be that as it may, Al-Sabah, (1988) argued that, the DD is not unique to oil and gas exporting countries alone. The 1960s boom in technologically advanced parts of Japan's manufacturing sector had unpleasant effects on the less vibrant tradable sectors, which include agriculture. Also, the Swiss Franc witness a real appreciation as a result of the 1970s boom in the export of Swiss bonds and money, this, in turn, hurt traditional Swiss exports and export competing for industries (Bature, 2013:7)

Against the backdrop of the competing analysis of which of the models of the RC thesis is responsible for the poor economic performance of oil-rich countries and the trajectory of those that are suffering from the resource curse phenomenon. One wonders what the future direction of Ghana with its new oil wealth would look like. What is apparent, and possibly disturbing, is the fact that the curse occurrence is to some degree is common across the African continent. What is uncertain, nevertheless, is whether Ghana is likely to escape or experience the curse. To erase the uncertainty, there is a need to conduct a study that will apply all the components of resource curse thesis to analyze the situation in Ghana.

## **Study Objective and Research Questions**

The main Objective of this study is to examine the current economic situation in Ghana and determine the prospect of Ghana failing into any of the RC model. The study looks beyond the dominant models of early warning of Dutch disease in Ghana but rather put all the models of resource curse mechanism into the test to come up with comprehensive narratives that will help understand how best Ghana can escape resource curse that has bewilder fellow resources-rich African countries, most especially Nigeria. This is done through critical assessment of the impact of oil on Ghana economy growth

### **Main Question**

- Can Ghana be argued to be suffering from Resource Curse?

### ***Sub Questions***

- To what extent has the variables of Resource Curse have effects on the Ghanaian economy at the advent of oil discovery in commercial quantity in Ghana?
- How can Ghana economy avoid becoming a victim of Resource Curse?

## **Methodology**

The feasibility of applying existing data for the major study is becoming more dominant (Smith, 2008; Doolan & Froelicher, 2009; Creswell, 2009). Therefore, this research relies solely on the use of secondary data. This is because the research problem boasts of the vast amount of data that has already been collected

and archived by researchers all over the world. Moreover, making use of existing data offers a practical option for studies with limited resources and time (Creswell, 2009:56). Besides, secondary data analysis is considered an empirical exercise like that of primary data analysis since they both make use of the same research principles, which produce valid and credible findings (Doolan & Froelicher, 2009:206).

In the process of exploring text that was pre-produced, planning is the first step to be taken as highlighted by O'Leary (2010). The planning includes but not limited to establishing a list of texts that are relevant, identify the method or ways to access them as well as how to deal with biases and to be aware of the credibility and background of the authors. Most importantly, to be aware of what exactly to look for in text and any ethical concerns that might be intrinsic in the study (O'Leary, 2010:222). Mostly, O'Leary suggestions in dealing with secondary data were well thought-out in carrying out this study. I made use of a variety of search engines to find relevant data closely related to the research questions and the topic bearing in mind the authenticity and the credibility and authenticity of the source of text.

The secondary data explorations were dependent on non-published and published materials originating from journal articles, official reports by GoG, World Bank, IMF, magazines, newspapers, and academic books. Searches for journal articles, books, and newspaper articles will do through keywords such as Dutch Disease, Resource Curse, Africa Oil Curse, Ghana Oil was used on Google, Google Scholar, ISS Library, and other search engines and respectable journals such as Science Direct and JSTOR. These groupings were adequate to trim down all data collected on how Ghana can avoid the Oil miracle turning into a debacle. All secondary data selected for the specific analysis of Ghana situation were limited to the year 2007 to date because oil was discovered in 2007 while the documents used for literature review has no years of publication limitation,

In order to answer the research questions of this study the first step was to engage in literature review to identify the structuralist and new institutional economics variables that best explains the RC thesis. The identified variables fall into two categories, the political and the economic effect of RC. Variables such as DD, Terms of Trade, volatility in the Real Exchange Rate and Commodity prices falls under the economic effect while quality of institutions and policies, democracy and corruption falls under the political effect. Having identifies the variables, data on pre-oil discovery were gathered from various credible sources both from Ghana government and the international institutions to understand the structure of Ghana export economic and the drivers of the economy before oil discovery. After having a clear understanding of how Ghanaian economy performed pre-oil era and if there were traces of component of RC before oil discovery, it was easy to make sense of the variables identified in chapter 2 that are used in analyzing whether Ghana have the chance to fall into RC in chapter 4 of the study.

### ***Scope and Limitation of Study***

The scope of the research is to identify the impact of the discovery of oil in Ghana on the economy as well as proposing possible solutions to avoid the resource curse syndrome in Ghana. In spite of best of efforts to minimize all limitations that might creep into the study in the course of this research, there were

certain envisage constraints within which the research was completed. The research was conducted with a strict reliance on secondary data and majority of statistical data to ascertain the impact of an oil discovery on Ghana economy (manufacturing and agriculture) are mostly from government sources. Therefore, the inability of the researcher to conduct a field study to discuss with stakeholders from both the manufacturing and agricultural sector in Ghana is a limitation that hinders the researcher ability to double check the veracity of data collected from government sources. To deal with this limitation, the researcher, consulted with independent studies (International NGOs and UN bodies) that have conducted field studies to complement information gathered from government data of the impact of an oil discovery on Ghana economy. It is difficult for the research to come up with a growth model so that we can see if oil is damaging growth in Ghana due to lack of data and insufficient period to conduct the study

## **Conclusion**

The chapter emphasis is on the need to look the competing assumptions that explains when and how Ghana can escape or fall victim to RC that has ravaged the economy of several countries in the Africa continent. As discussed in this chapter the need to examine the current situation of Ghana is imperative for one to be able to make a definite comment about RC effect on Ghana economy.



## Chapter 2

# THE STRUCTURALIST AND INSTITUTIONAL ECONOMICS PERSPECTIVES OF RESOURCE CURSE THESIS

### Introduction

The first part of this chapter will look at the Prebisch and the structuralist school that described the major reasons for resources abundant countries in the third world not reaching their potentials as consequences of deteriorating terms of trade and global commodities price shock as well as the DD phenomenon. While the second part of the chapter look at the new institutional economics school of thought that place importance not only on the role of institutions but also on the quality of the institutions and policies governing the management of resources in the resource abundant countries as a panacea to the resource curse problem. In fact, the two perceptive frequently overlaps as both emphasized on need for structural changes that will empower institutions to facilitate distribution across both productive sectors and social groups. The next section is the discussion of the structural economics understanding of the resource curse, the solution and the likely challenges to face in an attempt to avoid falling into RC.

### Structuralist Economics Perspective on Resource Curse

#### *Dutch Diseases*

'Dutch disease' (DD) is one of the obvious crypto-grams of the resource curse thesis that have saturated the discourse among scholars. It is a term economist use to address circumstances whereby regardless of the abundance of natural resources of a country, yet its manufacturing sector begins to witness the decline, which in turn leads the underdevelopment of the (Ross, 2004). The concept of DD was invented in 1976 by the Economist to describe the undesirable outcome of North Sea petroleum on Dutch industrial output and implies the effects of a hard currency inflows associated with increasing resource exports causing an appreciation of the real exchange rate (Pegg 2010; Hjort 2006; Larsen, 2005). The DD phenomenon created unemployment through a massive movement of workers from the manufacturing sector to the booming gas sector for higher pay. This problem has occurred in so many countries of the world with different perspectives or trends leading to various difficulties. For instance, petroleum-exporting countries fell into such situation especially with the occurrence of 1973 as well as the 1979-1980 petroleum boom. Many countries were subjected to the conundrum of managing the affluence of the resources. The concentration of economic activities on a single sector can only cause more hardship and take a country several years backwards. The government and leaders under excessive wealth and riches loose bearing as a result of such sudden financial power and end up miscalculating ways to spend such accumulated wealth (Bature, 2013:6).

However, DD brings to the fore the need to devise strategies and policies for managing the oil industry in Ghana (Agyemang, 2016) due to the high expectations about the incentive that the exploitation of oil might give for the rest of the economy as Ghana enters the oil and gas era. The DD phenomenon has come with the fretfulness that the discovery of oil, as well as increasing foreign aid in Ghana, may endanger macroeconomic stability and growth. Dominating these concerns is the trepidation effect of DD will hinder Ghana non-oil sector.

### ***Terms of Trade and Real Exchange Rate Volatility***

One of the first relevant explanations of the resource curse can be traced to the 1950s structuralist thesis that focused on the deterioration in Terms of Trade (TOT) between primary and manufactured goods (Prebisch, 1950), and the unpredictability prices of primary product or the inadequate connexions between the natural-resource sector and the rest of the economy (Hirschman, 1958). To put it in simple terms, the premise of the structuralist school argument was that the prices of agricultural and mineral products would, in the end, experienced a descending curve in comparison to the manufactures and other products prices.

According to Frankel (2005), the theoretical rationale for the structuralist school of thought was that the demand for primary products globally is inelastic in regards to world income. The implication of this is that, for every single percent increase in income, the demand for raw materials increases by less than one percent. Largely, what Prebisch and the structuralists inferred from the theory they propounded was that, as a matter of policy the developing countries ought to;

“discourage international trade with tariff and non-tariff barriers, to allow their domestic manufacturing sector to develop behind protective walls, rather than to exploit their traditional comparative advantage in natural resources as the classic theories of free trade would have it” (Frankel, 2010:5)

Terms of Trade (TOT) can simply be defined as the “ratio of export prices to import prices” (Reinsdorf, 2009:1) or described as the relative imports price about the price of exports (Obstfeld & Rogoff, 1996:199). The interpretation of the definitions highlighted above implies the quantity of imports goods that any given economy can procure per unit of property to its exports. Available evidence suggests that if a country TOT witness an improvement, the country will benefit by having a stronger purchasing power to purchase more imports for any specified level of exports. While the exchange rate tends to influence TOT because an increase in the value of a nation currency will cause the prices of its domestic import to be lesser even though the prices of its domestic exports commodities might not be affected directly (Reinsdorf, 2009).

Bleaney and Greenaway (2001:491) argued that the instability of TOT and investment by real exchange rate (RER) hurt growth. They come to this conclusion by using data from 14 sub-Sahara African (SSA) countries that rely mainly on the exportation of primary commodities to investigate the consequence of TOT and RER volatility on growth and investment. For Bleaney and Greenaway, both the investment and growth witness increase at the improvement of TOT as well as eliminating the overvaluation of RER (Bleaney and Greenaway, 2001: 492-493).

However, Easterly et al. (1993) demonstrate in their work that, to a large extent the disparity in the economic growth of various countries is closely connected to the variation in the growth of TOT. In fact, TOT shocks are responsible for more than half of the output fluctuations in Low-Income Countries (Schmitt-Grohé, & Uribe, 2015; Kose and Riezman, 2001). This was also in line with Aghion et al. (2009) and Blattman et al. (2007) suggestion through their findings that there is a tendency for countries experiencing more volatile commodity prices to grow more slowly than the countries that are experiencing relatively stable price movements. In the next section, we shall examine the impact of prices on growth in details

### ***Commodity Price Shock***

Commodity price shocks are an essential form of external shock and are one of the predominant obstacles to economic growth in SSA (Addison et al., 2016:47). The prices of commodities are famous for being unstable, and it has been suggested that in particular, the prices of natural resources have been fundamentally disadvantageous to growth (Blattman et al., 2007; Hausmann and Rigobon, 2003). Indeed, the IMF and World Bank, even the UNCTAD have stated clearly in different studies that the influence of commodity prices on the incidence of poverty and economic growth in Low-Income Countries is a vital one (Dehn, 2000; Fabrizio, 2012; Cavalcanti et al., 2015). Just like Ghana, the majority of developing countries are predominantly an exporter of a single or few commodities to make up more than half of their income (Cavalcanti et al., 2015:2). Therefore, any significant price shocks can have a devastating impact on the incomes of individuals and as a result threaten the well-being of the vast majority of the country population. Ghana is a primary commodity driven economy. Hence, the structuralist point of view is germane to the understanding of the impact of oil discovery on Ghana economy because just like every other commodity, oil is also subjected to the global market price, which is out of hand of a developing country like Ghana.

Even though, there have been improvements regarding economic growth over the decades in Ghana and some SSA countries that rely mainly on primary commodities as their primary source of income as suggested by Anderson and Bruckner (2012). Primarily, the SSA growth has been slow because the mix of these commodities differs from country to country and some products are essential to certain countries than others (Addison et al., 2016:48). For that reason, for price shock not to have a devastating effect on the economy depends on how the government respond to the commodity price shocks that is capable of aggravating the debt problems, which is one of the major components of low rates of economic growth. Many governments in the late 1970s, for instance responded to commodity price booms through a sharp expansion of public expenditure for investment programs that are import-intensive but were forced to abandoned the programs or run into debt by borrowing to finance the programs when there is a steep decline in commodities prices (Kilian, 2014; Baumeister and Kilian, 2014). The structuralist thought will help us to evaluate the response of Ghana government to the commodity price shock in the past and the most recent years. It is essential to investigate how the Ghana government handled the commodity price booms that the country has witnessed, and if the government response follows the argument of the structuralist economics as articulated earlier in this study.

However, a plethora of studies postulates that the windfalls from commodity price shocks do not necessarily translate into sustainable income increase. This is because windfall profits linked with booms have a propensity to be consumed to a certain extent than to be invested while slumps may compel farmers to disinvest (Collier and Gunning, 1999; Dehn, 2000; Giordani et al., 2014). It is understood that price shock can be harmful and positive. However, positive shocks do not offset negative ones partly because adverse shocks have irreversible effects (Collier and Goderis, 2009; Varangis et al., 2004). While positive shock on commodity prices leads to increased foreign exchange earnings, which may result in an unwarranted appreciation of the RER. This makes other tradable sectors to be less competitive in global markets and, in due course, can lead to a decline in their production, known as the DD. For Collier and Goderis (2012), commodity booms in the short run have positive effects on output; on the other hand, the effect on output depends on the nature of commodity and the governance quality in the long term.

### ***Volatility in Real Exchange Rate and Export Diversification***

It was the believed of the international community and various governments of low-income countries that export diversification is the best way to solve the problem of global commodity price shock. Export diversification entails the introduction of new commodities as well as adding value to the existing ones in order penetrate new markets for exports (Obeng, 2017:2). Therefore, the necessity for export diversification has turn out to be more germane now than before, most especially in the wake of the recent fall in global prices of most essential commodities, which has overturned the macroeconomic advantages achieved over the years by the vast majority of countries that are dependent on commodities for exports earnings (IMF, 2015; Agur, 2016 ). However, several studies (Tadesse & Shukralla, 2011; Arawomo et al., 2014; Kazandjian et al., 2016; Kamuganga, 2012; Iwamoto & Nabeshima, 2012) have shown clearly that for example, exchange rate, RER volatility, and TOT among others are key factors to exports diversification. There have been debates among various scholars that the volatility in the RER has significant effect on the export diversification. While there are those that argued that the volatility hindered exports diversification (Goya, 2014; Hericourt and Poncet, 2013; Kamuganga, 2012), there are those (Agosin et al., 2009, Obeng, 2015) that maintained that the volatility in RER is not a given that export diversification of a country will suffer. The implication of the effect that the volatility of RER will have on the diversification of export in Ghana simply means that exporters will be very cautious to invest into exporting their produces because the volatility makes investment very risky as they become uncertain of the profits that can be made in the exports. This might cause them to divert a significant portion of their produce to the domestic market. It is imperative to put this variable of the structuralist economics argument to test in Ghana; of course, will be analyzed in Chapter 4 of this study.

### ***Relevance of Structuralist Economist School of Thought***

The structuralist economics theory focus is on the fact that economic development depends on various distinctive structures, which generally for developing countries, impose restrictions on growth. In fact, it is only in when there

are changes in the productive structure of the economy that development can occur most especially when such changes follow the path that favored the modern sectors such as industrialized and technology-intensive (Missio & Oreiro, 2015: 247). The concept of an economic structure refers to the composition of productive activities associated with some influences, such as the specialization pattern of international trade. Others include the technological capacities of the economy such as the labor force educational level, nature and development basis of institutions, the property structure of the production factors. In addition, the level of development and restrictions under which certain markets operate (the lack of specific segments of the financial market or the existence of a significant unemployment rate, for instance), among others (Ocampo et al., 2009).

For structural economics, there is a need to take into account, on the one hand, structural features of developing economies in analyzing the economic development process and, on the other hand, the role of the government in making sure that fundamental changes occur in developing countries. The essential originality of the approach is that it regards the present structural variation among developed and developing countries to be endogenous to the structure of endowment. With the economy's structure of factor endowment—defined as the relative composition of natural resources, labor, human capital and physical capital—being given at each stage of development and different from one stage to another, the optimal industrial structure will vary at various development stages. Therefore, to transit from the one stage of development to another, it is imperative for industrial upgrading to occur so that it can correspond with the improvement in the soft and hard infrastructure (Lin & Treichel, 2011:218).

Although the structuralist development economist differed from the neo-classical because their methods are different, rather than engaging in the formulation of hypothetical-deductive growth models, it uses the historical-deductive method to understand economic systems and economic development. Therefore, it views economic development as a complicated process of structural change that is historically translated as “industrialization”. This implies that increase in productivity is closely linked with the uninterrupted transfer of labor to sectors that produce more goods and services that are technologically sophisticated, with higher value-added per worker, which requires more skilled and educated labour and pay higher remuneration. That is also manifested in the continuous change in institutions and ideologies and values; and whose principal cause is capital accumulation with the incorporation of technical progress (Bresser-Pereira, 2012, 348-349)

### ***Critique of the Structural Economics***

However, Torres et al (2013) in their work titled “A survey of literature on the resource curse: critical analysis of the main explanations, empirical tests and resource proxies” revealed that none of the structuralists explanation to resources curse can be said to be categorically empirical tested (Torres et al., 2013:3). They argued that, if the DD thesis which is connected to the narrative that the boom in natural resources is an inhibitor to the industrial sector, the sector that is assumed to be the central dynamic force of the economy, either through RER appreciation or the absorption of production factors as suggested by Neary and van Wijnbergen (1986). Torres and others maintained that expanding the natural-resource sector is insufficient to counterbalance the undesirable

consequence of deindustrialization on the economic growth (Torres et al., 2013:3). Besides, there is an alteration in the structure of exports in favor of raw materials, or even in some cases causes a drop in the overall exports, and as a result plummeting economic growth (Gylfason, 2001). Even at that, going by various scholars (for example Sala-i-Martin and Subramanian, 2003; Leite and Weidmann, 2002) the empirical evidence does not offer unequivocal support for the DD as an elucidation of the resource curse. One of the most prominent scholars that dismiss the DD as an explanation for resource curse was Richard Auty.

Auty (2001) dismissal of DD as the narrative for resource curse was embedded in the comparison of difference cases of countries with abundant natural resources by showing their diversity and complexity as well as numerous exceptions that are immune to the curse such as Norway that maximized the availability of oil in abundance to emerge as a wealthy country. Although there are other resource curse explanations, only few can be partly linked to the DD symptoms, these arguments include the disincentive for entrepreneurship (Sachs and Warner, 2001), the drop in physical and saving-investment (Papyrakis and Gerlagh, 2007; Gylfason, 2001) and lesser investment in human capital and education (Bravo-Ortega and Gregorio, 2007, Birdsall et al., 2001).

## **Institutional Economics Explanation To Resource Curse**

### ***Quality Institutions and Policies***

The consensus on the significance of institutions as the most plausible explanation to RC has been on the rise over the decades. Various scholars have elucidated on the importance of policies and institutions to economic with some empirical studies (Acemoglu and Robinson, 2006; Mehlum et al., 2006; Hartford and Klein, 2005; Acemoglu et al., 2005; Lane and Tornell, 1996). For instance, Mehlum et al. (2006) posit that with the presence of a better institution, resource curse is avoidable. Although, Mehlum and colleagues adopted a rent-seeking model, however, they ensure that they make a clear distinction between the producer and grabber friendly institutions. That is to say, they identified the differences between institutions where production and rent-seeking activities are complementary to each other and a situation where production and rent-seeking are competing activities. The latter can be bad for growth when resource abundance attracts insufficient entrepreneurial resources out of production and into activities that are unproductive. With a producer-friendly institution, nevertheless, abundant resources draw entrepreneurs into production, which implies higher growth but they stress the possibility that natural resources affect institutional quality.

Apparently, the quality of the existing institutions determines whether resources will be in the long run a blessing or a curse (Lane and Tornell, 1996). The possibility of quality of institutions having a significant effect is recognized by some studies (Atkinson and Hamilton 2003; Ross 2001; Auty, 2001) and explanations that are profoundly rooted in the argument of endogenous institutions. They argued that the type of natural resource has a significant effect on the institutional context such as the quality of policies and the form of government.

Also, Mauro (1995) and Leite and Weidmann (2002) did not find credible evidence to substantiate the argument that favour the direct impact of the abundance of natural resources on economic growth between 1970 to 1990, but instead demonstrates the significant indirect effects of aggravating corruption which in turn, affect growth negatively. Sala-i-Martin and Subramanian (2013) and Isham et al. (2005) later confirmed this assumption by examining the influence of natural resources on growth in which they adopted broader indicators that can be used to determine institutional quality and policies. The consensus was that, for a specified level of institutional quality, the existence of abundant natural resource has no direct impact on growth. Their argument implies that for resource abundance to have immediate positive effects on growth there is a minimum quality level, at which the institutions in a country must attain

While Humphreys et al. (2007) emphasized the significance of making use of policies to limit the choices of private and public actors who are capable of destabilizing the social welfare goals in oil-producing countries, in particular where institutions are not well built. Some studies (Bleaney and Halland, 2009; Atkinson and Hamilton, 2003; Davis, 2001) center more exclusively on the difficulties of fiscal policy in dealing with the towering volatility of natural resources. For instance, based on evidence offered by Atkinson and Hamilton (2003), it is possible for the curse to be a clear symptom of the helplessness of governments to handle substantial resource revenues sustainably. They stress the cases where the amalgamation of natural resources, macroeconomic and policies on public expenditure policies has resulted in a low rate of genuine saving. Davis (2001) shows the value of having stabilization funds for non-renewable resources that will use in addressing the problem of high volatility and revenue streams uncertainty. A typical example that can be emulated in the management of income from natural resources is Norway, where part of the proceeds generated from natural resources are saved and distributed through a public fund between generations. With all intent and purposes, it is clear that understanding the difference between institutions and policies is very crucial.

### ***Rent Seeking and Corruption***

Some studies have shown the adverse effect of rent-seeking activities on natural-resource abundance on growth (e.g., Sandbu, 2006; Robinson et al., 2006; Torvik, 2002). For instance, Torvik (2002) presents a model that is deep-rooted in the narrative of rent-seeking where a more significant quantity of natural resources increase the population of entrepreneurs that engaged in rent-seeking and condense the number of entrepreneurs that are operating industrious businesses. With a demand externality, Torvik argued that the significant fall in income is by far higher than the boost in earnings from the natural resource. For that reason, there is a tendency for more natural resources to lead to poorer welfare on the one hand. On the other hand, the rent-seeking thesis cannot be accepted as a universal narrative to DD since the adverse effect of natural-resource abundance on economic growth can only be found in some countries (Bulte et al., 2005). Besides, Lederman and Maloney (2008) argued rent-seeking is not limited to natural resources abundance, there are other rents sources, for example, Foreign aid and monopoly rents.

Also, the idea of Political Dutch Diseases (PDD) been developed over the decades. PDD is a concept attributed to an increased rent-seeking and a destructive distributive scramble for resource rents by various and equally influential groups, which consequences are the decline in the level of investment and a

lower growth rate (Lane, 1996; Tornell, 1999; Baland and Francois, 2000). Bakwena et al. (2009:1) argued, “regarding influencing the impact of natural resource abundance on growth, a democratic governance system is better than a non-democratic one”. Bakwena and others argument is inconsonant with Alvarez et al. (1997) postulation that a dictatorship is a political regime that results to PDD where natural resources or windfalls do not only lead to slower economic growth but also produce and strengthen authoritarian inclination in the political governments of the third world countries. Such that Lane, (1999) argued that resources abundance exacerbates the power asymmetry between the general population and political elites. That part of elite’s power is derived from their preferred share of national income.

## ***Democracy***

The constitutional design or the system of government of a country define and shape how a country institution will look like or performs since they are the one that outline the “formal rules of the political game” (Andersen and Aslaksen, 2008: 4). As a result, democracy can be said to be one of the significant drivers of resource curse when its principles are not met (Bakwena et al., 2009:2). Unfortunately, the majority of the 53 countries in Africa are ruled by a totalitarian regime except nine states are categorized as flawed democracies. Anyanwu & Erhijakpor argued that since democratic institutions are prone to reducing corruption by offering checks and balances on elected officials, convalescing political institutions is a valuable means of addressing corruption in developing countries that are blessed with abundant natural resources (Anyanwu & Erhijakpor, 2014:5). Considering the status of democratic institutions in Africa, one might tend to believe that Ghana is doing fine regarding strong democratic institutions and governance practices as suggested by Gyimah-Boadi & Prempeh, (2012) and Okpanachi & Andrews (2012). However, the Economist Intelligence Unit report on democracy index placed Ghana at 78 positions out of 167 countries in the world even though it was ranked as a flawed democracy (Economist Intelligence Unit, 2013:5).

Empirically, the effect of oil and other natural resources on democracy and strengthening of totalitarian rule has been proven by various studies (Wright and Frantz, 2017; Brooks and Kurtz, 2016; Caselli and Tesei, 2016 Girod et al., 2016; Andersen and Ross, 2014). While some argued that there oil does not have any significant effect on democracy (see Caselli and Tesei, 2016), there are those that contest the academic understanding on the connection between oil and authoritarianism (see Brooks and Kurtz, 2016). For Brooks and Kurtz, “the claim that rents accruing from natural resource exports cause institutional atrophy and authoritarianism also relies on the assumption that governments in natural resource-rich nations are myopic, and that they trade off long-term growth for immediate consumption and power” (Brooks and Kurtz, 2016:7). A closer look at Qatar and UAE (authoritarian regimes with robust development and economic growth) in comparison with Venezuela and Gabon (authoritarian regime that is less developed with weak economy) make the democracy variable of the institutional economist’s argument to be valid in assessing the current situation in Ghana. Whether strong democracy will work for Ghana in addressing the issue of corruption and rent seeking which can lead to the country falling victim of the resource curse or the democracy variable is a goose chase in the Ghana context will be examine later in this study.



### ***Relevance of Institutional Economists School of Thought***

Institutional economics focus is on the understanding of the role of the evolutionary process and the role of institutions in shaping economic behavior (Albelda et al., 1987). Institutional economics emphasizes a broader study of institutions and views markets as the outcome of the multifaceted relationship between these various institutions (states, individuals, firms, social norms). Institutional economics also concerned with the allocation of resources as well as the level and distribution of aggregate income. Another primary concern is with the organization and is in charge of the economy, that is to say, its power structure, which oversees whose interests count. A significant variant is the new institutional economics from the later 20th century, which integrates later, the developments of neoclassical economics into the analysis, and this includes the role of law (formal institution) on economic growth (Li and Li, 2013). However, institutional economics focuses on learning, bounded rationality, and evolution (rather than assume stable preferences, rationality and equilibrium) (Dewey and Rutherford, 2008). Institutionalists have a more in-depth or broader set of explanatory variables, such as the essential economic role of the state, socialization of individuals, and the consequences of a business system. As a result, prices are a function of demand and supply, it is a function of markets and rights, evident in the conduct of businesses and governments, and the latter a matter of business control of the government (Samuels, 2008)

### **Conclusion**

Both the structural and institutional economics argument was brought to the forefront of the resource curse and DD phenomenon discourse as well as the implication such perspective will have on the understanding of the impact of oil discovery in Ghana as well as the possibility of Ghana escaping the resources curse dilemma. The structuralist school of thought, which is embedded predominantly in the Prebisch and Singer thesis. The structuralist argument as demonstrated in this chapter posited that manufactured goods have a superior income elasticity of demand than primary products, in particular, food. This was done for a sole purpose of understanding the effect of terms of trade and price shock on non-oil sector economy like Ghana that depend majorly on primary commodities such as agricultural and mining products. Although not is opposition to the importance of democratic institutions and policies as suggested by the institutionalist economist as the best way to escape resource curse, the structural economics has made us understand that regardless of how shrewd the leadership of a democratic country in SSA might appear. The way and manner the global market is structured are responsible for the continuous inequality within the world system. Because of the declining TOT that primary producers encounter, developing countries should endeavor to diversify their economies and minimize their reliance on principal commodity exports by developing their manufacturing industry. However, it is highly impossible for us to detach the new institutional economics narrative of quality institutions and policies from the structuralist school of thought. This is because even if we want to follow the path of the structuralist, successful diversification of the economy of developing countries requires quality policies that can only implement by strong institutions that will not enhance corruption and mismanagement of proceeds from the result of the diversified economy.

## **Chapter 3**

# **BACKGROUND TO DRIVERS OF GHANA'S ECONOMY, EXPORTS AND PRE OIL DISCOVERY**

### **Introduction**

This chapter focus is to examine the structure of the Ghanaian economy exports, the drivers of growth before the emergence of Oil in commercial quantity, government policy as well as identifying the best period that the Ghana economy witness growth. As a result, the chapter is divided into four main sections with the first part focusing on the structure of the economy regarding export. In this first part of the chapter, the research emphasised on how Ghana is an open economy that depends on external trade to achieve its economic growth. With this in mind, the research discusses how the export economic structure of Ghana can be divided into two categories namely Traditional Tradable Exports (TTEs) and Non-Traditional Exports (NTEs).

Both TTE and NTE spread across different sectors, but the predominant sectors that contribute to both TTE and NTE are the mining and agricultural sectors. In the second section of this chapter, the paper looks into the drivers of the Ghana economy before oil became a significant player in Ghana economy growth. The research identified the mining and agricultural sector as the primary drivers of the growth before oil enters into the equation. The third section discusses the historical pattern of growth in Ghana before the oil discovery, the good and bad period for growth as well as the factors responsible for such status of growth in Ghana before oil. The same third section of this chapter brings to the fore the government policy from the post-colonial era till the era of oil discovery in the management of the natural resources regarding the export economy of Ghana. The discussion of all the factors stated above is crucial to the understanding of the data analysis in the next chapter. Without clear picture of what is obtainable before the commencement of oil export in commercial quantity, it will be difficult for us to understand the changes that have occurred due to the oil discovery and the effect it has on the TTEs that occupied the larger percentage of Ghana revenue

### **Structure of Ghana Export Economy**

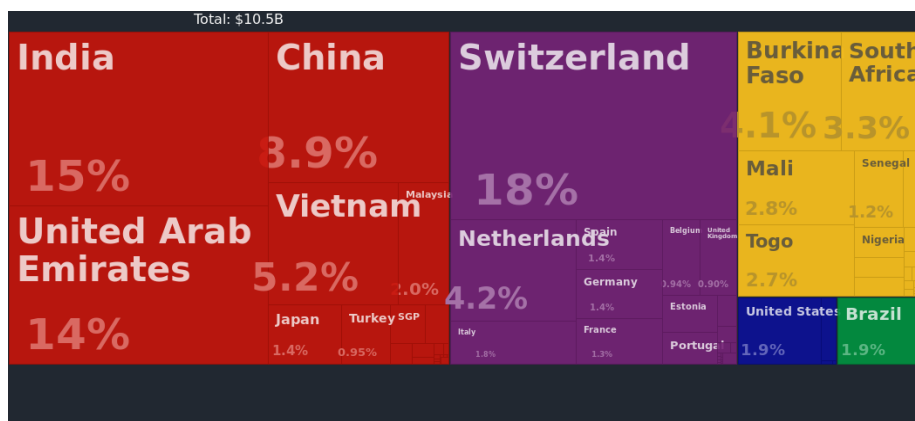
#### ***Traditional Tradable Exports (TTEs) and Non-Traditional Exports (NTEs),***

The export economy structure of Ghana is deeply embedded in the mining and agricultural sectors. The TTEs from the mining sector in Ghana are gold, diamond, manganese and bauxite (Addy, 1998; Aryee, 2001; Enu et al., 2013). Virtually all of the mineral output in the mining sector is exported apart from essential secondary mineral commodity (NTEs) industry involving the production of cement, and semi-finished steel that is sold in the domestic market. Although Oil production began in 1978 (Addy, 1998:230), it was not until 2011 that significant export of crude oil in commercial quantity join the league of TTEs from the mining sector. From the Agricultural sector in Ghana, the TTEs are

cocoa beans, timber, cola nuts, tuna and horticulture products (Enu et al., 2013:175), although, cocoa bean remains Ghana’s major export commodity. Non-Traditional Exports (NTEs) as defined in the Ghana 1995 Export and Import (Act 503) comprises of all export products apart from unprocessed gold, cocoa beans, lumber and logs. NTEs without a doubt is crucial to the Ghana’s export diversification ambition. Ghana’s NTEs—which primarily comprise of products such as canned tuna, veneer, cashew nuts, cocoa paste, horticultural products, as well as handicrafts— accounted for approximately 18% of the overall export income with a total value that amounts to US\$2,4186 million in 2013. With an annual average growth of 15%, the foremost driver of the NTEs sub-sector is cocoa butter and cocoa paste, contributing almost a quarter of the total NTE’s earning and a growth rate of 17 percent. While there are various products in the agricultural sector that have shown promises of attracting significant exports earnings, the predominant agrarian NTE products remain cashew nuts and oilseeds, pineapples, shea nuts, bananas, fresh or chilled tuna. For example in 2013, cashew nuts and oilseeds were the agricultural NTEs top earner that account for US\$155.6 million of the US\$306.11 million worth of fresh agricultural product exports

### ***Pattern of Ghana’s Export Destinations***

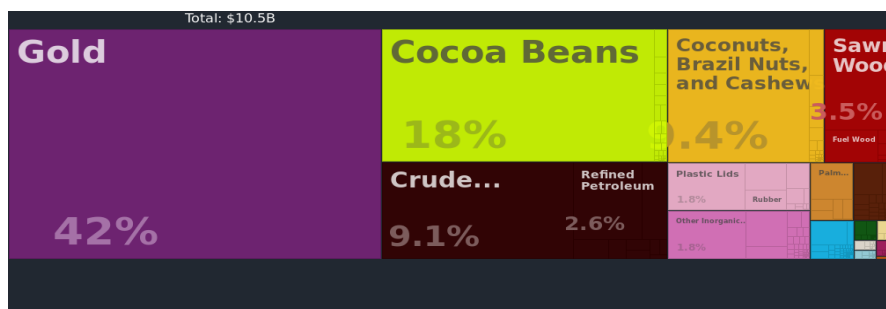
Ghana export to all over the world, however, the EU, based on available data accounted for half of Ghana’s export destination over the last decade with France, United Kingdom, Netherlands, and Germany consistently featuring as the top destination in EU since 2003. While Ghana’s main export partners are Netherlands, Burkina Faso, South Africa and the United Kingdom, Belgium, Switzerland, France, Italy, Turkey and German Federal Republic (Enu et al., 2013:175). The top export destinations of Ghana are India (\$3.21B), Switzerland (\$1.39B), China (\$1.06B), the Netherlands (\$669M) and France (\$607M) (OEC, 2017). However, countries such as Nigeria, Belgium, Spain, and Japan, which used to be prominent Ghana export destination a decade ago, have all fallen off the export destination radar. They give way to emerging economies such as China, Turkey, and India that possess "enormous market opportunity by the sheer size of their populations and growing middle classes with increased purchasing power”(Odei-Assibey, 2015:6). The figure below shows the 2016 export destination of Ghana



Available data suggests that when it comes to NTEs export destination, the ECOWAS economy is preferable and accounted for 34.8% in comparison to the EU which used to be the lead destination but now accounted for 31.5% in 2013. The loss of the Nigeria market due to the Nigerian government banning of more than 150 products importation which is predominantly NTEs (for instance, plywood veneered panels and aluminium plates) from ECOWAS sub-region and abroad, in general, is responsible for the low figure of Ghana NTEs export. For example, Ghana exports to Nigeria fell from US\$393.929 million to US\$141.093 million between 2005 and 2013, which represents a 64% decline in export. Although, emerging products such palm kernel, cocoa chocolate, and alcohol products have experienced a rapid rise in export value to Nigeria, with room to be exploited further (Odei-Assibey, 2015:6).

## Drivers of Ghana Economy before Oil Discovery

Ranked 64th largest export economy out of 120 and 77th most complex economic out of 89 in the world by Economic Complexity Index (ECI), available statistics shows that, in 2016 alone, Ghana’s total exports is around \$10.5B. Also, its imports were estimated to be approximately \$11B which in turn led to a negative trade balance of \$508M (OEC, 2017)<sup>1</sup>.



Nonetheless, the last five years have witnessed Ghana’s exports spiral downward the slope at an annual rate of -100%, from \$14.6B in 2011 to \$10.5B in 2016. While the most recent exports of Ghana are led by Gold and Cocoa at 42% and 18% respectively (OEC, 2017), it is highly germane to look at the historical antecedent of Ghana exports since independence to determine the drivers of growth then and now. This will serve as the background that will allow us to have a clear understanding of whether Ghana is presently witnessing the resource curse syndrome and if she will be able to escape it if not affected by resource curse currently when comparing notes of the past and present-day Ghana exports. The drivers of growths as identified falls into two categories, the mining and agricultural sector.

<sup>1</sup> <https://atlas.media.mit.edu/en/profile/country/gha/#Exports>

## *Mining Sector*

The minerals sector has always been one of the drivers of growth in Ghana before oil exploration in commercial quantity began in Ghana. Apart from the fact that the sector remains one of the most significant foreign exchange earners for the country, it is also a significant employer of labour most especially in the rural areas as well as linkages to other sectors (Addy, 1998:232). Although, when compared to the Agricultural sector concerning employment, the minerals sector has a minimal impact on employment as the sector accounted for less than 2% of the overall labour force in the country as well as less than 10% of industrial employment (Timmer et al., 2014). While mining can be said to affect the local population as a result of environmental degradation of water and air pollution due to mining activities (Ingram et al., 2011:304), mines also add to the development of the areas or communities in which they are situated (Owusu et al., 2016:215). The sector contributes to the development of the communities by adding to the infrastructures such as the building of hospitals, schools, and roads that in turn open up access to areas that are previously in remote locations (Owusu et al., 2016:215). For example, as part of Corporate Social Responsibilities (CSR) an estimated sum of \$43 million was contributed by the mining sector to the general public and the host communities of mines in 2011, which represent more than 50% increase to the 2010 contribution (Ghana Chamber of Mines, 2011). To put it in a clear perspective the table below demonstrates the importance of mining sector to the economy of Ghana.

**The Contribution of Mining Sector to Government Revenue, Value Added and Employment between 1960-2010.**

Year	Total Government Revenue <sup>a</sup>	Percentage of Economy-Wide Value Added	Percentage of Industry <sup>b</sup> Value Added	Percentage of Economy-Wide Employment	Percentage of Industry Employment
1960	–	5.8%	18.3%	1.9%	11.4%
1970	–	5.2%	15.9%	1.0%	6.4%
1980	–	2.6%	10.2%	0.6%	3.4%
1990	8.9%	2.9%	14.1%	0.9%	6.1%
2000	13.7%	2.8%	14.6%	1.8%	11.6%
2010	21.3%	2.9%	14.4%	1.1%	7.4%

Sources: Owusu et al (2016:216)

**Summary of sampling of mining sector's contribution to the economy of Ghana (1996– 98)**

		1996	1997	1998	Total
Corporate contributions (US\$)	Corporate taxes	\$915,471	\$362,709	\$—	\$1,278,180
	Royalties	\$14,639,614	\$11,681,568	\$15,638,091	\$41,959,274
	Dividend	\$8,732,318	\$7,039,575	\$2,891,308	\$18,663,201
	Custom duties	\$2,635,743	\$3,159,122	\$4,888,234	\$10,683,099
	Excise duties	\$2,051,140	\$2,289,066	\$1,987,855	\$6,328,061
Voluntary community contributions (US\$)	Water project	\$21,468	\$560,316	\$57,549	\$639,333
	Electricity	\$142,846	\$488,616	\$130,368	\$761,830

	School	\$75,523	\$201,919	\$358,413	\$635,855
	Health centre	\$27,775	\$6,740	\$102,821	\$137,336
	Road project	\$150,504	\$344,532	\$528,110	\$1,023,146
	Others	\$261,443	\$4,030,181	\$224,965	\$4,516,589
Staff contributions	No. of employees	13,795	13,063	13,338	
	PAYE <sup>a</sup> (US\$)	\$8,581,684	\$7,809,491	\$8,808,243	\$25,199,418
	Staff training (US\$)	\$434,941	\$2,038,545	\$1,329,482	\$3,802,967
Other economic contributions	Local purchases (US\$)	\$52,692,399	\$54,922,728	\$65,043,202	\$172,658,329
TOTAL CONTRIBUTION		\$91,376,664	\$94,948,172	\$102,001,978	\$288,286,618
Foreign exchange returned into Ghana (US\$)		\$188,331,816	\$178,827,118	\$203,714,201	\$570,873,134

<sup>a</sup> PAYE stands for Pay As You Earn; the contribution to personal income tax through employment of staff by the mines.

Sources: Aryee (2001: 66)

Even though, one of the major challenges of this research is availability of data, the two tables above however, revealed that it is without a doubt that mining sector contributes immensely to Ghana GDP before oil exploration in commercial quantity. Be it as it may, gold still represents about 95% of the earnings that come from mining sector (Addy, 1998:232; Aryee, 2001:66). This is not a surprise because West Africa has been regarded for centuries as one of the most important gold mining regions in the world with the present day Ghana occupying the leadership role in the region when it comes to gold mining and production that account for over 70% of the regional output of gold. Actually, gold production started in the territory of present-day Ghana more than 1000 years ago (Hilson, 2002:13).

Without being grandiloquent, there is no way one can disentangled the economic growth and development of Ghana for the past few decades from the performance of the mining sector most especially gold mining as suggested by Owusu et al (2016:214). Gold has always been the leading contributor to GDP. Gold play a dominant role in Ghana economic growth to the extent that by 2009, Ghana had risen to the 9<sup>th</sup> largest producer of gold in the world and 2<sup>nd</sup> largest in Africa that accounted for about 3.8% of global production which is different to the 2004 statistics that accounted for 2.6% global production (Bloch and Owusu, 2012: 434). According to Huq (1989), gold mining laid the foundation for Industrialization in Ghana because the development of available mineral resources of the country is considered an essential part of the nation's economic development.

Table 3

**Production of major minerals in Ghana between 1980– 1998)**

Year	Gold		Diamonds	Bauxite	Manganese
	oz	MT	Carats	MT	MT
1980	342,904	10.67	1,148,678	196,892	240,006
1981	338,042	10.51	836,020	156,769	197,436
1982	337,754	10.51	682,415	92,954	132,232
1983	285,291	8.87	336,309	82,310	175,288
1984	282,299	8.78	341,978	44,169	267,996
1985	299,615	9.32	636,127	124,453	357,270
1986	287,124	8.93	560,538	226,461	262,900
1987	328,926	10.23	440,681	201,483	242,410
1988	373,937	11.63	259,358	299,939	284,911

1989	429,476	13.36	285,636	374,646	273,993
1990	541,408	16.84	636,503	368,659	246,869
1991	845,908	26.31	687,736	324,313	311,824
1992	998,195	31.05	656,421	399,155	276,019
1993	1,261,424	39.24	590,842	364,641	295,296
1994	1,430,845	44.51	757,991	451,802	238,429
1995	1,708,531	53.14	631,708	530,389	186,901
1996	1,586,095	49.33	714,738	383,370	266,440
1997	1,758,005	54.68	829,524	536,723	332,443
1998	2,382,339	74.10	822,619	341,118	384,400

Source: Aryee (2001:64).

In the main, Gold is not the only contributor and driver of growth in the minerals sector before the oil discovery in commercial quantity. As displayed in the table above, Ghana is also one of the leading exporters of manganese in the world. The country witnessed a drastic fall in production in 1992 (279,000 tons) in comparison to 1974-75 where the country produced 638,000 tons, which is all time high production (Berry, 1995: 173). However, it worthy to note that it took a substantial rehabilitation process of the sector in the 1980s that helped to increase production from 159,000 tons to 284,000 tons between 1983 and 1989. Ghana has reserves exceeding 60 million tons by the end of 1991 raking up approximately US\$20 million from manganese exports in 1991 with a significant increase in revenue, US\$11.6 million in 1989 in comparison to US\$14.2 million in 1990 (Berry, 1995: 173-174). Ghana is also rich in Bauxite, even though the government has not exploited the potential of the mineral to the fullest. Notwithstanding, Ghana was ranked in the third position in the continent as Bauxite producer (Omayra, 2009:1). Although, there was a reduction for Bauxite exported from Ghana (GEPC Ghana, 2010), export of Bauxite witnessed an increase of 9.7% in 2013 (Omayra, 2013:1). Similar to others countries in the West African region, Ghana is blessed with vast deposits of diamonds as well and was ranked 12th among the world leading nations that produce the diamond in volume (Omayra, 2009:1). Nevertheless, the country production is below capacity which saw Ghana produced a little more than 370,000 carats of rough diamonds in 2009 (GEPC, 2010)<sup>2</sup>.

### ***Agriculture***

Agriculture is one of the drivers of Ghana economy pre-oil discovery era and it continues to be the country economy backbone despite the oil discovery and production (Timmer et al., 2014). The sector provided work for more than 40% of the entire Ghana population (Timmer et al., 2014; Ackah, 2016). Also, the sector has been one of the major contributor to Ghana's foreign exchange earnings for many decades. Not until 1992, agriculture accounted for the highest percentage of entire foreign exchange received in Ghana (Dei, 2017:21). This is possible due to the exportation of agricultural commodities as well as conservation of foreign exchange through the producing import-substituting raw materials and food. According to Hoefter (2001) "between 1999 and 2002 for example, the agricultural sector contributed 38.5%, 35.4%, 33.9%, and 35.5%, respectively, to the country's foreign exchange earnings" (Hoefter, 2001 cited in

<sup>2</sup> <http://www.gepcghana.com/diamonds.php>

Dei, 2017:22). For instance, the contribution of agricultural sector to the GDP was in the average of 39% between year 2000 and 2008 (Ackah, 2016). Agriculture add to a large extent to government revenue primarily through duties paid on the export of agricultural commodities, especially cocoa.

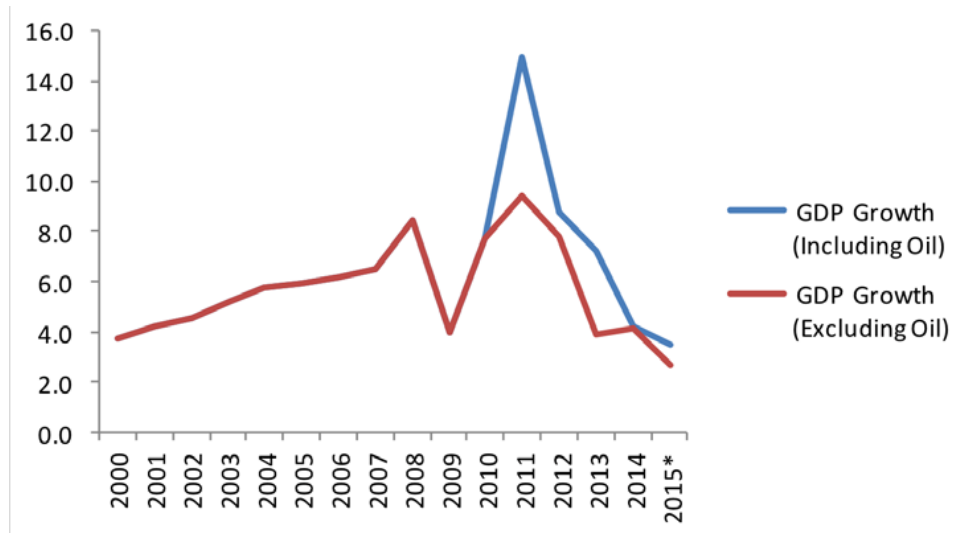
While agriculture is a major driver of Ghana economy before oil discovery, as 2009, the main drivers of growth in the sector are cocoa and crops/livestock sub-sector (ISSER, 2010). However, cocoa, timber and agricultural NTEs provided the main foreign exchange earnings for agriculture. Foreign exchange earnings from agriculture witnessed an increased from US\$1,549 million to US\$2,197 between 2007 and 2009, in which cocoa accounted for 84.9% while timber and agricultural NTEs accounted for 8.2% and 6.9% respectively (ISSER, 2010: 112-13). The implication of this that cocoa, timber and agricultural NTEs provided the leading foreign exchange earnings for agriculture, and it is possible due to the exportation of agricultural commodities as well as conservation of foreign exchange through the production import-substituting raw materials and food. Foreign exchange earnings from agriculture witnessed an increased from US\$1,549 million to US\$2,197 between 2007 and 2009, in which cocoa accounted for 84.9% while timber and agricultural NTEs accounted for 8.2% and 6.9% respectively (ISSER, 2010: 112-13).

The role of Cocoa in foreign exchange earnings is not also a surprise just like Gold in the mineral sector. According to Kolavalli & Vigneri (2011: 201), it is practically impossible to think about Ghana without thinking about how the cocoa sector offers more than 700,000 farmers the source of their livelihood. For Kolavalli and Vigneri, although, one cannot say that the cocoa sector in Ghana has been an unmitigated success. However, several administrations in Ghana as well as the colonial administration before independent, have taken advantage of cocoa as the main source of public revenue (Kolavalli & Vigneri, 2011: 201). As a result, the Ghanaian experience offers a recurrent model of a policy practice that is adopted by several other countries in Africa to be taxing the primary export sector in the country has to finance public expenditure (Herbst 1993).



## Growth Periods of Ghana

Figure 1: Real GDP growth (percent), 2000-15



\*Note: The rate for 2015 is projected

Source: Data From Ghana Statistical Service

Figure 1 above shows an increase in real GDP growth from 8.4% in 2008 (without oil) to 15% in 2011 (including oil). However, since 2012; the real GDP growth (including oil) has slowed and been declining from 7.9% to 4.2% in 2014 with a further declined projection of 3.5% in 2015.

### Government Policy Response To Economy Growth In The Pre-Oil Era

Ghana inherited an economy that appeared to be prosperous and stable from the British when it gained independence in 1957, by then Ghana was adjudged as the number one cocoa producer in the world (Baten, 2016). Ghana can boast of a relative advanced educational structure in addition to a well-built infrastructure required to service trade (Teal, 2002:1320). Unfortunately, the mid-1960s witnessed a collapsed in the price of cocoa, which led to the destruction of the fundamentals of Ghana economy stability. The implication of this means less foreign currency earnings from the exports of cocoa, which were the primary source of exports earnings and the problem, became worse due to the presence of pervasive corruption (Khor & Hormeku, 2006; Baten, 2016). This trend continues, and by the early stage of the 1980s, Ghanaian economy was in a state of the comatose and advanced state of total collapse. The per capita GDP that already showed negative growth all through 1960s period deteriorated further by decreasing at the annual rate of 3.2% between 1970 to 1981. For example, the cocoa production which already fell by half between the mid-1960s and 1970s made Ghana lose its market share from about 1/3 to 1/8 between the early 1970s to 1982-83. This same period witnessed the mineral production falling by 32% in which diamond production declined by 67%, Bauxite by 46%, manganese by 43% and gold by 47%. The lack of substantial foreign exchange earnings from exports led to drop in real minimum wage, tax revenue, in fact, the mid-

1960s to early 1980s is an era that government's resources had to plummet severely (Modern Ghana, n.d)<sup>3</sup>.

Nevertheless, the economy of Ghana witnessed a rebound because of restructuring under the post-1983 Economic Recovery Program after an extended period of decline that started in the early 1960s. In the agricultural sector, "the period 1984-2002 has witnessed positive real GDP growth rates, but with relatively poor performance in 1990 and 1999-2000" (Khor & Hormeku, 2006:6). In the mining sector, the restructuring, which comprises of revising series of legislation and the mining codes led to substantial increase in foreign investment in gold mining, the outcome of this is, increase in output and exports. For instance, there was a 700% increase in gold production between 1980 to 2000, notwithstanding the brief interruption during fall in gold price at the turn of the century, the mineral sector resumed its rising trajectory (Bloch and Owusu, 2012: 434). The price of gold that rose from \$300/oz in early 2002 to over \$1900/oz in 2011 era (Bloch and Owusu, 2012: 434) which represent the beginning of the oil exploration in commercial quantity.

However, the dramatic policies shift that ushered in ERP reconfigure the economic, social and political orientation of Ghana government, in fact, ERP exemplified the 1980s structural adjustment policies invented by the international donors and banking (Khor & Hormeku, 2006:4). Subsequent to the 1983 severe drought, Ghana government were left with few or no other options than to accept stringent World Bank and International Monetary Fund (IMF) loan conditions and set up the Economic Recovery Program (ERP). It is understood that the mining industry witnessed tremendous growth since 1983, most especially, ever since the commencement of ERP in 1983 (Aryee, 2000; Aryee and Aboagye, 1997; Addy, 1999). The aim of the first phase of ERP between 1983 and 1985 was to eradicate any form of price distortions as well as re-establishing macroeconomic balances through rigid fiscal and monetary policies. The main policy changes included exchange rate reforms and trade policy, and by the year 1986, Ghana had adopted a more flexible exchange rate structure. While the aim of the second phase of the ERP that started in 1986 was to remove all kind of structural obstruction that serves as hindrances in steering the economy in the economy and steering the economy en route for sustained growth. A liberalisation agenda was initiated which includes but were not limited to the liberalization of imports, reduction of domestic price distortion, and the deregulation of the commodity and service markets. The period witnessed a significant increase in growth rate, reduction in the budget deficit, currency devaluation as well as lower inflation rate. (Khor & Hormeku, 2006:4-5).

It is evident that the ERP primary objective is to ensure that apart from the mining sector, other sectors that had significant export potentials, in particular the NTEs to becomes attractive to investors to transform the general economy of Ghana (Mensah et al., 2015; Bloch and Owusu, 2012; Domfeh, 2003; Aryee, 2001). The outcome of all these programs was the official enactment of the 1986 Minerals and Mining law, which sought after the promotion of investment, in particular, foreign direct investment (FDI) in the mineral sector, coupled with increase in productivity as well as mineral exports earnings (Akabzaa and Darimani, 2001; Aryee, 2001; Amankwah and Anim-Sackey, 2003). By 1994, the 1986

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<sup>3</sup> <https://www.modernghana.com/GhanaHome/ghana/economy.asp?s=a>

Minerals and Mining law went through the phase of amended that gave birth to Minerals and Mining Amendment Act of 1994 (Act 475). By the year 2006, 1994 (Act 475) was replaced with the Minerals and Mining Act of 2006, Act 703 which till date govern the mineral sector (Bloch and Owusu, 2012). This approach becomes successful as evident in the injection of private investment capital for mineral exploration in the mining sector between 1983 and 1998 that was in the tune of US\$4 billion.

Government policy shift is not limited to the mining sector; the agricultural sector is without no doubt had performed below its potentials. According to Datey-Bah (2012);

*“The policy of mass cocoa spraying, the procurement of tractors for farmers groups on hire purchase in order to mechanize agriculture, the presidential initiative of youth in agriculture, establishment of the Buffer Stock Management Company, the establishment of the Savannah Accelerated Development Authority (SADA), are manifestations of that commitment leading to unprecedented feat for the first time in the 2010-2011 crop year by exceeding 1 million metric tons of cocoa harvest” (Datey-Bah, 2012:192).*

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To meet the government of Ghana Vision 2020, in 2001, the "Accelerated Agricultural Growth and Development Strategy (AAGDS) was adopted to achieve at the minimum 6% annual growth rate in the agricultural sector—which includes cocoa, forestry, livestock, fishery and crops (Khor & Hormeku, 2006:5). The crux of the strategy is the promotion of export of selected products, majorly NTEs (for example cashew, maize, pineapples, Asian vegetables, and tilapia), through enhanced entrée into overseas markets, in conformity with Ghana's comparative advantage. This policy approach was targeted at increasing the agricultural exports in Ghana by an average of 15% yearly from the 9% increase in agricultural exports recorded between 1991 and 1996 (Khor & Hormeku, 2006). More recently, despite the anticipation of oil revenue, Ghana government have shown unalloyed commitment towards the improvement of the agricultural sector.

## Conclusion

This chapter shows how Ghana is an open economy that depends on external trade to achieve its economic growth. The export economic structure of Ghana can be divided into two categories namely Traditional Tradable Exports (TTEs) and Non-Traditional Exports (NTEs). Both TTE and NTE spread across different sectors, but the predominant sectors that contribute to both TTE and NTE are the mining and agricultural sectors. In the second section of this chapter, the paper looks into the drivers of the Ghana economy before oil became a significant player in Ghana economy growth. We identified the mining and agricultural sector as the primary drivers of the growth before oil enters into the equation in which Gold and Cocoa play predominant roles. This chapter has also revealed the historical pattern of growth in Ghana before the oil discovery, the good and bad period for growth as well as the factors responsible for such status of growth in Ghana before oil. Besides, this chapter brings to the fore the government policy from the post-colonial era till the era of oil discovery in the

management of the natural resources regarding the export economy of Ghana. The discussion of all the factors stated above is crucial to the understanding of the data analysis in the next chapter. Without clear picture of what is obtainable before the commencement of oil export in commercial quantity, it will be difficult for us to understand the changes that have occurred due to the oil discovery and the effect it has on the TTEs that occupied the larger percentage of Ghana revenue.

## Chapter 4

### ANALYSIS

#### Introduction

To ascertain that Ghana has the capacity or potential to escape the resource curse, in the previous chapter we already looked deeply into the broader context of Ghana records of managing the natural resources discovered before Oil discovery, most especially Gold which occupied the leading position historically. While some scholars (Tsikata, 1997; Tsuma, 2010; Ayelazuno, 2012) have argued, that Ghana cannot be said to be new to the resource curse phenomenon, if not all aspect of the resource curse, at least some aspect of it. The focus of this chapter is to test structuralist economists and the institutionalist economist's variables on resource curse narratives identified in chapter two of this thesis to analyse the present state of Ghana economy about resource curse ascribed to the oil discovery in the country.

As discourse earlier in Chapter 2, the resources curse thesis has two significant effects, the economic and the political impact. From the economic effect, Dutch Disease (which covers the appreciation of real exchange rate and the resource movement), the volatility in the Terms of Trade, commodity price, and real exchange rate as well as its effect on diversification of export are variables that are used in assessing the possibility of Ghana suffering from resource curse and the chance of escaping the curse if not yet affected by the curse. From the political effect aspect of the curse, variables of the institutional economists identified in chapter 2 of the study are used for the analysis. Presence of strong democratic governance, quality institutions and policies as well as corruption is brought to the fore of discussion.

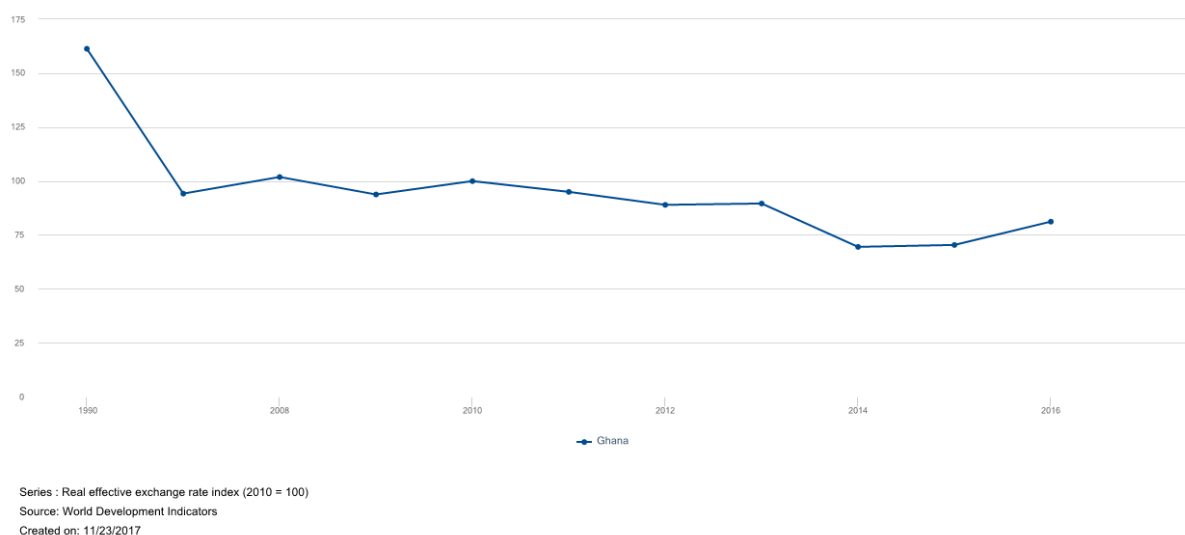
#### Economic Effect

##### *Dutch Disease*

As discussed earlier in chapter two of this paper, Dutch Disease is one of the strands of resources curse thesis which have two main symptomatic features. The first one is that a country suffering from Dutch Diseases will witness an appreciation in the real exchange rate which is detrimental to local producers and therefore led to a significant decline in the production of the tradable goods (Magud and Sosa, 2010:8-10). Available data used in this paper to test the hypothesis of DD suggest otherwise. The figure below clearly demonstrates that since 2011 that the exportation of oil in commercial quantity commences in

Ghana, the real exchange rate of Ghana cedi has witnessed continuous depreciation.

**Figure 2: Real effective exchange rate index Ghana (2010=100)**



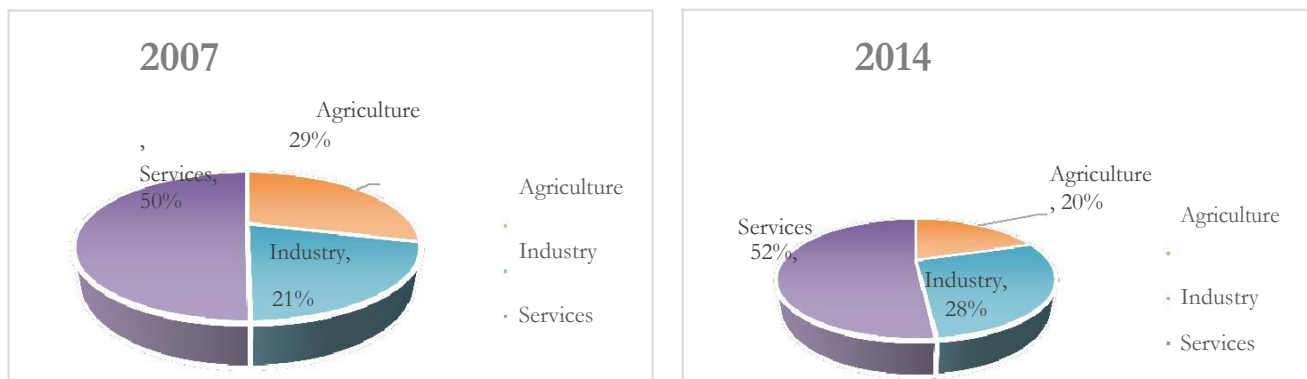
Link to source: World Bank (2017)

<http://databank.worldbank.org/data/reports.aspx?source=2&series=PX.REX.REER&country=GHA#>

While the World Bank data did not capture 2017, the Bank of Ghana 2017 Monetary Policy Report indicated the continuous depreciation of Ghana Cedi against major currencies such as US Dollars, Euro, and British Pound (Bank of Ghana, 2017: 10). Although, the cedi, in the month of April 2017, “appreciated by 2.1 index points in trade-weighted terms, compared with 2.78 index points appreciation same period last year” (Bank of Ghana, 2017: 10). The implication of this is that the discovery and exportation of oil has failed to trigger the appreciation of real exchange rate as predicted by the Dutch Disease literature. Preferably, the depreciation of the real exchange rate of Ghana cedi can be attributed to the further fall in the price of cocoa and gold, which remain the backbone of the Ghana export earnings (Osei & Nti, 2014). For Osei and Nti, the oil windfall on Ghana is just like a perfect storm situation because whatever brief appreciation the emergence of oil exportation has caused is temporary and this is evident in the figure above. It is not out of place if one argues that the oil exportation of Ghana is timely, as it seems to have helped in the stabilisation of the exchange rate that has been fallen even before the emergence of oil.

Be it as it may, the second strand of the Dutch Disease narrative is yet to be accounted for with the evidence of the depreciation of the real exchange rate of Ghana cedi. The second strand of the DD is embedded in the narrative of decline in productivity growth which suggests that the factors of production in the non-resource sectors will be pulled away towards the resources and non-tradable

sectors. This implies that there would be a decline in both industry and agricultural sectors while the service sector grows. However, available data as demonstrated below shows that, although there is a slight increase in the service sector between 2007 that oil was discovered in Ghana and 2014, the increase is not in a dramatic way that can validate the DD narrative.



Source: Starkey (2015:11) <https://www.nottingham.ac.uk/economics/documents/research-first/kate-starkey.pdf>

Apart from the fact that the Agricultural sector has been on the decline since the 1960s, at least one would have expected a drop in the industrial sector since factors of production are now concentrated towards the non-tradable. The depreciation of cedi has hindered the decline in the industry because it has kept the competitiveness in the industry alive (Starkey, 2015:11). More recent data from the Bank of Ghana even shows that in 2016, the agricultural sector witnessed an increase to 22.6% from 20% in 2014 as regard sector contribution to the GDP, while the industry decline from 25.3% in 2015 to 24.2% in 2016. For the service sector, there was a decline to 53.2% in 2016 as compared to 2015, which was 54.4% (Bank of Ghana, 2017:5). What can be deduced from the evidence gathered so far is that one cannot say there is a trajectory increase as expected in the non-tradable sectors and decline in the industry sector because the growth and decline are fluctuating. Nevertheless, the issue of productivity is still worrisome because it is the nucleus of competitiveness challenges and Ghana weakness in innovation and labour market efficiency and most especially in technology was main highlights of the Global Competitiveness report of 2014-15 (Schwab, 2014: 192-193). Considerably, one might be tempted to agree with the DD literature that suggested that there will be lack of competitiveness as resources are diverted towards resource extraction activities and away from productive activities.

Wijnbergen (1984) argument resonated with how Ghana government responded to the issue of productivity; Ghana has been proactive in the implementation of

various policies that will make the industrial sector to be more competitive. For instance, Industrial Sector Program (Zakari and Boly, 2013:16) and the Industrial development plan (2011-2015) are targeted towards enhancing the production and competitiveness of the industry. Evidence gathered from this study suggests that the policy response of the Ghana government cannot be downplayed as an essential factor that is responsible for growth in the industry as well as balance the growth in the service sector since 2007 that oil was discovered in commercial quantity. Although, it is too early to make a definite comment because we cannot link the change in the global prices of cocoa and gold with the oil discovery in Ghana. Nevertheless, one can reasonably conclude that Ghana has been able to avoid falling into the DD effect “for now” and the DD has not been able “for now” have a negative impact on Ghana economy as propounded by various scholars.

### ***Terms of Trade and Commodity Price Volatility***

According to Turnovsky and Chattopadhyay (2003:268), volatility in the TOT and the real exchange rate has a negative impact on the growth rate. Unarguably, it has been proven empirically in the previous chapters that the volatility in commodities markets as well as the resulting policy may perhaps pose a menace to development. A typical example of the argument around volatility can be drawn from the recent drop in the global price of crude oil to nearly 50% of the original price. The figure below shows the volatility in oil price



Source; <http://markets.businessinsider.com/commodities/oil-price?type=wti>

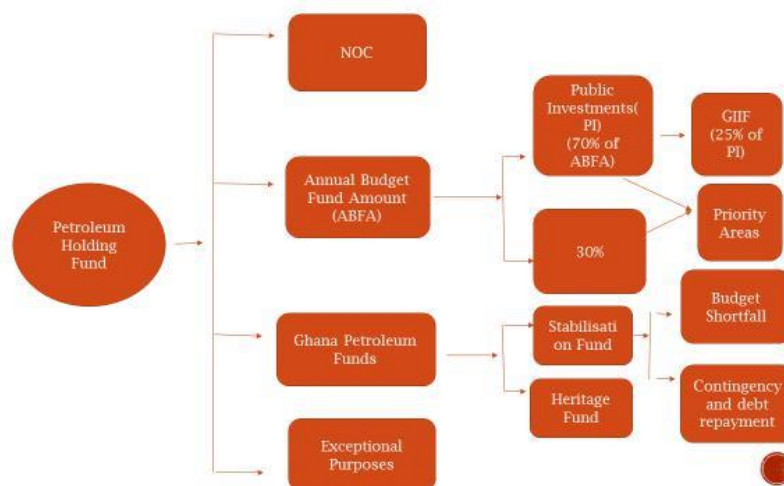
The fall in the oil price, as well as other major commodities, destabilized the government forecast as regard budget and expenditure. “Ghana experienced slower growth due to the adverse effects of declining commodity prices and tight financing conditions. Growth is projected to recover modestly to 2.6 percent in 2017, but will largely depend on a continued recovery in commodity prices” (Bank of Ghana, 2017:11). For example, the Ghana government November 2015 budget was prepared based on the per barrel price of \$99.736, but only for



the price of crude oil to fall below \$50 the same year (Kpodo, 2015). To make the matter worse, presently the global price of crude oil is volatile and erratic, moving back and forth between \$49 and \$57 in 2017 (Bank of Ghana, 2017:11). This type of volatility is what Turnovsky and Chattopadhyay (2003:267-268) posited that would hurt an economy such as Ghana by affecting fiscal policy. While by no small measure, the fall in price of crude oil has severe negative impact on the Ghana fiscal management, economic growth, and macroeconomic stability (Bank of Ghana, 2017:12), the government of Ghana response to such volatility is what majority of African countries that have fell victim of the resource curse syndrome are lacking.

For instance, the GoG had implemented the Petroleum Revenue Management Act (PRMA), to avert any form of revenue deficit from affecting the budget. According to Ackah (2016), “the Ghana Petroleum Revenue Management Act (PRMA) 2011 (Act 815) provides a framework for the collection, allocation and management of petroleum revenue in a responsible, transparent, accountable and sustainable manner”. With the PRMA, two petroleum funds were established. The first one was the Ghana Stabilisation Fund (GSF) with the objective to advance macroeconomic stability through bolstering of budget revenue in the period of shortfall. The second petroleum fund that was established by the PRMA was the Ghana Heritage Fund (GHF) intended to conserve wealth for the upcoming generations (IFS, 2015:2).

Figure 4; Oil Revenue Framework in Ghana



Source: Ackah (2016) [https://mpru.ub.uni-muenchen.de/69953/2/MPRA\\_paper\\_69953.pdf](https://mpru.ub.uni-muenchen.de/69953/2/MPRA_paper_69953.pdf)

According to Starkey (2015:12), these funds ought to be useful in mitigating against the effect of DD by “diversifying their portfolio of investments”. The PRMA framework was set up in a way that the Annual Budget Funding Amount (ABFA), which cannot exceed 70% of the revenue, is met and the remaining

30% is shared between the GSF and GHS (Starkey, 2015; Ackah, 2016). However, only the GSF funds can be drawn in the period of revenue shortfalls because of price and production volatilities. However, it is just the GSF which can be used should in case there is a shortfall, and this cannot exceed \$250 million that can be drawn (Ackah, 2016). It is worthy to note that, if the oil price remains at the average of \$50, the Natural Resource Government Institute posited that the GSF would be substantially depleted (Starkey, 2015). On the other hand, the GHF is an endowment fund and can only be used in a situation where the oil and Gas resources are (Ackah, 2016). However, the problem with policies like this is embedded in several factors such as accountability, transparency, and political will. This will be elaborated in details later in this chapter.

Having said that, since no one can correctly assert when the oil price volatility will become stable, the primary concern now should be how well Ghana can maintain the budget stability. Even though the government has done well in establishing the petroleum wealth funds, the apprehension that the GSF could soon be wipe-out if the trend of volatility continues cannot be ignored. While it is safe to say that the volatility in the oil market as for now has not negatively impacted on the state finances severely, what one can deduce in the present scenario is that the current situation could change rapidly if the oil price continues to fall or unstable. It is understood that it will be imprudent for Ghana to borrow to maintain spending because Ghana already faces high borrowing costs. For that reason, it is conceivable that volatility could have negative impact on Ghana economy in future years and therefore there will be some undesirable outcome of oil discovery in commercial quantity in the country.

### ***Volatility of Real Exchange Rate on Diversification***

As discussed in chapter 2 of this paper, the primary solution proposed by the international community as well as various governments of developing nations to address the vulnerability to the problem of volatility in commodity price, most especially for countries that are predominantly resource and commodity-driven has been the promotion of export diversification. However, one major factor that has been identified by various scholars that can negatively affect the drive for export diversification has been laid at the doorstep of volatility in the real exchange rate. While there are studies (Goya 2014; Kamuganga 2012; Hericourt and Poncet, 2013) that suggested that RER volatility indeed affect export diversification negatively, on the contrary, there are those (Agosin et al., 2009) that argued that RER volatility effect on export diversification for several countries is insignificant. Available evidence from this study, however, suggests that the RER volatility has not hindered the export diversification of Ghana, which is in line with Obeng (2017) argument. He maintained that “when the local currency depreciates against the rest of the world, exports become competitive and so will promote export diversification and when the local currency appreciates, exports

become uncompetitive and that could discourage export diversification” (Obeng, 2017: 2).

Regardless, of the volatility in RER, the fall in the price of Cocoa and Gold, which are the primary source of export earnings for Ghana in the 1980 and 1990s made the government of Ghana to felt the need to diversify its export base. The attempt to encourage export diversification led to the promotion of marine products, aluminium, wood, and horticultural products as well as other products that fall under the classification of NTE (ISSER, 2002 cited by Yeboah, 2005). To ensure that the economy is more diversified the Ghana government came up with a National Export Strategy (NES). The general purpose of the NES is to increase the potential of the NTE sector to have a maximum contribution towards the GDP growth, in particular, the national development that will enable the government to create decent formal employment as well as ensuring high standards of living for the citizens (NES:5).

According to Asamoah et al. (2016), Ghana progress in the last ten years to developed horticulture export industry is highly commendable, and the country has the potential of becoming the world leader in horticulture export in the present day. For example, Ghana has made significant progress in becoming a champion in the export of pineapple, a product that was practically in non-existence in 1990 rose to 68,000 tons in 2004 (Asamoah et al., 2016: 20). By 2008 pineapple export earn US\$10.6 million which increased in 2013 by 13% raking in US\$19 million (Odei-Assibey, 2015:4). In addition, medicinal plants witnessed a significant increase because of the policy direction that encourages export diversification NTE products. Between 2012 and 2013, medicinal plants witnessed a tremendous 200% increase from hat more than 200% from US\$14.2 million to US\$43.1 million (Odei-Assibey, 2015:5). The success story of Ghana as one of the fastest growing economies in SSA with the growth rate of that average 11% between 2007 and 2011 and a 13 % growth rate in 2011 statistic (Word Bank 2011) has never been hinged on oil production. This is because before the commencement of oil exportation, Ghana has a more diversified economy. The economy is so diversified to the extent that no particular product holds a leading position, be it in its production or export composition. The figure below demonstrates the degree of Ghana export diversification even before the emergence of oil exportation.

Figure 3: Ranks and values of Ghana top ten exports in 1998 and in 2010

Description	1998		2010	
	Export Value	Rank	Export Value	Rank
Cocoa beans, whole or broken, raw or roasted	\$630	1	\$3,546	1
Gold, unwrought, semi-manufactured, powder form	\$170	2	\$892	2
Veneers and sheets for plywood etc <6mm thick	\$136	3	\$119	3
Wood sawn, chipped lengthwise, sliced or peeled	\$134	4	\$91	4
Prepared or preserved fish, fish eggs, caviar	\$72	5	\$81	5
Cocoa butter, fat, oil	\$71	6	\$69	6
Oils petroleum, bituminous, distillates, except crude	\$34	7	\$62	7
Unwrought aluminium	\$34	8	\$43	8
Palm oil and its fractions, not chemically modified	\$29	9	\$35	9
Aluminium ores and concentrates	\$26	10	\$33	10
Cocoa paste	\$21	11		
concentrates, iron ores >20% Manganese	\$17	14	\$14	17
Aluminium plates, sheets and strip, thickness > 0.2 m	\$11	18		
Plywood, veneered panels and similar laminated wood	\$6	25		
			\$10	27
			\$2	60
			\$0	209
			\$0	443
and epoxide resins, in primary forms; polycarbonates, alkyd	\$0	626		

Sources: Daruich et al., 2016:24)

The available evidence from the findings of this study shows that, one cannot ignore the fact that Ghana has been plagued by instability and stop-and go growth for long as suggested by Fosu and Aryeetey (2008) and Gocking (2005). However, the diversification of Ghana economy coupled with strong macroeconomic performance is an indication that Ghana is most likely to escape the oil or resource curse because the significant factors that contributed to Ghana status as fastest growing economy in SSA are deeply rooted in the non-oil sector.

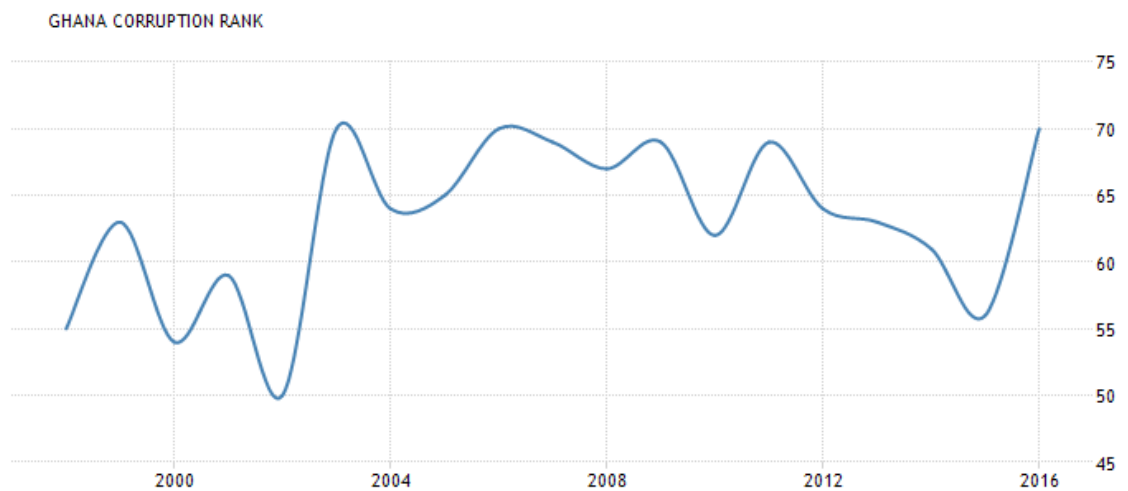
## Political Effect

### *Democracy and Corruption*

Democracy has been said to be one of the primary drivers of resources curse, most especially when the guiding principles are jettisoned and are not met (Bakwena et al., 2009:2). Various studies (Jensen and Wantchenkon, 2004; Ul-

felder, 2007; Ross, 2012; Wright et al., 2015) has shown that oil wealth strengthened autocratic rules and lowered the level of democracy. It is difficult to argue with such assumptions going by the plethora of examples that are available in Africa from Nigeria to Angola, Libya to Equatorial Guinea, Gabon to Chad just to mention a few. According to Ross, oil has been the most consistent type of resources linked with sores institutions and less democracy (Ross, 2012). Since the best way to reduce corruption is through democratic institutions that serve as check and balances to elected officials (Anyanwu & Erhijakpor, 2014:5), the importance of democracy in escaping resource curse syndrome cannot be underestimated.

However, the successful successive democratic election in Ghana since the return to civil rule in 1992 has made Ghana become a model and reference point for economic management and good governance in the Africa continent (King, 2009:4). In the resources governance report of 2013, the country was even ranked 15th position out of 58 states globally. The resources governance ranking take into cognisance the government policy that promotes accountability and transparency in the distribution of oil revenue to sub-national authorities in mining communities (Abdulai, 2017:3). Nevertheless, one might want to agree to the narratives that the discovery of oil would not be problematic for Ghana because of the democratic nature of Ghana coupled with the fact that the country was ranked 64th least most corrupt country in the world by Transparency international in 2014 on the one hand. Unfortunately, the 2016 Transparency International Corruption Perceptions Index that rated Ghana in 70th position (Transparency International, 2016:7) is a cause for worry and to start rethinking the previous assumption that the democratic nature of Ghana and low corruption rating, when compared to other resources abundant countries in Africa will enable the state to escape the resource curse syndrome. The figure below shows clearly that corruption has been on the rise since oil exportation on a large-scale commercial quantity started in Ghana.



SOURCE: TRADINGECONOMICS.COM | TRANSPARENCY INTERNATIONAL

Source: <https://tradingeconomics.com/ghana/corruption-rank>

At this juncture, the arguments of Ross (2015) and other scholars that maintained oil wealth has the potential to weaken democracies seem plausible based on the available data to this study. Although a study conducted by Starkey (2015) in Ghana suggested that the rise in corruption in Ghana is not as a result of oil rent because Ghana government have put in place various policies and institutions that encourage accountability, transparency, and the involvement of the civil society in the resource management decision making which are components of good governance. It is important to critically examine the institutions and policies in place meant to address corruption and promote accountability.

### ***Quality of Institutions and Policies***

#### **Ghana Petroleum Revenue Management Act (PRMA)**

The PRMA as discussed earlier is a government policy that divided the oil revenue into two, 70% for budget and 30% into heritage and stabilization funds. With this approach government of Ghana aimed at showing transparency and accountability of how the oil rents are been spent. Unfortunately, there are various flaws in the PRMA that can make the government to spend more than 70% on the budget or mismanaged the 30% meant for stabilization and heritage funds which will in turn undermine the objectives of setting up the funds in the first place. For example Section 23 (3) of the PRMA empower the Minister of Finance to set the ceiling without guidelines that will determine the ceiling, therefore giving the Minister unlimited power because is highly unlikely for the Parliament to object the Minister set ceiling. Without guidelines that can also check the excesses of the Minister of Finance, it is not impossible for the Minister to set a ceiling that will accommodate the corrupt interest of the political lobbyist and political godfathers. Also, the PRMA vulnerability also gives room for the Minister to engage in discretionary spending of the contingency fund because Section 23 (4) of PRMA allows the Minister to transfer any excess over the ceiling for debt payment.

The discretionary spending of the Fund available to the Minister is tantamount to non-prudence of revenue management and will be difficult to hold the Minister responsible should in case the Minister use his/her discretion to spend the money outside the PRMA defined priority areas. Apart from the fact that the PRMA failed to clearly state the type of debts that excess revenue meant for contingency can be used for, it is practically impossible for anybody to hold the Minister responsible if the Minister discretionary decided to use the money to pay debts outside the defined priority areas. Notwithstanding, the lack of tight regulation that can guide the Minister in determining the ceiling of Stabilization funds is an incentive for a corrupt for the Minister to unduly bloat the size of this seemingly unrestricted fund.

Furthermore, PRMA Section 49 that addresses the general transparency issue level of inconsistency is more fascinating. While sub-section 1 of Section 49 stated unequivocally that, the management of the petroleum revenue and savings should be in tandem with international guidelines and standard of good governance, the sub-section 3 of the

same section quickly rubbished such idea of transparency. Sub-section 3 gave authority to the Minister not to release data or information that he/she deem fit in his opinion could “prejudice significantly” the performance of the heritage and stabilisation funds. Rather than creating a conjecture in support of disclosing information to the public, unfortunately, the business and political interest of the elites are protected by the law by erring on the side of secrecy

### **Public Interest and Accountability Committee (PIAC)**

Public Interest and Accountability Committee is multi-stakeholder (NGOs, CBOs, government agencies, traditional and communities’ representatives etc.) committee set up for an independent assessment of government use and management of petroleum revenue in the PRMA. The establishment of PIAC ought to be a testament to the readiness of the government to be transparent and accountable to the public by carrying them along in the process of decision making in relations to oil wealth management. Nevertheless, a closer look at the PRMA provision on PIAC revealed a severe weakness that will not only undermine the purpose of setting up the committee in the first place but also will hinder the ability of the committee to serve as an independent watchdog monitoring the Petroleum Funds. Ideally, PIAC should serve as a crucial link between the government and the public that will give autonomous and unbiased assurance on the proper management of the funds. Unfortunately, the responsibilities of the Committee authority are not well spelt out in Act. At best, the role ascribed to the Committee in the Act figuratively can be said to be “advisory to the Executives and the Parliament”, which is a contradiction to the demand of the general population of Ghana. Apart from the fact that, the Parliament has not been able to debate the report of the committee for three years now, and the inability of the committee to investigate or demand information from companies, individuals, and government agencies involved the petroleum revenue management or petroleum development due to lack of authority to do so.

The most noteworthy threat to the PIAC integrity is stated in Section 54 (2) that empowers the Minister to appoint the committee members. The Minister has the discretionary power to determine the ceiling and administer the Petroleum Funds and yet authorised to select and determine the compensation of members of suppose “independent committee” that ought to put the Minister in check. Apart from the allowance of compensation for committee members stated in Section 57, the committee is expected to hold meetings twice a year (Section 56c), have it own administrative sectarian (Section 53 (2)) while consulting widely with citizens (Section 53(1)) as well as publishing the reports in the newspaper and on its website (Section 53 (a,b)). It is somewhat unfortunate that, a committee that supposes to function independently has no provision in the law that state clearly, how to fund the committee despite all the critical responsibilities stated above. From the situation discussed above, there is a propensity for corruption to set in and a lofty policy will be defeated in achieving it aims

## Conclusion

From the findings of the study, the variables that structural economists argued that will cause Dutch Disease has not yet prevailed in Ghana. It has not however prevailed not only because the continuous depreciation of Ghana cedis but also because of good revenue management policy that established the Ghana Stabilization Fund and Ghana Heritage Fund. Nevertheless, the stabilisation fund as the findings of this study revealed run the risk of running out and may not be enough to stabilise future budget based on some flaws in the revenue management Act. Although, both the structural and new institutional economics explanation on resource curse are valid in the understanding of the current situation in Ghana. However, the institutional economist's solution to escaping the resource curse seems more plausible. The institutionalist variables help to know that although Ghana stands a chance to avoid the resource curse, it is not a given because there is still a lot of work to do in improving the quality of institutions and policies to curb corruption in the management of oil revenue.

It was also discovered that it is true that the volatility of Term of Trade, price of commodities, and Real Exchange Rate had impact on the economic growth of Ghana but did not find any correlation with hindrances in the diversification of export. However, the panacea to the effect of these variables on the economic growth of Ghana is intertwined with policy response of Ghana to mitigate the effect. On the political effect, a critical review of the Petroleum Revenue Management Act (PRMA) helped in understanding the possibility of Ghana escaping the same fate other resources abundance countries in the region suffered. The findings of this study resonate with the argument of Sala-i-Martin and Subramanian (2013) and Isham et al. (2005) that for institutions and policies to successfully mitigate resource curse effect, the level of institutional quality must reach a certain level. The government of Ghana has put in place commendable policies, all that it requires is a political will to follow through and ensure that loopholes in the various policies that can hinder the success of the policies in achieving the purpose they are meant to achieve. Otherwise, corruption will continue to grow, and the country will fall into the resource curse. Nevertheless, the conclusion that can be drawn from the findings of this study is that the oil discovery come at a time that Ghana seems to be better equipped, both with tools and historical know-how, to avoid past mistakes. This is something the neighbouring countries such as Nigeria and Serial Leone did not have when diamond and oil were discovered in the countries.



## Chapter 5 Conclusion

This study set out to examine the effect of the oil discovery on the economic growth of Ghana through the lens of RC and its implication for the sectors that are the backbone of Ghana economy pre-oil era. Since there have been series of competing narratives that best explain the prospect of Ghana suffering from RC or not yet suffering from it and stand a higher chance of not falling victim of RC. We are asked two questions 1) to what extent has the variables of Resource Curse from the structuralist and institutionalist economics have effects on the Ghana economy at the advent of oil discovery in commercial quantity in Ghana?, and 2) how can Ghana economy avoid becoming a victim of Resource Curse?. These questions were deemed essential to answer the central question of this study that seeks to understand what impact does the Resource Curse of Oil Discovery have on the Ghana Economy Growth? To answer these questions, the study adopted structuralist and institutionalist economics thinking to address the questions by identifying variables that best explain the current situation in Ghana. The findings of revealed that the effect is a dichotomy, the economic aspect and the political narrative. For the economic strand, DD, volatility in term of trades and commodities prices, real exchange rate were used to do the data analysis while democracy, corruption, quality of institutions and policies were the institutionalists variables deployed to answer the questions asked in this study.

For the research question one, the findings revealed that Ghana appears to have evaded the effect of RC considering the depreciation of the Ghana cedi that has been on a downward slope even before the discovery and exportation in commercial quantity. In fact, any form of appreciation will not be detrimental but rather a blessing at this time that is in depreciation and volatility crisis. Although this does not suggest that the discovery of oil is not necessarily disadvantageous because of the impact, it has on the exchange rate, and the effect depends on the state, which a country economy is at the time when oil exportation began. Furthermore, the Ghana industrial sector support plan appears to work in the prevention of the anticipated deterioration of the industry sector. Despite the fact that the volatility in TOT and price of commodities including oil have been volatile of late which is a testament of how it affected Ghana spending and budgeting plan, the GoG seems to be more prepared with other countries in the region. Ghana policy in managing their oil revenue is plausible enough to cover up for the volatility in TOT and commodities price.

The findings also revealed that RER volatility had not hindered the export diversification agenda of Ghana. This is because of the policy response of Ghana government to introduce the National Export strategy. The strategy helps to promote commodities that were nearly at zero contribution to exports earnings now occupying a dominant position in export earnings contribution to the economy. The promotion of the NTEs helps Ghana reduce the effect that TOT and volatility in RER might have on the economy since the fall in the price of commodities don't fall at the same time. A diverse economy like Ghana has been able to withstand the shock in decline in price when compared to other resource abundant countries in the region that have a less diversified economy.

Again, the findings show that the National Export Strategy has increase the potential of the NTE sector to have a maximum contribution towards the GDP growth, in particular, the national development that will enable the government to create decent formal employment as well as ensuring high standards of living for the citizens. In this study, it was revealed that Ghana remain one of the best models of democracy with the strong intuitional arrangement in Africa, with proactive policies that are capable of mitigating against the economic effect of RC, although corruption rate is becoming higher. However, the increase in the rate of corruption that was revealed in this study cannot be connected to oil rent because there is no evidence that can be used to justify it. For the second research question, the solution to how Ghana can escape the RC is deeply rooted in the quality of the institution and policy response to some variables of the RC economic effect.

Although Ghana appears to be on the rights path by establishing the stabilization fund and heritage funds to cater for future generation and the revenue shortfall that arises from volatility in TOT and prices of commodities, it is essential to sound a strong warning that it not yet Uhuru for Ghana about RC. The major flaws in the Petroleum Revenue Management Act (PRMA) is a time bomb that ruins the economy of the Ghana. The unlimited power given to the Minister of Finance in the administration of the stabilization and heritage funds is an open check to corruption and nepotism. Let us agree that the incumbent Minister and even the next one will be honest enough not to capitalise on the flaws on the PRMA; no one can give a categorical statement that the occupant of the position of Minister will be more Catholic than the pope. Nevertheless, the conclusion that can be drawn from the findings of this study to address our central research question is that the oil discovery come at a time that Ghana seems to be better equipped, both with tools and historical expertise, to avoid past mistakes. This is something the neighbouring countries such as Nigeria and Serial Leone did not have when diamond and oil were discovered in the countries.

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