

HOW CAN GHANA AVERT THE RESOURCE CURSE?  
LESSONS FROM FOUR NATURAL RESOURCE RICH ECONOMIES

BY

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## DECLARATION

I hereby certify that this Master's Thesis is my original work. I have not copied from any other students' work or from any other sources except where due reference or acknowledgement is made explicitly in the text, nor has another person written any part for me.

This thesis was completed under the supervision of Professor Suzuki Yasushi.

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## **Abbreviations & Acronyms**

AfDB – African Development Bank

AU – African Union

BBC – British Broadcasting Corporation

CIA – Central Intelligence Agency

CPI – Consumer Price Index

EITI – Extractive Industries Transparency Initiative

FDI – Foreign Direct Investment

GEP – Ghana Economic Performance

GNA – Ghana News Agency

GSS – Ghana Statistical Service

HDI – Human development Index

IMF – International Monetary Fund

IRIN – Integrated Regional Information Network (UN)

OPEC – Organization of Petroleum Exporting Countries

PIAC – Public Interest Accountability Committee

PRMA – Petroleum and Revenue Management Act

RWI – The Revenue Watch Institute

TI – Transparency International

UNCTAD – United Nations Conference on Trade and Development

UNFCCC – United Nations Framework Convention on Climate Change

NEP – National Economic Plan

IBRD – International Bank for Reconstruction and Development

HIPC – Heavily indebted poor countries

HDI – Human development Index

WDI – World Development Indicators

ISI – Import Substitution Industrialization

EP – Export Promotion

## **Abstract**

Natural Resource rich economies over the past few decades after the oil crises of the 1970s have been plagued with what has been termed the “resource curse” hypothesis, where resource rich nations have failed to reap expected benefits from the natural resources they possess, instead they perform worse than their resource poor counterparts.

This research from a multiple case study point of view, sought to draw lesson from four experienced resource endowed nation (Nigeria, Chad, Malaysia and Indonesia), all of which have had encounters with crude oil and gas as a natural resource they depended on (and some still do) for foreign exchange and government revenue. Two (2) of the cases were viewed from a diversification point of view and the other two (2) from a dependence point of view.

The proposition made was that, diversification could serve as a policy buffer that can help avert a natural-resource rich nation’s vulnerability to the resource problem. Which from the cases analyzed, it proved that although not an easy step for a nation to take, it does pay off in the long run. The researcher also discovered that, an enabling environment amidst other factors is vital to attract FDI into the economy (the Ghanaian economy), to kick start diversification into other sustainable: sectors, sources of budget financing and employment for the economy: as seen in the ‘success’ cases, as these FDIs flowed into their non – extractive sectors, they also brought technical know-hows which improves

productivity and efficiency, leading to an expansion in outputs and possibly living standards.

Aside a few cases, such as Norway, this research concludes from the cases studied that the economy of Ghana can avert the resource curse should it put in efforts to reduce its reliance on the primary sector of its economy, and create an enabling environment to attract FDIs which is a key factor if it seeks to transform its economy, as seen in the success cases.

**Keywords:** Economic Diversification, Economic dependence, Resource Curse, Dutch disease, Foreign Direct investment.

## **CHAPTER 1: THE PROBLEM**

### **1.1 Background of Study**

Natural Resources for centuries, since those days when countries were enclaves to these days where they are traded on commodities markets, have been a source of wealth for nations for decades and as such a blessing for developing countries (Rosser, 2006), its endowment in a country should have meant an increase in wealth and living standards of its economy.

Although several studies by pre-1980 development theorist supported this argument, many studies conducted after the 1980s have insisted otherwise (Examples are: Auty 1990; Gelb 1988 as seen in Sachs and Warner, (1995)). Countries rich in these resources are seldom seen with the impacts expected; usually these natural resource rich nations are plagued with slow growth and poor development indicators (Rodriguez & Sachs 1999; Anyanwu et al., 2009).

The African continent is one of such place; out of its 53 countries, 22 of these were classified as natural “resource-rich” nations in a study on oil and gas in Africa: these were the mineral and fuel resource exporting countries; in the study they classified 31 of the countries as resource scarce, (Anyanwu et al, 2009. pp. 93-94), although these 31 countries export other commodities such as agro products. The continent also has a majority of its members in the lower income status of the World Bank’s classification of countries using their GNI per capita (Atlas method computation); in terms of Human development it has a majority of

its countries in the poor stages of United Nation's HDI indicators (The World Bank 2012; HDI 2012). Sachs in 2001 stated that, most resource rich nations compared to their resource poor counterparts always perform much worse in terms of growth and development. "The oddity of resource-poor economies outperforming resource-rich economies has been a recurring motif of economic history" according to Sachs & Warner (1995).

These poor development indicators lead to: inequalities among the rich and the poor in the country; urbanization which causes an increase in informal sector employment in the economy; also harsh living conditions where basic public goods, such as education and health may not be easily accessible. A state of development that researchers claim is worse than when the country did not yet have that particular resource, especially oil and gas. This question thus arises: does natural resource endowment do more harm than good? Or as the 2001 Nobel Price winner, George Akerlof put's it: isn't more and more of these always better? As far as I know, the more of a financial resource you have, the more possible investments you can make. Governments complain of deficit problems, how to pay back debts and how they can finance their development projects, but should not the discovery of these resources, especially oil and gas, make available extra funds for these developments?

The problem is that which has been coined as the resource curse phenomena, a situation in which most resource rich nations find themselves, where the expected outcome of a resource's contribution to a nation's development does not happen,

and it is rather plagued with poorer living standards than expected. Gylfason (2001) discussed “four (4) main channels of transmission from abundant natural resources to stunted economic development, [he outlined them as:] (1) the Dutch disease; (2) rent seeking; (3) overconfidence; and (4) neglect of education”, he then highlighted on the need for investment in education, without which any resource rich nation may fail to improve living standards of its citizens. Anyanwu et al. (2009), in listing the channels of transmission, in a joint study by AU and AfDB also agreed with Gylfason concerning (1) and (2) and added three other factors through which natural resource contribute to slow growth in Africa. (2009, p. 79)

Several policy recommendations have been made by earlier researchers to prevent or combat the resource problem, some have stressed on transparency in the use of the oil revenue, others have talked about a stabilization & heritage fund to stretch the oil benefits to future generations, others have suggested economic diversification to reduce dependence on just the resource (Humphreys et al, 2007, pp. 15-17; Gylfason, 2011, p.18). All these are policies that have worked for earlier resource rich nations, like Norway, Botswana, Malaysia etc. and hopes are that they will work for new resource rich nations like Ghana.

Ghana has been dependent on commodities and its primary sector for its foreign exchange; in 2010 its major exports were Cocoa and gold. Ghana discovered commercial quantities of Oil and Gas reserves in 2007 and started drilling and

exporting in December 2010. The third major export of the country in 2011 then became Crude oil, increasing the industrial (mining contribution) share of GDP by 41%, from 18.6% in 2010 to 25.9% in 2011, and to a provisional 27.6% in 2012.

In 2001, Gylfason found out that: since the 1960s, of all the Sixty-Five (65) natural resource rich nations only four (4) had managed to show better performance in terms of growth, investment in education, and human development, of these four, Malaysia, Indonesia, and Thailand succeeded through economic diversification. Which is a policy through which these nations reduced their dependence on just their natural resource for government expenditure and foreign exchange cover, decisions which derailed possible Dutch disease in the future.

The future is uncertain, and for a new oil rich nation like Ghana, there are lessons its policy makers can learn from the past experiences of earlier resource rich nations, and even from it's own. What path would Ghana take? Will future researchers portray Ghana as a success story or a failed attempt? This research seeks to outline that the main cause of the resource problem is dependence, and not just in the abundance of the resource. It seeks to lay before its readers how dependence or economic diversity would translate into the living standards of people in the country, from the resource curse point of view, with lessons from other countries applied to Ghana's case.

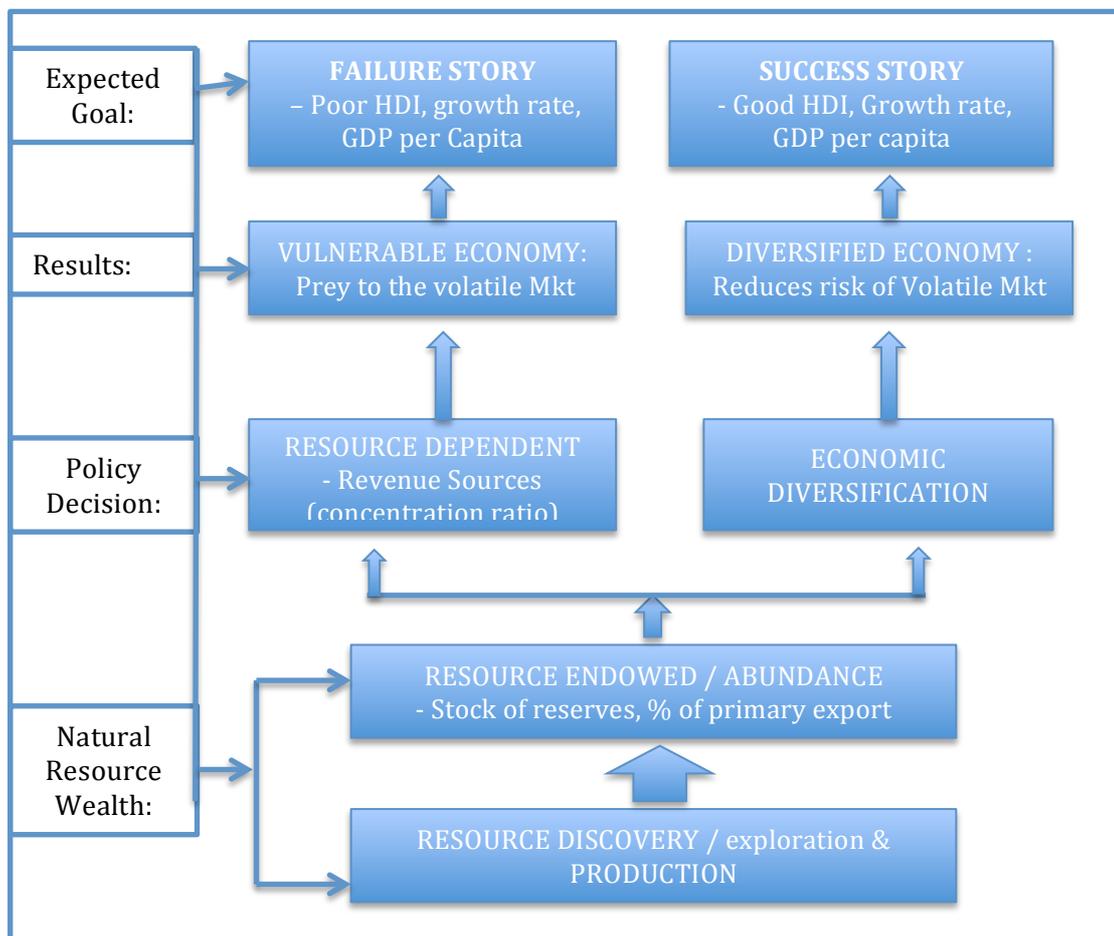


Figure 1.1: Conceptual Framework

From figure 1.1 two stories can be told: a success one and a failure one which all came from one source, that is being naturally endowed with a non renewable resources such as Crude oil and Natural gas as addressed in this report.

Although several of work in relation to Oil and Gas and development has been done (Ismail, 2010), with some works concentrating on the Dutch disease, volatility and economic diversification, in their effort to reduce the risk of dependence on commodities whose prices are very volatile, none has sought to

consider this study for Ghana, and to use cases from other success and failure examples to draw possible policy directions. It is easy to assume that it seems researchers take the stands that Ghana's export is diversified: since it has a commodity in the fuels, the minerals and Agro crops, or that it is too complex to consider. Ever since the discovery of oil, most the researches have handle its research from a socio-political economic point of view; Some looked at it from: how the revenue would be used properly to enhance developments (R. van der Ploeg, Stefanski, & Wills, 2011); the readiness of the country as an oil exporting nation, and its ability to escape the resource curse (Gary, Manteaw, & Armstrong, 2009). Mitchell, (2012) looked into a direct cash distribution of oil revenues to Ghanaian citizens, as a potentially powerful approach to protect and accelerate Ghana's political and economic gains, and saw it as a way through which the country's social contract will be strengthened. Others saw institutional capacity and necessary reforms as vital to aid Ghana's success as an oil exporting nation, and dodging a possible resource curse (Harguth, 2012); also analysis of the petroleum revenue bill drafted and the effect of using future revenues or reserves as collaterals was considered by Gatsi, (2010); the world bank on the other hand studied the economy-wide impact of the oil find in Ghana (World Bank, March 2011), while others disputed the notion that the country is in its early stages of Dutch disease as stated by the World Bank's report (Dartey-Baah et al, 2012). The researcher seeks to analyze a scenario of a possible aversion of the Resource Curse and Dutch disease phenomenon, through lessons from the experiences of

both natural resource dependent nations, and economically diversified nations, and what Ghana can learn from them as a two (2) year old oil-exporting nation.

While earlier researchers have sought to understand why countries with natural resource abundance are plagued with slow growth and poor levels of development indicators, this research seeks to support the notion that abundance does not necessarily mean dependence and that diversification can aid a natural resource abundant nation to make the best use of its resource and to take off. Also to find workable ways from earlier resource rich nation's experiences through which Ghana can learn to avert the possible pitfall.

## **1.2 Statement of the Problem**

Some say it is better for a resource to stay hidden than to be explored, since many nations that found vast quantities of natural resources, especially in the fuels, ended up with slower growths and worsen qualities of life, than expected. Others argued that it was through these same natural resources that the "big nations" now (that is: USA & UK) grew in the early ages. The current trend has been described using the term "the resource curse".

IMF (2011) in a report stated that: "Low-income countries rich in natural resources have historically performed worse economically than might have been expected. They have fallen prey to conflict, corruption, or over dependency on a single resource." Sachs in 2001 also talked about how, since 1960's resource rich nations have suffered from poor economic conditions than their resource poor

counterparts and this is my motivation of this research, a view shared by earlier writings like Sachs & Warner, (1995)

The future is uncertain, and although most Ghanaians are optimistic that Ghana's oil will bring better standards of living, and that its exports are diverse, to what degree is it diversified, and what would happen if policies do not go in directions to maintain it diversified, in seeking to escape the resource curse. Will Ghana fail to be a success story even as the petrodollars starts flowing in?

This main argument behind this report is about the resource curse and dependency issues of oil rich nations, and what Ghana can learn from past experiences of natural resource rich nations, from both negative and positive effects that resulted from their policy decision, in order to reduce its vulnerability to the resource problem.

### **Specific Objectives**

The research seeks to fulfill these specific objectives:

- To study the experiences of some selected natural resource abundant nations and how these resources affected their economic growth & development: to critically analyze the transmission between the two, and its implications on Ghana's development.
- To measure, to what extent economic diversification can help promote economic growth in a natural resource rich nation, and possibly help it escape the resource curse.

- To suggest how Ghana can avert a possible pitfall that most natural resource rich nations have fallen into through their overdependence on their natural resources, especially crude oil.

### **1.3 Assumptions & Propositions**

#### **1.3.1 Assumptions**

The main assumptions that would be made in carrying out this research would be that:

Government's policies will flow in the direction of attracting FDI, empowering private industries, in the quest to increase manufactured share of GDP and manufactured exports. Also policies that invest in existing sustainable sectors, and seek to find other cash crops that its arable land can produce to be exported; finally policies that would focus on the education of its citizens.

#### **1.3.2 Propositions**

This research proposes these two ideologies, which would be the basis for our analysis:

P1: Ghana is highly dependent on its natural resources, and with a new addition being crude oil and gas; Ghana is more vulnerable to the resource problem, as a developing nation.

P2: A diversified economy is the way out of resource problem vulnerability if resource rich nations are to get expected benefits from their natural resources.

### **1.3.3 Limitations of Study**

The study is limited to the four cases under consideration and how the various nations have handled its natural resource aided growth. The research does not go deep into the socio-political reasons why natural resource rich nations may fail or succeeded. It is thus limited to their policy decisions that transformed their economies as they reduced or increased their dependence on just natural resource, especially crude oil, for development.

### **1.4 Methodology**

This research is an exploratory study and would be carried out from a qualitative point of view, using a multiple case study. This is the case type called collective by Stake (1995). Yin (2003), as seen in (Baxter & Jack, 2008), describes that this case study type “enables the researcher to explore differences within and between cases. The goal is to replicate findings across cases, because comparisons will be drawn, it is imperative that the cases are chosen carefully so that the researcher can predict similar results across cases, or predicts contrasting results based on a theory.” It would be done using secondary data, and literature written about growth, oil, and the resource curse. The researcher would organize articles, News items, government budget and policy documents. These would be organized from

Research databases such as Nexis Lexis, Proquest, Google Scholar, Bank of Ghana and several Ghanaian Governmental and non-governmental websites.

With the help of the Case study method, the researcher would attempt to answer his research question. The case study would be centered on finding out how some nations failed to escape the resource curse even as they were over dependent on their natural resources, and how others succeeded through good policies and Economic diversification. The countries that would be studied are Nigeria, Chad, Malaysia, and Indonesia. Of all the 65 classified resource rich nations in 2000, two out of the four chosen case studies for this research are among the only four countries that have been able to diversify their economies: making them not totally dependent on just one resource for competitiveness, and have been industrializing (Gylfason, 2001). The generalization methods to be used in this case study is based on deductive: in deductive the case becomes the empirical evidence of an existing theory; and in this, generalizations “are made from known cases and applied to an actual problem situation by making appropriate comparisons. This is also called naturalistic generalization” (Stake (1995) in Johansson, 2003).

### **1.5 Importance of Study**

Ghana as a country found commercial quantities of oil in 2007 and started receiving what researchers call the ‘petrodollars’ in the first quarter of 2011. Two years down the line since production started, how is the economy adjusting to the newly found resource, is it making it a blessing instead of a curse?

This study seeks to generalize a policy recommendation that is aimed at helping the sustainable development of a nation (Ghana), a country that earlier researcher suggested was doing better than many oil exporting nation in its sub-region.

Other researchers, Policy makers, and Economists stand to benefit from this report in various ways.

### **1.6 Organization of Thesis**

This thesis is organized into Six (6) chapters, centered on natural resource endowments and their contributions towards the growth and sustainability of a nations quality of life; it investigates how Ghana can have a better swing at this, than earlier natural resource rich nations that failed.

Chapter One has sought to define the existing problem of resource curse and how it affects a nation's growth and development, it is also made up of the conceptual framework, Objectives of the research, its limitations, its methodology and the assumptions under which this research work was carried out. At the end the reader should have a clear understanding of what the problem is.

Chapter Two seeks to contrast the arguments surrounding resource dependence and Economic growth. A literature review will be done on the relations between resource abundance, resource dependence, Volatility, Dutch disease, and between economic growth and development of a resource rich nation. In conclusion, the difference between resource abundance and resource dependence would be clear

and diversification of a countries export will be a suggested possible solution to the problem.

Chapter Four would be an introduction of Ghana as a country endowed with resources: it's relevant political, socio-economic history would be outline in order to make objective arguments; its natural resource strength and how it has depended on it for years would be presented; the oil discovery and several relevant indicators would be reported and analyzed. At the end Ghana's dependence on its natural resource and how the country has handled them over the years would be clear.

Chapter five seeks to report on case studies that will be done on four (4) crude oil exporting nations, who have already had decades of experience with this and other natural resources. Nigeria and Chad would be studies from the point of view of natural resource dependence and economic development; Malaysia and Indonesia would be studied from the point of export diversity and economic development. Two of these resource rich nations have escaped the curse, thus lessons and policies that help would be a good guideline for policy recommendations for Ghana. Also this chapter would seek to analyze the uncertainty that surrounds Ghana's future in terms of its export diversity and its sustainable development. A cross case analysis would be performed on resource rich nations, concerning export diversity and Economic growth. This chapter seeks to conclude whether

export diversity would help Ghana even as its exports are natural resource skewed.

Chapter Six would be the conclusion of the five chapters and the policy recommendations that the research could make to guide the policy makers in Ghana and the Sub-Saharan African region as a whole, even as new discoveries are been made all over region. It will also suggest area where further studies could be undertaken in the body of knowledge.

## **CHAPTER 2: LITERATURE REVIEW**

Over decades of study about natural resources and their contribution to development, questions such as: is natural resource abundance a problem? Does it destroy or make better the economy that extracts or produces it? How can it be escaped, if it brings a curse or how can a blessing be harnessed from it? – These questions have lingered behind the thoughts of researchers even as they work their way out to understand the dynamics surrounding a resource's contribution to an economy's development.

Is more always better or does more breed vulnerability to the resource curse? Several researchers (such as Gelb in 1988; Auty in 1990) since the late 1980s have tended to disagree with the conventional wisdom that existed surrounding resource abundance and growth, their conclusion were that resource abundance retards growth instead of enhancing it.

The review of literature in this research has been divided into four parts; It looks at previous researches in the light of Natural resources and how they affect economic development which gives rise to the resource curse and the Dutch disease phenomenon; this then led us to contrasting the policy solution of diversification against dependence in responds to the resource problem that hunts resource abundant nations. The researcher will then see how the review can help understand events that are taking place in a 3 year old oil exporting nation, Ghana,

and how diversification can serve as a buffer to actions being taken to avert a possible resource curse.

## **2.1 Natural Resources & Economic Development**

Growth models have been used over decades in explaining how the economy works, to name but a few there are: Classical and Neoclassical theories of growth; Rostows stage growth models; Solow's growth model; Harrod-Domar growth model; Endogenous and Schumpeterian Growth models. All these have been trying to explain how the economy operates, from their unique point of view.

Natural resources' relationship with the growth of an economy is one that is a complex issue to explain. Earlier economist saw natural resources' contribution as a positive effect on a country's growth. It was not until the 1980s that the study of Natural resource effects on economic growth took a different turn (Davis & Tilton, 2005), ever since the study of Gelb (in 1988) and Auty (in 1990) several authors have sought to explain the dynamics of how natural resources, in all categories: land; minerals; fuels; crops affect the development of an economy. Natural resource wealth is viewed as income through which the economy can fund developmental projects. In Ghana 70% of this wealth finances the annual budget, which is allocated to the development of 11 priority sectors, while the rest 30% is invested in petroleum funds such as Stabilization fund and Heritage fund (Ghana's PRMA, 2011). In their relation to an economy, especially the non-renewables resources, Humphreys et al (2007, p.8) suggests that these natural resources should be seen as assets and the consumption of the revenues from their

sales viewed as a consumption of capital and not as income, and the Resource rents that flow from them as wealth flow and not as income (IMF, 2012) to aid its wise use.

Decades of writings on the natural resource and development, have had diverse outcomes but a majority of these have shared the view that: resource-poor economies turn to out-performed their resource-abundant counterparts (Sachs & Warner, 1995, Auty, 1998; 1999; 2001a; 2001b; Gylfason 2001), the fact that resource abundance has led many of those economies to slow growth and poor development indicators gave way to the term “resource curse” (Humphreys et al, 2007, p.1). Researchers over the years have sought to explain the cause for this slow growth: Rodriguez & Sachs (1999) attributed it to the possession of unsustainable, high levels of income by these economies, that is, living beyond their means; Davis & Tilton (2005) realized that good policies “can foster the conditions needed to ensure that mining is ... a positive force for development” Auty (2006) also attributed it to lack of good policies on how to manage the effects of resource rents; Bazilian et al. (2013) saw (necessary) institutional reforms as critical for long-term prosperity & growth, as they studied growth of most small oil & gas rich economies in the coast of the Gulf of Guinea; the lack of which creates a resource-curse-vulnerable economy.

Is resource abundance, a problem in itself? Before the late 1970's these had led to the growth of many of the nations that are now termed developed nations. Many

of these nations depended at some point in their path to development on some extractive industries (Ali, 2006). Stijn (2005) argued that natural resource contribution to growth was not as clearly defined as negative; he added that the effect of natural resource in economic growth is made up of both positive and negative channels through which an economy can be affected. A sentiment shared by Papyrakis and Gerlagh (2002) but who also concluded that in the end natural resource abundance impedes economic growth rather than stimulate it. Reason being that empirically the negative indirect effects outweighed the direct positive effects from the resource.

Various channels have been suggested through which natural resources negatively affect growth indirectly, although they do have some positive direct effects according to Papyrakis & Gerlagh (2002), see also Brunnschweiler & Bulte (2008), and Stijn (2005).

These channels include:

- Dutch Disease - describes as the sudden appreciation of the real exchange rate of an economy: this increases real wage, driving out pre-existing exports and import competing industries. (Gylfason 2001; Anyanwu et al, 2009; p.79, Lipschitz, 2011, p.1; van der Ploeg et al., 2011)
- Rent Seeking - These behaviors by elites in the society that robs welfare from it, as they seek to keep existing structure of rights through corrupt practices that channel resource rent away from growth enhancing needs of

the economy (Gylfason, 2001; Anyanwu et al., 2009, p.79; Lipschitz, 2011; p.1, IMF, 2012).

- Price Volatility, dependence and vulnerability (Anyanwu et al., 2009 p.79; Lipschitz, 2011, p.1; IMF, 2012; van der Ploeg et al., 2011)
- Tension between oil-producing region of the country and non-oil producing regions: a case that is quite unique to Africa, a classic example is Nigeria's Niger Delta (Anyanwu et al., 2009, p.79).

From literature, the abundance of a natural resource therefore gives rise to the so-called resource problem, which is experienced through several channels. Although a few countries, such as Norway, Botswana, and Malaysia have managed to make good of their resource, giving their citizen somewhat better standards of living, most natural resource rich nations, such as Algeria, Nigeria, and Chad, mostly in sub-Saharan Africa have wallowed in low growth and low development as compared to their resource scarce counterparts.

## **2.2 The Resource Curse, Volatility & Dutch Disease**

Although the idea of the negative effects of natural resources on an economy was noted by earlier researchers (as the Paradox of plenty), it was after Richard Auty's book in 1993 on the Resource curse thesis, that the term "Resource curse" (or problem) came to be known and used to describe, a resource rich nation's inability to reap the expected benefits from the natural resource it owns, in terms of growth and development. Venezuelan politician Juan Pablo Pérez Alfonso, one

of the founders of OPEC, called their oil resource the devil's excrement. Atkinson & Hamilton (2003) and Anyanwu et al., (2009, p.79) introduced the resource curse as the negative or inverse relationship that exist between natural resource abundance and economic growth; using the share of resource rent in GDP as the measure for natural resource abundance Atkinson and Hamilton demonstrated that it is negatively correlated with GDP per capita growth rate. Gylfason & Zoega (2001) also argued that, "since 1960s economic performance of low-income countries has been inversely related to their natural resource wealth", a view that was also shared by Auty (2006).

Brunnschweiler & Bulte (2008) on the other hand termed the resource curse, a red herring, to them resource dependence did not affect growth rather resource abundance positively affected growth & institutional quality, a view shared by Stijn (2005). The magnitude of the effect is determined by the country's resource abundance, its constitution, and institutions: to them institutions played the most important role if resources were to lead either to negative or positive growth.

From literature (Rosser, 2006), It can be seen that the resource problem manifests itself through several forms, but broadly through **socio-political effects** such as: civil war; governance issues; corruption & rent seeking behaviors and institutions. The other form of effects is seen from the **market point of view**, mainly seen in the Dutch disease hypothesis; volatile prices; and resource rents. This research takes the path of market effects and seeks to prevent it as it draws on lessons from earlier resource rich nations.

### **2.2.1 Volatility**

The Oxford dictionary defines volatility as a word derived from volatile; it then defines volatile as “liable to change rapidly and unpredictably, especially for the worse”. In economics volatility is measured through risk, that is, calculating the standard deviation or variance of a data set.

The volatility of oil prices plays an important role in it becoming a problem or a helping hand. Volatile commodity prices make prediction difficult: of revenue, budgeting and government expenditure. It makes government vulnerable in terms of revenue, if oil income finances a big proportion of government expenditure. Van der Ploeg & Poelhekke (2009) termed it a quintessential feature of the resource curse, after conducting a cross-country empirical analysis; they found out that countries with a high contribution (greater than 19%) of natural resource exports in GDP are more volatile. Volatility is a perfect example of a channel through which natural resources translate into slow growth: when prices are too high they flood in a windfall of rents, which leads to several effects and when they are too low, unprepared governments may have to borrow to supplement their budgets, especially for dependent economies. Even as Rosser (2006) recalled from earlier reviews that “the problem for resource abundant countries was that international commodity markets were inherently unstable and that any instability within them could easily be transferred to domestic economies, in turn affecting the reliability of government revenues and foreign exchange supplies and dramatically increasing risks for private investors”. It has been noted for decades that oil prices over the past years have been volatile, and has brought windfall of

rents and problems to vulnerable resource dependent countries in the past, especially in the mid-70s. Predicting or measuring the movement of these prices in order to forecast expenditures or revenues has been a futile effort.

This instability in the commodity market makes counting on revenues from the extractive sectors difficult for most developing countries whose economies are natural resource based, and this inability “hampers the effective planning needed for economic development” (Davis & Tilton, 2005).

### **2.2.2 Dutch Disease**

The ‘Dutch disease’ phenomenon refers to the fears of deindustrialization that gripped the Netherlands when the Dutch guilder appreciated following the discovery of natural gas deposits within the country’s jurisdiction in the late 1950s and early 1960s in their North Sea. The boom in gas exports led to a decrease in total export even as their manufactured exports were brutally affected (Gylfason 1984).

Stijns (2005) deduced that oil and gas reserves are somewhat associated with Dutch Disease symptoms, where there tend to be slower real growths in the non-natural resource sector of the economy, when reserves are large: With signs of a smaller share of manufactured exports in total export, and a higher share of primary (commodities) products in total export. Also models presented in Matsuyama (1992) and also in Sachs & Warner (1995) “suggested that greater resource abundance can lead economies to shift away from competitive

manufacturing sectors in which many externalities necessary for growth are generated”.

Ebrahim-zadeh (2003) wrote a beautiful article on the Dutch disease, one she described as wealth managed unwisely. In this article she describes the two effects that results out of the appreciation of the real exchange rate of an economy, which happens as more wealth flows into the economy, be it through extraction of natural resources or FDI inflows; or an increase in nominal exchange rate value or commodity prices. These two effects she outlined as the spending effect and the resource move effect.

- **Spending effect:** In a flexible exchange rate regime, the increase in foreign currency supply into the economy, drives up the strength of the local currency, leading to a sudden appreciation of the real exchange rate of the country, this weakens the competitiveness of the country’s manufactured exports and causes its traditional export share of total exports to shrink.
- **Resource move effect:** Concurrently, even as the local industries (traditional exports industries) losses competitiveness, vital resources (i.e. labor and Capital) necessary for production shifts from the tradable sector to the non-tradable sector, to meet the risen local demand for goods and service, and also to the booming oil sector. Thus production shrinks in the lagging traditional export sector.

See also Sachs & Warner, (1995), Davis and Tilton (2005), Gylfason (1984).

These two effects have played out nations for years mostly in oil rich ones, with vivid examples in the 1970s, when oil prices soared and oil exports rose at the expense of lagging agricultural and manufacturing sectors. A similar example is that of higher coffee prices in the late 1970s (after frost destroyed Brazil's coffee crop) triggered a boom in the coffee sector in producers like Colombia at the expense of manufacturing (the lagging tradable sector), as resources were reallocated to the agricultural or non-tradable sector (Ebrahim-zedeh, 2003).

So, is Dutch disease really a problem? Some have argued that it is only a natural adjustment to the inflow and the risen local demand, the problem with it is the shift in resources from one sector to the other, the transition and adjustment can be painful, difficult and takes time, others saw it as a destruction of the learning process since the manufacturing sector thrives on learning by doing (Matsuyama, 1992, Sachs & Warner, 1995, Ebrahim-zedeh, 2003) to Davis and Tilton (2005) the effects of the Dutch disease impedes economic diversification and promotes an economy's dependence on the volatile mineral markets.

In sum the researcher can conclude that, numerous works done on the study of natural resources and its effect on the economic well-being of a natural resource rich country, it is quiet easy to agree with Massol & Banal-estañol (2011) that the resource curse phenomenon can be looked at from two points of view, from the issue of governance over these resources (Political, Socio-economic view) or from the view point of Market mechanisms (Volatility of Prices, Dutch disease).

Several solutions and activities are being undertaken by international agencies towards assisting natural resource endowed countries make the best of these resource: several researchers have suggested transparency in the use of the resource wealth, a view supported by Extractive Industry Transparency Initiative, put in place by the British and Oxfam; Norway's 'Oil for development' initiative (DCR, 2012); others have suggested the stabilization account; Economic diversification, to reduce dependence on a single resource as a source of income.

## **2.3 Economic Diversification or Dependence**

### **2.3.1 Dependence**

In Auty's final comments on his paper in 2001, he recalled that, resource-abundant countries during the First Golden Age of Economic Growth, which is the period between 1870 and 1913, had very strong growths and this repeated itself during the Second Golden Age, which is the period between 1950 and 1973. Auty notice that, "the growth collapses of the late 1970s and early 1980s resulted from the backfiring of the resource-abundant countries' efforts to reduce their commodity dependence". Sachs & Warner (1995) also suggested four predicaments that have plagued Africa, and caused it to experience slower growths, one of these was, African countries' high reliance on Natural resource exports, which I seek to term dependence. Thus dependence has become a necessary step to slow growth in many resource rich nations: Rodriguez & Sachs (1999) puts it this way "resource abundance is an important determinant of economic failure"; to Auty and Gelb (2001), natural resource abundant nations

tended to undermine the efficiency of their investment, a behavior quite found on the contrary when it came to their resource poor counterparts, see also Auty (1998); but Brunnschweiler & Blute (2008) sought to differ in their results, in seeking to clarify their results, which suggested that the more the resource of a country the better its institutions and growth, they define and distinguished between, resource: abundance; dependence; and rent. To the researchers:

- Abundance was seen as the stock measure of the resource wealth of the economy. That is the amount of natural capital endowment a country possesses: which could be in the form of mineral deposits, oil field reserves, forests, farmland. See also (Gylfason, 2011, p. 10);
- Dependence was seen as the degree to which that resource is the only source of income from its exports revenue. That is “the extent to which this nation depends on these natural resources for its livelihood”. See also (Gylfason, 2011, p. 10);
- Rents are seen as the windfall flow of income, that can be caused by high market prices, exchange rate or quantity extracted.

To me, the problem of slow growth although debatable arises from high dependence on these natural resources (commodities), a situation which can make the nation vulnerable to shocks, and fluctuations a view shared by Lipschitz (2011, p.1) and not from the abundance of it, which can be in reserve volumes, or quantities in terms of several natural resources. Working with data from 85 countries between 1965 and 1998, Gylfason & Zoega (2001) summarized their

results in these three statements, they discovered that: “(a) economic growth varied directly with gross investment, genuine saving and gross saving; also (b) gross investment, genuine saving and gross saving were all inversely related to resource dependence; and (c) growth varied inversely with natural resource dependence”. Dependence was also seen as the reason for most natural resource rich countries’ inability to respond effectively to shocks, which affect their prosperity level (Isham et al., 2005). There is the need empirically to reduce dependence if natural resources are to be growth enhancing to the economy that owns it.

Dependence was conventionally calculated as the composition of primary (commodity) exports in the GNP of a country (Sachs & Warner, 1995, 2001). (Brueckner, 2010) measured this differently using a purchasing power parity adjusted measure of Sachs & Warner’s version, arguing his was a “real” version of the earlier “nominal” version. Brueckner’s results showed a stronger negative relationship between dependence and per capital growth rate of GDP.

### **2.3.2 Economic Diversification**

“Economic diversification is generally taken as the process in which a growing range of economic outputs is produced. It can also refer to the diversification of markets for exports or the diversification of income sources away from domestic economic activities (i.e. income from overseas investment)” (UNFCCC, 2013). To Siegel, Johnson, & Alwang, (1995), Economic diversification was “the

process of structural transformation as resources are shifted out of the primary (natural resource based) sectors into secondary (manufacturing based) and tertiary (services based) sectors”, a reverse of which can be seen as the resource problem. Gylfason wrote in the book “beyond the curse” that diversification “encourages growth by attracting new economic activity that avoids excessive reliance on primary production in agriculture or a few natural-resource-based industries, thus facilitating the transfer of labor from low paying jobs in low-skill-intensive farming or mining to more lucrative jobs in more high-skill-intensive occupations” (Gylfason, 2011, p. 18). Although it takes time to actualized economic diversification, it may be a necessary step, if any natural resource dependent nation wants to enjoy long-term growth. “Many oil-rich countries have aimed to use their vast oil revenues to finance diversified investments and a “big push” in industrial development” (Sachs & Warner, 1995), but only a few have been committed and have seen the fruits of it.

Auty, in introducing his paper in 2001, talked about four necessary conditions for sustained, equitable, rapid economic development; from four difference sources he gathered that there was the need for:

- Equitable access to land and primary education;
- Public accountability and an effective market;
- Openness – an open trade policy; and
- A competitive economic diversification, necessary against shocks (Auty, 2001a).

Massol and Banal-estanol (2011) also in their paper assessed the performance of resource based export diversification strategy, from which they suggested: Risk management through hedging; a stabilization fund and Export diversification policy as ways to combat the volatile problem faced by natural resource dependent economies.

Economic Diversification, although can easily be suggested as a necessary economic policy for development is not a straightforward policy that any country can see through; many have tried and have failed to achieve the required success. Gylfason (2011, p.18-20) offered some guidelines through which diversification can start, be nurtured, and maintained. Summarizing and adding other view, the review came up with:

- Avoiding overvaluation of currency: This fights against crowding out of import substituting industries and encourages exports. In the long run an over-valued currency has the potential of causing the painful experience of reallocation factors of production, through the Dutch disease phenomenon. See also Ebrahim-zadeh (2003);
- Transparency: which goes hand in hand with accountability, and protection for whistle blowers will prevent rent seeking activities and aid proper management of the wealth that accrue fro the natural resource. A view supported by several international agencies, like TI, EITI, RWI and The Natural resource Charter.

- Better Education at all levels: “Education and diversification go hand in hand” Gylfason (2011, p.18), the better the education system, the better the quality of human resource the system produces for the economy. This can lead to better paid jobs, Entrepreneurs, etc. Investment by government in education has also been seen as positively correlated to the country’s growth and development, See Gylfason (2001).
- Have an industrial development policy: In this light, government should set up policies that will encourage industries that will be set up in line with the country’s comparative advantage. This aids in producing value added goods, which has the potential of bringing in more export revenue than the raw products.
- Support for Research and Development and protection for intellectual property: This serves as a buffer to the industrial policy and encourages innovation, learning by doing, this is vital for diversification and development.

Auty (2006) complemented Indonesia and Malaysia for the good policy foundations that aided their economies transformations from resource driven growing economies to industrializing ones, a diversity that helped these countries limit the effects of the Dutch Disease. The researcher will consider these countries in the analyses.

## **2.4 Ghana and The resource curse**

Ghana, formerly known as the Gold Coast, has always been dependent on commodity exports and its primary sector for foreign exchange revenue, from gold and then to cocoa, which became a major source of income and employment for both government and its citizens. The discovery of commercial quantities of oil in 2007 brought in another primary source of foreign exchange revenue.

Before then, not much Ghana related researches were done concerning the resource curse phenomenon, my notion is that it is because this resource problem has been highly associated with the Oil and Gas resources in the past, therefore Ghana's discovery sparked research in that field. Oxfam through the civil society group in Ghana conducted a study on Ghana's readiness to be an oil and gas economy, a report card in which they scored Ghana as a 'C', which many accepted as fair enough (Oxfam, April 2011), the World bank analyzed the effect of this oil-find on the whole economy (World Bank, March 2011), the main suggestions that came out of most studies was the need for transparency and accountability in the use of the resource wealth (supported by RWI, TI, Oxfam, other Local Agencies, like PAIC). The government went into partnership with Norway, under the program 'oil for development' (DCR, 2012), through this a stabilization account which would be later converted into a heritage fund was created into which according to the petroleum management Act (bill) passed, 30% of the revenue receipts would be saved for future use.

Is Ghana economy diversified? Ghana's three major exports in 2011 were Cocoa, Gold and Crude Oil according to GEP (2011), prepared by GSS, it is quite clear that the Ghanaian economy, although with 48% GDP service contribution (CIA facts Book, 2012) is heavily dependent on its primary sector in terms of its exports and foreign exchange revenue. In February, 2010 Dr. Ngozi Okonjo-Iweala, Managing Director of the World Bank Group, in an interaction with Journalists "urged Ghana to focus on diversifying her economy and use the expected revenue from oil and gas for socio-economic development" (GNA, 10<sup>th</sup> February, 2010). Ghana's hope of making the best of the natural resources it owns may best hang on a diversified economy.

Lastly, IMF's paper on macroeconomic policy frameworks for resource rich developing countries pointed out that recent developments in Sub-Saharan Africa shows that resource rich countries have grown faster than their non-resource rich counterparts within 2000 and 2011, which is contrary to what earlier researchers demonstrated about the 1980s and 1990s resource rich nations. But then again the aggregate performance of resource rich countries, demonstrated a worse performance in terms of HDI, Life Expectancy, Adult literacy, and even in infrastructures, as compared to their resource poor counterparts even though their GDP growth rate were better (IMF, 2012).

### CHAPTER 3: METHODS OF DATA COLLECTION & ANALYSIS

This research was conducted from a qualitative point of view. In conducting a social science research as this, one could make use of a range of qualitative research methods, Yin (2009, p.8) gave conditions to consider in choosing which method to use, and the conditions are:

- Your research question: its type;
- The extent of researcher’s control over actual behavior events;
- The level of focus on contemporary events than historical ones.

Thus in Table 3.0 below, Yin showed the various research methods and the conditions under which the can be used.

<b>METHOD</b>	<b>Form of Research Question</b>	<b>Requires control of behavioral Events</b>	<b>Focus on Contemporary Events</b>
<b>Experiment</b>	How, why?	Yes	Yes
<b>Survey</b>	Who, what, where, how many, how much?	No	Yes
<b>Archival Analysis</b>	Who, what, where, how many, how much?	No	No/Yes
<b>History</b>	How, why?	No	No
<b>Case Study</b>	How, why?	No	Yes

Source: Yin 2009

Table 3.0: Qualitative research methods

The researcher after considering the conditions underlining the choice of qualitative research designs chose to conduct a case study research, with a partly historical aspect.

Yin goes on to define a case study as “ an empirical inquiry that investigates a contemporary phenomenon in depth and within its real-life context, especially when the boundaries between phenomenon and context are not clearly defined” (Yin, 2009, p.18). Among the case study methodologies there are: single case studies and multiple cases studies. The research goes beyond just a case to use the comparative method to study various cases in order to conduct a balanced look at the effects of resource endowment’s on an economy’s wellbeing.

Be it economic diversification or dependence; the effect of the stock (Quantity) of reserves; the size of the population, and living standards indicators.

### **3.1 Data Collection**

Yin (2009, pp.101-113) presents six sources of evidence collection when it comes to case study researching, “these are: documentation; archival records; direct observation; interviews; and participant-observation”, where their comparative weaknesses and strengths were discussed.

From the list of available sources of evidence in the case study methodology (refer to Appendix A2), only the documentation and archival records can offer the evidence needed to properly confront the research questions of this study in the frame of time available apart from their strengths and weaknesses.

The research design depicts a rather no need for primary data collection, since literature exist on events, policies, indicators needed for the analysis. Data on the five (5) countries analyzed in this report was gathered from literature, published and unpublished works of earlier researchers, from a wide range of databases, such as Google scholar, EBSCO Host, Proquest; and the databanks: such as UNCTAD database; World Trade Organization (WTO), World Bank Databank's World development Indicators; and Eurostat. From the World development Indicators (WDI), 30 years of data was gathered from 1983 when Ghana adopted ERP 1 to 2012 on various indicators about each of the five countries, in order to understand and map out trends and to make the effort to analyze in context. Also each country's relevant history: policies relevant to its long-term development, was looked up in order to report from an objective point of view.

### **3.2 Cases & Method of Case Analysis**

A Case Study as defined already by Yin (2009, p.18), will help us understand the phenomenon surrounding resource abundance and development in depth from the past experiences of earlier nations, and draw policy implications for Ghana. To some, the case study methodology is used for exploratory research but to Yin, "every research method can be used for [any of the] three purposes: exploratory, descriptive and explanatory" (Yin, 2009, p.7).

The choice of a fitting case study type is crucial to the research. In selecting cases researchers seek to either predict similar results (literal replication) or contrast

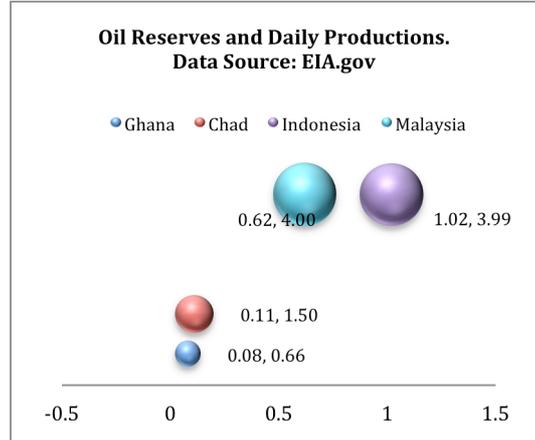
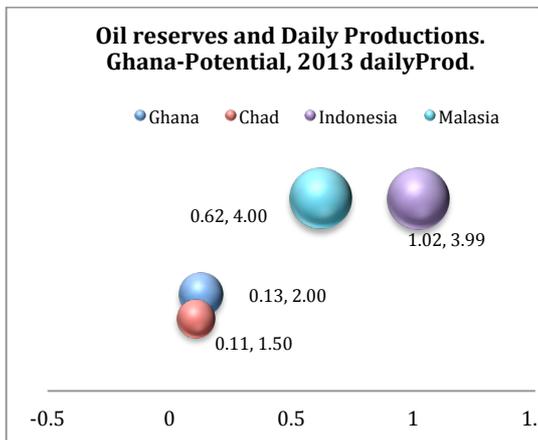
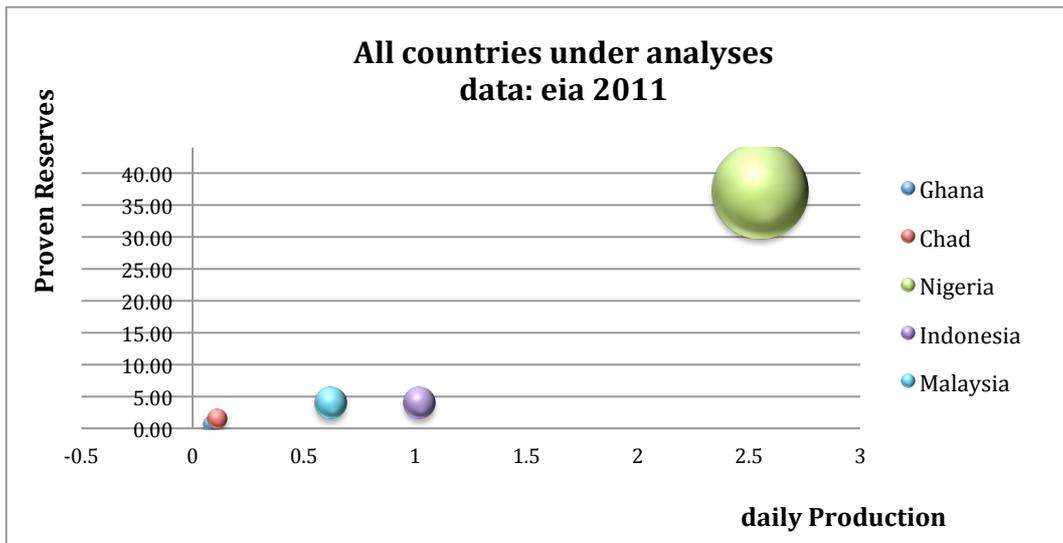
between results (Theoretical replication) (Yin 2009, p.54). To pursue a theoretical replication Yin further suggests 4-6 cases. Thus although there are single and multiple cases studies, due to the nature of the research, this study is that of a multiple cases study; a “two tail” design with two cases from each subgroup, a failure story and a success one, so “that the theoretical replication across subgroups are complemented by literal replications within each subgroup” (Yin 2009, p. 54)

### **3.2.1: The Cases**

When it comes to resources and development, there have been success stories with earlier cases like the USA and the UK, or Norway and the United Arab Emirates; and failure stories, with Nigeria being a very common example (Anyanwu et al, 2009; Bevan, Collier, & Gunning, 1999). The researcher after considering the various nations that comes to mind when talking about natural resources and development chose Nigeria and Chad as a case depicting dependence and Malaysia and Indonesia as a case depicting economic diversification with varying outcomes. Gylfason (2001) talked of four (4) countries of all the Sixty-Five (65) natural resource rich nations at that time, which had managed to show better performance in terms of growth, investment in education, and human development. Malaysia and Indonesia were among the four.

In terms of Crude oil daily production and proven and potential reserves, It can be seen from Figure 3.1 that Ghana is in the range of reserves of the various cases to

be considered, and a projection by a Bloomberg report is that the reserves may even get to 5 billion barrels by 2015 (McClure, 1<sup>st</sup> Dec. 2010) as more discoveries are being made and nautical boundaries expanded (Xinhua News Agency, 16<sup>th</sup> Dec. 2011).



Sources: Authors computation, data: eia.gov, tullow Ghana

Figure 3.1: The daily productions and proven reserves of various countries

The various cases have their unique properties in relation to development from a natural resource point of view: some would be looked at from population size and its impact on benefiting from the resources, most importantly these would be looked at from either dependence on or diversification from the few resources or abundant resources they possess; and their ability or inability to diversify, as related to their success.

### **3.2.2: The Case Study Design**

There are five components of a case study research design according to Yin (2009, pp. 27- 35) and these are:

- Questions

The case study method as already seen in Table 3.0 is useful when a researcher seeks to answer how and why questions, thus in conducting this study the questions I sought to answer were: How and why, did some of these natural resource endowed nations succeed in reaping benefits from them, whiles it corrupted others; and How are the results from these case studies applicable in Ghana, What recommendations can be made from the analysis?

- Proposition

This points the researcher to the scope, or what he really wants to find out. In this research my proposition was that: resource endowed nations succeeds in become less risky economies with good economic indicators through economic diversification; but mostly dependence on natural resources makes an economy vulnerable to the resource problems. I propose that natural

resource endowment could have positive impacts on Ghana's economy if economic diversification is undertaken.

- Units of analysis

These are the various cases to be studied; information was collected about these 5 cases, with Ghana included. The first two conditions give the guidelines as to what to collect about the cases.

I chose 4 case lessons, two from the viewpoint of diversification, these were Malaysia and Indonesia and two from the point of dependence: those two cases are found in the sub-Saharan African region, close to Ghana, these were Chad and Nigeria.

- The Logic linking data to propositions

This is the data analysis stage of a case study research, what techniques would best help use data to explain propositions. Here I will use time-series analysis, pattern matching, and cross case synthesis to analyze data collected on the various nations.

- Criteria for interpreting the findings

The criteria for interpreting case study findings are to "identify and address some rival explanations" for the findings. In this study I see some rival cases such as United Arab Emirates and Norway, who are dependent on their oil and have been successful.

This research seeks to generalize a policy recommendation that has aided some resource abundant nations in the past and is still helping; it will be more

explanatory than exploratory since earlier researches on Economic diversification exist. Yin (2009), suggests the case study method as best fit for this study considering its characteristics.

A comparative study is another name given to conducting a multiple case study, in which comparable analysis in context is performed on the four crude oil drilling nations (who are natural resource endowed) chosen as cases, from the view of results of policy actions of dependence and economic diversification, This study follows similar comparative analysis by Bevan et al. (1999), for Indonesia and Nigeria; and Danquah (2009) for Ghana using those same two countries. The difference here lays in the use of two (2) extra countries: Chad, which is a small economy that depends on its small stock of crude reserves; and Malaysia which is proportionately similar to Ghana in many ways, but managed to diversify its economy from natural resource dependence. Thus adding two cases in the respective fields of: success through diversification, and failure through dependence on their resource. Taking into consideration their reserves.

### **3.2.2.1 A multiple case design & Logic**

In conducting a case study research, as already noted, one can undertake a single or multiple cases study. Yin observed that in a single case study there are high chances of misrepresentation if a case is not accurately selected. He further recommends multiple cases study as a better chance of performing a better case study research.

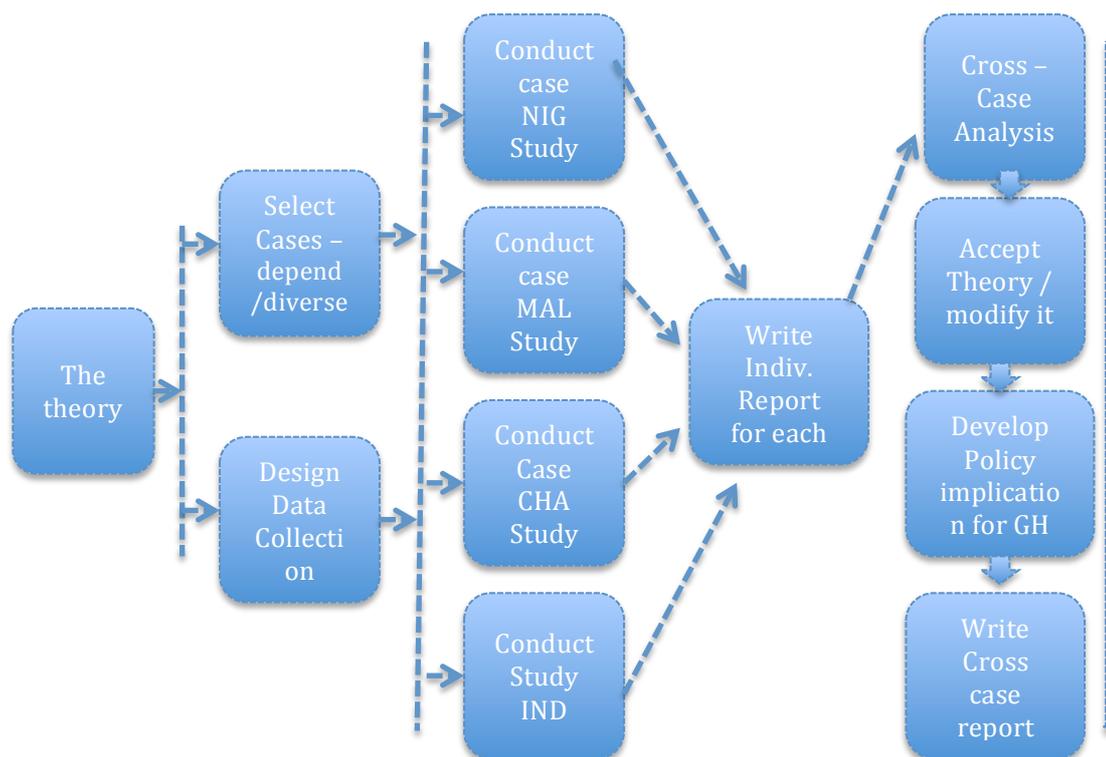
Although single cases are justifiable under certain conditions: such as a rare or unique circumstance or representing a typical case, such as the Norway's case with oil. Multiple cases study fits the focus of my study.

As shown in Figure 3.2 below, the logic of research was divided into three parts: The first is **Define and design**: this is where the research questions are defined and appropriate cases selected to be studied, also the data necessary for analysis are selected, and the protocol to collect the data is planned. The next stage is **prepare, collect and analyse**: where data on each case is collected and a critical study for trend and relationships between variables are observed and reported, at the end individual case reports are written for each case. The last stage is **Analyze and conclude**: This is the stage of cross-case analysis where theory implications can be drawn from the cases for Ghana.

The four case lessons was analysed to fulfill the researcher's objectives: that is how did economic diversification aid or dependence slow down the growth and wellbeing of the various countries. Literature depicts that both positive and negative effects exists when talking about natural resources and development, therefore how does economic diversification reduces the economies vulnerability to the resource problem and the negativities. In conducting the study, the researcher will:

- Assess each country-case's resource base and how important it is to their revenue stream, this shows how resource based the country is.

- Report on a few of the relevant policy decisions that were made before and after the oil discovery. Success or failure factors
- Measure for the countries dependence on the resource; check export portfolio, and Commodity exports to per capita growth rate of GDP and the concentration ratios of Governments export revenue. Lastly
- The economic trend of various socio-economic indicators would be analyzed; the relevant history of the trends would be reported to put analysis in context, difficulties documented in instituting the diversification.



Source: COSMOS Corporation, seen in Yin, 2009, p. 57

Figure 3.2: Modified Yin's Multiple Case Study Research design

In summary, Crude oil per head through population size and stock of reserves was analyzed; the concentration ratio of export revenues in government expenditure was checked to look out for dependence, the development trajectory of the four countries in relation to policies in line with economic diversification or dependence was critically analyzed in context.

Before reporting on the cases let us first take a look at the country to which policy implications from the case studies would be applied.

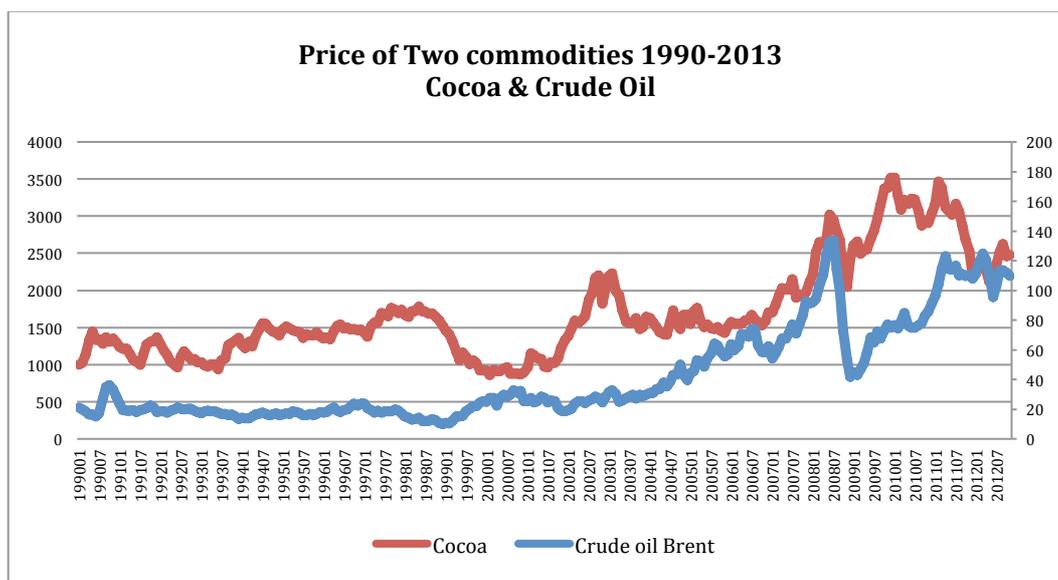
## **CHAPTER 4. GHANA – A natural Resource rich nation**

Ghana, one of the high growing economies in sub-Saharan Africa, recorded 14.4% in 2011, from an average growth rate of 5% between 1983 (when it adopted ERP) and 2008. This country has been dependent on its commodity exports for decades (Gary et al., 2009). Its export basket is primary sectors and natural resource skewed, with Cocoa and other agro products, Gold and other minerals and now crude oil.

The question therefore is: does this make its portfolio diversified? Is there the need to seek a safe haven in value added or man-made exports to help improve standards of living? Because the new crude oil industry just like any extractive industry does not offer much employment or growth linkages for existing industries, it may even retard their growth, according to earlier research.

Ghana's main exports aside gold prices are the two commodities displayed in Figure 4.0, the Chart demonstrates the volatility that has plagued these commodities' markets (in terms of price) and thus the rents received from them aside the budgeting issues of over or under budgeting of expected revenues which impede development activities. The degree of extraction or harvesting also affects revenues that would be received in that period.

According to Gary et al., (2009) Ghana doesn't gain much from its mineral industry in terms of revenue as it does from these other two commodities.



Source: Authors Analysis, Data source: Econstat

Figure 4.0: Trends in the commodity Markets

#### 4.1 Relevant Trends in History:

GHANA, a new oil rich nation that has been dominated by its service sector (Zenith Bank Newsletter, March 2013) since 2005, (see Chart 4.1 below) with this sector contributing about 48.5% to GDP in 2011, has politically been known as one of the most stable nations in the sub-Saharan African region, with a good record of power changing hands peacefully ever since the early 1990s (please refer to Appendix A1 For historical events); economically the country has the record of being the world's second largest cocoa producer after Ivory Coast, and Africa's biggest gold miner after the largest, South Africa. It has been noted to be one of the continent's fastest growing economies, and the continent's newest oil producer (BBC Country Profile, 2013). Ghana as an economy has depended on its natural resources for income and foreign exchange import cover for years. To Boame (1998), Ghana had “gained from its comparative advantage in primary

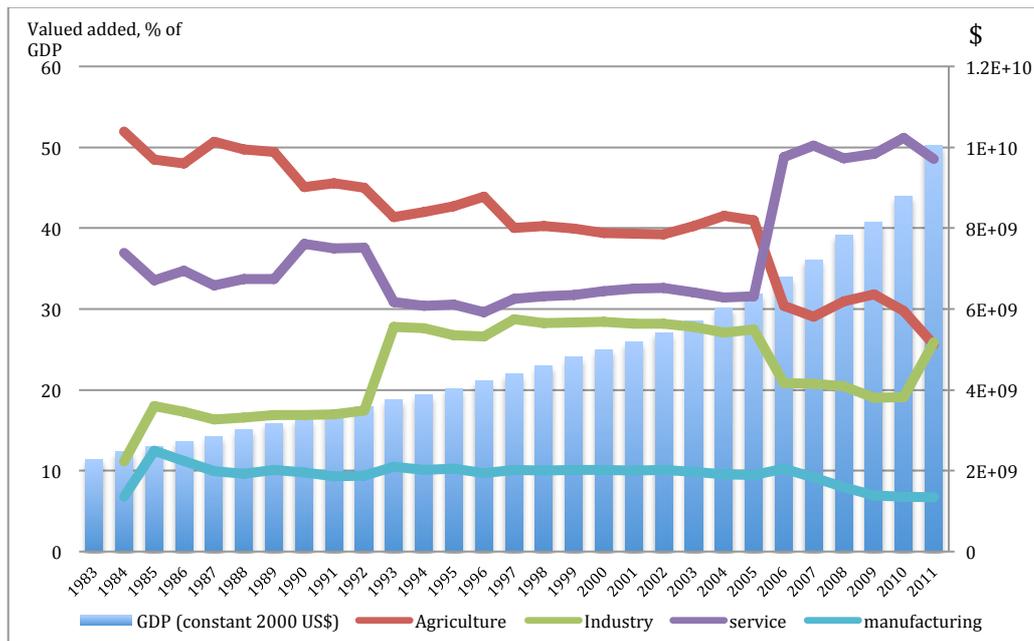
commodities as a source of economic growth” within the period of his study which was between 1960 -1990.

When Ghana discovered its first oil fields in 2007, hopes were that “its star will continue to shine and that oil revenues will help accelerate the country’s effort to meet the UN Millennium Development Goals (MDGs) by 2015” (Gary et al., 2009). Boosted by crude oil, cocoa, and gold revenues, the country in 2011 initiated several economic reforms to spur growth.

“In 2011 [it] became a middle-income country, the ninth in Africa to attain this status” (IRIN News: 18 June, 2012). As can be seen from Figure 4.1, The Ghanaian economy has had stable growth between the 90s and early 2000s, after the 1993 gold rush, which can explain the increase in output contribution by industry, after Ghana sold its controlling stake in the country’s biggest gold mine, Obuasi Gold mine, a decision which brought in FDI and technical know-how into the extractive sector and boosted output.

The share of industry once again in 2011 increased, following the addition of crude oil as one of the major exports, causing a record high GDP growth rate of 14.4% in that year and 8% in 2012.

Ghana’s employment structure hasn’t changed that much, in 1992, 62% of total employment was in the Agriculture sector; in 2006 it was 57% of total employment (WDI, 2013). To change there is the need to increase literacy levels and encourage private involvement by creating the enabling environment.



WDI, (2013)

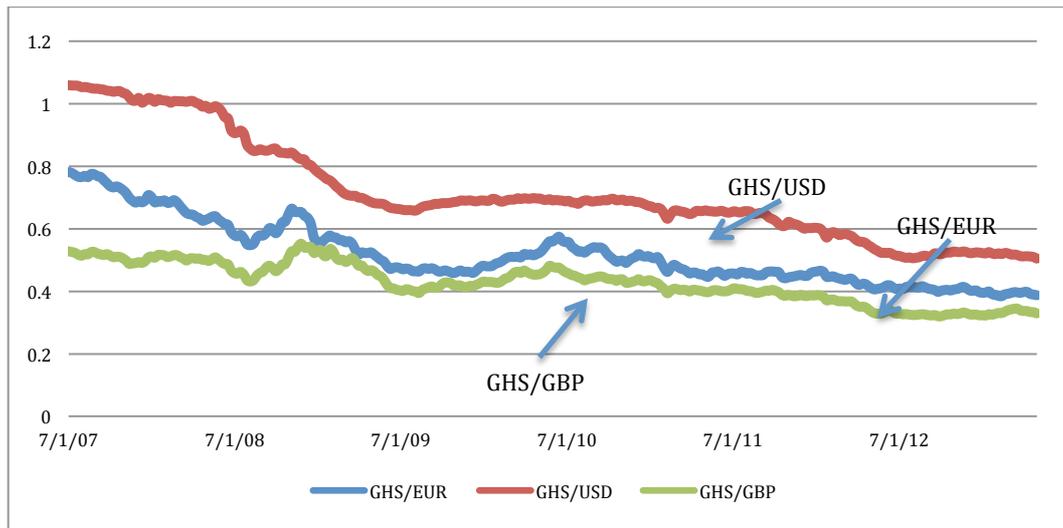
Figure 4.1: The Ghanaian Economy, Sectorial contributions

**Exchange Rate Trend:**

Ghana’s exchange rates against most of its major currencies (that is: US dollars; British pound sterling; and the Euro) have seldom appreciated since it opened up its economy in the early 80s. For example one (1) dollar equaled one (1) cedi in 2007 by 2011 it had fallen to 1 dollar to 1.9 Ghana cedis (See Figure 4.2 below)

This has been desired by most exporters since they get more for their exports in terms of local currency, but makes it hard for importers, mostly small-scale manufacturers who purchase raw materials and machinery for production. Thus the cedi they need to convert to make purchases from other countries keep increasing year on year, making some transferring increases directly into their pricing systems.

Although it is quiet early to tell, the symptoms of Dutch disease, which is a sudden appreciation of the real exchange rate, has not yet shown its head, as seen in Figure 4.3



Data source: oanda.com

Figure 4.2: 6 years Nominal exchange Rate Trend for Ghana

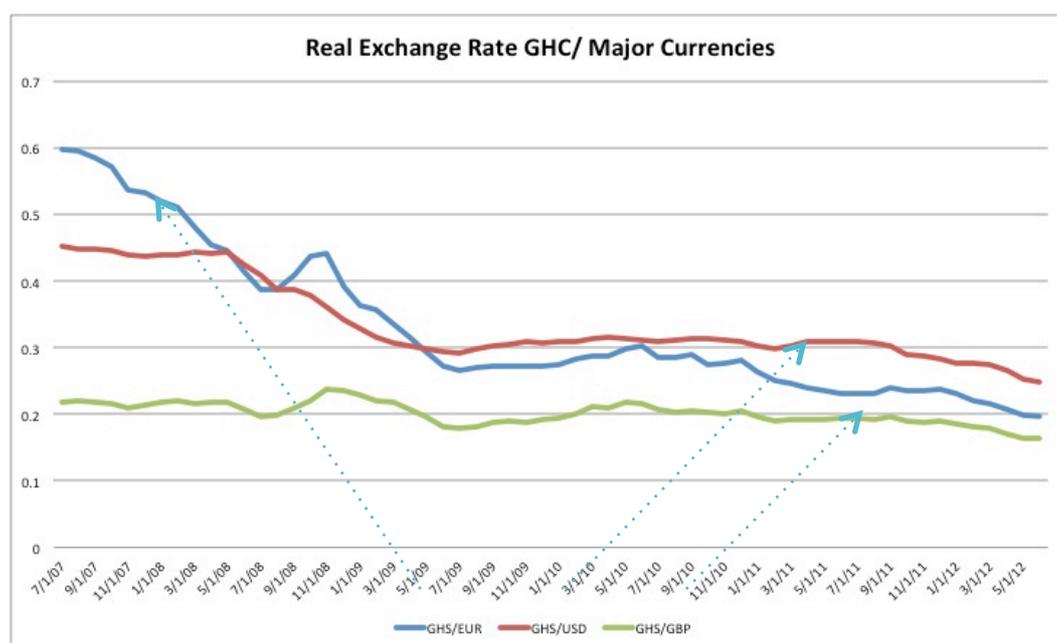
### Real Exchange rate

Using the formulae for converting nominal into real exchange rate, by taking the “relative prices of the tradable and non-tradable in the country as an indicator of the country’s competitiveness level in the foreign trade” (Kipici & Kersriyeli 1997) and then multiplying it by the nominal exchange rate, The researcher sought to see if there were early signs of the Dutch Disease symptom of a sudden appreciation of the local currency.

Data on the CPI’s of Ghana and its major-currency countries was gathered from Eurostat.com, GSS, and Oanda.com. Researcher’s calculation was based on

recommendation by: Kipici & Kersriyeli (1997) on the selection of the best fitting price index for real exchange rate calculation.

The results as seen in Figure 4.3, shows signs of an appreciation in the last quarter of 2008, during which preparations for extraction of the oil were being made after discovery in 2007, but no signs in late 2012. This can only depict that it may be too early to see symptoms, or that the economy is absorbing the inflow of funds from the oil exports quiet well.



Source: Authors computation, data source: GSS, econstat

Figure 4.3: Real Exchange rate of Ghana for its Major currencies

Although in this early stage chart (Figure 4.3), the researcher does not see any symptoms yet, Rai & Gross (2012) in their article, predicted a risk of loss of competitiveness of Ghana's cocoa in a few years to come, as the Ghanaian

currency starts to appreciate making its cocoa more expensive in the international market.

In Auty (2001), the researcher cited Ghana as a classic example of a staple trap economy, as he looked at the political economy of resource abundant nations, to him Ghana was highly vulnerable to external shocks as it recorded low on industrializing and diversification. Thus now that it has crude oil added to its exports, it goes a long way to make it increase in its dependency on its primary sector for growth. There is the need to move to secondary and tertiary sectors, which are more sustainable drivers of growth, especially for a middle-income country seeking to advance and not to be trapped.

### **The Ghanaian Exports:**

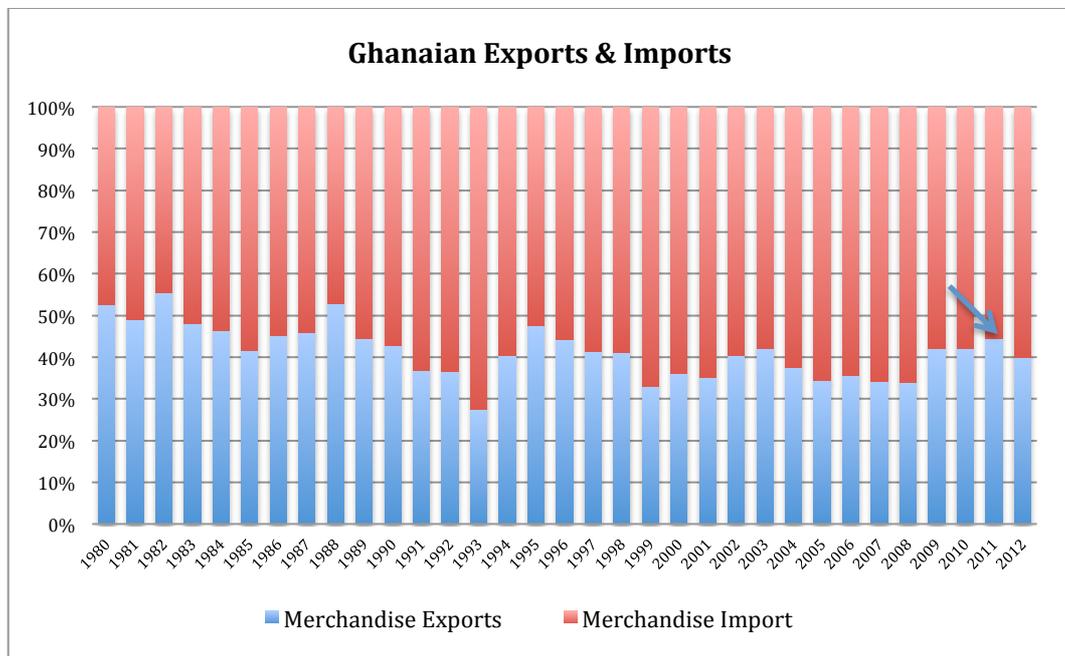
Boame, (1998) wrote an interesting piece on Ghana's primary-export-led growth between the period of 1960 and 1990. He outline export proceeds in Ghana as this:

“Export proceeds are the main source of foreign exchange needed for the importation of intermediate and capital goods. The contribution of exports to the economy of Ghana has been substantial. Ghana has traditionally depended on export revenue as a major source of government revenue (this is a fiscal linkage). Exports comprised as much as a quarter of GDP during the immediate pre- and post-independence periods. Export duties comprised, on the average, between 10.2 and 35.3% of central government revenue from 1975 to 1990 (Kapur et al., (1991)).”

As seen already the state of the Ghanaian economy is like that of most developing-commodity-dependent economies, with little or no value added / manufactured exports.

“While non-oil growth is likely to decelerate [in 2013] as a result of energy disruptions and high real interest rates, increased oil production is projected to keep overall growth close to 8 percent” (IMF, 2013 Country report).

In terms of **trade**, it can be reported from Figure 4.4, that the country was able to import more even as exports increased in value terms with the production and exportation of crude oil:



Data source: WTO (2013)

Figure 4.4: Ghana’s Trade History

Aside 1982 and 88, Ghana's historical terms of trade has always been a deficit. 2011's increase in exports was pushed by crude oil as seen from the segments of trade and their contribution in 2011 (refer to Figure 4.5), thus a majority of that year's export came from the fuel and mining sector of the economy.

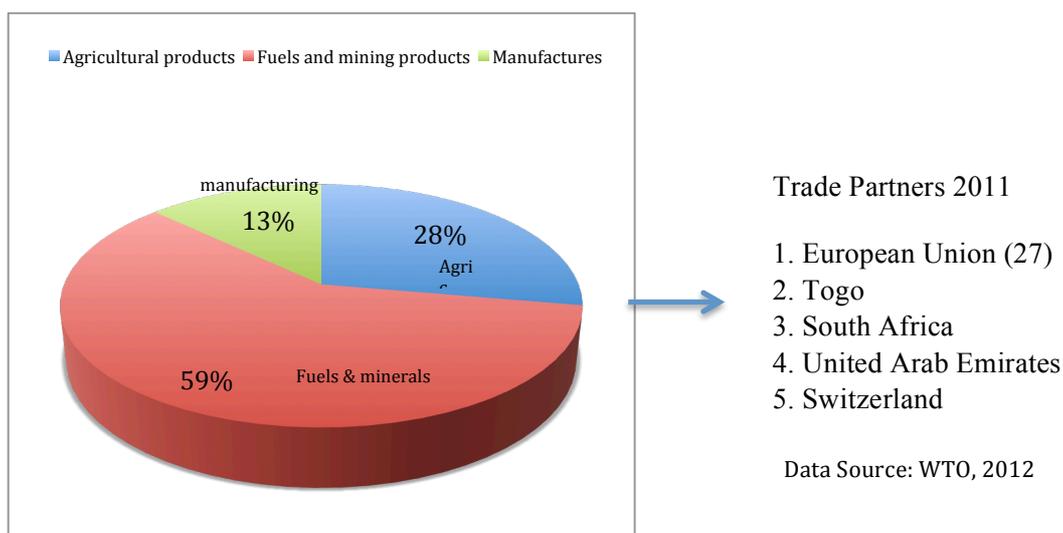
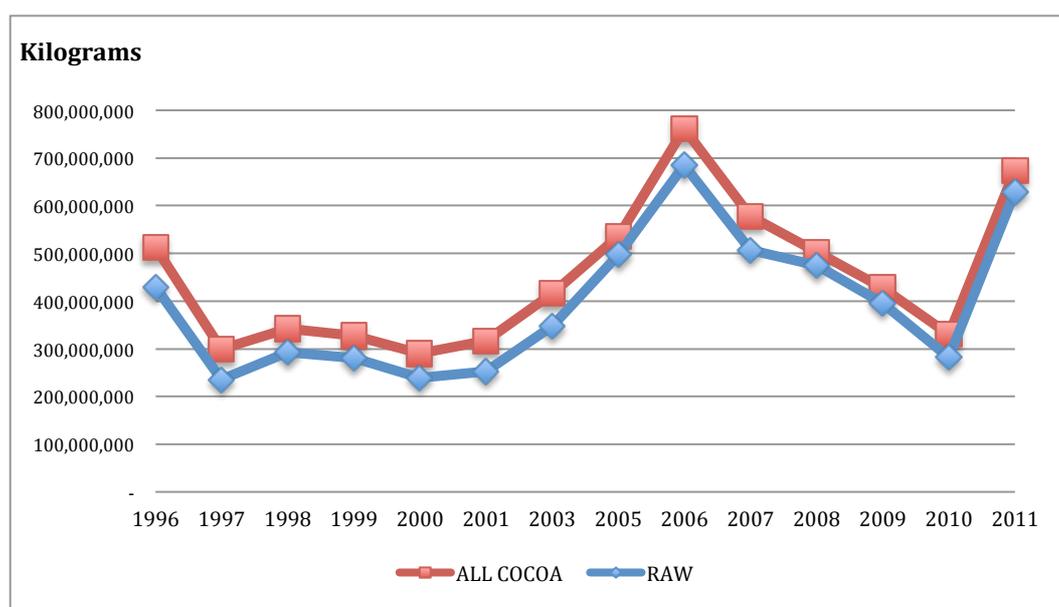


Figure 4.5: Ghana: Breakdown of Exports in 2011

## 4.2 The Cocoa Industry

Ghana has been the second world's largest exporter of cocoa after Ivory Coast for decades. In a study by Rai & Gross, (2012), they outlined, "Cocoa has long been a crucial export for Ghana. [Ghana's Total] Export earnings [equaled] \$3.8 billion during the first quarter of 2012: up 23% from a year earlier [and] driven by cocoa, oil and gold according to the Bank of Ghana. [In] the first quarter of 2011, cocoa bean receipts brought in 61% of the country's total export earnings."

In proportionate terms, although the share of agriculture’s contribution to GDP has fallen to the increase in industrial sector’s contribution due to the export of crude oil, cocoa has not fallen in value terms, the quantity of cocoa exported increased in 2011 as seen from Figure 4.6. Although it’s just one year of crude oil exports, The researcher can still say, cocoa exports were not affected and possibly will continue to be one of the country’s major export due to the size of employment the agriculture sector provides for Ghanaian working force, and the revenue cocoa export brings to both government and farmers.



Data Source: UNCTAD, 2013

Figure 4.6: The export of Cocoa in quantity terms

### 4.3 The Mining Industry & Other Exports

Ghana is not a stranger to the mining and extractive industry, being the second largest exporter of Gold in sub-Saharan Africa; it also exports bauxite, manganese and industrial diamonds.

Mining (as a matter of fact extractive industries) needs a few workers, and many of these that it employs “(particularly the more skilled workers) come from abroad, [thus], the host country gets [very] little from mining besides the monetary benefits flowing from corporate taxation, [its share] and royalties” (Davis & Tilton, 2005).

A 2008 World Bank report said “that Ghana lacked the capacity to properly collect revenues and audit payments from gold-mining companies during the past three years as gold prices more than doubled. The result has been that increases in metal prices [has] mainly [translated] into benefits for operators [instead of the host country therefore] improving mining sector revenue management is key to translate mining investment in Ghana into sustainable development outcomes” (Gary et al., 2009) for the country.

#### **4.4 The Oil and Gas Industry**

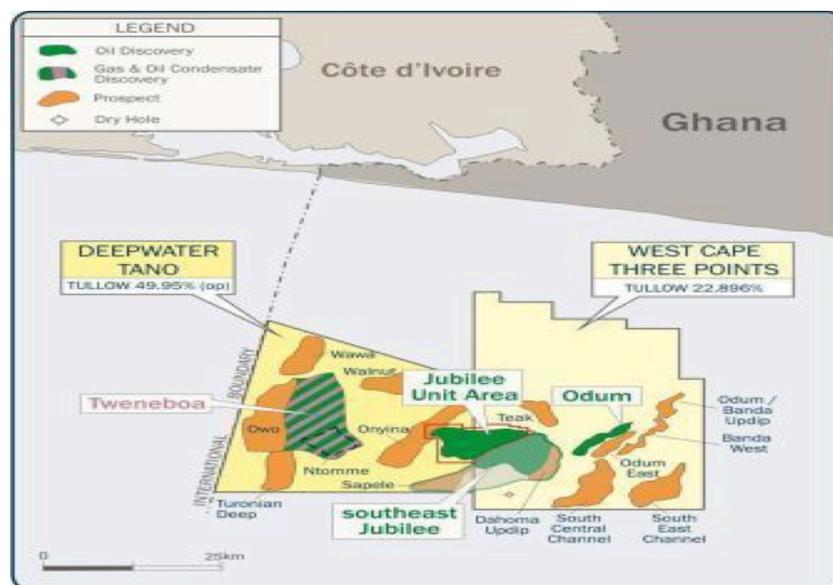
The country is also rich in crude oil and gas reserves, which was discovered on the shores of Ghana in 2007. Although “Ghana’s potential 4 billion barrels are significantly below those of major oil producers such as Saudi Arabia with 265 billion, Canada with 175 billion, Venezuela with 98 billion and Nigeria with 38 billion” placing Ghana 50<sup>th</sup> on a global scale (R. van der Ploeg et al., 2011), the possible problems associated with the oil resource cannot be overlooked. Ghana’s daily production of 120,000 barrels per day (bpd) is insignificant when compared to the big producers in the sub-Saharan region: like Nigeria which produces 2.4 million bpd; or Angola which produces 2.0 million bpd, or even Congo which

produces 230,000 bpd. But does this prevent it from the vulnerability that comes with dependence? No, it may rather worsen it in a case, from a point of view. Dependence on a few resources may be more detrimental than that of those with higher reserves, Gylfason (2011 p.10) cited Chad and Mali as examples.

Ghana's Oil fields located west of Cape three point, close to the nautical boarder with Cote d'Ivoire, as clearly seen in Figure 4.7, contains concentrates of hydrocarbon: the three oil fields are:

1. Jubilee fields: currently operated by Tullow Ghana plc., a British oil company.
2. Tweneboa, Enyenra & Ntomme, and 3. Sankofa & Gye Nyame,

With the first already developed and the other two other discoveries soon to be developed by Jubilee fields and ENI oil respectively.



Source: Tullow (2013)

Figure 4.7: Tullow Gh. plc. Geographical Picture of the Oil fields

Oil and Gas production is due to commence in 2016 on Tweneboa, Enyenra &

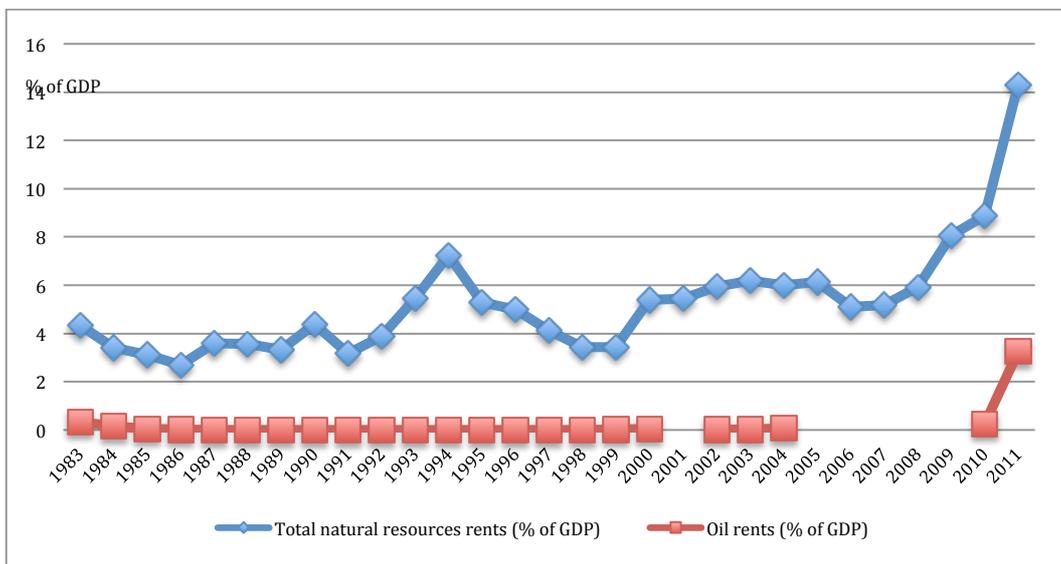
Ntomme (acronym: TEN) fields in addition to jubilee fields, which has been feeding the economy for the past three years. TEN fields, according the Xinhua News Agency (24<sup>th</sup> April, 2013), is expected to produce 76,000 barrels per day of crude oil and 50 million standard cubic feet of Natural gas at peak levels.

“The International Monetary Fund [IMF] predicted that government revenues from oil and gas could reach a cumulative US\$20 billion over the production period of 2012–30 for the Jubilee field alone” (Gary et al., 2009), thus how these funds will be channeled to aid development and the transparency of its use is necessary. More importantly, policies to seek to diversify the economy’s dependence on these natural resource would go a long way to spread benefits to future generations, aside saving 30% share deposited in a heritage fund, as instructed by the PRMA passed by parliament.

Ghana is currently “pursuing the establishment of an Enterprise Development Center to build the capacity of its businesses to participate more actively in the oil and gas industry, by becoming key suppliers of quality products and services” (Xinhua News Agency, 24<sup>th</sup> April, 2013). This will certainly lead to job creation and achieving increased economic growth through the development of other sectors.

#### 4.5 Ghana and Dependence

Despite the country's progress in terms of poverty reduction, good governance indicators than most of its counterparts in its region, a stabilized economy and an average of 4-5% of growth rate, "Ghana is still a poor country of 23 million people dependent largely on its informal sector for employment and on its primary commodity exports for foreign exchange revenue —cocoa, gold, timber ..." (Gary et al., 2009).



Data source: WDI (2013)

Figure 4.8: Ghana's Natural resource Rents

With a look at the percentage of the value of natural resources rents compared to GDP on Figure 4.8, it may be misleading to assume that it is not natural resource dependent, but as can be seen in 2011 (as oil rents started flowing in), natural resource rents value almost doubled, thus the oil is bringing in rents that can lead to it being depended on for revenue.

#### **4.5.1 Diversification Attempts and Areas to diversify**

In the “1960s manufacturing grew at relatively high rates, benefiting from a state-led development strategy that included import substitution. A number of large industrial enterprises, including Volta Aluminum Company (Valco) smelter, sawmills, and timber processing plants; cocoa processing plants; breweries; cement manufacturing; oil refining; textile manufacturing operations; and vehicle assembly plants were created in that period” (Kolavalli et al., 2012).

Steel (1972) studied 39 of these industries that were established before and after Ghana’s independence, his findings were that of the 39 firms only 9 were efficient and that by 1967-68, 77% of them were inefficient in their operations.

This tells us that, taking a step towards structural change will not be the first time for Ghana, but then lessons from failure in the past should guide future investments.

Boame, (1998) found out that growth of Ghanaian exports had granger causality to economic growth, thus the proceeds from exports find themselves into other sectors and these sectors also improve exports.

Thus the need to find ways to diversify our portfolio in order to weather against fluctuations will be a good policy to undertake even as it has discovered and started exporting the most volatile commodity, crude Oil and natural Gas.

“Export diversification has frequently been recommended as a means of effectively stabilizing the export earnings of commodity-dependent countries” (Derosa, 1992). Ghana since its quest to industrialize in the early 60s has tried to

add value to a few of its primary exports especially cocoa, changing a portion of its cocoa into paste to increase the value earned from its sale.

According to Rai & Gross (2012) investment money is flowing to oil sector in Ghana, and not Cocoa nor developing the manufacturing sector, even though Ghana was ranked third among sub-Saharan Africa as destination for foreign direct investment in 2010, with an estimated amount of \$2.5billion, according to a joint report from the African Development Bank and African Development Fund.

Even as will be discussed in the case studies, there are always areas into which a country can move in order to diversify its economy, reduce dependence and improve standards of living. The main sectors are:

- Agricultural Sector: Other Cash crops aside cocoa, coffee. Other Agricultural products of high export value that Ghana's arable land can produce, for example: Malaysia's palm oil history.
- Industrial sector: mainly manufacturing or agro-based value adding industries - This can be divided into two parts: manufacturing for local market and manufacturing for exports, one can precede the other. In Ghana, agro processing can be a starting point, if efforts are made to attract FDI into other sectors aside oil, then these investors can bring some technical know-how that would be beneficial in years to come.

The current government is pursuing a transformational agenda, one pursued through three broad objectives: Economic diversification; Social inclusion; and

macroeconomic and debt sustainability. In terms of diversification, it seeks to leverage on its oil and gas resources to establish a robust Job-creating manufacturing sector, to do this there is the need to curtail a few bottlenecks to growth through infrastructure provision especially in the area of stable energy supply (IMF, 2013, country report).

## CHAPTER 5: FOUR CRUDE OIL RICH NATIONS

### – The Case of Four different natural resource experiences

A majority of low-income economies with “abundant natural resources in sub-Saharan Africa, Asia, and other regions rely heavily on exports of primary commodities for their foreign exchange earnings” (Derosa, 1992). The commodity market is one example of a market that is plagued with uncertainty of expected earnings. Thus **volatility**, one major concern for natural resource rich nations and commodity dependent economies, has caused several downfalls in the past. Some have learnt from it and tried to reduce their dependence, others have failed in their attempt, leading to natural resource being seen as a curse rather than a blessing to many economies that possess them.

“The government could resort to stabilization and saving policies and improve the efficiency of financial markets” in controlling its negative impacts, but having a fully diversified economy would serve as a buffer: because then, “the shocks to non-traded demand can be accommodated through changes in the structure of production rather than expenditure switching” (F. Van der Ploeg & Poelhekke, 2009).

In performing this case study, the researcher sought to know: how and why, some of these natural resource endowed nations succeeded in reaping benefits from their natural resources, while others were corrupted by it? I took four cases in total: two cases of dependence; and two cases of economic diversification, to estimate how these separate paths and policy decisions can impact on the

development and living standards of a new crude oil country (Ghana) in years to come.

From CIA Factbook, updated May 2013, Table 5.0 below shows classifications of the types of goods being exported by the various countries under study:

Country	Fuels	Other Minerals	Agricultural products	Manufacturing / value added
<b>Ghana</b>	Crude Oil	Gold; Bauxite; Manganese ore; Industrial diamonds	Cocoa; Timber; Tuna; Horticulture products	Aluminum
<b>Indonesia</b>	Crude Oil and Natural Gas	n.a	Rubber	Electrical Appliances; Plywood; Textile
<b>Malaysia</b>	Petroleum and Natural Gas	n.a	Palm oil; Rubber	Semi-Conductor; Electronic equipment; wood products; textile; chemicals; solar Panel
<b>Chad</b>	Crude Oil	n.a	Cotton; Cattle; Gum Arabic	n.a
<b>Nigeria</b>	Petroleum	n.a	Cocoa; Rubber	Petroleum Products

Source: CIA Factbook 2013

Table 5.0: Classification of Goods Exports from the five countries

It can be analyzed at a glance that all the cases under study currently export the fuels classification of commodities and at least one other classification. It is also clear that the two cases to be considered for diversified economies (Indonesia and

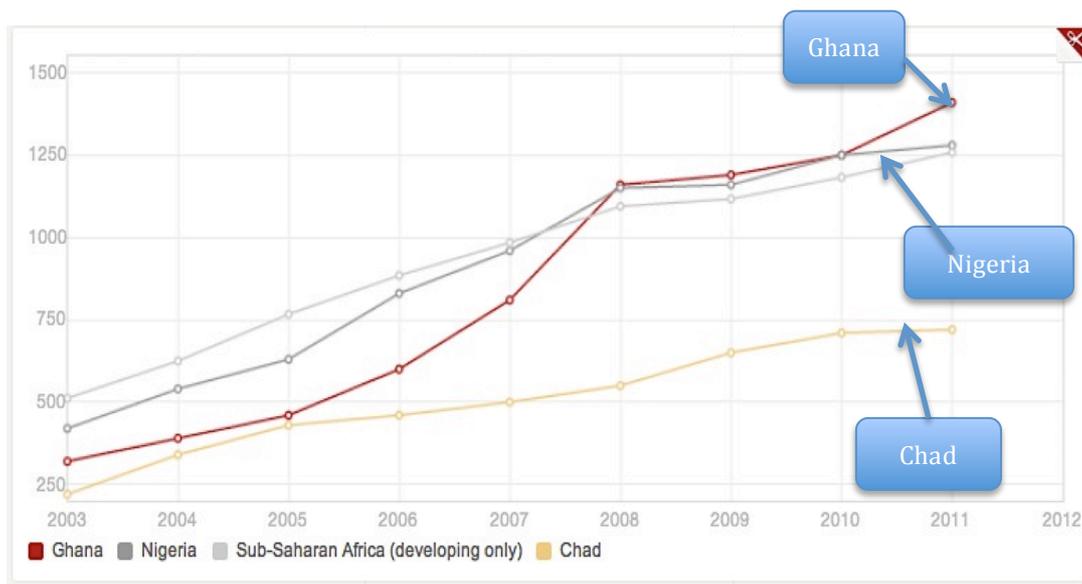
Malaysia) have quite a range of products it exports under the value added or manufactured exports. Now let us consider the first two countries.

### **5.1 Nigeria and Chad: The story of dependence**

The case of dependence on natural and extractive resources is quite a common phenomenon when it comes to the sub-Saharan African economies. There are cases like South Africa and Angola where although these natural resources and industrial developments have brought wealth to the country, its economy is burdened with inequality issues, amongst its urban dwellers as well as rural dwellers, and its rich and poor classes. But then there are also successful cases, example of which is Botswana.

In this section, Nigeria and Chad are our case studies from two different point of view: Abundantly endowed nation, populated and dependent; and for Chad, few resources and dependence.

In the Figure 5.0, Ghana's per capita GNI in 2010 overtook that of Nigeria. The chart also shows that the three countries are around a similar income group: Ghana and Nigeria are currently in their lower middle-income status; while Chad is in its low-income class. Gylfason (2011, p.7) argued that "for reasons that seem to be related in part to poor management of their natural resources" Nigeria, one of the countries that discovered their oil resource after independence from British colonial rule, could not make sustainable economic progress decades after inflow of oil rents into its economy.



Source: The World Bank (WDI)

Figure 5.0: GNI per Capita of dependent economies under study

### 5.1.1 Nigeria: Large reserves, large population, and dependence

Nigeria has always been introduced as Africa's most populous country and one with highest Oil reserves in sub-Saharan African region: it is one of the highly populated countries in the world, currently constituting of about 162.5 million people (WDI, 2013), rich in crude oil, a resource it discovered a few years after independence. It is often argued though that would Nigeria have been better off if it had not found its crude oil?

In 1971, it had the opportunity of joining OPEC due to its large reserves, and enjoyed the windfall of oil rents in the boom periods of mid 70s, which came with oil price hikes: a world event that led this oil rich nation into dependence on this resource, based no its policies and governance decisions made. It also went into a recession a few years later when the oil prices plunged.

In this section the researcher will highlight on the events that reduced Nigeria's

ability to make good use of its wealth and other factors that led to the nation's failure to take off with this large resource endowment.

The researcher considers two researchers: Bevan et al. (1999) and Danquah (2009) who had conducted earlier comparative research between Nigeria and Indonesia. In the cross-case analysis section, I highlight on a few factors according to these researchers how and why one failed and the other succeeded in showing positive development indicators.

#### **5.1.1.1 Relevant History**

Just like most sub-Saharan African countries, although Nigeria had independence on 1<sup>st</sup> October 1960, it had unstable governance and economic up and downs until the late 1990s.

The liberation of Nigeria from British rule in 1960 was a slow process. Nigeria before its formation as a country was divided into three sectors with three different tribes, to the North was the most populous Hausas, to the west was the Yoruba, and to the east was the Ibos where the oil reserve is located in its Niger delta region, the same section which decided to leave the confederation in the mid-1960s leading to the Biafra war, which took many lives.

These various tribes supplied Peanuts, Palm oil and Cocoa as they traded with the British through United African company and the Royal Niger Company. The British did not settle, they related with them through the trading companies (Bevan et al., 1999, p.11), Thus unlike other colonies Nigeria was not a colony that had British settlers, they used trading companies to control it, and indirectly

ruled the people through their chiefs they installed. Bevan et al. puts it this way, “the British became not agents of development but defenders of a stagnant, feudal structure” (1999,p.10), so although some trading infrastructure such as roads, railways, ports and harbors were built or improved, these developments were at the expense of the feudal Nigerian economy. Contrary to the case of Malaysia, in this case money was loaned on behalf of the Nigerian economy to build these infrastructures, increasing local government’s external debt in the 1930s.

After independence, Nigeria had several coup d’état, events that disrupted the newly found state’s governance and impeded the attraction of FDI, although it had a huge local market and cheap labor. These events lasted until the 2000s when the economy started to take off again.

In 1971, when Nigeria joined OPEC, a barrel of Crude oil then was \$2 per barrel, within 2 years, the price jumped, as events in the middle east triggered a price hike to \$12, with an increase in output Nigeria reaped a windfall of unexpected rents, these wealth although large found themselves in the pocket of elites and the military government who were then in rule, to the point that the then ruler, Gen. Yakubu Gowon (1966 -1975), said Nigeria was not ready for a civilian rule, wanting to stay in power a little bit more.

It started with a per capita income of \$108 in 1960 and by 1979 it had raised this to \$938 before it went into the recession in the 80s, an event that did hit its economy really hard.

It's worth noting that following the discovery of the oil reserves, joining OPEC and the years of windfall rents in oil earnings due to price hikes in the mid-70s, attention of the politically unstable Nigeria was drawn to its oil resource more than any other natural resource it possessed. It also did not develop new areas from which it can earn foreign exchange: such as other cash crops; or man-made capital like encouraging manufactured exports. As Danquah (2009) puts it, the economy became an "oil monoculture" with little or no interest in economic diversification.

In 1983 as oil prices began to plunge, the supply of foreign exchange began to fall, but then government's exchange rate policy of maintain the existing rate led to further difficulties contributing to the need for further harsher austerity measures which distorted living standards in the country for years.

Corruption, centralization of power and its abuse was a norm in Nigeria's history for 35 years after 1965: a typical example was during the Abacha regime (1993-1998): Onyeukwu (2007) as seen in Danquah (2009) writes of the predatory state he created, monopolizing rents for himself and "plundering state fund to the tune of US\$ 4 billion". Many of these took place during the various regimes (between 1965-1998), robbing the state of good standards of living and the economy from its take off in terms of development.

In the year 2000, Nigeria under Olusegun Obasanjo (2000-2008) enjoyed stable, prosperous civilian governance for the first time after 34 years of unstable governance.

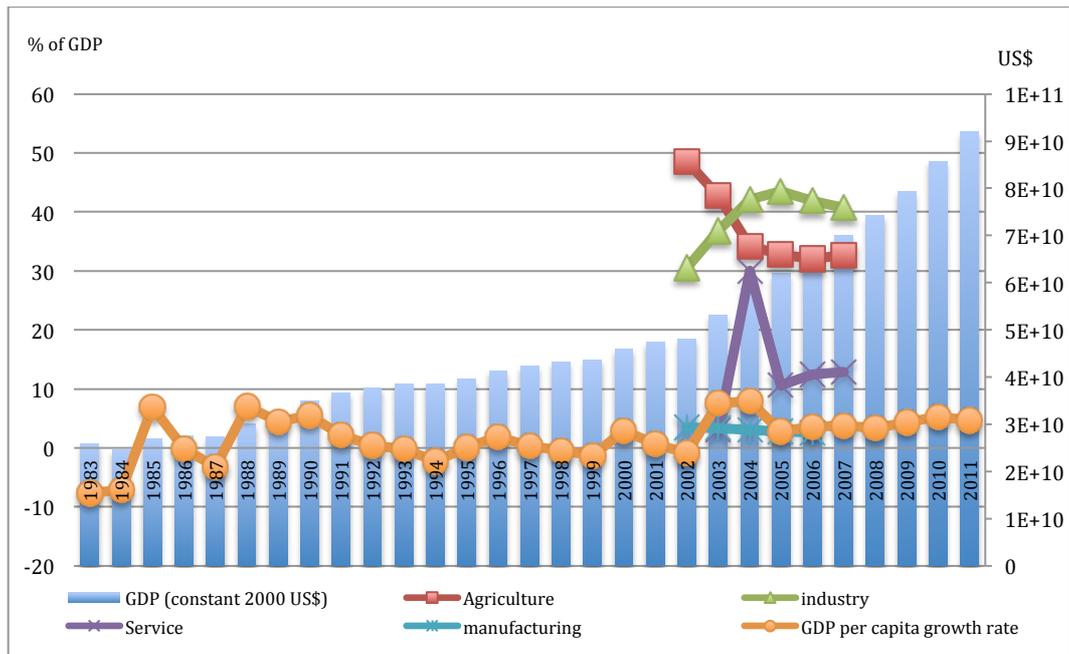
According to CIA factbook (2013) its current president, President Goodluck Jonathan, “has established economic teams that includes experienced and reputable members and has announced plans to; increase transparency, have a diversified economic growth, and improve its fiscal management. Lack of infrastructure and slow implementation of reforms are key impediments to growth. The government is working toward developing stronger public-private partnerships for roads, agriculture, and power”

#### **5.1.1.2 The Nigerian Economy**

Nigeria, currently one of the populous countries with an average population growth rate of 2.4% annually (WDI, 2013) is expected to be the “single largest contributor to population growth globally” by 2050, in a 2013 report by BBC (Alexander 25<sup>th</sup> June, 2013).

The Nigerian economy is one that is highly influenced by its petroleum sector, it is estimated that about 95% of its foreign exchange comes from petroleum exports and earnings from this finances 80% of government expenditure (CIA factbook, 2013). Despite earlier researchers estimates of US\$ 350 billion oil revenue generated between the periods 1965 and 2000, the country’s annual per capita

income in 2000, 35 years after inflow of funds from this sector, was US\$1,400 (Danquah, 2009). Currently it is US \$2,800 (GDP PPP) and with a 2010 estimate declaring 70% of its population behind poverty line (CIA factbook, 2013).



Data Source: WDI (2012)

Figure 5.1: Nigeria’s GDP and Other Indicators

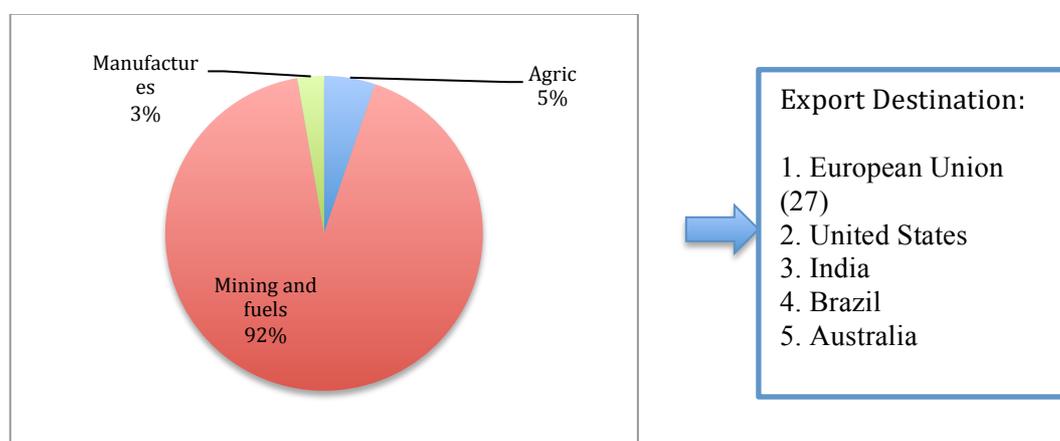
Although Agricultural sector contributes the least to its foreign exchange, it still is the economy’s major employer absorbing almost 70% (1999 estimate by CIA) and 45% (WDI, 2004) of its total employment. According to data from WDI (2012), in 1983 about 57% of its employment was in services, it had just enjoyed windfall of oil rents, Agriculture did not pay off like being in the service sector. After the depression, coup d’états and autocratic regime of Abacha (1993-1998), in 2004, employment in service was 42% of all employment.

The country had a negative per capita growth rate in the early 80s and mid-90s, possibly due to the depression and world crises: but not until mid-2000s did its growth stabilize. Although petroleum still contributes most to its output growth, it has been growing at an average of about 4% annually since 2005 (refer to Figure 5.1 above). The possible explanation can be that oil rents are being managed better than they were in earlier years.

In terms of **Nigeria's Exports**: "Oil and natural gas are the most important export products for Nigeria's trade" (Economywatch, 29<sup>th</sup> March, 2010).

In 2007, it was reported that Nigeria exported approximately 2.327 million barrels per day. "In terms of total oil exports, Nigeria ranks 8th in the world with a reserve of approximately 36.2 billion barrels" as of 2009 (Economywatch, 29<sup>th</sup> March, 2010).

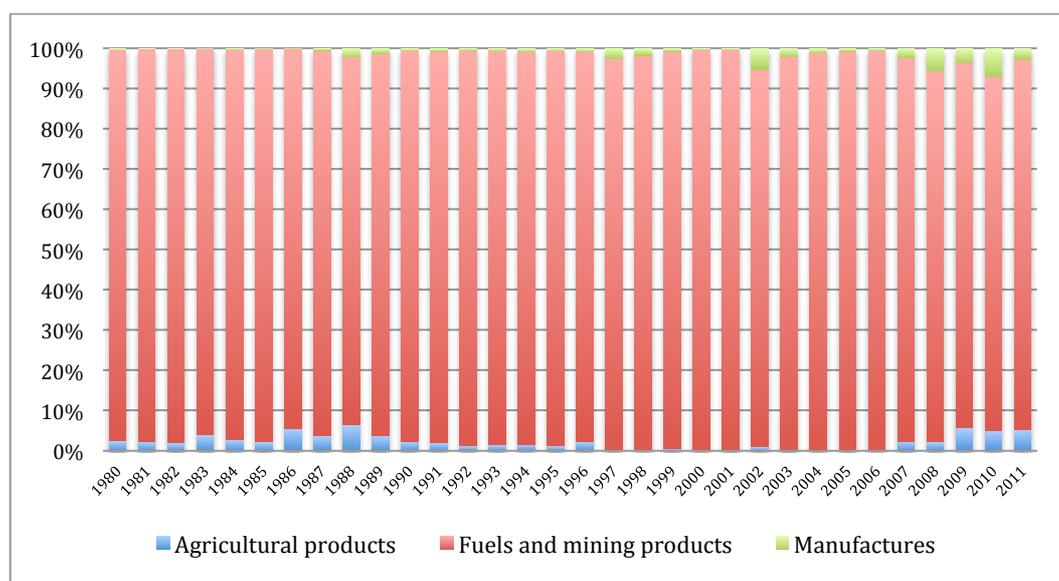
Although throughout the years it has still been exporting cocoa, timber and oil products, a breakdown of its exports from data by WTO (2012) shows 5% Agriculture, 92% Fuels and mining products, and 3% manufactures, as seen in Figure 5.1.



Data source: WTO (2012)

Figure 5.2: Nigeria's Exports in 2011

Over the previous years this phenomena has not been different, a data showing 31years of trade from 1980 to 2011 depicts a high reliance on Crude and although efforts are being made to increase the other sectors contribution, the economy is still venerable to external shocks as seen in the relative Chart (Figure 5.3)



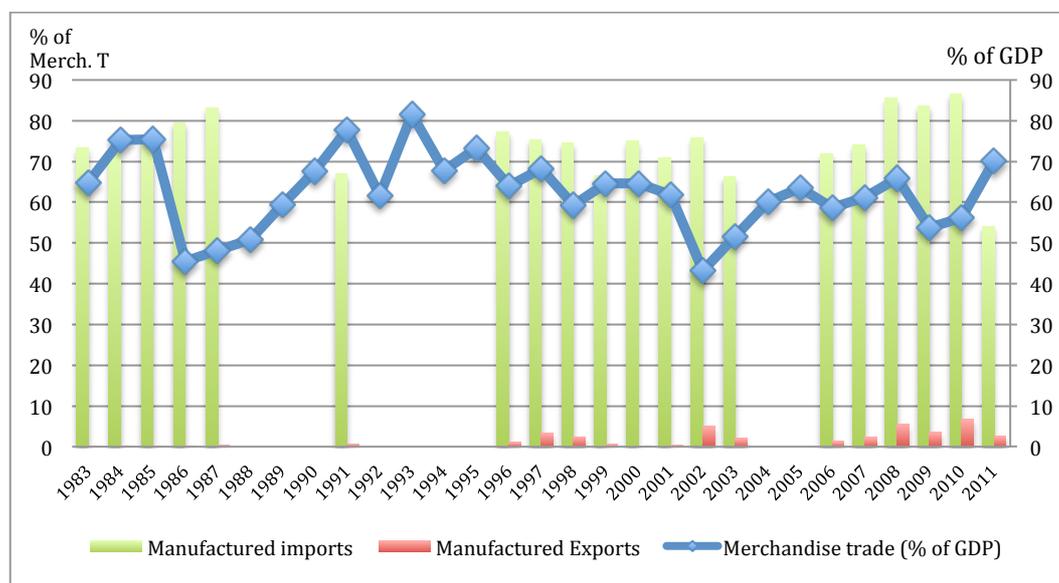
Source: WDI (2012)

Figure 5.3: Nigeria - Relative share of Exports

In terms manufactured trade, Nigeria just like most sub-Saharan developing countries import more than it exports, comparably its exports are insignificant compare to its imports.

From Figure 5.4 (below) it can be deducted that when it comes to merchandise trade, which on average has had a value of 60% of GDP since 1983, it has had almost negligible manufactured exports since 1983, but with an average of 70% of manufactured imports in its Merchandise Trade. Meaning manufactured exports

has been negligible in Nigeria's trade, and that most of its trade in terms of Manufacturers are imports.

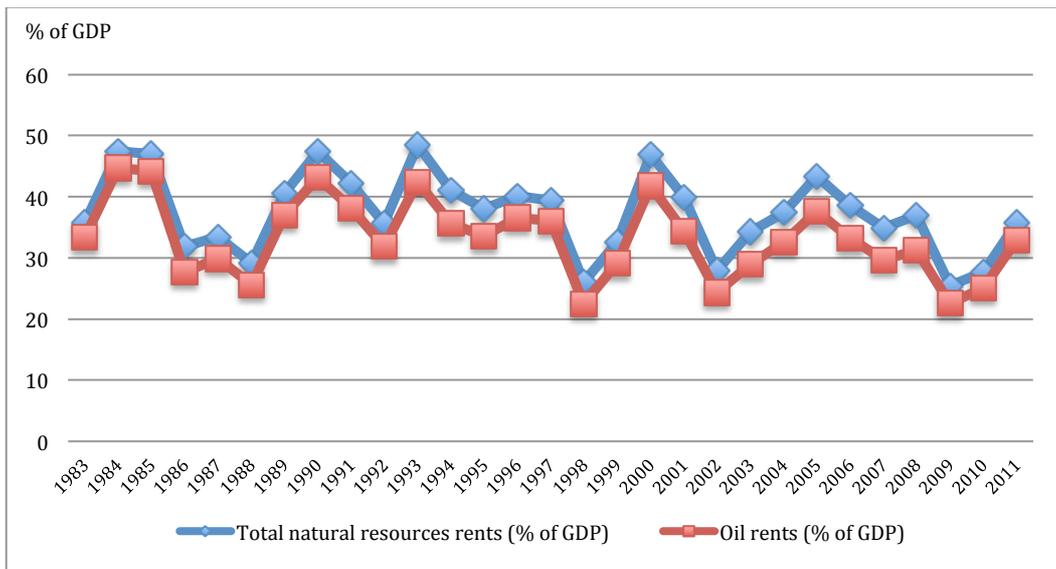


Source: WDI (2013)

Figure 5.4: Nigeria's Manufactured exports and Imports as % of Merchandise trade

Next, let us take a look at Nigeria's resource rents, which tells a similar story as the relative export chart (Figure 5.3).

From Figure 5.5 below, it can be seen that Nigeria's natural resource rents have somewhat moved with its oil rents unlike that of Malaysia, depicting its dependence on this Oil rents as main source of natural resource rents, and such a dependence is risky in such a volatile commodity market.



Source: WDI (2013)

Figure 5.5: Nigeria's Natural resource Rents

### 5.1.1.3 The Nigerian failure to take off

Looking at the political and economic history of the various countries it is easy to agree with the writers Bevan et al., (1999, p.5) that economic policy matters in how a resource rich nation will turn out in terms of development.

For Nigeria, its political economy had a lot to do with why it could not take off with the windfalls or to even diversify its economy.

Corruption & unstable governance during the period of the windfall of rents: before Nigeria entered its decade of recession in 1983, the windfall was partly managed under an unstable military rule, the funds were not expected, as in the words of the first head under which these windfall came “the only problem Nigeria has now is how to spend the money she has” (Gen. Yakubu Gowon, 1966

-1975).

These corrupt practices, bribery and rent seeking activities also weakened the institutional quality of Nigeria, the country became a fragile predatory state, where securing your contracts and properties became uncertain, this dampened investor's confidence in the early ages before the 21<sup>st</sup> Century. As it is known security of contracts is a necessary facilitator of FDI inflows.

With the windfall of rents, Nigeria tried to pursue an inward trade policy of Import substitution instead of outward orientation, this was the time to gain competitiveness in some other productive sectors and to make use of its advantage in cheap labor aside the oil sector or to even create some linkages (forward, backward and final demand) from the oil sector. These other linkages would have create employment amidst contributing to better standard of living

Mismanagement of oil wealth: It is not clear whether a resource rich nation like Nigeria has a development policy documents its governments are committed to, like that of Malaysia. Spending is said to have been done, but not to improve living standards of its poor. During its dictatorship regime under Gen. Sani Abacha (1993-1998), human right abuse and corruption was a norm. New York Times on 19<sup>th</sup> August 2004, reported:

“Almost all of the nearly \$500 million frozen in Swiss bank accounts connected with the late Nigerian dictator, Gen. Sani Abacha, was "obviously of criminal origin" and may be returned to the Nigerian government, the Swiss Justice Ministry said Wednesday”

To Danquah (2009) Indonesia managed to avoid the resource curse while Nigeria was trapped in it, because it managed to open up its economy during the second wave of the oil crises, to create a non-oil sector, when Nigeria was still waiting for another windfall.

In summary, Nigeria could have been one of the rich oil nations and probably the richest in sub-Saharan Africa in terms of living standards. But contrary to this, its socio-political environment has been plagued with mismanagement, corruption and rent seeking activities, and an unstable governance since it found the oil resource in the 1960s.

Aside from its dependence on the oil resource creating its vulnerability to the volatile commodity market, mismanagement of the petroleum earnings has been one of its setbacks in taking off.

In session 5.2.2, Indonesia would be considered: a more populous land, with lesser reserves but managed to escape the curse and make developmental use of its resource rent. In this report it is a success story in terms of how the resource rents were handled during the windfall and investment policy decisions afterward.

### **5.1.2 Chad: Few Reserves, and dependence**

The Story of Chad is that of another resource dependent country, but this time it is dependent on the few resources it has at its disposal. Its history tells us that it has

not had the enabling political environment, to make developmental policies that will lead to better standards of living for its citizens. Even when aid came to assist, government failed several times to meet targets that will keep the aid flowing, from the IMF and the World Bank.

The main lesson picked from this case was the effect of an enabling environment or stable governance on the development of a resource rich nation. Here Chad's history is considered, its economic indicators analyzed so as to draw a few lessons from its development as a resource rich nation.

#### **5.1.2.1 Relevant History**

'République du Tchad' as it is referred to in French was one of the colonies of France in the early 20<sup>th</sup> century. The French who settled in the south of Chad in order to exploit the colony's agricultural potential ruled over the various factions in the country: mainly divided into south, central and the north. It ruled the south directly but the other parts through their religious leaders and chiefs.

In 1960 Chad became an independent nation after the French dissolved their control over central African nations in 1959. Five years after independence, there was a revolt against the ruling autocratic regime's policies, a revolt that led into a civil war between the south and the other parts of the nation (that is north and central), since the then president was a southerner. This war lasted several decades and weakened the socio - political platform upon which any successful nation is built. In 1987 through international interventions, the two parties called

for a seize fire.

In 1994 the international court of justice help resolve Libya and Chad conflicts giving Chad control over the Aouzou strip, a land portion known to be rich in Uranium and other minerals, a land which caused conflict between these two neighboring nation for years.

Looking at the history of Chad, it has had authoritarian regimes and military rule and civil wars even since it became a republic. In 1996, it held its first multi-party election and elected the current president, who was instrumental in transforming its political structure from the civil war to a state with laws. He is in his 4<sup>TH</sup> term after 15 years of rule, re-elected in 2011.

Anyanwu et al. (2009, p.57) talked about the completion of “petroleum development and pipeline project” in 2004, from Chad through Cameroon to the coast, a project the World Bank and the three oil companies (ExxonMobil, ChevronTexaco, and Petronas) jointly undertook, since Chad’s internal instabilities made it too risky for private investors. This made Chad rich in crude oil rents, rents that have financed government’s defense activities against rebel groups since 2003.

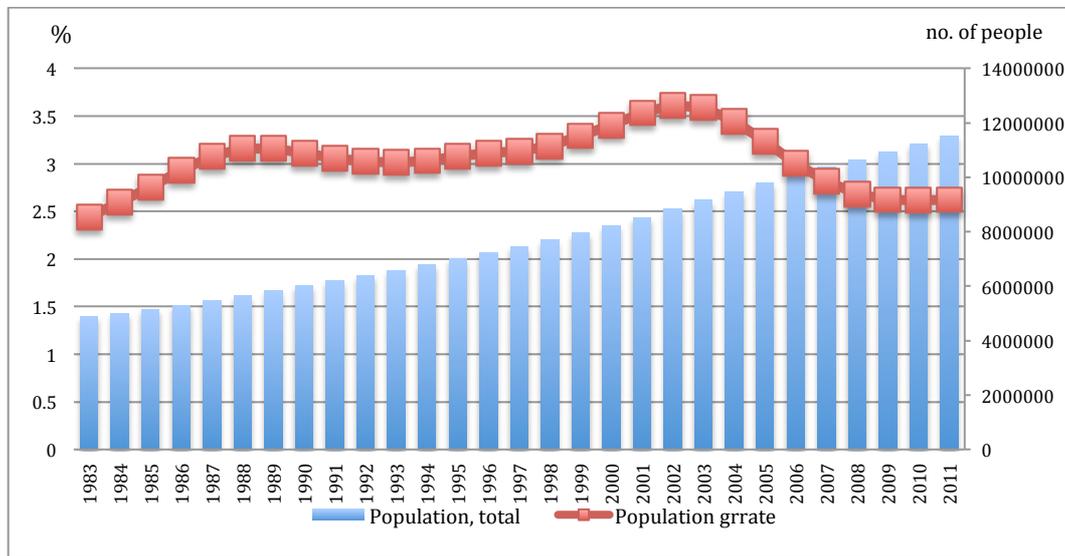
Amidst all the corruption that exists in Chad, with BBC country profile (2013) ranking it “the world’s most corrupt state”, it’s crude could transform its economy and improved standards of living if it was in a stable environment.

An article in the financial times, by Matthew Green cited Chad as one of Africa’s

oil woes, He wrote:

“An influx of oil wealth has done little to stabilize the country, which began pumping about 160,000 barrels a day in 2003 through a \$3.7bn pipeline project operated by ExxonMobil, Petronas and Chevron. Analysts say President Idriss Deby has sought to use the income to buy weapons to fight rebels in the east in spite of a World Bank sponsored program to ensure the funds are ploughed into development” (Green & Times, 2008).

Currently the country is made up of around 11.5 billion people (WDI, 2013), and many ethnic groups, but the most populous ethnic group is the Sara’s with 27% by 1993 census (CIA Factbook, 2013), but a majority of Chadians are Muslims. As can be seen from Figure 5.6, it has one of the highest population growth rates as compared to the other cases in this report, especially the industrialized countries.

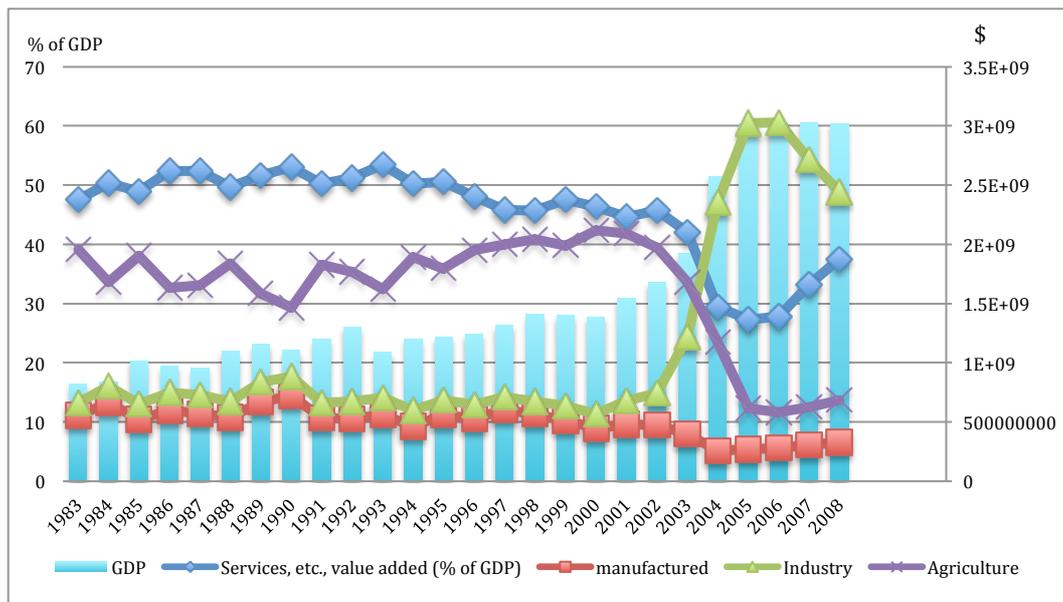


Data Source: WDI (2013)

Figure 5.6: Chad’s Population growth rate and value

### 5.1.2.2 The Chadian Economy

Online Britannica encyclopedia (2013), in reporting on the country's budget in 2009, estimated revenues to be CFAF 971,000,000,000: a figure of which 62.9% is petroleum revenue, 31.1% from non-petroleum tax revenue accounted, and about 6.0% as grants. Its expenditures amounted to CFAF 1,125,200,000,000: with 60.9% expensed on current expenditure (mainly in defense); and for developmental expenditure, 39.1%. This depicts a strong reliance on petroleum income but also that these funds do not go into financing developmental projects.



Data Source: WDI (2013)

Figure 5.7: Chadian Sectorial Output Value Added, GDP Constant (2000)

Chad's economic output has had an unpredictable behavior since the 1980s until 2000s when it discovered oil, after exploration started the output from this new sector led to an increase in the GDP and thus the per capita of the country substantially as can see from the Sectorial output Chart, (Refer to Figure 5.7).

The discovery of the crude oil and increase in productions caused an increase in industrial value added, thus the value added as a percentage of GDP for agriculture and services started to decline, with agriculture remaining down at the moment, depicting (a possible) less efforts by government to revive it.

According to CIA FactBook (2010), most of the crude oil rents goes into financing defense, against rebel groups: a move that robs the country from enjoying the benefits of its natural resource.

In terms of foreign exchange and expenditure financing channels, Chad is highly dependent on foreign aid and assistance (donors); and its exports mainly Agriculture based aside its crude reserves which take a large share of exports. It has no experience with industrialization nor its policies, thus to industrialize would be a very big step.

In 2011 its GDP (constant 2000 US\$) was US\$3,423,281,787, depicting a 1.6% growth over the 13% it had in 2010 (WDI, 2013).

Also over 80% of Chadian's workforce are involved in "agriculture: mostly small-scale subsistence farming, herding and fishing" with a 2001 estimate of 80% behind the poverty line (CIA Factbook, 2013).

In terms of exports, Chad before oil discovery was an agricultural based exporter, with cash crops such as cotton and Arabia gum, but with the entrance of crude and the windfall of rents from this sector which in value terms was almost 70% of GDP in 2005, tended to make them undermine the slow process of the cash crops,

thus making them inefficient sources of finance, a typical example is its cotton sector.

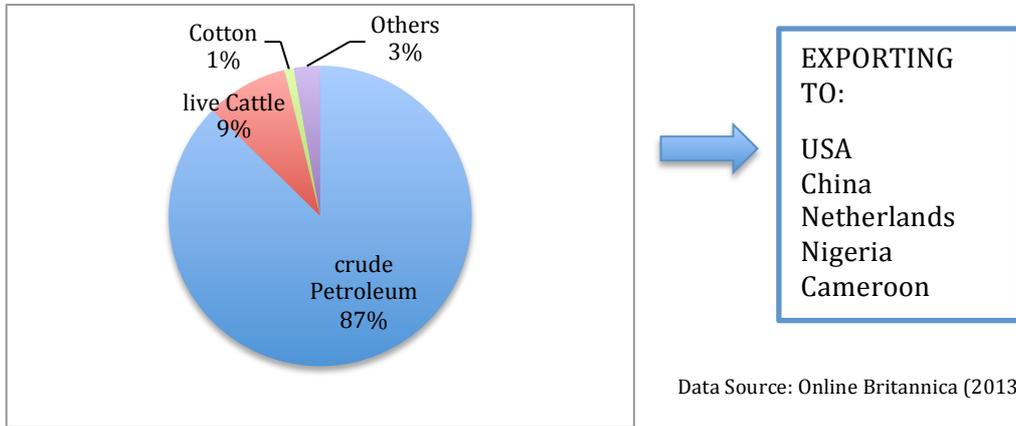
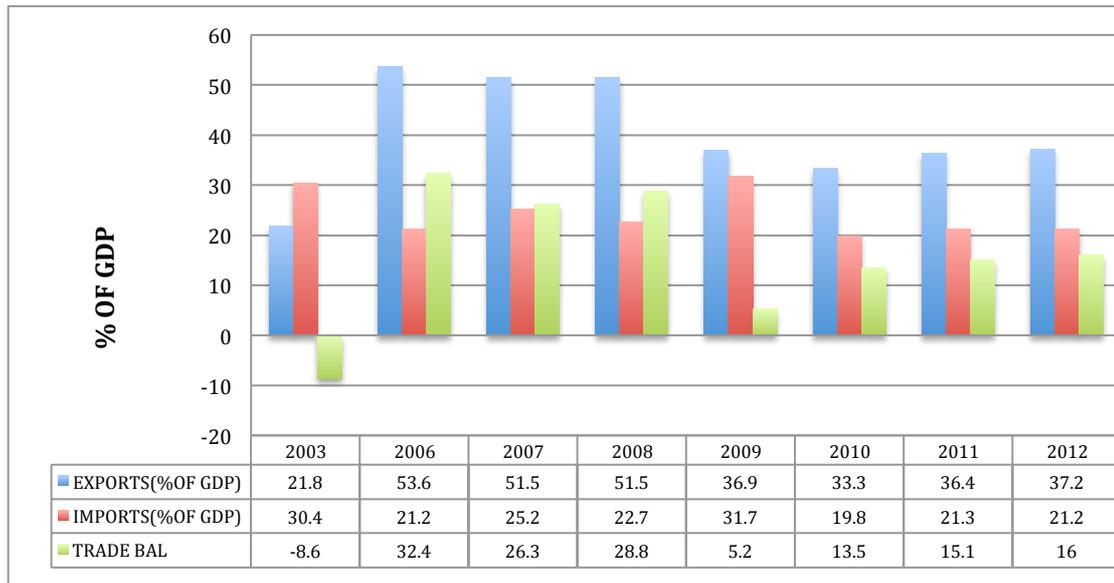


Figure 5.8: Chad's 2009 Exports Categories and destinations



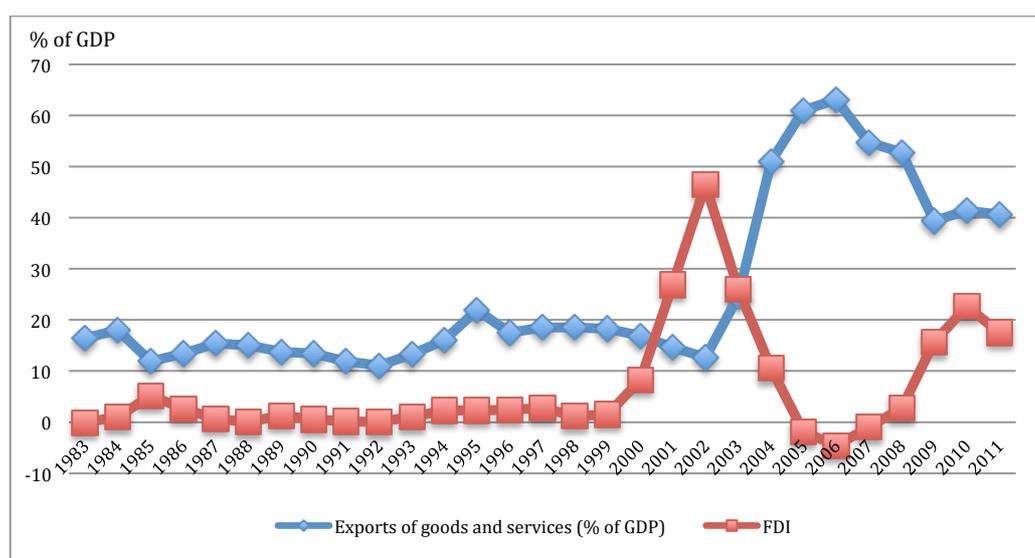
Data Source: AfDB, 2013

Figure 5.9: Chad's Trade Balance: Exports and Imports as a percentage of GDP

From Figure 5.9 above, shows the effect of the construction of the 2004 pipeline for transporting crude oil to the coast of Cameroon, which caused an increase in

exportable outputs per day, which led to an increase in exports that reigned until 2008, according to production values from US energy information administration (eia, 2013), Its daily productions peaked in 2005 and since then has been falling as can be seen on the industry value added on Figure 5.7.

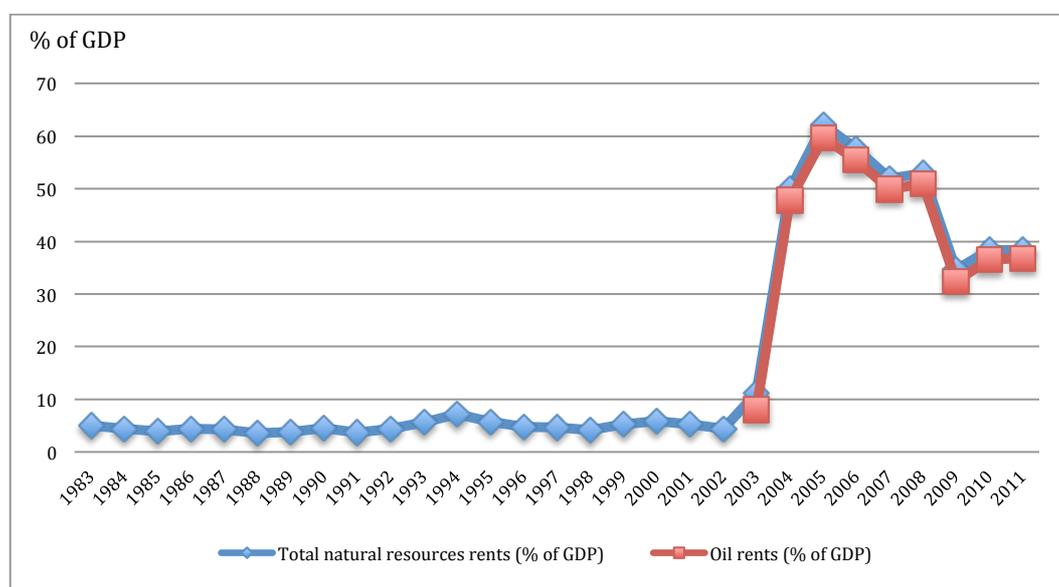
According to a country report by AfDB, in 2012 “The secondary and tertiary sectors increased their contributions to national wealth creation (14% and 40% of GDP respectively), but the economy remains highly dependent on the primary sector (46% of GDP)” (AfDB, 2012). The report projects that growth in 2013 will be pushed by the non-oil sector of the economy since production levels keep falling. It has been able to build a refinery in collaboration with the Chinese National Petroleum Corporation, in 2012, which can affect its export in terms of refined petroleum products.



Data Source: WDI, 2013

Figure 5.10: Chad: Inflow of FDI and Value of Exports as a percentage of GDP

Chad is a case of dependence as can be seen from Figure 5.11, aside its dependence on primary products for foreign exchange, its oil rents in value terms is same as its resource rent, signaling no other natural resources provides any other rents. Also looking at its value as a percentage of GDP, it can be deducted that Crude oil is the most contributing to government revenue in that economy. Hovering around 60% of GDP in value terms in 2005.



Data source: WDI, 2013

Figure 5.11: Chad's Natural resource Rents

### 5.1.2.3 Factors of the Chadian development failure

The main cause of this country's inability to use the rents from its natural resources especially crude to take off is due to unstable political environment that has tormented it for years, aside the finite nature of the resource.

An unstable political environment only drives away foreign direct investment; as a result, Chad's economy has to depend on aid and the few primary exports for its survival.

FDI later flowed in when the oil production started in early 2000, fell and picked up again in 2008, in a more stabilized economy.

Aside the instability issues: their geographical limitation, that is being landlocked, gave it a resource-transporting disadvantage. Thus the intervention by the World Bank with the provision of a pipeline from Chad through Cameroon was helpful in increasing outputs exported after 2004 and increasing revenues.

After being a bit stabilized, and having had 4 democratic elections since 1996, it is still dependent on its primary sector, a sector that has not pushed it much in GNI per capita, as at 2001 before the oil, its GNI per capita was the same value as in 1983, \$190. Depicting the poor state of the people in the economy before the oil rents started flowing into the economy. Thus it is the Oil outputs that transformed it to \$720 in 2011, what is going to happen to its outputs now that daily oil outputs is falling.

Lastly, the country is more stable now, with its stock of reserves falling by the day and its cost of retrieving the crude oil increasing, thus rents from the crude resource are reducing, a fall in crude prices will make matters worse for Chad, although non-oil sector is picking up with the return of the cotton industry in

2011, and the startup of cement production in the country. The country also needs to diversify into other sectors especially in the tertiary and secondary sectors.

Now let us consider two success stories from an economic diversification point of view

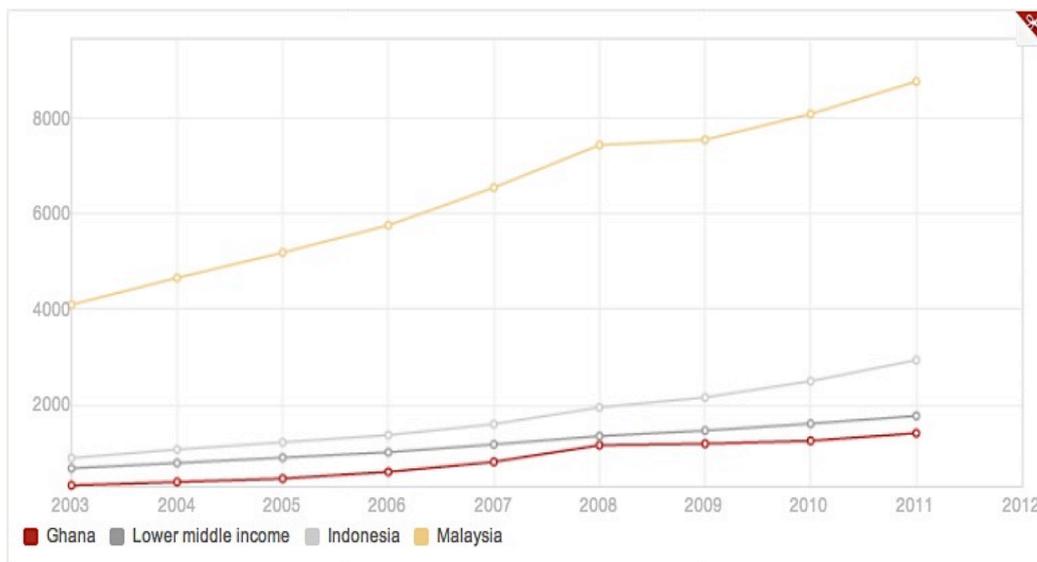
## **5.2 Malaysia & Indonesia: The stories of Economic diversification**

Economic diversification as a policy recommendation for resource rich nations has been widely accepted by most development economist for decades, while some have suggested a movement away from the staple sectors which traps many developing nations, after these staples have contributed their portion to the country's development, others have suggested adding value to the outputs of the staple sectors, all targeting at economic growth and development.

Some countries had shifted to man made products instead of reliance on the natural somewhat non- renewable resources, and others have sought other renewable ways that they are competitively advantaged in.

In this section I discuss the case of two of such countries, which have sought to reduce their vulnerability to the resource problem through diversification. According to Hartwick's rule, to sustain future consumption, current consumption must be postponed, and funds invested in reproducible, man-made capital, which goes in the long way to increase the standard of living of its citizens (Vincent et al., 1997, p.30).

As you can see from Figure 5.12, these two countries have each strived to increase their per capita GNI, and the standards of living of its citizens over time.



Source: The World Bank (WDI, 2013)

Figure 5.12: The GNI per capita of Economic Diversified economies & Ghana

### 5.2.1 Malaysia: Economic Diversification in a similar Country

Malaysia is a unique case study when it comes to natural resource rich, government policy, and development.

Although it has several factors and development plans in common with Ghana: like its population size, in the range of 20 -30 million people; same British colonial masters; year of independence, that is 1957; the NDP which is focused on vision 2020, Malaysia has managed to follow its various development plans through and is currently targeting to move up from its current upper middle-income status to be an advanced economy.

They managed to move from being dependent and a staple economy into an industrialized one. Ghana is currently in its lower middle-income status, and it is empirically proven that dependence on natural resources is no way of taking a country beyond the middle-income trap, there is the need for the technology multiplier.

At the end of this section the reader should understand the factors that contributed to Malaysia's success, in terms of policy, infrastructure, investment.

#### **5.2.1.1 Relevant History**

The Malaysian peninsular comprising of 13 states in three regions: that is Peninsular Malaysia to the west, and Sabah and Sarawak to the east, is a former British colony, which gained independence on 31<sup>st</sup> August 1957. In those days it was known for its tin mines and rubber plantations, sectors which attracted immigrant workers mainly from China and India to work in them, workers whose families now form part of Malaysia as citizens, creating a county with both Malays and non-Malays.

Currently it has a population of 28.86 million, with a population growth rate of 1.6%, its population is made up 50.4% Malays; 23.7% Chinese-Malaysian; and 7.1% Indian-Malaysian, 18.8% others ( CIA Factbook, 2004 estimate). All these ethnic groups vary in terms of culture, work, attitude, and even income. Malays were farmers and fishermen; the Chinese ethnic worked in the mines; and the Indians on the rubber plantations.

Its gross domestic product has increased tremendously since independence and

for 2011 it was USD 287.9 billion with a life expectancy of 74yrs according to world development indicators (WDI, 2012)

The country since the 1965 has undertaken 5 year development plans consecutively formerly called the New Economic Policy (NEP) (Jomo, 1990, pp.143 – 150), and now called the New economic Model (NEM) aimed at two main goals, poverty reduction and restructuring of the Malaysian economy, a process it has gone through for the past 45 years. In a speech before the “Malaysian Business council in December 1991, prime minister Mahathir affirmed the government’s commitment to economic growth calling for Malaysia to become a ‘fully developed country’ by the year 2020” (Vincent et al., 1997, p. 14) The tenth one, with an acronym NEM was presented on the 10<sup>th</sup> June, 2010 for the period 2011-2015, the government insisted that the previous plans lacked affirmative action (Abidin, 2011): that is, policy actions that aim to reduce discrimination in offering benefits to citizens; in terms of employment, subsidies etc., due to one’s race, gender, or religious affiliation.

Tin was the main natural extractive resource that drew the British to Malaysia, just like gold did them to Ghana (formerly Gold coast), through this industry several infrastructure necessary to facilitate the production and transportation was introduced, infrastructures that were built from the taxes and proceeds from the same sector, for example the railways, ports, roads and the dredging machinery which brought technical know-how. Jomo (1990, p.5) added that these

infrastructures were generally more developed than in any British colony.

Tin remained one of the main pillars of Malaysian exports until manufactured exports grew rapidly in 1970s (Thoburn, 2011), after which output from the mine grew more and more insignificant, as they did the country continually found new sources of growth, like the palm oil and petroleum in the 1970s (Jomo, 1990, p.66). Currently CIA Factbook (2012) does not even record Tin as part of Malaysia's exports.

Malaysia in the 1970's begun as an economy dependent on its primary commodity exports just as many other lower-middle-income countries at that time, but by the year 1990, it had diversified its exports greatly, the share of manufactured goods in exports had risen from 12% in 1970 to 59% in 1990 (Vincent et al., 1997, p.11). Although in terms of industrialization, Malaysia started with primary processing as the larger share of its gross output, by the year 1989 consumer durables (made up of Textile, footwear, wood products, furniture etc.) had taken over, and by 1990 intermediate goods (Chemical engineering final products) had the lion share (Drabble, 2000, p.236, Table 12.1). Alavi (1996, p.51) demonstrated a similar trend, in that, he looked out for the sources of output growth in the manufacturing sector between the years 1959-1989. He observed that there had been a shift between Import Substitution and Exports expansion: from the early 1980s the import substitution contributed negatively to growth, demonstrating that production had become more import intensive. From the table, in all these years domestic demand expansion contributed the most as shown in

Table 5.1 below, this demonstrates an inward looking by manufacturing sector, especially high in the early 80s, which is an effects of protection through the ISI.

<b>Source of manufacturing Output Growth (% Contribution)</b>			
<b>Time</b>	<b>Import Substitution</b>	<b>Export Expansion</b>	<b>Domestic Demand Expansion</b>
<b>1959 – 1963</b>	41	-1	60
<b>1963 – 1968</b>	49	12	39
<b>1968 – 1973</b>	11	-1	90
<b>1973 – 1979</b>	1	9	90
<b>1979 – 1984</b>	-26	25	101
<b>1984 – 1989</b>	-27	53	74

(Source: Alavi 1996, p.51, Table 2.11)

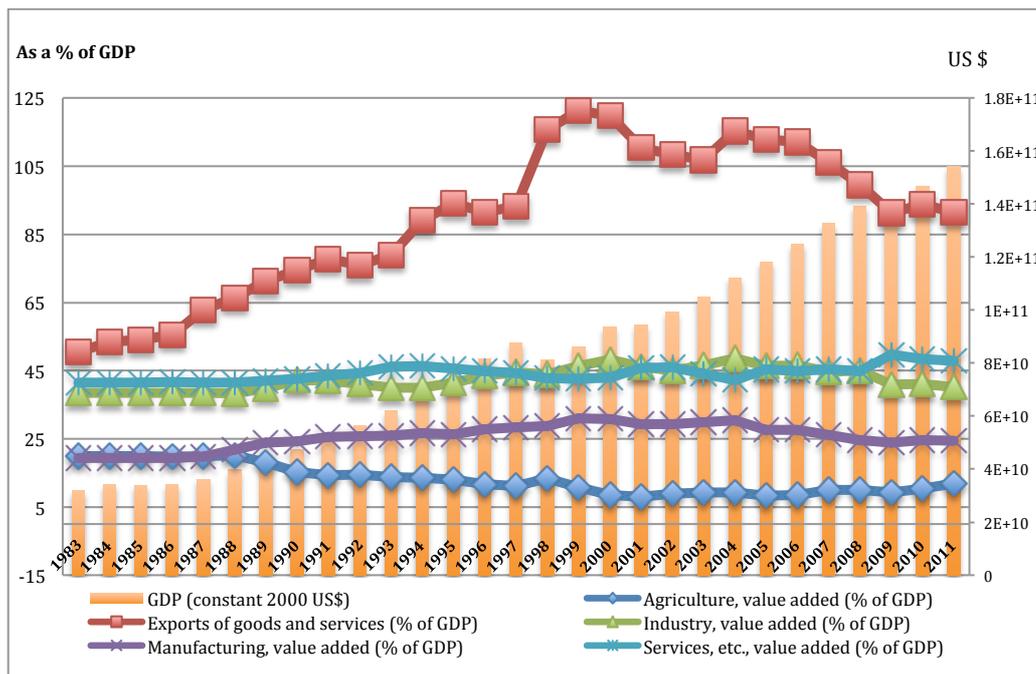
Table 5.1: Sources of output growth in the Malaysian manufacturing industry (1959-1989)

Following a recession in the 1980s during its fourth National Economic Plan (NEP), the government decided to cut some public expenditure and liberalized its foreign investment regulations, thus foreign investment in manufacturing rapidly increased. To the extent that by early 1990s, three areas of the country, on the west coast of the Malaysian peninsular were all heavily industrialized, in addition industrial capacity rose in these years due to investments by government in the steel and automobile industries (Vincent et al., 1997, pp.11-12).

### **5.2.1.2 The Malaysian Economy**

While agriculture took a 40% share of GDP in 1955 and 1960, by 1965 it's share had reduced to 32% and by 1988 it was around 21%. Mining's share due to petroleum and gas grew from 6.3% in 1970 to 10.4% by 1988, and the share of

manufacturing also followed an increase trend from 13.4% in 1970 to 23.9% in 1988 (Jomo, 1990). The Figure 5.13 shows a picture of how the economy has been pushed by its exports over the years, showing as high as 121% of GDP in 1999.



Data Source: WDI (2013)

Chart 5.13: Economic Historical Trend of the Malaysian economy

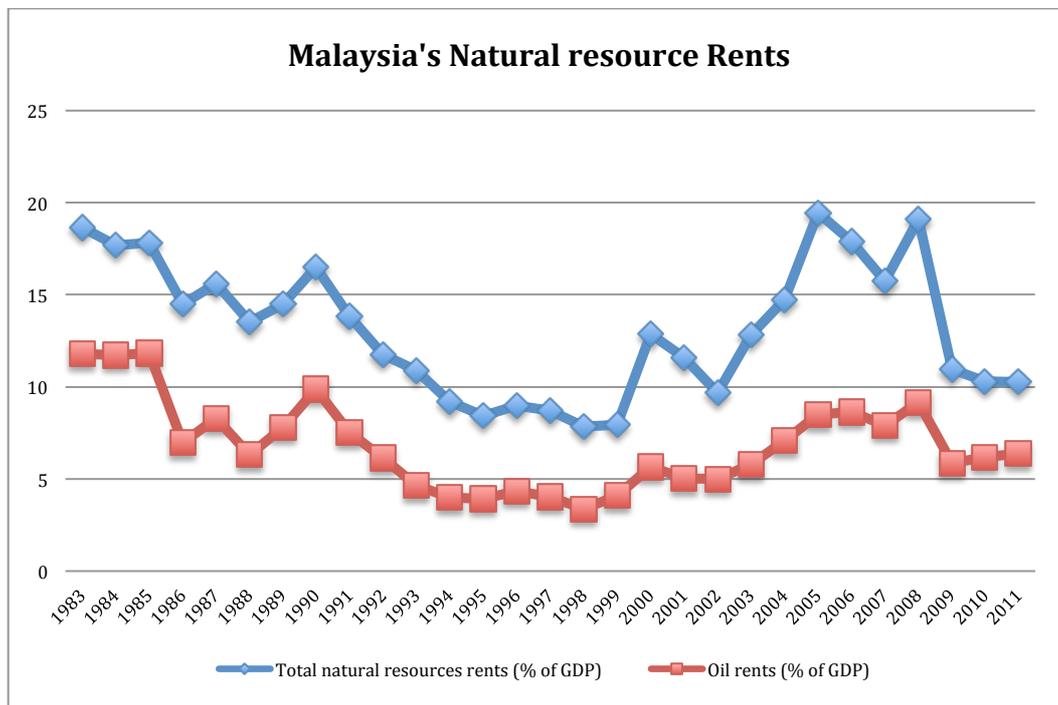
How rich is the Malaysian economy in terms of natural resources? After independence the first Malaysian plan 1966-1970, recorded tin, iron ore, bauxite, and gold as the country’s “minerals of importance”, but by 1970s oil made its appearance as one of the top four although its export earnings surpassed that of tin and oil palm in 1976 and timber products in 1979 and Rubber in 1980. At the beginning of 1980s oil had become the country’s leading export (Vincent et al.,

1997, pp.73-74).

In terms of commodity “Malaysia, ... enjoys a rich resource base with a relatively small population, and its development strategy has been based on its comparative advantage in primary products: rubber, palm oil, wood and petroleum” (Boame, 1998) resources which contributed greatly to its export driven growth before the manufacturing took off in the 1970s. Manufacturing although it started earlier than 1970 played an insignificant role in the early ages, it was just involved with the forward and backward linkages of two main sectors and the service providers to the Tin mines and the rubber plantations, which were the main growth drivers of the economy at that time (Alavi, 1996, p.29).

The Malaysian economy had not always been successful or resilient to the shocks from the commodity market. Amidst its development plans, just when manufacturing started to kick off in the country, and also with the rapid increase in commodity prices in mid-1970, Malaysia went into a recession in the next decade, a recession which came because of its very open nature, a policy that had help its earlier success (Jomo, 1990). A recession they recovered and learnt from.

The value of rents from natural resources and oil as a percentage of GDP has varied overtime due to the other natural resources the country exports but from the Figure 5.14 it looks like it's being driven mainly by the oil earnings.



Data Source: WDI (2013)

Figure 5.14: Malaysia's Rents from its Natural resources

Concerning Malaysia's **Development Policy decisions**: The main decisions that affected Malaysia's growth have to do broadly with the ten development plans it has pursued since independence till date, currently pursuing the tenth one.

As the oil sector began to reflect its contribution to the economy and became the leading natural resource being exported in terms of earnings by the 70s, the third Malaysian Plan (1979-80) announced five objectives of this sector, "calling for a new and strategic role of oil" (Vincent et al., 1997, pp.74), outlining it from local content point of view; increasing revenue and export earnings through oil sales; environmental consideration as they extract more and more; serving local oil consumption needs; and enhancing a favorable investment climate in the country.

Statistically a great progress according to Vincent was made towards this objective, to the extent that local consumption needs were to an extent being met by domestic oil production (1997, p.75).

### **5.2.1.3 How Malaysia succeeded to take off**

From literature, It can be said that the answer to the question, how did they succeed, could be as simple as, it reduced its reliance on a single or just primary exports, and that it knew when to dilute its reliance on them, getting some man-made capital involved in their primary commodity export led growth. The economy introduced efforts to reduce its reliance on primary, extractive, natural resources, to create a diversified export portfolio before it started to exploit its oil / petroleum resource in 1970.

For starters let us consider geographical location, the researcher agrees with Tan et al., (1997, p.8) that Malaysia's geographical location and its natural resource wealth gave it a great advantage in taking off and transforming its economy.

Also, although foreign mining investments have often served as enclaves with a few backward, forward or final demand linkages, and little or no benefits accruing to the host country, the tin mining in the early stages of Malaysian development provided backward linkages in engineering. This became useful to many engineering based industries that came up later after tin industry became a less significant to exports, by the 20<sup>th</sup> century local engineering were ready to meet the

engineering needs of new industries such as oil palm and rubber (Thoburn, 2011).

Malaysia began as an export driven economy, its economy grew on produce-to-export (Jomo, 1990) now with the reconstructions of various economies after the Second World War, and the commodity price boom in the mid-70s, amidst its development plans, made it one of the high growing economies.

To Jomo, (1990, p.53) the Malaysian export-led growth's success was "based primarily on the expansion in the quantum of products it exported and the changes in the composition of exports", to a lesser extent also on the favorable commodity prices as in mid-1970's.

After independence this rapid export-led growth achieved in its early development days (1960 – 1990) came about through continuing efforts to:

- Increase the lands under cultivation, where it shifted emphasis to high priced crops like palm oil
- Selectively replant its rubber plants in order to increase the output
- Exploit its non-renewable natural resources – that is tin, timber, natural gas and petroleum.

Malaysia succeeded because it diversified its economy, but unlike the Latin American countries, the instability existing in the commodity market was not what drove the Malaysians to seek economic diversification, according to Alavi, (1996, pp.30 - 31) it was the forecasted gloomy future "of the economy and the

move towards political independence of Malaya which instigated a change in development policy.” There was a forecasted population growth, which the expected expansion in employment in the two main sectors (Tin and Rubber) could not cope with; the World Bank (then IBRD) then “recommended diversification into other forms of export agriculture and manufacturing”. The World Bank actually suggested “an import substitution industrialization strategy which was supposed to be accomplished through: tariff protection; encouraging local industry entrepreneurship; attracting foreign capital, offering new taxes and other initiatives; provision of industrial estates facilities; and infrastructure development.”

The success of the Malaysian economy as a natural resource abundant economy that took off, although a complex issue has to do with the policy decisions that were made after independence, and the commitment of its various successive governments to the existing development plans and policies. Also the investment decisions that were made by government in order to transform the infrastructure base of its economy to make private industries expansion easy had a part to play (Alavi, 1996, p.33), its enabling environment that attracted FDI into its economy.

Next, let us consider Indonesia, one that was really transformed through FDI as it sought an export led growth.

## **5.2.2 Indonesia: Economic Diversification in a largely populated**

### **Country**

The populations of Ghana can nowhere be compared to that of Indonesia, about 242 million according to WDI (2013): comparably this population is almost twice that of Nigeria and about ten (10) times that of Ghana. Although both Nigeria and Indonesia are populous countries and both enjoyed windfall rents from their crude oil resources after independence and also both went through hardships, dictatorships, and their dictatorship regime ended in the same year, of these two only Indonesia managed to diversify its economy to reduce its vulnerability to the resource curse. Nigeria is still dependent on its crude oil resource, as reported above.

To Danquah (2009), Indonesia's foreign investment law in 1967; its government's investment in Education and Agriculture during its take off; and its efforts to diversify its export after the 1980s to reduce their reliance on the crude oil, which by then was their main foreign exchange provider, led to its success through the crises, and to this study considering it as a success story.

The researcher will consider from a historical background policy decision that aided this economy's growth in order to suggest factors that might have aided its success as a resource rich nation.

#### **5.2.2.1 Relevant History**

Indonesian's struggle to become a republic took decades of war, revolutions by

political movements, and the strength of its educated class. Sukarno and Hatta were people who were instrumental in the unification of the various movements and to the declaration of independence in 1945 after Japanese occupancy three years earlier and the independence war (Kano, 2008, p.200). After independence, the process of becoming a sovereign state took another five years of reform work by the first government and struggle with the Dutch.

After Indonesia became a republic, many of the Dutch and western firms were nationalized, through several laws that were passed, as belonging to the state and the people: with Indonesian state taking over the various Dutch colonial industries that had exploited them for years.

Indonesia's main patterns of trade and tradable goods changed drastically from colonial times to the 1980s, a decade in which it sought to diversify its economy.

The sugar era reached its heights in 1920 but successive events such as the World War I and II, worldwide depression in the latter part of this decade robbed the sugar industry of its ability to support Indonesia's export economy, this was taken over by the rubber era (1930s – 1950), by 1930 rubber, the tree that takes longer to grow than sugar cane, but can be tapped for twenty to thirty years and easily processed, had taken over as the main export (Kano, 2008, p.115). These two eras had brought in technical know-hows from the west and the Dutch by 1950s.

The petroleum era coincided with the sovereignty of Indonesia, although oil drilling started decades ago, this era begun due to laws that transferred almost all the oil production sites to the state. Thus creating several state oil companies that

were later combine to form the only one state oil company Pertamina. From the 1960s to the mid-80s “ oil & natural gas overtook other commodities as the key export of Indonesia” (Kano, 2008, p.239).

This is the era where Indonesia became dependent on its oil resource, as it joined OPEC and oil price hikes happened in mid 70s. Oil became the most contributing source of revenue for the central government as production levels increased in 1977, and is still vital, according to Komarulzaman and Alisjahbana (2006), although the oil & gas and other mineral sectors were no longer the main exports of Indonesia after the structural changes in 1986, they still have been very significant to the Indonesian economy in terms of government revenue.

By the 1990s, industrial products had taken the lion share of products the country exports, creating another sector from which it can tax and create employment for its populous nation. “As manufacturing rose to define a new era in the late 1980s, industries diversified into a number of private business groups that were called ‘konglomerat’” which was mostly owned by Chinese entrepreneurs (Kano, 2008, p.245)

Suharto’s new order era ushered in another phase of change in laws, ownerships structure and re-organization of the disorderly clustered state owned enterprises. It also opened up the economy to FDI inflow, which boosted economic activity in the late 60s and 80s. Two years after Suharto (1965 - 1998) took over office, the government introduced a foreign investment law with a lock-in mechanism. This law opened up Indonesia and attracted investors from the West, Europe, and Asia

who brought in capital to seek (cheap) labor-intensive manufacturing for exports. Thus instead of the norm in Africa where the majority of FDI goes to its extractive sectors, Indonesian FDI inflows went into secondary and tertiary sectors, benefiting the people greatly through employment.

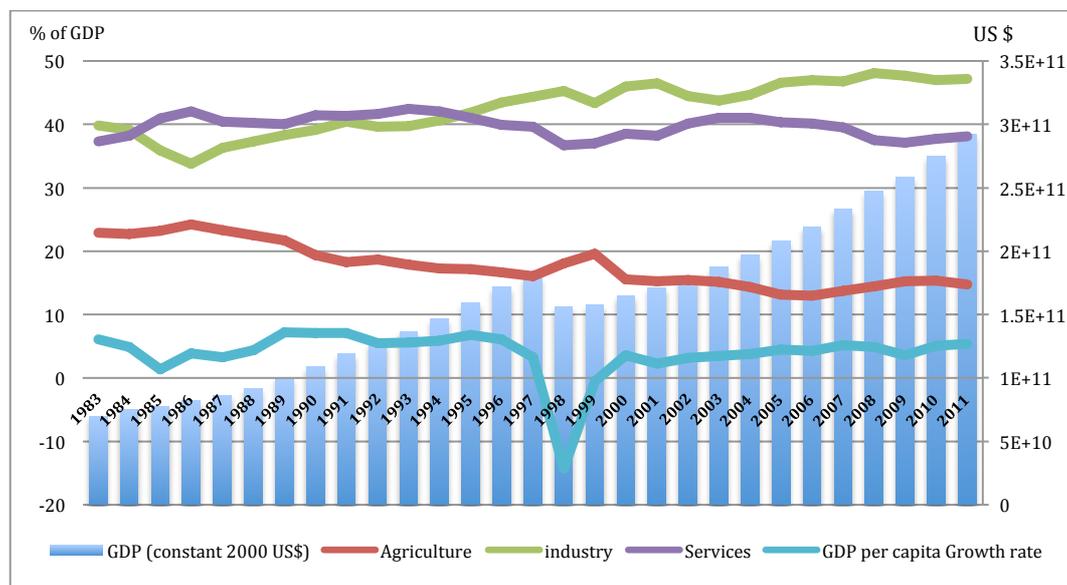
Now, is it that there was no corruption or rent seeking activities in Indonesia as in Nigeria? No, Kano (2008, p.247-248) talked about how misuse of the licensing system became a common phenomenon, where political connections gave some businessmen easy access to licensing rights: mostly for Chinese intermediaries and entrepreneurs. Also the military seeking some exclusive source of income after the independence war, in the 50s begun engaging in profit making enterprises that lasted and expanded as the years went by, some even supported illegal activities such as smuggling.

In 1998, Indonesia recorded negative per capita growth rate due to revolution against the Suharto regime, a regime that had existed for 32 years, according to reporters, it was caused by harsh economic environment that had been created by the Asian financial crises of 1992 causing rising unemployment, inflation and uncomfortable future expectation in standards of living.

#### **5.2.2.2 The Indonesian Economy**

The economy of Indonesia, as has been reported has undergone several changes, in trade, politics, policies and structural reforms after it gained sovereignty in

1950s. Most of the laws and policies of its government went a long way to improve economic conditions, and living standards of its citizens. From an HDI of 0.422 in 1980, which is classified as low human development, it rose to 0.540 in 2000 and 0.629 in 2012, almost at par with the average of its current class, that is medium human development.

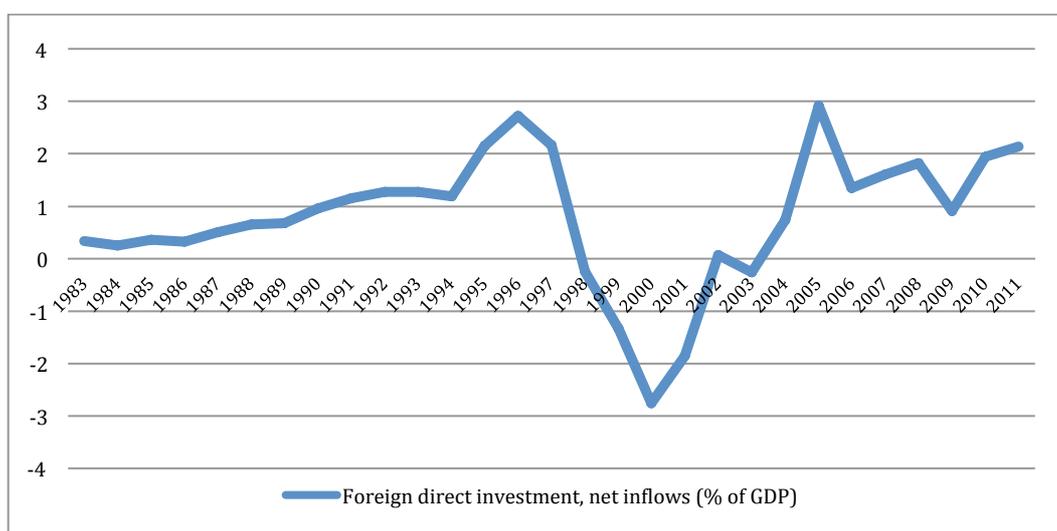


Data Source: WDI 2013

Figure 5.15: Indonesia's Economic indicators – Sectorial Value Added

As Figure 5.15 depicts, the value added from industry which comprises of manufacturing and mining has been the one that has shown significant increase since the 1980s, at the end of the petroleum era, This show signs of increase in output from the manufacturing sector of the economy. The fall in per capita GDP growth rate was due to the revolution against the Suharto regime and the 1998 riots and call for reforms.

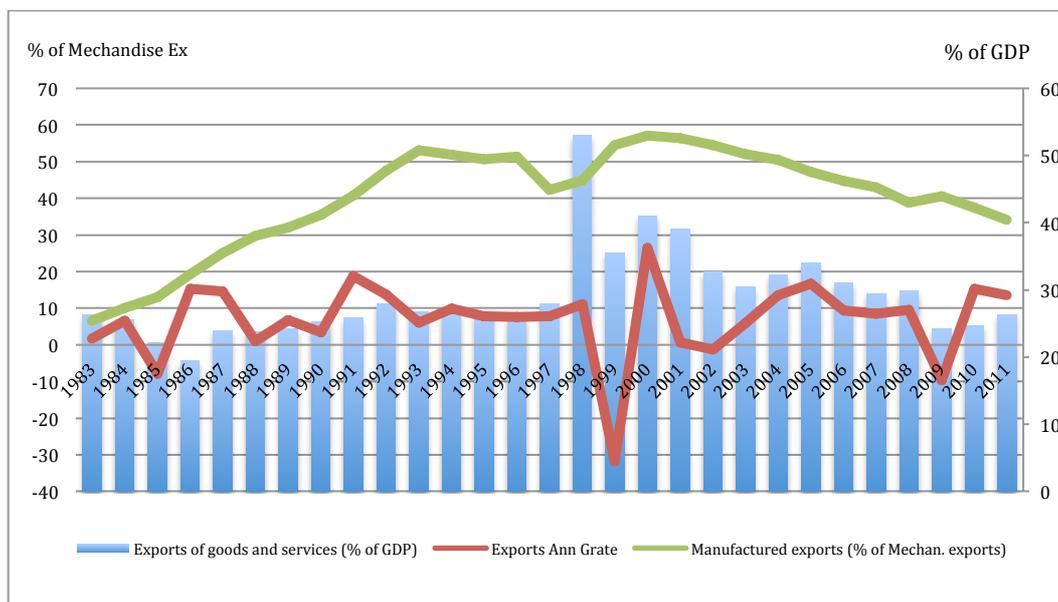
The Figure (5.16 & 5.17) shows the second era of FDI inflows and openness, after the 1974 restrictions, this decision helped sustain the Indonesian economy through several crises after early 80s, especially the World oil crises (worse impact 1986) and Asian financial crises (1992). Although the harsh economic conditions and unstable political atmosphere robbed it of inflows in the late 90s (1998 revolution and reforms), it picked up again in early 2000s.



Data Source: WDI 2013

Figure 5.16: Indonesian Foreign direct investment

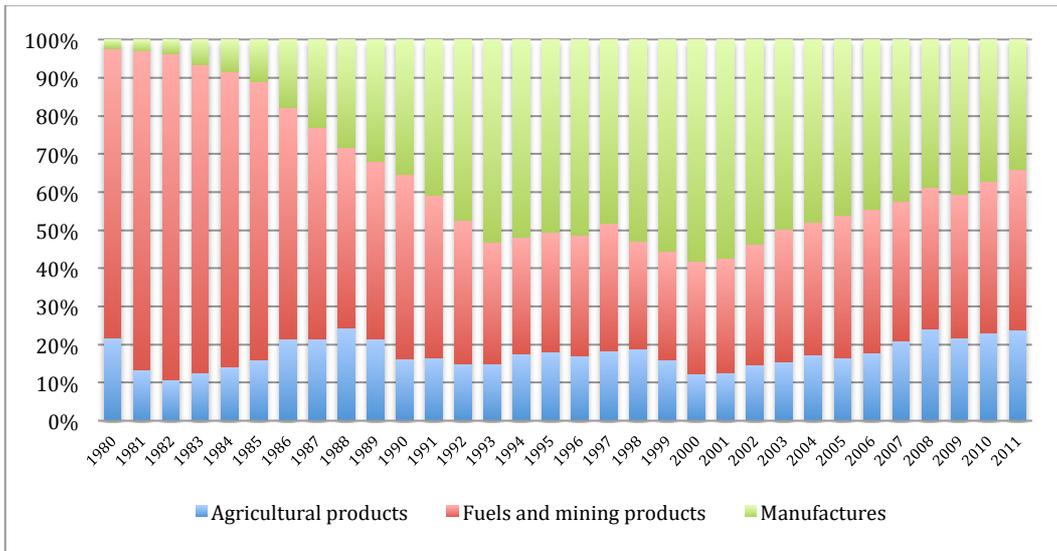
Primary commodity as a percentage of merchandised exports had fallen from 98% in 1970s to 64% in 1990 (Vincent et al., 1997, p.12) showing a reduction in the reliance on its primary outputs by early 90s. In the 1980s key export commodity had shifted from petroleum and gas to a variety of manufactured products, a trend that kept increasing even after the 1990s Asian financial crises (Kano, 2008, p.243).



Data Source: WDI 2013

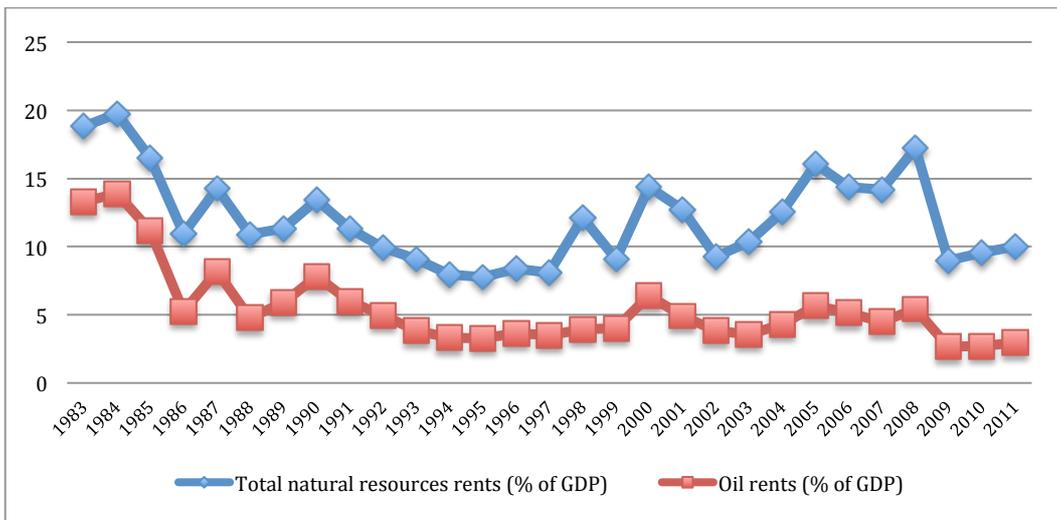
Figure 5.17: Indonesia's Exports

From Figure 5.17, and 5.18, it can be deduced that it was not until 2000s that the economy of Indonesia saw a decline in the contribution of manufactured goods to its total exports, causing an increase in the relative shares of Agriculture and Industry (Mining).



Data Source: WTO 2012

Figure 5.18: Indonesia's Relative Chart of Sectorial exports

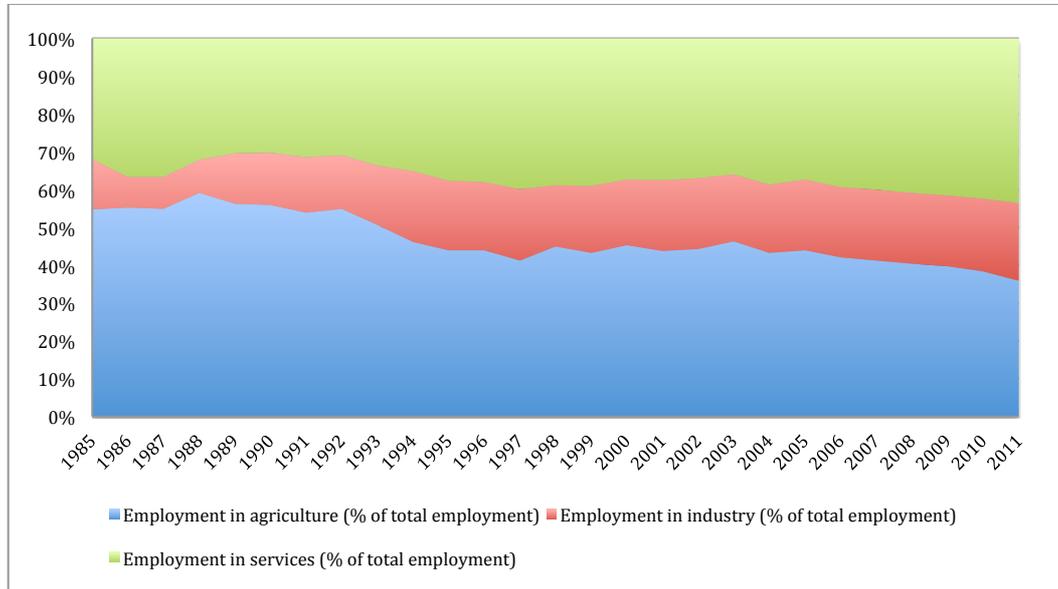


Data Source: WDI 2013

Figure 5.19: Indonesia's Natural resource Rents

In terms of dependence the Indonesian economy has really transformed overtime, from an all-time dependent economy on its natural resources and primary products to one whose exports are now made up of a majority of manufactured exports even as rents from the natural resources and its oil as a percentage of its

GDP keeps falling overtime. See Figure 5.19.



Data Source: WDI 2013

Figure 5.20: Indonesia's Employment by Economic Activity

As can be seen from the Figure 5.20, due to its diversification policies and the inflow of FDI into its economy the structure of employment has improved, from Agriculture to industry and service provision sectors.

### 5.2.2.3 Factors of the Indonesian success in transiting

The nationalization Laws Indonesian government undertook after it became a republic in the 1950s was instrumental in making it benefit especially from its crude oil resource, aside its other sectors. In this law, only in industries where they needed special technical assistance were former key foreign hired as consultants on contract (Kano, 2008, p.216).

Also Indonesia centered its economic diversification program on manufacturing and managed to surpass the oil in exports by the late 80s (see Chart 5.16), which was in the early 80's still the predominant foreign exchange earner. By "2002, oil and gas was 21% of total exports, wood products 3%, non-oil mining 7%, and other industrial products was 65%" (Danquah, 2009).

The management of state oil funds: although to a degree there were rent seeking activities and corruption, the increase in oil earnings brought about expansion of the only state oil company, Pertamina; thus transforming itself into a multifaceted enterprise, with a huge asset base and employing some thirty thousand Indonesians. The state oil company diversified and invested in various sectors, but lack of proper supervision on the side of government, led to the need to redeem it from its debt by mid 70s. (Kano, 2008, p.242)

Also "Indonesia opened [up] its economy to the global market, encouraged competition and attracted investors into non-oil sectors of [its] economy" (Danquah, 2009), an action was vital in achieving the structural change that started in 1980s.

In the early 1980s when oil prices begun to fall, and FDI inflow had reduced due to restrictions placed after 1974 "anti-Japanese riots", the government "toned down its promotion of "pribumi" ownership in favor of policies that encouraged

Chinese businesses in hopes of stimulating the country's private sector"; the Suharto regime also relaxed restrictions on FDI inflows and began push for manufactured exports (Kano, 2008, p.249). It is possible that Indonesia would have gone through the same process Nigeria went through in the 1980s had it not been these policies, that diversified its economy and gave government another heavy stream of income source through taxes.

The government's expenditure on long term investment, especially in agriculture and education (Danquah, 2009) was one of the key points that Gylfason (2001) also considered in citing Indonesia as a successful story: He wrote, of the 65 resource rich countries, "only four managed to attain both (a) long-term investment exceeding 25 percent of Gross Domestic Product on average from 1970 to 1998, equal to that of various successful industrial countries lacking raw materials, and (b) per capita GNP growth exceeding 4 percent per year on average over the same period. These four countries are Botswana, Indonesia, Malaysia, and Thailand."

The plaza accord of 1985 between Japan and United States of America, made Japanese firms seek cheaper production bases outside Japan, Indonesia therefore became a perfect fit, as it had started changing its structure to reduce its dependence on its crude as the only foreign exchange earner.

Although Indonesia's crude oil is still significant to its economy, it managed to change the structure of its exports and its economy, a move that created jobs in manufacturing and service sectors; jobs that the oil industry could not provide. Thus the researcher can say that Indonesia's opening up and attraction of FDI improved the standards of living.

**In Comparing Nigeria and Indonesia**, Bevan et al. (1999, p. 2-3) tries to point out why similar windfalls, large population, similar policies before the 1960s, led to differing results in terms of development after the huge oil windfalls in both economies. To them:

- Indonesia tried to focus on establishing an environment that was conducive for growth in a non-oil economy, whereas such an environment did not exist in Nigeria by the time the windfall started flowing in;
- Also although both governments started with ISI trade strategy in the 50s and 60s, by the 70s when the windfall of rents from the oil sector started flowing into their economies, Indonesia started shifting its focus from ISI to Non-oil export orientation, while Nigeria's focus remained unaltered;
- In terms of economic liberalization, Indonesia had its economic liberalization earlier (in 1967) than Nigeria (in 1986) but Nigeria subsequently reversed it. Indonesia had experienced a hyperinflation in 1966, an event that shaped its policies priorities and decisions afterwards.

- Both governments invested during the boom but according to Bevan et al., (1999,p.2), Indonesia's investments were more economically productive than that of Nigeria.
- Exchange rate policies during and after the boom also affected their development after the mid-70s, since Nigeria allowed his to appreciate, while Indonesia tried to seek competitiveness as it opened up its economy.

### **5.3 Cross - Case Analysis and Implications for Ghana**

The oil boom in Ghana is taking place in a time “of increased attention to the problems of [natural] resource-rich states, and Ghana has important opportunities to learn from the positive and negative examples of others” (Gary et al., 2009). This is why this report is considering how some succeeded and why others failed to reap long-term developmental benefits from the oil resource amidst other resources they possess, and to search for the policy implications for Ghana, in terms of economic diversification and dependence.

Keer (2012) took the stand that “Ghana's [ability] to defy the pessimistic theory of the “oil curse” and [to] demonstrate [her ability] to turn the oil into a blessing remains probable: and that Ghana was of a more democratic and peaceful state than some of its African counterparts. To Gary et al., (2009) “Ghana is widely seen by donors and others as a “model country” in terms of macroeconomic and political stability, investor friendliness, good governance, and efforts to reduce

poverty, and it has received billions in donor assistance and debt relief over the past two decades”

Even as a late entrant into crude oil exports with existing exemplary nations like Norway and even Botswana’s diamonds from which practical lesson can be drawn for policy decisions, a natural resource led growth transiting to an export led growth should be probable, although the latter has not yet taken off in Ghana.

Considering inequality, the researcher look at inequality within a nation and not between countries. Even as Richard Freeman, a Harvard University economist at a recent OECD policy forum argued although “ inequality worldwide has decreased, inequality within each country has increased” (Conference Board of Canada, 2013), with all the countries under study between medium and High inequality ranges, having a GINI index range of 0.3 – 0.5.

After a look at the trend of HDI values of various countries over a period of 7 years (due to lack of data for Nigeria over past periods, only 7 years could be compared), It can be seen that each year most of the countries made advancement even if by a little. Both Nigeria and Chad are in the low human development category, whiles Ghana and Indonesia are in the medium Human development with Malaysia in the High human development category (refer to Appendix A3).

### **5.3.1 Outcome Analysis: Indicators of Successful and Failure Cases**

In the table below I present a summary of cross – case analysis of the four countries and even of Ghana, based on findings from review and analysis made when conducting the study. I picked indicators that seek to measure growth and living standards in the various countries, and compared them in the cases studied in this report.

About measuring inequality in income distribution, Barro (2000) talked about the existence of a non-linear relationship between inequality and growth in a panel analysis of nations. Others argued that both very high inequalities and high egalitarian societies impede growth and development (Court, 2004).

Two indicators were employed aside HDI and GINI indexes in the analysis; the researcher used UNDP’s Multidimensional poverty index (MPI) and Inequality Adjusted Human development indicators. Both were introduced in 2010 to compliment analyzing the standards of living through HDI: measuring living standards in terms of health, education and income, through a number of indicators: for MPI – Ten (10), and IHDI – a sum of the losses in each term’s (health, education, income) HDI value due to inequality in access to it.

Economic Indicators	Description	COUNTRIES				
		Malaysia	Indonesia	Ghana	Nigeria	Chad
<b>Transparency</b>	6 – high 1 – low transparent	N.A	3	4	3	2
<b>Income Class</b>	L-MI –lower MI U-MI – Upper MI L-I –low income	U-MI	L-MI	L-MI	L-MI	L-I
<b>GINI index</b>	Inequality 100 – unequal 0 – equal economy	46.21 (2009) 48.63 (1984)	34.01 (2005) 30.47 (1984)	42.76 (2006) 35.35 (1988)	48.83 (2010) 38.68 (1986)	39.78 (2003)
<b>MPI</b>	Poverty 1 – high poverty 0 – no poverty	N.A	0.095	0.144	0.310	0.344
<b>% Loss I-HDI &amp; HDI</b>	Inequality (2013) % HDI loss due to inequality	N.A 0.769 (HDI)	18.3% 0.514 (IHDI) 0.629 (HDI)	32% 0.379 (IHDI) 0.558 (HDI)	41.4% 0.276 (IHDI) 0.471 (HDI)	40.1% 0.203 (IHDI) 0.340 (HDI)
<b>Export Composition</b>	Level of primary sector contribution to exports	< 50%	< 50%	> 50%	> 50%	> 50%
<b>FDI – inflow to:</b>	M – manufacturing / Secondary E –Extractive / Primary sector	M	M	E	E	E
<b>Case classified as:</b>	D – dependent DE – diversified Economy	DE	DE	D	D	D

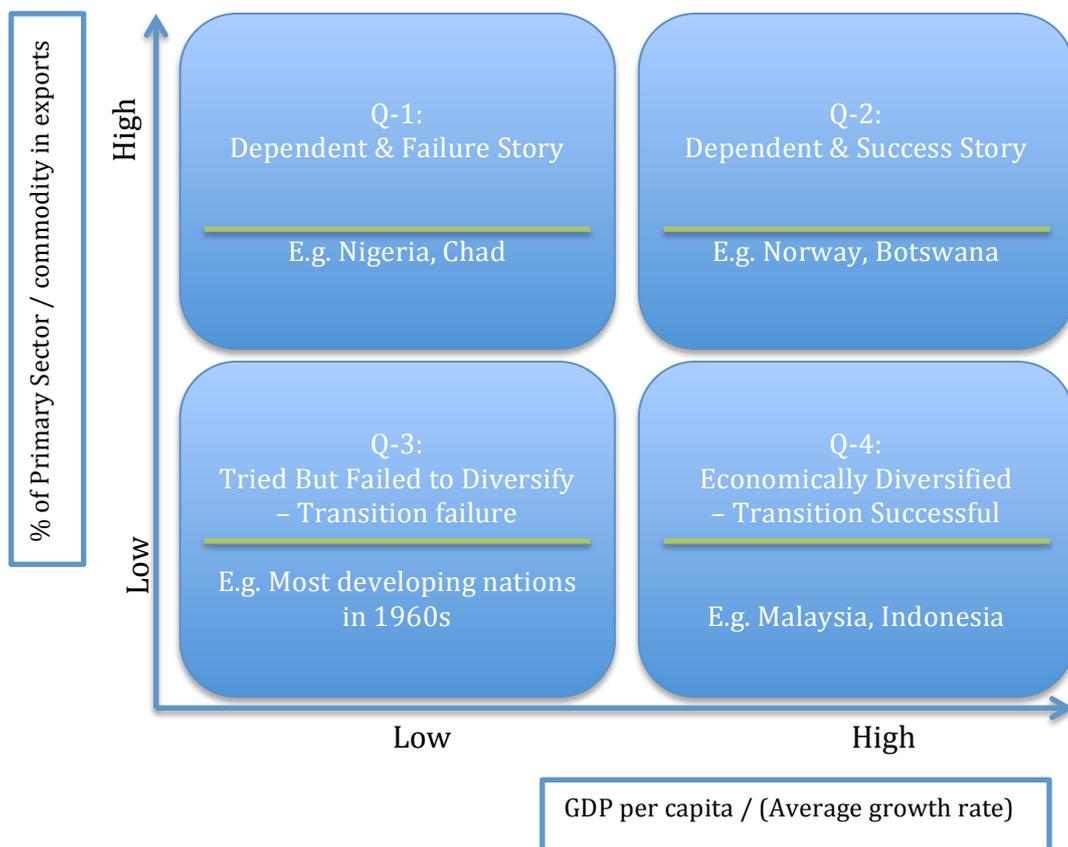
\*N.A – according to UNDP, due to lack of data some indicators could not be computed  
Data Sources: UNDP HDR, WDI, and WTO.

Table 5.2: Outcomes of a Failure or Successful economy

Looking at Table 5.2: The researcher can report that most of the entries of Ghana's indicators are found in the middle of the range of entries of both

extremes (the resource dependent and economic diversified cases), also inequality and poverty was high in the two dependent cases (Nigeria and Chad) than in the economic diversified cases (Malaysia and Indonesia). Destinations of FDI inflow are to different sectors, for dependent cases mostly extractive and to the diversification cases, mostly manufacturing.

From the cross case analysis, the quadrant below was deduced. Figure 5.21 classifies resource rich countries into four quadrants: Q-1, Q-2, Q-3, and Q-4.



Source: Authors Deduction

Figure 5.21: The 4 Quadrants: Positioning Natural resource rich economies

It is worth noting that no single developing natural-resource rich nation is static in one worse quadrant forever, especially if efforts are being made to improve its economy. All these nations strive to be a success story thus striving to move from quadrants 1 and 3 to quadrants 2 and 4.

Our case studies fell in quadrants 1 and 4. To the researcher the worst case a country can find itself in is quadrant 1 and the best would be quadrant 4.

### **5.3.2 Population Size Effects**

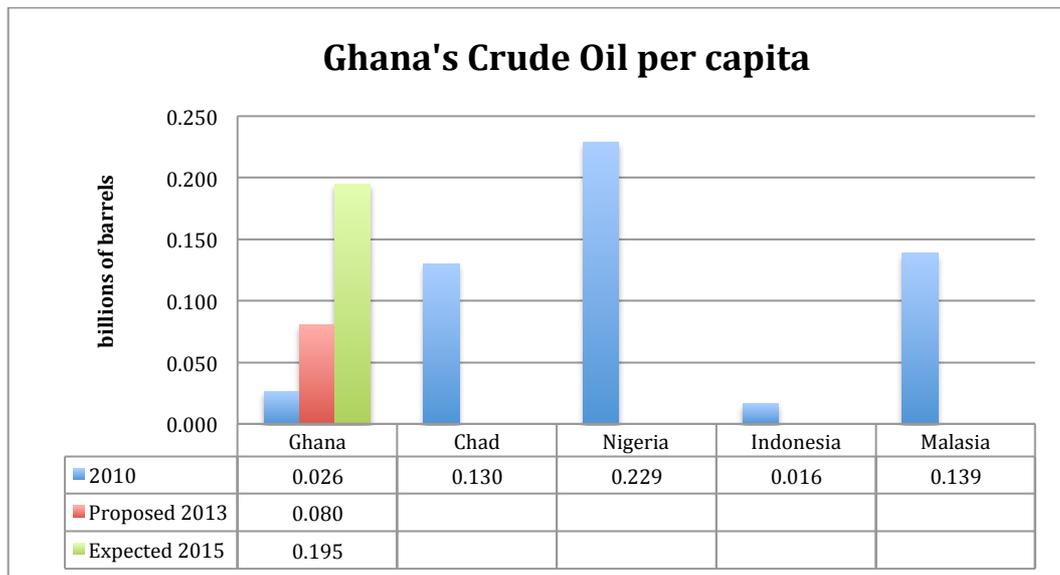
Does the size of the population matter in determining how an economy can benefit from its resource or avert the curse? After computing crude oil reserve per capita: using population and proven reserves of the four countries, with proven and projected reserves of Ghana it became clear that in terms of crude oil per capita, population size will determine how high its per capita would be. This indicates each citizen's worth in terms of reserves.

From proven reserves Ghana was higher than Indonesia but lesser than all the other countries, as shown in Figure 5.22 below. From the chart the researchers can also assess that in terms of crude oil per capita, Ghana may be catching up to Nigeria, in years to come considering the population growth rate and the expected increase in reserves as more discoveries are being made in Ghana.

The question remains does population matter? Norway is known to be one of the prosperous Crude oil rich nations, with an HDI of 0.955, a reserve of 5.8 billion barrels (CIA Factbook, 2010) and 7.3 billion barrels in 2013 by its petroleum

directorate. Ranking third in world oil exporters but has population less than 5 million, with a growth rate of 1.3% according to WDI (2013).

Nigeria and Indonesia both have very high populations, but both have shown opposing effects, in terms of crude oil and development. A huge population can give access to human capital, but this same advantage can hinder growth, if its human resource quality is not improved through education. Lastly, from Chad's case, a country less in terms of everything (comparably): population, reserves, HDI and is also dependent and poor. Thus From the cases, it can be concluded that it is quit complex to see the direct effect of population size on crude oil being a blessing or a curse to its host economy,.



Source: eia.com, Tullow.com, WDI (2013)

Figure 5.22: Per capita crude oil reserve for the various cases

### 5.3.3 The Challenges of Diversity

Diversification is not as easy as just expressing a desire in an industrial policy document. It goes beyond that, through a process, and needs several facilitators in place to aid its success, See also Galfylson (2011, p. 10). There are many facilitators but I will outline a few of them:

- I. Industrial Policy: What industry to invest in is one of the most important questions or decision to be made in an industrial policy. To say, which of the industries would offer the country comparative advantage in trade? Potters forces of comparative advantage assist in this analysis. Also choosing between superior products or Low cost products can be a big issue because of late entrance and competition. In terms of the south East Asian growth, industrial policy seemed to have had an important impact on rate of investment, for example Malaysia's change in capital investment, focusing on priority sectors in 1980s and 90s, were part of the decisions that aided its transition. (Alavi, 1996, p.1)
  
- II. Infrastructure development: what public goods are needed to facilitate productivity in terms of infrastructure? Energy, roads, Market, Lack of these impedes private investments and inflow FDI into productive sectors. For Ghana a typical case would be its energy issues, this has made production cost higher, which directly leads to a reduction in productivity, especially in the manufacturing sector.

- III. Quality of Labor force: this will determine the country's labor productivity, is there a need for investment in higher level of education or to improve its quality and curriculum. Government's investment in education and in producing more skilled human resource would go on to improve worker's productivity, output growth, and better standards of living. Also its quality determines how its labor can be involved in the extractive sectors, for example engineers, service providers and even entrepreneurs.
- IV. International branding: if the country is going to add value, it may need a market ready for its products, what value is the country offering that is not already being offered? Or how will it take advantage of its comparative advantage, its local market, infrastructures and resources to create a brand name for the country.
- V. Cost of doing business in Ghana: how easy is it to start a business in Ghana and how profitable is it; this leads to attracting needed FDI for industrial expansion. "Inward FDI helps expand trade. It can also boost productivity by providing access to new technology, business and manufacturing processes, and management know-how, as well as by fostering a competitive and innovative business environment" (Conference Board of Canada, 2013)

- VI. Socio – political factors: good governance, and necessary institutional reforms without which a state fails to develop and to create better standards of living for its citizens, as existing structure of right may not be helpful.
  
- VII. Ease of Technological adaptation and innovativeness of the economy: for most developing countries, technical know-how is brought in through FDIs, and the quality of its skilled labor to be able to adopt and improve it is necessary to aid expansion of its industrial sector.

#### **5.3.4 Policy Implications**

Papyrakis & Gerlagh (2002) in their article concluded that “natural resource wealth may stimulate growth but only under certain conditions”: they concluded that although empirically the investment channel was the most important of them all, the level of corruption, level of openness, the state of its terms of trade, and its educational standards played explanatory roles why a natural resource would positively stimulate the growth of the economy than owns it. There is therefore the need for policies to go in line with a couple of these to stimulate growth in a resource rich nation like Ghana, especially in terms of educational standards.

The Oil sector employs an insignificant number of the country’s labor force, and mostly skilled, thus to reduce the likelihood of high unemployment, inequalities,

leading to civil violence and a predatory state, there is the need for economic diversification, guard against crowding out of the current employment providers, such as cocoa, and also creating the enabling environment to attract FDI into Ghana's non-oil sectors in order to create employment. Thus Vital public goods, and infrastructure development is also necessary to stimulate private sector involvement in development.

Gylfason's (2011, p.10) suggestion for gradual transformation of the economy implied that a balanced approach to policy and investments in the growth aiding sectors would enhance long-term sustained growth of the economy.

In summary, government's strategies can take from four various points of view:

- **Resource Strategies:** to explore and find other natural resources it can leverage on to create more sustainable and renewable growth enhancing industries, especially in the secondary and tertiary sectors of the economy.
- **Technological Strategies:** to develop technical ability through education, and learning by doing. Inflow of FDI into non-extractive sectors mostly come with advance technical know-how, the ability of labor to adopt may be vital to the countries growth.
- **Institutional Strategies:** change is hard, but where reforms would lead to a better outcome, they must be undertaken to reduce the bottlenecks, which retard growth. In deciding whether to seek change, according to Khan (1995), to prevent a transitional failure (type II State failure), he proposed that the net rent seeking outcome (outcome – rent seeking cost)

should not be negative. Benefits should outweigh the cost in seeking the change.

- **Capacity building strategies:** investments in education and manpower development, which goes a long way to improve the efficiency of the labor force in the economy. In addition to this the provision of needed public goods and infrastructure will serve as a catalyst to encourage private involvement in the development process.

## **CHAPTER 6: CONCLUSION & RECOMMENDATION**

A wide range of factors and variables affect development; thus there are no “one-way fits-all” policies in development economics, which is why there arises the need for policies that aid the achievement of a country’s developmental targets.

One of such policies that have been known to aid economic advancement is **economic diversification**, this helps the country to make good use of the international market, to increasing its trade revenues and foreign exchange reserves / cover.

Most of the natural resource rich nations have fallen prey to the resource trap; one that Auty, (2001) calls the ‘staple trap’, where resource rich economies become vulnerable to external shocks and fluctuations, and it cripples them in terms of growth. Although it seems that corruption and rent seeking works against policies that can help these countries get out of the trap, their commitment or motivation to policies is necessary; as some have instigated that natural resource rich countries (mostly sub-Saharan Africa) lack the necessary pressure to industrialize thus making them dependent on their resources.

### **6.1 Conclusion**

Well, Gylfason (2011, p.8) describes a lesson the founding father of Singapore, (a nation that is natural resource poor but has better standards of living than most of its resource rich counterparts) learnt,

He said:

“I thought then that wealth depended mainly on the possession of territory and natural resources, whether fertile land ... or valuable minerals, or oil and gas. It was only after I had been in office for some years that I recognized ... that the decisive factors were the people, their natural abilities, education and training. (Lee Kuan Yew, 1998)”

Thus depending on a finite resource for development as this report has sort to outline, is detrimental to Ghana’s sustainable growth and development. The natural resource is a blessing from which revenue can be harnessed to promote other sustainable sectors that will continue to sustain the country’s development and improve employment opportunities long after the non-renewable natural resource is long gone. Lack of this ability has landed many sub-Saharan African countries and primary sector dependent economies in vulnerability to market swings and to the resource curse phenomenon.

Although earlier studies have proved through empirical evidence that most natural resource rich countries (especially crude oil rich nations) fail to reap the expected benefits from their resources and almost always end up in a worse development state than their resource poor counterparts, this resource curse is not a disease that cannot be cured through good policies.

The propositions for this report was that resource endowed nations succeed in become less risky economies with good economic indicators through economic diversification; but mostly their dependence on natural resources makes their economies vulnerable to the resource problems. And through the cross-cases analysis: from diversification point of view, it was realized that the role of FDI in

non-extractive sectors of the successful cases was crucial in getting their then dependent economies diversified, in addition to the pursuit of good growth policies. From the dependence point of view, it can be deduced that a lack of appropriate policies that benefit the people and not individual pockets, and a chaotic socio-political environment robbed citizens from better living standards, and its economy from foreign investment and growth.

The researcher therefore concluded that there was the need for appropriate policies that would attract FDI to the non-extractive sectors of Ghana and improve value adding and manufacturing sectors in line with our comparative advantage. Ghana's petroleum resource although insignificant when compared to Nigeria can still cause as much damage as what Nigeria has experienced if appropriate policies are not adhered to. From the research, Ghana has the opportunity to learn from these examples and make appropriate policy decisions to transform its economy to quadrant 4 (Refer to Figure 5.5), and avert the possible resource curse, even as it hopes to move from its current lower middle-income status to an upper middle-income.

## **6.2 Recommendations & Further Study**

Finally, It is quite clear from a look at resource poor nations like Japan, Singapore, Korea and even earlier staple economies like Britain, United States, Malaysia, that there is the need for any developing country to transit from being a staple economy into a value adding one if it's going to advance to a higher income status and better living standards.

The way out as outlined in this study is structural economic diversification. To achieve this several factors as outlined already need to be in place, to ease the transition of the economy, which takes time.

Ghana must seek an export-led growth, its local market is only 25 million, and there are areas to diversify. But, what areas are best for a country like Ghana? From the study it seems it is best at primary sector areas. But then if Ghana does diversify into these areas, won't these areas make it more vulnerable to the commodity market and to the resource problem? A further study could take deeper look into the Ghanaian case in terms diversification and areas to diversify.

According to a Ghana country report by the IMF (2013), "Going forward, [and achieving a] successful economic transformation will require a realignment of [government] spending away from wages and subsidies toward investment in infrastructure" in order to facilitate output expansion.

To attract FDI into non – extractive sectors, there are some factors that influence the decision of investors and IMF (September 2003) study on "FDI in Emerging Market Countries" outlined them as:

- Market size and growth prospects of the host country: where investors aim at serving domestic demand (market) rather than just tapping its cheap labor. See also Alavi (1996, p.1)

- Wage-adjusted productivity of host country's labor, rather than the cost of local labor per se: investors look out for efficient investments and not just cheap labor.
- The availability of infrastructure is very critical: How is the host country best prepared to address infrastructure bottlenecks, the availability of needed infrastructure may guarantee the ease of inflow of FDI.
- "Except in some sectors, tax incentives (holidays) do not play an important role in determining investment location, although reasonable levels of taxation and the [overall stability] of the tax regime do."
- A "stable political environment, as well as conditions that support physical and personal security, is an important benchmark that is used in judging the likelihood of adverse changes in the investment climate for foreign-owned firms". See also Alavi (1996, p.1)
- "Corruption and governance concerns: [these] have a significant bearing on investment prospects. The investment regime and the environment for business: including the business licensing system; the tax regime; and the attitude and quality of the bureaucracy". These are all important factors investors consider.
- The "perceptions of regulatory risks: [Recently,] greater attention is being [drawn to] the legal framework and the rule of law [of the host country]. A predictable legal system, which among other things respects the sanctity of contracts and facilitates a level playing field", is preferable.

From Alavi (1996, p.19, p.27) It can be said that the EP strategy of trade is a policy that can promote income distribution: in that, in a country where labor is abundant, for example Indonesia, manufacturers that are labor intensive would improve the wages of labor in the country.

Moreover the ISI and EP strategies should be seen as a sequential or combined process in promoting trade led development, although their use depends on the specific country.

For further study, researchers could do a single case study on Malaysia's export led growth so as to make detailed policy guidelines for Ghana; also Industrialization in Ghana, then and now could be looked into in a more detail analysis so as to propose a possible industrialization guideline policy for development.

## APPENDIX A.

### A1. Ghana's Historical table

In the Table below, the researcher recalls Historical events in Ghana's socio-political economy:

<b>Date Events</b>	<b>1957 - 1966</b>	<b>1967 - 1983</b>	<b>1983 - to date</b>
<b>Internal Points</b>	Independence from British Socialist state under first president. Import Substitution industrialization. Infrastructure developments – ports & harbors; roads; electricity supply dam. State owned enterprises established	Political instability, unstable environment for development Deterioration terms of trade Highest inflation 123% Balance of payment problems. Cocoa smuggling by farmers for better price. Corruption, gross inefficiency in operations of State owned enterprises.	ERP I&II, openness, privatization of SOE), floating exchange rate, inflation targeting Constitution drafted in 1992. 4 <sup>th</sup> republic (1983 - to date) Vision 2020 - alleviate poverty. - Political factions do not follow a common development plan. Oil discovery Average growth rate of 5% till 2008
<b>External points</b>	Most African states still colonies	Oil shock, risen oil prices – 1975 Independence of most African states	World recession, leading to 1983 hunger. Went into HIPC. Millennium development goals adopted.

### A2. Yin's Suggestion of Possible Sources of Evidence for research

Here presented in Table 3.1 are three out of the six, which might have been relevant for this research.

<b>SOURCE OF EVIDENCE</b>	<b>STRENGTHS</b>	<b>WEAKNESSES</b>
1. Documentation	<ul style="list-style-type: none"> <li>• Stable – can be looked at over and over</li> <li>• Contains exact details</li> <li>• Inconspicuous – was not created because of the case study</li> <li>• It has a broad coverage, in terms of time events or settings</li> </ul>	<ul style="list-style-type: none"> <li>• Can be quiet difficult to find</li> <li>• If collection is incomplete it possess the problem of biased selectivity</li> <li>• It comprises of unknown bias of the author</li> <li>• May be withheld deliberately from researcher</li> </ul>
2. Interviews	<ul style="list-style-type: none"> <li>• Targeted and focused on case study topics</li> <li>• Provides perceived explanations and causal inferences</li> </ul>	<ul style="list-style-type: none"> <li>• Can be biased from poorly articulated questions</li> <li>• High Possibility of response bias</li> <li>• Interviewee may give interviewer what he wants to hear.</li> </ul>
3. Archival Records	<ul style="list-style-type: none"> <li>• Has similar strengths as Documentation plus</li> <li>• Precise and mostly Quantitative</li> </ul>	<ul style="list-style-type: none"> <li>• Has similar strengths as Documentation plus</li> <li>• Privacy reason may impede access</li> </ul>

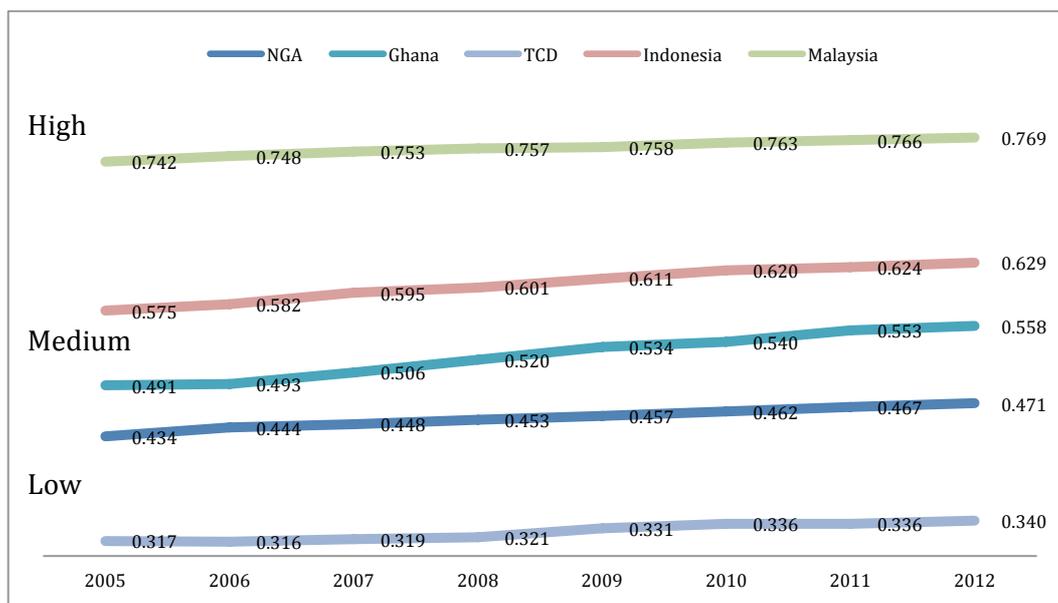
Source: Compiled from Yin (2009)

### **A3. Human Development Index (HDI)**

As explained by the UNDP's Human development report, the HDI measure was first introduced in 1990 as a complementing measure of living standards. It is done from three dimensions, the Income index, education index and health index. Increases in gross national income per capital affects the income index, a change in life expectancy affects the health index, and an increase in the expected years of schooling and mean years of school affects the education index, together these three indicators form the HDI, scoring between 1 and 0, with those close to 1

indicating high human development and those close to 0 indicating poorer human development.

HDI trend of various countries under study for the past 7 years



Data Source: UN-HDI (2013)

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