THE CONTRIBUTION OF OIL TO THE ECONOMIC DEVELOPMENT OF GHANA: THE ROLE OF FOREIGN DIRECT INVESTMENTS (FDI) AND GOVERNMENT POLICIES.

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ABSTRACT

Crude oil can attract a lot of investments and development into a country but when not managed well can as well cause a lot of destruction and conflict. Like fire, crude oil is a good servant but can be a bad master too depending on how it is handled.

Using Dunning’s eclectic paradigm, a positive relationship between foreign direct investment and locational attraction was established. Of the two components within the locational attraction, natural resource attracts more foreign direct investment than market size in the case of Africa. It was established through our case study of Angola that oil attracts foreign direct investment because oil is a location attraction which attracts foreign firms. These investments on the other hand contribute to the productive capacity of the receiving country thus stimulating economic development.

However, the availability of natural resources (oil) and its ability to attract foreign investment does not guarantee economic development. The establishment of appropriate institutions, mechanisms and policies would ensure efficient use of oil revenue for sustained economic growth. We identified vital policy options (the Fund mechanism and spending rule) available to Ghana, with inference from Norway, which could help evade the ‘Dutch Disease’.

Oil production could thus attract more foreign direct investment and contribute to the economic development of Ghana only on condition that appropriate oil revenue management policies are implemented.

Key words: Foreign Direct Investment, oil revenue, government policy.
‘Blood may be thicker than water, but oil is thicker than both’

- Perry Anderson
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<tr>
<td>AGC</td>
<td>Ashanti Goldfields Corporation</td>
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<tr>
<td>BIT</td>
<td>Bilateral investment treaty</td>
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<td>Bpd</td>
<td>Barrels per day</td>
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<td>ERP</td>
<td>Economic Reform Programme</td>
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<td>FDI</td>
<td>Foreign Direct Investment</td>
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<td>FTZs</td>
<td>Free Trade Zones</td>
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<td>GDP</td>
<td>Gross Domestic Product</td>
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<td>GFCF</td>
<td>Gross fixed capital formation</td>
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<td>GIPC</td>
<td>Ghana Investment Promotion Centre</td>
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<td>GNPC</td>
<td>Ghana National Petroleum Corporation</td>
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<td>HIPC</td>
<td>Highly Indebted Poor Countries</td>
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<td>IPAs</td>
<td>Investment Promotion Agencies</td>
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<td>MNCs</td>
<td>Multinational Companies</td>
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<td>MNEs</td>
<td>Multinational Enterprises</td>
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<td>NCS</td>
<td>Norwegian continental shelf</td>
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<td>NGL</td>
<td>Natural Gas Liquids</td>
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<td>ODA</td>
<td>Official Development Assistance</td>
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<td>OECs</td>
<td>Oil exporting countries</td>
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<td>OLI</td>
<td>Ownership Locational Internalization</td>
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<td>OPCs</td>
<td>Oil Producing Countries</td>
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<td>PPP</td>
<td>Purchasing power parity</td>
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<td>SMEs</td>
<td>Small and medium sized enterprises</td>
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<td>SOEs</td>
<td>State-owned enterprises</td>
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<td>SSA</td>
<td>Sub Saharan Africa</td>
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<td>STFI</td>
<td>State’s Direct Financial Interest</td>
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<td>TNCs</td>
<td>Transnational Companies</td>
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1 INTRODUCTION

1.1 Background

Crude oil can attract a lot of investments and development into a country but when not managed well, it could cause a lot of destruction and conflict. Foreign Direct Investment (FDI) refers to an investment made to acquire lasting interest in enterprise operating outside of the economy of the investor (BPM5, International Monetary Fund, 1993). FDI is playing an increasingly vital role in the development efforts of most developing economies. Inflows to developing countries increased from 2002 to 2008 recording $114.30 per head for 2008 whilst that of developed countries amounted to $944.89 per head. In percentage terms, the share of developing countries increased somewhat, to 37% of global FDI inflow. Africa received its largest ever share of world FDI inflows in this same year amounting to US$ 87.65 billion (UNTAD, 2008). Global inflows of FDI fell by 39% from US$ 1.7 trillion in 2008 to a little over US$ 1.0 trillion in 2009 (UNCTAD, 2009).

The decline in FDI was widespread across all major groups of economies. According to the UNCTAD Report (2009), as a result of the global financial and economic crisis, FDI flows to developing and transition economies, which had increased in 2008, declined in 2009 to 35% and 39%, respectively.

Although Africa has succeeded in attracting some percentage of total world FDI flows, the continent’s share still lags behind that of other developing economies. For instance, in 2008, developing economies in Africa received about 14.12% of total FDI inflows to developing economies worldwide compared with 23.26% for developing economies in America and 62.48% for developing economies from Asia (UNCTAD, 2008). Even when African states do attract Multinational Companies (MNCs), it is principally because of their (abundant) natural resources and the size of their domestic market. According to UNCTAD (2008) figures, four natural resource endowed countries namely Angola, Egypt, Nigeria and South Africa accounted for more than half (61.99%) of total FDI inflows to Africa in 2008.

Until the mid 1990s, Sub-Saharan Africa (SSA) received only a small share of FDI relative to other developing regions of the world. Nigeria and Angola have been two of the most successful countries because of their comparative locational attraction in oil. The role of natural resources in the location decision of Transnational companies (TNCs) is apparent
through the sectoral allocation of FDI inflows within the region. Traditionally, about 60 per cent of FDI in Africa is allocated to oil and natural resources (UNCTAD, 1999). The strong reliance of African countries on their natural resources and market size as a means of attracting FDI has been well evidenced by many studies (e.g. Pigato, 2000).

In recent years, African states have also taken initiatives other than just relying on natural resources and size of market to attract FDI. Initiatives such as Fiscal Incentives, Financial Incentives, Rules-based incentives, Investment treaties and other Investment Promotion activities such as the establishment of Investment Promotion Agencies (IPAs) to serve as a one stop centre for investors to deal with regulatory and administrative requirements, etc all aimed at boosting the image of the countries as well maintaining an investor friendly environment.

Ghana is no exception when it comes to the implementation of initiatives to attract FDI into the country. FDI inflows constituted about 36% (US$ 5,755 billion) of the country’s GDP (US$ 16,004 billion) for the 2008 fiscal year (UNCTAD report, 2009), an increase of 115 per cent from 2002. Ghana discovered oil in 2007 and the country expects about 1 billion US dollars as revenue from the oil and gas exploration in respect of royalties, income tax and interest payment with an anticipated unit price of 60 US dollars a barrel per day. According to the Ministry of Energy’s estimate, 120,000 barrels per day is expected in the first phase of the exploration until 2015 (Anticipated Volume of Production-AVP). With the start of oil production expected in late 2010, government revenue and FDI inflow are expected to increase.

A country can attract as much FDI with its natural resources, and can accumulate as much revenue as possible from the exploration of these resources but when the revenue is not well utilised, it becomes a curse rather than a blessing to the country (i.e. resource curse). Even in some cases, especially in Africa, a perceived disproportionate allocation of oil wealth results in armed conflicts. Government policies go a long way to ensure the future economic success of a resource endowed country. This is particularly important when the resource is exhaustible (e.g. oil, gold, etc). Appropriate government policies and the establishment of relevant institutional structures (as in the case of Norway) could ensure the appropriate utilization of resource revenues for a sustained economic growth. There are many fiscal policy choices available to oil-producing countries to choose from in an attempt to make the best use of oil revenues for sustained growth. Oil resources are exhaustible, which raises intergenerational considerations and exposes the need for balance between government consumption and
savings for the long run. Policymakers must find the right mix of consumption today and tomorrow, as well as prioritizing poverty-alleviating spending programs (Alonso, 2006).

1.2 Purpose

The purpose of this study is to ascertain:

- Whether FDI inflows to Ghana could increase as a result of oil exploration.
- What should be the appropriate Government policies to enable efficient use of the oil revenues?
- The expected overall economic contribution of oil to Ghana’s economy

What this research seeks to do, is to look into the role oil could play in attracting more FDI and its contribution to the overall economic growth of Ghana making inferences from the case study of the oil sector’s role in the Angolan economy. We will also examine the policy options available to the government of Ghana in managing its oil revenues and whether government policies would ensure the appropriate use of oil revenue as in the case of Norway.

In the light of the purpose of our research, we seek to answer the following questions: can oil production lead to an increase in FDI inflow to Ghana? Can appropriate government policies ensure efficient use of the oil revenues? Can oil production have positive impacts on Ghana’s economic development?

Figure 1 below is a summary of our thesis and it seeks to represent the flow of our analysis. As stated above, we seek to ascertain whether oil production (petroleum activities) could increase FDI, whether appropriate government policies (management) could lead to increased revenues and if the previous two situations are true, will it result to economic development?

Figure 1: Thesis outline
1.3 Delimitations
The scope of this study is limited to only one determinant of FDI, which is locational attraction with focus on the natural resource aspect of the locational attraction. The study is also limited to Ghana, Angola and Norway. The time periods under consideration are the years 2000 to 2008.

1.4 Limitations
It must be noted that the quality of FDI data is poor because of inadequate national statistics and under-reporting. Sectoral data for FDI is unavailable. It is not easy to get data on most African countries and even in the cases where such data is available, it is sometimes unreliable. This is the difficulty faced in the course of this research. Because of this difficulty, secondary data from relatively credible sources such as The IMF, The World Bank, UNCTAD, scholarly journals and few state organizations like investment promotion agencies (IPAs) in our model countries were used. Another difficulty faced was the interpretation of data found on Angola from Portuguese to English and the limited time frame for this study. Nonetheless, the analysis is based on several independent sources providing a degree of confidence about the veracity of recent trends.

1.5 Significance of this research
The significance of this study cannot be overemphasized, especially when in recent times there are so many resource abundant countries in Africa who are still wallowing in abject poverty, corruption and resource mismanagement. It is in this light that this paper seeks to highlight the importance of the oil sector in the attraction of FDI and some of the most efficient ways in which oil revenues can be well managed. This study is an addition to earlier researches that investigated the relationship between natural resources and its effects on economic development. The findings of this study could serve as a good source of information for policy makers in oil-rich African countries in making appropriate fiscal policy decisions. It can also serve as a field for further research.

The continuation of this research is structured into five main chapters which are as follows:

Chapter two deals with the theoretical framework and literature review, chapter three explains the methodology used, chapter four comprises of the data analysis, presentation and discussion and lastly chapter five contains our conclusions and recommendations.
2 THEORETICAL FRAMEWORK AND LITERATURE REVIEW

This chapter examines the theoretical framework of our thesis. It also includes a literature review of some available data on the subject area.

Background

Over the past decades, there has been a significant increase in Foreign Direct Investment (FDI) to developing countries. The role of FDI as a source of private external finance to developing countries has become increasingly important. This stems from the fact that income levels (revenues) and domestic savings in these countries are very low and negligible. Therefore, external capital is needed to supplement domestic savings so as to spur and growth development. Again, most of these developing countries do not have access to the international capital market. They therefore have to fall back on other sources of foreign finance like official loans from multinational organizations such as the IMF/ World Bank, portfolio investment and FDI.

However, official lending to most developing nations especially in Sub Saharan Africa (SSA) has considerably declined over the years (Asiedu, 2002). Foreign aid per capita declined from an average of $35 over 1989-92 to about $28 over 1993-97 (World Bank, 2000b) and even further down in the 21st century. As a result of this, developing countries find it very necessary to attract and increase their share of FDI in order to compensate for the decline in official lending (Foreign direct investment in the developing world is on the rise, with flows excluding portfolio investment and private bank lending) reaching $238 billion in 2005 (UNCTAD, 2002).

2.1 Foreign Direct Investment (FDI)

As contained in the Balance of Payment Manual: Fifth Edition (BPM5) (Washington, D.C., International Monetary Fund, 1993) FDI refers to an investment made to acquire lasting interest in enterprise operating outside of the economy of the investor (UNCTAD, 2002). By FDI, we mean international capital flows in which a firm in one country creates or expand a subsidiary in another. Rotjanapa, (2005) also defined it as an investment involving a long-term relationship and reflecting a lasting interest and control of a resident entity in one economy (Foreign direct investor or parent enterprise) in an enterprise resident in another economy (FDI enterprise or affiliate enterprise or foreign affiliate). Thus an investment made to acquire lasting interest in the enterprises operating outside the economy of the investor is FDI (UNCTAD, 2002).
FDI implies that the investor has significant degree, partial or full control or influence on the management of the enterprise resident in the other economy. The most distinctive feature of FDI is that it involves not only the transfer of resources but also the acquisition of control (Krugman and Obstfeld, 2009). Components of FDI are equity capital, reinvested earnings and other capital (UNCTAD, 2002). The different determinants of FDI represent a fundamental focus of literature on FDI flows.

Contributions to FDI date back to the early 20th century. Nurske (1933) and Ivers (1935), explain international trade in the perspective of portfolio theory and interest rate arbitrage. In a much similar argument, Branson (1970) and Corden (1974), explain international capital flows as a means for equilibrating marginal productivity of labour and capital firms of the same parent or multinational company. However, the more current literatures relating to FDI are concentrated around questions such as why an enterprise needs to engage in FDI and what factors could make a country an attractive location for FDI activities. Williamson (1975), Hymer (1976), and Dunning (1993) in their efforts to answer these questions emphasised on knowledge, skills and patent, while Hood and Young (1979) put more emphasis on managerial skills, higher organizational set up and monopolistic control as essential firm-specific assets. Brainard (1993) stresses that by engaging in FDI, there could be potential for a trade-off between the advantages of market ‘proximity’ through FDI and the ‘concentration’ of production facilities.

Aliber (1970), on the other hand, considers economic stability differences as an essential condition in attracting FDI and Rugman (1979) particularly, points out that certain locations are mostly useful for enterprises as a means of meeting their goals as well as diversifying their business risks while Vernon (1966), however puts more weight on the specific characteristics of a country that is capable of attracting production facilities to a specific location during a particular stage of a product’s life cycle.

Dunning et al (1977) and Dunning (1988) provide an even more comprehensive approach which attempts to include both microeconomic and macroeconomic factors by combining arguments of ownership, location and internalization advantages of FDI. This is known as the Dunning’s Eclectic paradigm. The eclectic paradigm is a simple, yet profound, theory. It avers that the extent, geography and industrial composition of foreign production undertaken by MNEs is determined by the interaction of three sets of interdependent variables which, themselves, comprise the components of three sub-paradigms (Dunnings, 2000).
The first is the competitive advantages of the enterprises seeking to engage in FDI (or increase their existing FDI), which are specific to the ownership of the investing enterprises, that is their **ownership (O) specific advantages**. This sub-paradigm avers that, all things being equal, the greater the competitive advantages of the investing firms, *relative to those of other firms* (and particularly those domiciled in the country in which they are seeking to make their investments) the more they are likely to be able to engage in, or increase, their foreign production (Dunnings, 2000). The second is the **locational attractions (L)** of alternative countries, for which the MNEs would undertake activities so as to add value to their operations. This sub-paradigm asserts that the more the immobile, natural or created endowments, needed by the firms to use jointly with their own competitive advantages, favour a presence in a foreign, rather than a domestic, location, the more firms will choose to supplement or take advantage of their O specific advantages by engaging in FDI.

The final sub-paradigm of the OLI tripod which is **Internalization (I)**, which offers a framework for evaluating alternative ways in which firms may organize the creation and exploitation of their core competencies, given the locational attractions of different countries or regions. Such modalities range from buying and selling goods and services in the open market, through a variety of inter-firm non-equity agreements, to the integration of intermediate product markets and an outright purchase of a foreign corporation.

The eclectic paradigm, like its near relative, internalization theory, avows that the greater the net benefits of internalizing cross-border intermediate product markets, the more likely a firm will prefer to engage in foreign production itself, rather than license the right to do so, for example by a technical service or franchise agreement, to a foreign firm. Dunning (1993)

The eclectic paradigm is therefore mathematically represented as;

$$\text{FDI} = f (O, L, I)$$

O is ownership, L is location and I is internalization.

### 2.2 Current trends of FDI in Ghana

Until recently, FDI was not fully embraced by African leaders as an essential feature of economic development, reflecting largely fears that it could lead to the loss of political sovereignty, push domestic firms into bankruptcy due to increased competition and, if entry is predominantly in the natural resource sector, accelerate the pace of environmental degradation (Dupasquier & Osakwe, 2005).
Ghana was among the first countries in Africa to pursue economic reforms. Yet FDI trends have not been sustained, and Ghana has not been able to reap the benefits that a more stable inflow of investments could bring (UNCTAD, 2003).

Ghana has a long, though modest, history of FDI. The early foreign establishments date back several centuries. In more recent times – the 1970s – FDI was mainly in import substitution manufacturing. Annual inflows were as high as $68 million for about two years, but were much less in most years, even slipping to negative numbers (net outflows) in the late 1970s, and hovering at under $5 million in the mid-1980s (UNCTAD, 2003). With the introduction of the Economic Reform Programme (ERP) in 1983, Ghana undertook a relatively successful transition from an administrative system of economic management to a market economy. The share of FDI to gross fixed capital formation in Ghana rose (from 1980 to 1992) but still below the African average (Boateng & Glaister, 1999). By 2007, it rose dramatically to 16.14 percent (the highest ever) from 15.23 percent in 2006.

Gross domestic product (GDP) grew at an average annual rate of 5.4 percent between 1984 and 1990 and gross fixed capital formation (GFCF) doubled as a percentage of GDP. FDI remained sluggish during the period 1991-1995, but Ghana was considered a front runner, ranking among the top 10 investment locations in Africa (UNCTAD, 2003). Ghana has always instituted extensive joint programmes through legislature and administration of investment codes since the mid-60s (Boateng & Glaister, 1999).

There was an increase in FDI which was triggered by the adoption of policies in 1986 to attract investment in natural resources. FDI to SSA countries tends to be natural resource based, mainly in extractive industries (Asiedu, 2001). Investor response to the new mining law enacted in 1986 was positive, causing a surge of investment similar to a mini “gold rush” (UNCTAD, 2003). The divestiture programme also attracted FDI. The primary aim of this programme has been to increase local control of key economic sectors while utilizing foreign expertise to do so (Afriyie, 1988).

When privatization began in 1988, there were 350 State-owned enterprises (SOEs). The programme got on to a slow start. Chhibber and Leechor (1993) and Appiah-Adu (1999) both acknowledged that Ghana is among a few countries in South Saharan Africa to implement economic reforms aimed at sustainable economic growth and development among which was liberalization of FDI regulatory framework. A turning point came in 1994, when the Government put its most prized asset, Ashanti Goldfields Corporation (AGC), on the market. There was an abrupt peak in FDI flows of $233 million as a result of the sale of AGC to the...
South African mining company, Lonmin. This deal, one of Africa’s largest privatization to date, put Ghana in the spotlight for international investment (GIPC, 2000). FDI also flowed to services (Banking, Telecommunications, etc).

After 1996, FDI inflows declined and Ghana barely just made the ranks of the top 20 FDI recipients in Africa in 1996-2000 (figure I.2). Many of Ghana’s neighbours – such as Senegal and Côte d’Ivoire, which attracted less FDI than Ghana in 1991-1995 – have had a comparatively better experience in recent years (UNCTAD, 2003). The main deterrent to new FDI was the deterioration in economic conditions. In 1998 and 1999, Ghana’s economy suffered a shock with the fall in prices of its major exports – cocoa and gold – and the rise in price of its major import, oil resulting in severe trade imbalances a rapidly depreciating currency and high interest rates, accompanied by an expansionary fiscal policy, yielded unsustainable budget deficits, (UNCTAD, 2003).

FDI inflows recovered in 2000. The policies introduced by the new Government, which took office in January 2001, have helped stabilize the economy. A restructuring of debt under the Heavily Indebted Poor Countries (HIPC) programme took place. But the decline of worldwide FDI in 2001 has deterred inflows to Ghana as elsewhere. FDI inflows as a percentage of gross fixed capital formation to Ghana stood at 16.1 percent in 1999, declining to 9.6 percent in year 2000. It decreased further to 7.1 percent in 2001 and then to 4.0 percent in 2002, (UNCTAD, 2003). In terms of geographical location of new investments projects, the Greater Accra region has the bulk of the Ghanaian infrastructure, followed by the Ashanti region, then the Western and Central regions. The least developed regions in terms of infrastructure which recorded little or no investment flows are the Upper East and Upper West Regions respectively (Boateng & Glaister, 1999).

The UK leads the league of foreign investors in Ghana with over 12 percent of the projects, followed by Germany and India with 8 percent each. The others representing about 42 countries contribute about one-third of the projects (Boateng & Glaister, 1999). South African investors now play a major role in the mining industry. They also focus on domestic market opportunities, particularly in brewing and the distributive trade. Interesting recent developments as signalled by GIPC data has shown that Asian investors account for the largest investment in registered projects: for example, China, India and Malaysia were increasingly important in the recent bout of privatization. Malaysian companies have invested substantially in the telecommunications and telephone sector, including television and film, infrastructure and the provision of services for the free trade zone (UNCTAD, 2003).
2.3 Impact of FDI in Ghana

As earlier on mentioned in this study, Ghana’s portion of FDI inflows is almost negligible, although it has risen in recent years. Ghana, like many other African countries, relies heavily on natural resources in its attraction of FDI inflows and is thus able to attract flows to only few sectors within the economy. The impact of FDI is therefore felt in those specific sectors and in few other areas, mostly in the areas of capital formation, employment generation and technology transfer (GIPC, 2007).

2.3.1 Capital Formation

FDI contribution to Ghana in terms of capital formation has been about 5 per cent from 1996-1999 (UNCTAD, 2002), still low compared to the average for SSA. By and large, ODA inflows formed about 50 per cent of the formation of capital in Ghana between the periods 1990-1999 (UNCTAD, 2002). Most of these ODAs were linked to FDI projects as long term loans and grants. These funds also contributed to infrastructural development and not only that but also the establishment of FTZs and customs rehabilitation. Then came a period, 1993-1998, when there was a rise in portfolio investment complementing FDI flows in the area of privatization in the formation of capital (UNCTAD, 2002).

2.3.2 Employment generation, technology and skills transfer

In terms of job creation, technology and skills transfer, FDI has played an enormous role in Ghana and this also has a multiplier effect in the economy. According to the GIPC estimates of registered projects, FDI has generated about 72,384 jobs for the Ghanaian population and about 4,652 for non-Ghanaians between the periods of 1994-2002. An UNCTAD survey of small and medium sized enterprises (SMEs) with linkages to foreign firms or export activity shows that firm size has increased in the last five years (2003-2008). Out of 83 projects registered during the second quarter of 2009 alone, 56 (67.47%), were wholly-owned foreign enterprises and 27 (32.53%) were joint ventures between Ghanaians and their foreign partners with about 4,457 jobs believed to have been created. 92.15% (4,107) of the total jobs to be created will be for Ghanaians and the remaining 7.85% (350) for expatriates (GIPC, 2009).

FDI has also aided significantly to the increase in the stock of technology in Ghana by providing machinery and equipment and at the same time helped in the build-up of local industrial capabilities by contributing to skills formation. This is particularly evident in the area of natural resources exploration such as mining, where the use of capital-intensive
technology has developed a pool of trained labour. Product improvement, constituted the most relevant support to local firms, followed by training, provision of machinery and equipment together with information on market opportunities (UNCTAD).

2.3.3 Government Policy

Since Ghana is yet to start drilling its newly discovered oil, the government has not yet put in place any policies with regards to the use and management of the oil revenues that would be received. Thus, we are going to review literature of Ghana government policy with regards to FDI.

In recent years, there have been a lot of reforms in national policies in Ghana and Africa as a whole all aimed at attracting further FDI. In the early 1980s Ghana embarked upon economic reforms to reverse economic decline, and to generate sustainable growth and development under the auspices of the IMF (Boateng & Glaister, 1999). Some of the key areas that were considered for reforms were Liberalisation of FDI regulatory framework, Economic stabilisation including reduction in fiscal deficits, Privatisation, rationalisation and restructuring of SOEs and in the development and upgrading of physical infrastructure.

In 1994, Ghana’s Parliament enacted and promulgated the Investment Promotion Centre Act to regulate all FDI activities in the country. This act is aimed at easing the establishment of businesses and attracting investment. It created the Ghana Investment Promotion Centre (GIPC) to deal with all aspects of the FDI regulatory framework, in sectors covered by the Act.

The UNCTAD World Investment Report (2006) is quoted as saying that ’recognizing that an investor-friendly admission phase has a beneficial effect on the subsequent relationship between host and investor, countries such as Ghana and Mali have reformed their admission procedures by introducing one-stop shops’. Although this Investment Act makes no mention of specific standards of investor treatment, Ghana’s track record of investor treatment has shown that it is non-discriminatory to investors from any part of the world. Investment treaties which most often spell out and guarantees better treatment standards have been entered into by Ghana. Ghana has entered into more than 20 BITs with a number of capital-exporting countries. Most of these agreements were signed and ratified between 1989 and 1992 and a number of others have been signed but are still awaiting ratification (UNCTAD, 2006).

In addition to the BITs, some treaties for the avoidance of double taxation have also been entered into with others still under negotiation. Ghana’s Constitution prohibits the compulsory
taking of private property without compensation. The GIPC Act reflects this, guaranteeing that a foreign-owned enterprise shall not be subject to expropriation or nationalization unless appropriation of it is in the national interest and for a public purpose (section 28 of the GIPC Act). The legal system of Ghana is based on Common Law supplemented by specific legislation. Judicial independence is enshrined in the Constitution and all investors have equal rights and access to the courts of law where business and investment related disputes can be resolved or settled. There has been a tax reform system in Ghana as well, creating the new Tax law (Act 597, 2000) where there has been reduction of corporate tax rates. Corporate income tax has been reduced from 35 per cent to 30 per cent for companies listed on the Ghana Stock Exchange, and to 32.5 per cent for unlisted companies (GIPC 2003).

There have also been a number of incentives and inducements for foreign investors quite recently. These include tax holidays, capital allowances, locational incentives, customs duty exemptions, just to mention a few. These are specified in the relevant statutes such as the Income Tax Decree, 1975 (as amended), Free Zones Act, 1995, Art. 504, Income Tax (Amendment) Act, 1998, Art. 551 and Ghana Investment Promotion Centre Act of 1994 and applied fairly.
3 METHODOLOGY

This section will include data used and methodology adopted in this research. This section explains the type of data collected, its descriptive statistics, particular approaches used in our analysis and the rationale behind our specific choice of path used in the study.

3.1 Method used in this research.

We adopted a qualitative method in our study. Since our research is descriptive in nature, we adopted a case study (often associated with descriptive studies Ghauri, 1983) strategy in arriving at our results. According to Ghauri and Gronhang (2005), a case study is particularly useful in business studies when the phenomenon under investigation is difficult to study outside its natural setting and also when the concepts and variables under study are difficult to quantify. In our research, oil is a natural resource found only in some countries and a study of this nature can only be undertaken in a country with oil resources. A study outside the natural setting (a country without oil resource) would be meaningless. Ghauri and Gronhang (2005) also argue that the case study strategy is useful for theory development and testing. Our research seeks to test the theory in FDI literature which states that one of the major determinants of FDI is the locational attraction (i.e. natural resources and size of market) of the receiving country (e.g. Dunning, 1981). Two case studies were used in our research.

3.2 Data

In order to establish a meaningful relationship between FDI inflows, oil exploration and economic development, FDI data was collected from our model country. Other macroeconomic indicators such as GDP, growth and inflation rates and balance of payment figures were compiled in order to analyse the overall impact of oil on the economy of our case country. We relied heavily on statistics from our secondary sources to draw these relationships.

As mentioned earlier, the quality of FDI data in Africa is poor and there is lack of transparency in data provided thus we relied on secondary data from relatively credible sources such as The World Bank, IMF, UNCTAD, scholarly journals and a few state organizations in our model countries.

The choice of data on GDP, growth and inflation rates and balance of payment used in our research to measure economic performance is based on the rationale that these
macroeconomic indicators give a simple measure of a country’s economic performance and are the most often used indicators by The World Bank and IMF as performance measures.

Since there are two parts to this research, data collected was grouped under two broad themes; FDI and Government policies.

3.3 Case study based on Dunning’s Eclectic paradigm (FDI)

Oil is a locational attraction that, according to Dunning (1981), is a determinant of foreign direct investment. Since our research sought to extrapolate the observations in our case study (i.e. Angola) to our subject of research (i.e. Ghana), there were two steps involved.

The first step was to use Dunning’s Eclectic paradigm to assess whether oil exploration in Angola has any relationship with FDI inflows and an analysis of the overall impact of oil on Angola’s economy. As stated in our theoretical framework, Dunning (1981) identified ownership specific advantage, locational attractions and internalization as the determinants of FDI. The locational attractions component is made up of natural resources and market size. The natural resource component is vital for our study since oil is a natural resource and its ability to attract FDI can be best analysed by Dunning’s Eclectic paradigm. This is because the eclectic paradigm has remained as a dominant analytical framework for accommodating a variety of operationally testable economic theories of the determinants of foreign direct investment (FDI) and the foreign activities of multinational enterprises (Dunning, 2000).

With empirical data from our case study, we sought to test Dunning’s assertion that locational attractions (oil in our case) are among the determinants of FDI. Based on the FDI data collected on Angola and seven other African countries, FDI trends were analysed by matching (comparing) inflow figures and an attempt was made to establish a relationship between FDI inflows and natural resources (especially with oil related activities). Also, the role oil plays in Angola’s economy was analysed in order to establish the contribution of the petroleum sub-sector to the country’s economic development.

The second step involved the process of extrapolation. The observations in our case study (i.e. Angola) were used to estimate whether similar trends as observed in case study can be expected in Ghana. This was done by assessing FDI trends in Ghana, a brief review of the country’s economy and finally assessing whether observations in case study can be expected in Ghana.
Our choice of Angola as a model is because Angola has been one of the most successful countries in Africa attracting FDI because of its comparative locational advantage in oil, among other things. This supports a case for a relationship between oil production and FDI inflows and hence the decision to choose Angola for our analysis.

3.4 Government policy

Due to the limited time available for this research, we just briefly highlighted the three main fiscal policy options used by governments to manage their economies (i.e. neutral, contractionary or expansionary) and budge on to our case study to determine the appropriate policy options available to oil-rich countries. Norway is a perfect example of a country that has evaded the resource curse and has achieved substantial growth through effective management of its resources. A case study of Norway was used to determine some of the most appropriate oil management policies the world has witnessed. The fiscal policy adopted by Norway and the institutional frameworks put in place for the management of its oil revenue were briefly explored. We explored the oil fund mechanism (known as ‘The Government Pension Fund’- Global) and guidelines (spending rules) adopted by Norway. The applicability of these policies (or some of these policies) was examined by putting the Norwegian model in the context of Ghana.

We acknowledge that the political, economic, institutional and infrastructural conditions in Africa and for that matter Ghana are different from that in Norway. This limitation will be duly considered in the analysis.

3.5 Validation

Validity is concerned with whether or not there is a good match between researchers’ observations and the theoretical ideas they develop and the degree to which findings can be generalized across social settings (Saunders et al., 2009; Bryman and Bell, 2007). Some researchers argue that different criteria must be used to assess a research depending on whether it is a qualitative or quantitative research. We will adopt Lincoln and Guba’s (1985) trustworthiness criteria as a measure of validity for our research. This includes credibility, transferability, dependability and confirmability.

3.5.1 Credibility (paralleling internal validity)

In qualitative, interpretative study, there are several socially constructed views of reality. A researcher must be able to prove that his interpretations and explanations of a social situation are credible. Credibility in research is thus the extent to which data used and conclusions
reached are authentic and trustworthy. To ensure the credibility of our research, our conclusions are based on a thorough analysis of data collected. As is usually the case with Africa, over and under reporting are common with government data. We therefore adopted the triangulation technique (e.g. Denzin, 1970) by gathering data from different sources. Every data collected from government sources was compared with independent credible sources (e.g. UNCTAD) in order to ensure there are no significant differences thus resulting in greater confidence in data and findings.

3.5.2 Transferability (paralleling external validity)

Qualitative research might provide different results under different or even similar circumstances. It is therefore difficult to make generalizations of findings and make claims that the same results are applicable everywhere because qualitative research typically entails the extensive study of small groups, or of individuals sharing certain characteristics (Bryman and Bell, 2007). We therefore used ‘thick descriptions’ (as argued by Lincoln and Guba, 1985) of our case studies and this provides readers a database for deciding whether it is possible to transfer our findings to other milieu (Bryman, 2004). We were also able to establish a relationship between our findings and existing theory and this increases the level of transferability of our studies as suggested by Bryman (2004) and Yin (2003).

3.5.3 Dependability (paralleling reliability)

Dependability entails the extent to which a research is reliable. It is concerned with integrity, truthfulness and other traits that enable a reader to rely on a research. The fact must however not be forgotten that same results may not be achieved even if a research is done again in the same context (Lincoln and Guba, 1985; Saunders et al., 2009). We achieved dependability by adopting the auditing approach. We provided details of the methods, techniques, and steps taken to gather data and undertake analysis. These information would help readers understand why and how we arrived at our findings.

3.5.4 Confirmability (paralleling objectivity)

Research, especially qualitative, needs to be free from the bias and prejudice of the researcher. The researcher must act in good faith and ensure that personal preferences do not affect findings (although this is difficult to measure especially in qualitative studies because intuition plays a vital role in qualitative research). Our conclusions are based on unbiased analysis of data gathered and personal preferences or theoretical inclinations did not influence the conduct of our research.
4 DATA ANALYSIS, PRESENTATION AND DISCUSSION

This chapter analyses, presents and discusses all data gathered making use of texts, diagrams and tables where appropriate. The chapter is divided into two parts: Foreign Direct Investment and Government Policy. The first part will begin with a country analysis of Angola with concentration on the oil sector. We will continue with the FDI trends in Angola after which an attempt is made to establish a relationship between FDI inflows and natural resource endowment, as argued by Dunning as a determinant of FDI. The contribution of oil to the economic development of Angola will then be discussed to conclude the first part. The second part will start with a review of government (fiscal) policy trends available to oil producing countries. We will start with a brief analysis of the Norwegian economy and continue with an analysis of the petroleum sector and its significance to Norway. We will discuss fiscal policy tools used in oil management and end with how these observations could be applied to Ghana.

4.1 Foreign Direct Investment (FDI)

4.1.1 Country details and oil sector (Angola)

Angola is a country in south-central Africa bordered by Namibia on the south, Democratic Republic of the Congo on the north, and Zambia on the east; its west coast is on the Atlantic Ocean. Angola was a Portuguese overseas territory from the 16th century to 1975. After independence, Angola was engulfed in intense civil war from 1975 to 2002. The country is the second-largest petroleum and diamond producer in Sub-Saharan Africa.

According to the 2008 BP Statistical Energy Survey, Angola had proven oil reserves of 9.035 billion barrels at the end of 2007 or 0.72% of the world's reserves. A more recent estimate by the EIA of US puts the figure at 9.5 billion barrels. Although the oil and diamond sectors have remained buoyant throughout the long years of civil war and general decline, the rest of Angola's industry has been at a virtual standstill for decades (Washington Post). It was the Belgian company, Petrofina, which first discovered Angola's oil in 1955; offshore reserves were found in the Kwanza Basin. However, it was not until 1966 that Angola's true oil-producing potential was realized with the discovery of substantial reserves off the coast of Cabinda. Sonangol was created in 1976 to manage all the oil production and distribution. In 1978, the Angolan Government authorized Sonangol to acquire a 51% participation in the Cabinda and coastal QA concessions (now FS and FST), even though the management of the operations remained under the control of the operators.
In December 2006, Angola was admitted as a member of OPEC and produced 1.871 million bpd in 2008 (OPEC Annual report, 2008) up from about 900,000 bpd in 2002. Angola’s total oil production capacity has grown considerably over the past decade averaging around 2 million bpd in 2009 (compared to 750,000 bpd in 1999). Crude oil capacity estimates are now over 2.1 million bpd, most of which is offshore. Oil consumption is estimated to be around 65,000 bpd, leaving almost all production for export. The majority of Angolan oil is heavy to medium crude (30 degrees – 40 degrees API) with low-sulfur content of about 0.12 percent to 0.14 percent (EIA, 2010).

Angola has become the largest crude oil producing country in Africa, surpassing Nigeria in 2009 due to attacks on the oil infrastructure in the Niger Delta. Oil plays an important role in the economy of Angola, accounting for 90% and over 40% of export revenues and GDP respectively (mBendi, 2010). Angola’s oil production activity as a member of OPEC for the year 2009 is represented below:

**Figure 2: OPEC crude oil productions by country, 2008**

Despite the country’s massive crude production, domestic consumption is relatively low thereby leaving the rest for export represented in Fig. 3 below:
Figure 3: Angola oil production and consumption, 1999-2009

Angola has enjoyed growth in its FDI inflow for the past three decades although there were isolated cases of decline in certain years. The country’s FDI inflow increased from US$ 37 million to US$ 15.548 billion from 1980 to 2008 (about 41,922% as per UNCTAD records). An extract of Angola’s share of FDI inflows from 2000 to 2008 is presented in table 1.

Comparing this with another oil-rich country, Nigeria recorded an increase of FDI inflows from US$ -739 million to US$ 20.279 billion for the same periods. However, Angola is relatively smaller than Nigeria in population size. Angola’s inflows for 2008 would amount to US$ 862.77 per head compared with Nigeria’s US$ 134.11 per head based on UNCTAD’s 2008 population estimates. A detailed analysis of FDI inflows among selected resource endowed countries and less resource endowed countries in Africa will be presented later in the next section.

4.1.2 FDI trend in Angola

**Source:** EIA International Energy Annual: Short-Term Energy Outlook

*Total Production includes all liquids*
Table 1: FDI inflows in Angola from 2000 to 2008 in billion US $

<table>
<thead>
<tr>
<th>Years</th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>FDI inflows in USD</td>
<td>0.879</td>
<td>2.145</td>
<td>3.133</td>
<td>5.685</td>
<td>5.606</td>
<td>6.794</td>
<td>9.064</td>
<td>9.796</td>
<td>15.548</td>
</tr>
<tr>
<td>% of World FDI</td>
<td>0.064</td>
<td>0.262</td>
<td>0.498</td>
<td>1.006</td>
<td>0.763</td>
<td>0.698</td>
<td>0.620</td>
<td>0.495</td>
<td>0.916</td>
</tr>
<tr>
<td>FDI as % of GDP</td>
<td>9.62</td>
<td>24.01</td>
<td>27.41</td>
<td>40.73</td>
<td>28.35</td>
<td>22.18</td>
<td>18.26</td>
<td>18.75</td>
<td>21.66</td>
</tr>
</tbody>
</table>


(According to UNCTAD, the FDI flow figures include the following three components: equity capital, reinvested earnings and intra-company loans. Data on FDI flows are presented on net bases (capital transactions' credits less debits between direct investors and their foreign affiliates). Net decreases in assets or net increases in liabilities are recorded as credits while net increases in assets or net decreases in liabilities are recorded as debits).

For the observed period in Table 1, FDI inflows grew (except in 2004) averaging US$ 6.5 billion from 2000 to 2008. Growth in percentage terms averaged 90.3% from 2000 to 2003. The following year recorded a 1.4% drop in total inflows from US$ 5.7 billion to US$ 5.6 billion. The country recovered from the fall and recorded a 21% growth in 2005 compared with its 2004 figures. Average growth recorded was around 30.3% from 2005 to 2008. It can be observed that average growth from 2000 to 2003 was magnificent and was almost three times more than growth experienced from 2005 to 2008. This stagnant growth is partly due to the significant impact of the global economic crisis (2007 – date) which saw global inflows of FDI fall by 39% from US$ 1.7 trillion in 2008 to a little over US$ 1.0 trillion in 2009 (UNCTAD, 2009).

FDI as a percentage of GDP increased concurrently with the Nominal GDP from 2000 to 2003 and then fluctuated from 2004 to 2008. In 2003, FDI inflow as a percentage of GDP was 40.7%, representing a substantial contribution to the country’s economy. The implication is that, foreign capital has played and continues to play a pivotal role in developing the productive capacity of Angola.
Angola is relatively small in terms of population size compared with other countries in the world. Its share of total FDI inflows is equally minimal and has remained below 1.5% throughout the observed period. Although the country’s percentage of world FDI inflow experienced growth averaging about 167% from 2000 to 2003 before falling by 24% in 2004, the country’s average share of world FDI inflow for the four year period 2000 to 2003 was 0.46%. A fall in Angola’s share of total FDI inflow continued until 2008 when it recovered by about 85% from the previous year. Despite the fall in Angola’s share of total FDI inflows during 2004 until 2008, total inflows kept increasing. The reason being that, total world flow of FDI has consistently increased over those periods.

Angola is one of Africa’s highest recipients of FDI. This notwithstanding, its share of total world FDI inflow is still low on the world stage (but relatively high as per the country’s size) averaging about 0.59% for the nine year period. This re-enforces earlier claims that Africa’s share of total world FDI inflow still lags behind.

One other indicator which tends to serve as a guide for foreign investors when deciding on investment locations and takes into consideration structural, infrastructural and institutional frameworks in the recipient country (rather than natural resources) for investment is the IFC and The World Bank’s ‘Doing Business rankings’. Angola was ranked 155th, 156th, 167th, 170th and 169th from 2006 to 2010 respectively. The ranking takes into consideration the ease of starting a business, dealing with construction permits, employing workers, registering property, getting credit, protecting investors, paying taxes, trading across borders, enforcing contracts and closing a business. The lower the rank, the easier it is to do business in that country compared with other countries. Hence, Angola’s rankings show that it has relatively become more difficult to conduct business in 2010 compared to 2006. This may be as a result of the worsening of business environment in Angola or as a result of other countries improving their business environment compared with Angola. This notwithstanding, Angola, apart from its natural resources, has other incentives and is making efforts at creating favourable macroeconomic conditions, which has among other things resulted in attracting foreign investors into the country.

4.1.3 FDI and its relationship with natural resources (oil)

Countries that can offer a large domestic market and/or natural resources have inevitably attracted foreign investors in Africa. South Africa, Nigeria, Ivory Cost, and Angola have been traditionally the main recipients of FDI within the region (Morisset, 2000). For instance,
Chevron Texaco, a California based oil and natural gas company, has invested about US$ 4 billion in Angolan development projects as at 2008 (mBendi).

Over the years, Nigeria and Angola have been two of the most successful countries receiving FDI because of their comparative locational attraction in oil despite their unstable political and economic environments. The 1999 World Development Report of the World Bank ranked Angola as fourth among African countries with the highest average FDI inflows for the years 1996 and 1997. In 2008, as per UNCTAD records, Angola is the second largest recipient of FDI inflow in Africa. On average, resource endowed countries in Africa ‘ceteris paribus’ have attracted more FDI inflows than their counterparts with less natural resources. Table 2 below samples the distribution of FDI flows among abundant natural resource-endowed and less resource endowed countries in Africa.

Empirical evidence of distribution of investments (in different provinces) in Angola as reported by Banco de Desenvolvimento de Angola’s ‘Boletim de Conjuntura’ (2009) shows that on average, provinces near the oil blocks register higher rates of investment than other provinces. Luanda, which doubles as the capital as well as a province with vibrant oil activities such as oil refinery etc recorded about US$ 10.59 million investments with more than 50% accruing to the oil and gas sector.

Dunning (1981) argues that natural resources and market size are components in the locational attraction that attract FDI into a country. Our sample of eight countries (table 2), four well-endowed in natural resources (e.g. oil, gold, etc) and four less-endowed in natural resources reveals that average FDI inflows per head to the four resource endowed countries amounted to US$ 193.83 in 2008 compared with that of less resource-endowed countries at US$ 4.67 per head. The same disparity in the distribution of FDI inflow can be observed for the entire periods under consideration. In fact, the growth in FDI distribution per head grew on average by about 1,117% for the four resource-endowed countries and by only 2.41% for the four less-resource endowed countries from 2000 to 2008. It was also realised that among the four resource endowed countries, the countries with oil wealth (Nigeria and Angola) on average recorded higher FDI inflows than those without oil (Ghana and South Africa. Note: Ghana classified under countries without oil in this context because it is yet to start oil production).

Although both groups of countries have recorded growth in FDI inflows per head, the gap between resource-endowed and less resource-endowed countries widened with the former experiencing growth about 463 times more than the latter. The distribution among only
resource-endowed countries does not represent a normal distribution either. In 2008, Angola recorded the highest inflow per head at US$ 862.77 with US$ 181.38, US$ 134.11 and US$ 90.79 accruing to South Africa, Nigeria and Ghana respectively.

Another trend that could be realised from the inflow figures is the level of influence that the two components within Dunning’s locational attraction factor (i.e. natural resources and market size) have on the distribution of FDI inflows among the two groups of countries. From our observations, a more positive relationship could be established between natural resources and FDI inflows than between market size and FDI inflow. The more natural resources available in a country, the more FDI it is able to attract ‘ceteris paribus’. A comparison among resource-endowed as well as between resource-endowed and less resource-endowed countries with varying population sizes confirms this assertion. Among the four resource-endowed

Table 2: Distribution of FDI inflows among selected (well and less natural resource endowed) African countries in billion US$

<table>
<thead>
<tr>
<th>Countries</th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>South Africa</td>
<td>0.888</td>
<td>6.789</td>
<td>1.573</td>
<td>0.734</td>
<td>0.799</td>
<td>6.644</td>
<td>-0.527</td>
<td>5.687</td>
<td>9.009</td>
</tr>
<tr>
<td>Angola</td>
<td>0.879</td>
<td>2.145</td>
<td>3.133</td>
<td>5.685</td>
<td>5.606</td>
<td>6.794</td>
<td>9.064</td>
<td>9.796</td>
<td>15.548</td>
</tr>
<tr>
<td>Ghana</td>
<td>0.166</td>
<td>0.89</td>
<td>0.59</td>
<td>0.105</td>
<td>0.139</td>
<td>0.145</td>
<td>0.636</td>
<td>0.855</td>
<td>2.120</td>
</tr>
<tr>
<td>Togo*</td>
<td>0.410</td>
<td>0.640</td>
<td>0.530</td>
<td>0.340</td>
<td>0.590</td>
<td>0.770</td>
<td>0.770</td>
<td>0.490</td>
<td>0.680</td>
</tr>
<tr>
<td>Benin*</td>
<td>0.600</td>
<td>0.440</td>
<td>0.140</td>
<td>0.450</td>
<td>0.640</td>
<td>0.530</td>
<td>0.530</td>
<td>0.255</td>
<td>0.120</td>
</tr>
<tr>
<td>Kenya*</td>
<td>0.111</td>
<td>0.500</td>
<td>0.280</td>
<td>0.820</td>
<td>0.460</td>
<td>0.210</td>
<td>0.510</td>
<td>0.728</td>
<td>0.960</td>
</tr>
<tr>
<td>Malawi*</td>
<td>0.400</td>
<td>0.410</td>
<td>0.170</td>
<td>0.660</td>
<td>0.108</td>
<td>0.270</td>
<td>0.300</td>
<td>0.550</td>
<td>0.370</td>
</tr>
</tbody>
</table>

Source: UNTAD online statistics database, all amounts are in million US$, * represents countries with less natural resource endowment.
countries, Angola recorded higher inflows relatively per head throughout the observed period. In 2008 for instance, Nigeria with a population 8.39 times more than Angola received FDI inflows only 1.30 times more than Angola. Ghana and South Africa, all with populations more than Angola and with relatively stable economic and political environments received lower shares of FDI inflows for the observed period.

The same trend can be observed between Kenya (less resource-endowed) and Angola (resource-endowed). Kenya’s population in 2008 was about double that of Angola but the country attracted FDI inflows 161.96 times less than Angola did for the same year. Similar trends can be observed during the entire period under observation. Our observation does not attempt to establish causality because a host of other factors such as political and economic environment, among others, all play a role in attracting FDI.

It must also be noted that although market size is a subset of a country’s population, other factors such as purchasing power, determined by factors such as income levels, inflation and interest rates among others are the actual determinants of market size. A country with a large population size but with low income levels (e.g. Kenya) might provide a smaller market size for products than another with small population size but with higher income levels (e.g. Sweden).

4.1.4 Oil, FDI and their contributions to the overall economic development of Angola

4.1.4.1 Oil and Development

Many researchers have established a negative relationship between growth and natural resources or at least slow economic growth among countries with abundant natural resources which they referred to as the ‘resource curse or paradox of plenty’ (e.g. Auty, 1993; Sachs and Warner, 1997: Karl 1997). Mehlum et al. (2006) also argues that the rate of growth depends on the differences in the quality of institutions.

4.1.4.2 Oil and Macroeconomic strength

Perry Anderson (2001), states that ‘Blood may be thicker than water, but oil is thicker than both’. Angola’s oil wealth has been a firm backbone of the country’s economy although diamonds, coffee, sisal, fish and fish products, timber and cotton are among a list of the country’s export commodities. Angola's high growth rate in recent years was driven by its oil sector and high international oil prices. The relatively stable macroeconomic situation is as a result of its oil revenue and operational management by authorities such as the Ministry of
Planning, the Ministry of Finance and the Central Bank. Angola's economy is highly dependent on the oil sector, which accounts for more than 40% of GDP and 80% of government revenues. In 2004, petroleum and petroleum products generated nearly $9.7 billion in state revenues (mBendi, 2010). Increased oil production supported growth averaging more than 15% per year from 2004 to 2007 (CIA World Fact Book). The Angolan economy grew 15% in 2008, with a reinforcement of the role of the oil sector, which benefited from a sharp rise in oil prices in the international market. In real terms, the non-oil component grew 20% compared to 11% in the oil sector (Banco de Desenvolvimento de Angola, 2009).

The sharp rise in international oil prices not only facilitated the funding of a vast programme of public investments but also ensured a surplus in the current balance. Between 2007 and 2008, Angola’s foreign reserves rose from US$ 11 billion to US$ 19 billion. The comfortable external position, reflected in the fact that foreign exchange reserves have almost doubled, has facilitated the policy of foreign exchange stability pursued by the Angolan authorities (Banco de Desenvolvimento de Angola, 2009).

Prudent macroeconomic policies have shown good results over recent years as Angola was considered in 2007 as one of the fastest growing economies in Africa. Angola is ranked 63rd based on The CIA World Fact Book’s 2009 GDP (purchasing power parity) rankings. In 2008 and 2007, the country’s GDP (purchasing power parity) were US$ 115.1 billion and US$ 101.6 billion respectively. Angola recorded the highest GDP growth rate among OPEC members with 18.56% and 21.13% for 2006 and 2007 respectively. Table 3 represents Angola’s nominal GDP, annual average GDP growth rates and balance of payment figures.

GDP

From table 3, Nominal GDP growth fluctuated from 2002 through to the end of the entire period under observation based on GDP at constant 1990 US dollars. However, as per year to year comparisons, an initial decline of 2.20% was experienced in nominal GDP in 2001 followed by about 28% growth in 2002 from the previous year. 2006 recorded the highest growth in nominal GDP representing about 62% above 2005. Nominal GDP per capita based on table 3 has shown significant increment after briefly falling in 2001. Over the nine year period under observation, Nominal GDP per capita registered grew from US$ 640 in 2000 to US$ 2,976 in 2007, a percentage average growth of about 45.62% per year. It must be noted that inflation rates during the observed periods have been relatively high (table 4) and are partly responsible for this significant increase in nominal GDP figures (i.e. nominal GDP only
uses current prices in the computation of GDP without consideration for inflation). According to The World Bank, Angola is ranked 90th in the world based on GDP (PPP) per capita with US$ 5,898 for 2008.

**Table 3: Nominal GDP and balance of payments in billion US dollars, average growth rate of real GDP for Angola from 2000-2008**

<table>
<thead>
<tr>
<th>Years</th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>GDP in USD</td>
<td>9.133</td>
<td>8.936</td>
<td>11.432</td>
<td>13.956</td>
<td>19.775</td>
<td>30.629</td>
<td>49.650</td>
<td>52.237</td>
<td>71.770#</td>
</tr>
<tr>
<td>GDP growth rate %</td>
<td>3.05</td>
<td>3.10</td>
<td>14.53</td>
<td>3.31</td>
<td>11.18</td>
<td>20.61</td>
<td>18.56</td>
<td>21.13</td>
<td>12.10#</td>
</tr>
<tr>
<td>BOP *</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–0.717</td>
<td>0.685</td>
<td>5.138</td>
<td>10.537</td>
<td>4.058</td>
</tr>
</tbody>
</table>


The significance of this growth is that, a country which cannot feed its citizens despite high (growth in its) GDP is worse of than another with a lower GDP (growth rate) but with a small population. However, other factors need to be considered when making analysis with per capita income. For example, an increase in per capita income could mean that the top percentiles of the population have grown richer while the lower percentiles have grown poorer as may be the case in China, which has seen a rapid increase in per capita income but also a sharp increase in income inequality. Some argue that increasing income inequality does not matter. According to them, ‘the rising tide lifts all boats’. But this matter is open to debate (Ghanaconscious, 2005).

With reference to table 5 in section 4.3.1 and EIA’s Petroleum Navigator statistics, based on weekly OPEC countries’ (year end) spot prices from 2000-2008, varied relationships can be observed between Angola’s GDP per capita (PPP) and world oil prices. Despite a fall in world oil prices by about 11.11% as per year end figures in 2001 compared with 2000, the country still recorded a 2.47% growth in its GDP per capita (PPP) from 2000 to 2001. An increase of about 56.86% in oil prices from 2004 to 2005 led to about 12.70% growth in GDP per capita.
(PPP) for the same period. 2007 recorded the highest growth rates for both world oil prices and GDP per capita (PPP) with 58.71% and 20.20% respectively.

**Balance of payment**

The country’s balance of payment figures have recovered from a deficit of US$ 717 million in 2003 to a surplus of US$ 685 million in 2004. It then continued with fluctuating positive figures from 2004 to 2008 with the highest surplus recorded in 2006 at US$ 10.5 billion. A balance of payment account records all monetary transactions between a country and the rest of the world (Sloman, 2004). Exports, receipts of loans and investments are recorded as positive or surplus items whilst uses of funds, such as for imports or to invest in foreign countries are recorded as a negative or deficit item. The balance of payment, as the name suggests, must balance. However, imbalances are possible on individual elements of the balance of payment such as the current account. This can result in surplus countries accumulating lots of wealth, while deficit nations become increasingly indebted. The implication of the balance of payment figures in table 3 implies that Angola has earned more wealth from 2004 onwards as a result of excess returns on receipts compared with spending. In simple terms, it means the country can pay for its imports and still maintain a positive balance in its accounts.

**Inflation and interest rates**

In table 4 below, inflation decreased at fast rates averaging about 12.5% for the seven year period 2002-2008. Countries usually prefer lower inflation rates because uncontrolled inflation results to unpalatable consequences with the commonest being a reduction in the purchasing power of money. A more stable inflation rate (e.g. from 2006-2008) encourages investment since reliable forecasts can be made. Interest rates on the other hand have been inconsistent but remained below 2.5% from 2003 to 2008. Low interest rates ensure liquidity within the economy, discourage savings and encourage investment since units with surplus funds would prefer investing in more productive areas in order to earn higher returns rather than saving.
Table 4: Inflation and Interest rates in Angola from 2000-2008

<table>
<thead>
<tr>
<th>Years</th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inflation rate %</td>
<td>_</td>
<td>_</td>
<td>105.6</td>
<td>76</td>
<td>31</td>
<td>18.5</td>
<td>12.2</td>
<td>10</td>
<td>13.2</td>
</tr>
<tr>
<td>Interest rate %</td>
<td>_</td>
<td>_</td>
<td>_</td>
<td>2.4</td>
<td>2.3</td>
<td>2.0</td>
<td>1.5</td>
<td>2.2</td>
<td>1.0</td>
</tr>
</tbody>
</table>

Source: Angola Ministry of Finance.

Other indicators such as external debt as a percentage of GDP declined drastically at an average rate of 44.38% from 2003 to 2008. Public spending in important sectors of the economy such as health, education, etc (refer to section 4.1.4.3 below) largely financed by oil revenue has increased but has been kept under control (representing about 20.6% of GDP).

4.1.4.3 Oil and Social improvement in Angola

The government of Angola has pursued efforts to reconstruct and rehabilitate infrastructure, with a view to facilitating the normalization of economic activity and fomenting the development of activities outside the extraction sector. China agreed to provide multi-billion dollar oil-backed loans to fund infrastructure development among which was a US$ 2 billion loan in 2004. The situation in the education sector shows some encouraging headway. According to internationally available data, the gross enrolment rates in primary education in Angola were 104.4% in 2003, 122.8% in 2005 and 164.5% in 2006. Enrolment rates increased substantially since the government recruited an additional 71 000 teachers between 2003 and 2007 and efforts were made in primary school construction. It has a strong transportation network with railways and roadways covering more than 51,000 kilometers. By 2008, the country had almost 0.5 million web users. It ranks 74 in the world in terms of mobile phone usage (Economy watch, 2009).

Since 2002, access to water and sanitation has improved significantly as a result of priority rehabilitation projects. However, water access cover is estimated to be 36% in urban and semi-urban areas and 22% in rural areas (European Community Joint annual report, 2007). According to the European Community Joint report (2007), although agricultural activities have been revived, de-mining has progressed, schools and sanitation systems have gradually developed, and road infrastructure, water and energy rehabilitation is under way, high levels of poverty and vulnerability still persist among the population. In 2008, Angola continued to
be in a weak situation in terms of the UNDP human development index occupying the 162nd position. According to the United Nations Development Programme (UNDP), the human development index (HDI) looks beyond GDP to a broader definition of well-being. The HDI provides a composite measure of three dimensions of human development: living a long and healthy life (measured by life expectancy), being educated (measured by adult literacy and gross enrolment in education) and having a decent standard of living (measured by purchasing power parity, PPP, income) (UNDP Human Development Reports, 2009).

4.1.4.4 FDI and Development

Lumbila (2005), states that FDI exerts a positive impact on growth in Africa. With his assertion and based on FDI trends analyzed in section 4.1.2 above together with other details presented below, a prima facie case can be established to support the assertion that FDI contributes to economic development.

Most foreign direct investments in Angola have traditionally been in the oil sector. Recent trends however indicate investments in other sectors of the economy especially in the food and beverages sector. In the year 2000, Coca-Cola opened a plant just outside Luanda at Bom Jesus in Bengo province with a US$ 36 million investment. This represented the first significant foreign investment in Angola outside oil and diamonds for many years. The arrival of Coca-Cola also gave a major lift to stagnant local industry. One company that has benefited directly from the arrival of Coca-Cola in 2000 is Angases, a local enterprise founded in 1949 to produce industrial and medical gases. Angases has won an exclusive contract to supply Coca-Cola with gas, ensuring a more stable future for the company.

Coca-Cola Bottling/Luanda, part of SABMiller PLC, the world’s second-largest beer maker and main bottler in Africa, in 2009 invested $70 million in the construction of a new beer factory in Cacuaco, Angola’s Luanda province. This investment was expected to create 700 new jobs, of which 430 in the N’gola Norte factory and the remainder in support roles (transport, logistics and finance). The impacts of this investment on the country’s development are enormous. Employment is created for the local labour market thereby providing income to households for consumption, savings or further investments. Corporate as well as personal income taxes will also be another source of revenue for the government. Factory buildings as well as other infrastructural activities involved with this investment will contribute to improving the infrastructural capacity of the country.
Other foreign companies have been quick to follow Coca-Cola's example. For instance, the Chinese company, Guangdong Overseas Construction Corporation, has invested US$ 7.2 million in a motorcycle assembly plant – the first of its kind in Angola.

These among others such as the planned Secil – Companhia Geral de Cal e Cimento SA’s (Secil) of Portugal’s investments in the construction and operation of a new cement plant in Angola are a few well documented FDIs into Angola. The activities of these companies directly (through taxes, license fees, etc.) and indirectly (through employing local labour, corporate social responsibility projects, etc.) contribute to the development of Angola.

4.2 Government Policy

Policy could be described as a plan of action to guide decisions so as to achieve rational or expedient results for the benefit of an entire society. It serves as a guideline directing actions towards attaining a desired outcome.

Government policy is an action taken by the government that ultimately affects the public; they come in the form of principles that underline the actions of the government in its pursuit of solving the public issues. They are administered through regulations, legislations, administrative practices and so on. There are various types of government policies depending on their intended outcome. Some are fiscal, monetary, trade policies, etc. As stated by the European Central Bank (2009), in the wake of high and rising oil prices from the beginning of this decade until mid-2008, economic developments and macroeconomic policy issues in oil-exporting countries have increasingly attracted a lot of focus and attention. Oil revenues are in huge sums and in most countries accrue to governments thus fiscal policy choices have a significant impact on economic performance.

Fiscal policy has to do with the use of government expenditure and revenues to influence economic activity in a state. The two main instruments of fiscal policy are government expenditure and taxation and any changes on these tools could cause an impact on economic variables such as aggregate demand, pattern of resource allocation and distribution of income. To this effect, fiscal policy refers to the overall effect of the budget outcome on economic activity.

Fiscal policy can be administered through three possible stances. It could be neutral, contractionary or expansionary. Fiscal policy is neutral in a case where government expenditure is the same as its tax revenue. This implies that government spending is entirely funded by its tax revenue. Expansionary stance of fiscal policy occurs when government...
spending increases while tax decreases resulting in a higher budget deficit or lower budget surplus and a contractionary fiscal policy stance are where government spending reduces and does not exceed tax revenue while the tax increases. This results in a budget surplus.

4.2.1 The Norwegian economic sectors

Norway has a very vibrant, diverse and a free market economy. A significant chunk of the economy is constituted by the services sector such as trade, banking, insurance, telecommunication, transportation, engineering as well as public services.

Figure 4: Norway’s major economic sectors and their contribution to GDP in 2008

The services sector accounted for 48 percent of GDP in 2008 whilst the petroleum sector including exploration and extraction accounted for 26 percent of GDP and about 49 percent of exports. The manufacturing industries contributed almost 9 percent of GDP in the same year (Statistics of Norway, 2009). Figure 3 gives us an illustration of these sectors.

Much of the manufacturing industries include machinery, construction of shops and oil platform, metal and paper products, electrical and electronic equipments, ship building which are highly export oriented.

Norway's generation of hydroelectric power has made most of these industrial activities possible, driven by its highly skilled and well educated labour force as well as the lack of corruption in the system.
Although Norway’s petroleum sector is very crucial to the economy, the value of its human resource cannot be ignored. Close to 90% of total national wealth is from the value of the human capital compared to the petroleum sector which contributes just about 4% to total national wealth. This is illustrated in figure 5. Thus, there is no wonder that the labour force forms an essential part of the economy. Human capital accumulation can lift living standards without natural capital (as in Japan and Singapore, for example), but natural capital is of little help or worse without the human resources necessary to harness it as in the case of Congo (Gylfason, 2008).

Following the discovery of vast deposits of oil in the Norwegian continental shelf (NCS) and the subsequent production of oil and gas, Norway has grown to develop a very stable and resilient petroleum sector which has now become the backbone of the economy. Its foreign trade has grown in leaps and bounds especially as the world craves for oil.

4.2.2 The petroleum sector and its significance to the Norwegian economy

Norway discovered petroleum in 1969 off the Norwegian continental shelf (NCS) and production began in earnest in 1971, June 15th to be precise whilst, more major discoveries were made in subsequent years. Currently, there are about 60 fields in production on the Norwegian continental shelf (Norwegian Petroleum Directorate, 2009).

In 2005, these fields produced 3 million barrels of oil (including NGL and condensate) per day and 85 billion standard cubic metres (scm) gas, for a total production of saleable petroleum of 257 million scm oil equivalents (o.e.) (Eriksen, 2006). In 2008, oil production
decreased to 2.5 million barrels per day (including NGL and condensate) but that of gas increased to 99.3 billion standard cubic meters (scm). The total production of saleable petroleum also fell to 242.2 million scm oil equivalent. Since its discovery of oil in 1969, Norway’s production of oil and gas has risen significantly over the past 30 years putting it at a rank of the world’s fifth largest oil exporter and eleventh largest oil producer in 2007. It was also the world’s third largest exporter of gas after Saudi Arabia and Canada in 2007 (Norwegian Petroleum Directorate, 2009). Figure 6 represents some of the world’s largest oil and gas exporters.

**Figure 6: The largest oil exporters (including NGL and Condensate) and gas exporters in 2007.**

![Irene Diagram showing oil and gas exporters](image)

*Source: KBC Market Services*

The Norwegian petroleum sector employs about 250,000 people directly or indirectly, it accounts for a third of government revenues and 90 per cent of its profits accrue to the state (KonKraft, 2009). About NOK119billion of the central government’s budget in 2009 came directly from the oil and gas sector. Norway’s GDP per capita has grown so fast in the past decades. Its GDP stood at US$452billion in 2008 (World Bank’s World Development Indicators, 2010).

Norway, being a matured and open economy is among those with the highest per capita foreign trade in the world. In 2008, Norway’s total exports of goods and services represented 47 percent of total GDP whilst that of imports was 29 percent. Crude oil and natural gas is the
single most important commodity group representing about half of total merchandise exports in 2008 (NPD Report, 2009). Much of Norway’s oil exports are to the European Union region and its major trading partners are the United Kingdom, Germany, Sweden, etc. On its part, Norway mainly imports food products, steel and vehicles. Norway’s solid economic performance reflects its prudent management of its petroleum and gas revenues, sound macroeconomic policies, as well as structural reforms, trade and investment liberalization throughout its various sectors.

**Figure 7: Microeconomic indicators for the Norwegian petroleum sector in 2008**

![Pie charts showing microeconomic indicators](image)

*Source: Statistics Norway, (Ministry of Finance)*

i. Activities of the petroleum sector has contributed enormously to economic growth and financing the welfare of the Norwegian state. Throughout nearly four decades of operations, the oil sector accounted for 26 percent of national value creation (Gross National Product – GNP). This is 3 times the value created by the primary industries.

ii. Tax revenues from oil production firms in the form of direct and indirect taxes and the direct ownership (the State’s Direct Financial Interest – SDFI) ensure that the state receives a larger value created from the petroleum industry. This accounted for 34% of total revenues in 2008.

iii. The export of natural gas, crude oil and pipeline services accounted for half of Norway’s exports in 2008.

iv. Investments from this sector accounted for 23% of Norway’s total real investment in 2008. This is as a result of the huge investments in petroleum activities such as exploration, field development, transport infrastructure, land facilities, etc.
4.2.3 Tools of fiscal policy in the management of petroleum resources

Norway is a small country of 4.6 million people but when it comes to petroleum exploration and the management of revenues coming from this sector, Norway is hailed as a giant in this respect. Norway has been relatively successful in using its highly consensus-oriented and parliamentary institutions and also the involvement of various interest groups representing business and labour, to reconcile competing claims for oil revenues with long-term objectives and stabilization goals (Eifert, Gelb, & Tallroth, 2003a).

There have been recorded sharp swings in oil prices in recent years. Over the years, oil prices plunged to a ground of US$ 12 per barrel in the late 1998. After a sustained and sharp recovery in 1999, which in some ways looked like the 1973-82 trend in oil prices, it surged to US$ 30 per barrel in 2000. It fell back to US$ 20 per barrel in 2000. 2009 has seen a decline too. This recent trend in prices can be described as an oil price cycle with the ‘boom’ period between 2003 and 2008 and a downturn or ‘bust’ in 2009 (IMF, 2005).

This volatility of oil prices poses major challenges to oil-producing countries (OPCs), since OPCs have to find best ways of utilizing the oil revenues and sustaining the conditions. (Eifert et al., 2003a). Managing oil revenues well is much more like managing a budget well but even more important to OPCs is determining issues such as how much to save for future use, how to achieve economic stability in the face of uncertainty and widely fluctuating oil revenues and avoid the “boom bust” cycles as well as how to ensure that the spending is of high quality whether in terms of large investment projects, public consumption or subsidies (Eifert, Gelb, & Tallroth, 2003b). Key policy objectives should be to pursue fiscal strategies aimed at breaking the procyclical response of expenditure to oil prices which implies eliminating expansionary fiscal policy biases during oil booms and critically targeting prudent non-oil fiscal balances and also reducing the non-oil fiscal deficit over time (Barnett & Ossowski, 2003). Most oil producing countries vary in a number of areas and it is based on these variations that determine the kind of fiscal policies to be adopted. Some of which are the size of the oil reserves, maturity of the oil industry, the relative importance of the oil to the economy, the government’s financial position, the stage of development of the non-oil economy and the tax structure and ownership of the oil sector.

Norway has adopted and implements a relatively flexible framework using the non-oil deficit as an anchor (IMF, 2007). The Norwegian Government Pension Fund (Global) is the main oil fund used by the Government as a fiscal tool for managing oil revenues.
**i. The Government Pension Fund (Petroleum Fund)**

- **History**

The Norwegian Government Petroleum Fund was established in 1990 by the Norwegian Parliament or Stortinget, when it adopted the Act on the Government Petroleum Fund (Act of June 22, Act no. 36). ‘The Fund’s name was later changed to be called the Government Pension Fund-Global in 2006.

‘The Fund’ mechanism ensures that money will only be allocated to ‘The Fund’ in the event that there is a surplus. Although it was formed in 1990 as the Petroleum Fund, whereby it would receive all the central government’s net cash flow from petroleum activities and returns accruing to ‘The Fund’s’ investments, it was not until 1996 when it received its first ever transfer for the fiscal year of 1995. This was because in the early 1990s, there were budget deficits due to a recession thus revenues from the petroleum sector went into the repayment of debts and fixing of current fiscal needs. It was in 1995 that the budget went into a surplus status. Over the years, ‘The Fund’ has grown into one of the world’s most independent and largest fund in terms of assets and wealth. This is as a result of high oil prices which have enabled the government to make very huge capital transfers into ‘The Fund’.

- **Purpose**

‘The Fund’ was established to safeguard petroleum wealth for future generations. ‘The Fund’ serves as a buffer in the event that oil prices decline or there is a decline in mainland economic activity as well as a tool for dealing with the prospective decline in oil and gas volumes. ‘The Fund’ takes receipt of all central government’s net cash flow from petroleum activities and returns accrued on ‘The Fund’s investments through the state budget. ‘The Fund’ curbs unnecessary spending by stipulating that spending should only be based on the real returns at the annual public budget. In principle, only 4 percent of the total inflows from the petroleum sector should be allocated to the budget every fiscal year. Thus ‘The Fund’ Acts as a tool for the government to deal with other financial challenges that might be posed by the nation’s aging population. So it became a kind of a long-term savings measure by government to accumulate financial assets for future contingencies.

By curbing spending, ‘The Fund’ also serves as a means of stabilizing the economy from over expenditure, increased domestic aggregate demand, high inflation and interest rates and overheating of the economy by shielding the domestic economy. This is possible via the
investments that are done in foreign financial assets using the receipts from oil and gas sector thus controlling the spending of the revenues. This interaction between the flow of oil revenues from the petroleum sector to ‘The Fund’ and its connections with the other activities of the economy is illustrated in figure 8 below. There is also an element of diversification with ‘The Fund’. By investing the petroleum wealth into a portfolio of international assets and securities, there is an increase in expected return accruing to ‘The Fund’s investments while the risks associated with the investments are reduced.

**Figure 8: The petroleum activities, Pension fund-Global and the Norwegian economy**

(Source: Norwegian Ministry of Finance)

**Figure 9: The integration of the Government Pension Fund into fiscal policy in Norway**

Returns on investments

<table>
<thead>
<tr>
<th>FUNDS</th>
<th>STATE BUDGET</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pet. Revenue</td>
<td>Expenditure (Consumption &amp; Investment)</td>
</tr>
<tr>
<td>Transfer to finance</td>
<td>Non-oil budget deficit</td>
</tr>
</tbody>
</table>

(Source: Norwegian Ministry of Finance)

As a basic principle of an oil fund, it must be able to integrate with the budget so as to enhance the efficiency of public spending and coordination of the fiscal policy. At the same
time too, guidelines and operational rules that are known to be rigid must be avoided. The interaction between the Pension Fund – Global and the fiscal budget is illustrated in figure 9 above. ‘The Fund’s income is the central government net cash flow from petroleum activities (via the state budget), and the return on Fund investments is added to ‘The Fund’. ‘The Fund’s expenditure is made up of an annual transfer to the Ministry of Finance corresponding to the amount of petroleum revenues applied in the fiscal budget. The transfer from ‘The Fund’ finances the non oil budget deficit. According to the fiscal guidelines, this should equal 4 per cent of ‘The Fund’s capital. In this way, money is accumulated in ‘The Fund’ if, and only if, there is a Government budget surplus including oil revenues (Eriksen, 2006). There must also be stringent mechanisms to ensure professionalism, transparency and accountability in the management of ‘The Fund’.

- **Organisation and Management**

The running and management of The Government Pension Fund is clearly stated in ‘The Fund’s Act. There is a clear line of obligations and responsibilities The Norwegian Ministry of Finance has the sole and overall responsibility of how ‘The Fund’ is managed and it has delegated that responsibility to the Norges Bank (The Central Bank of Norway) which sees to the day-to-day running and operation of ‘The Fund’. The Ministry of Finance gives ethical guidelines for the management of ‘The Fund’, therefore The Norges Bank’s operational management of ‘The Fund’ is always within the guidelines and regulations that the Ministry has set for it.

The Ministry of Finance, being the official owner of ‘The Fund’, is tasked with the responsibility of defining long-term investment strategies for ‘The Fund’, thus, it makes all the strategies and benchmarks of how ‘The Fund’s asset should be allocated. Some of these strategic choices made include, the currency and country of distribution assets to invest in for ‘The Fund’, the asset classes and the different market segments of the securities, etc. These strategic choices are reflected in a benchmark portfolio. This portfolio is a “virtual” fund, consisting of equity and bond indices for the various markets in which ‘The Fund’ is invested. (Eriksen, 2006). The Ministry monitors and evaluates the operational management of ‘The Fund’ as well as reports to the Norwegian Parliament about the strategies and performance of ‘The Fund’.

The Central Bank (Norges Bank) set up the Norges Bank of Investment Management (NBIM) since 1998 to manage ‘The Fund’s. All the strategies and benchmarks set by the Ministry of
Finance are implemented by the Central Bank. Its main aim is to manage ‘The Fund’ in such a way that ‘The Fund’s value will be maximized especially its expected returns. It does all the risk evaluation and control pertaining to ‘The Fund’ and reports back to the Ministry. It also provides any professional advice and exercises the rights of ownership of ‘The Fund’.

The Norges Bank manages ‘The Fund’ separately as an exchange reserve from its own exchange reserves. The Pension Fund is therefore not part of the task for the Central Bank and is strictly separated from the Norges Bank’s own activities. Again the Central Bank is autonomous from the government, therefore, maintaining a distance between politicians who could have some influences on ‘The Fund’. The system of management of the pension fund is clearly based on three vital criteria, that is, transparency, accountability and professionalism. Below is Figure 10, which illustrates the structure of governance and management of the Government Pension Fund. This structure is founded on Act, regulations and separate contracts.

**Figure 10: Governance structure of the Pension Fund-Global**

(Source: The Norwegian Ministry of Finance)

Ethical guidelines were introduced in 2004 for ‘The Fund’. It has two instruments being used which are; the right of ownership and the exclusion of companies from ‘The Fund’. The right of ownership being the obligation to ensure that financial returns are such that future
generations too, would benefit from the oil wealth. The exclusion of companies from ‘The Fund’ has to do with the obligation to respect the fundamental rights of persons who might be affected by companies due to ‘The Fund’s investment in those companies. In addition, the exclusive mechanism is a defensive measure aimed at avoiding situations where ‘The Fund’ runs the risk of being complicit in ethically unacceptable practices.

The benchmark for ‘The Fund’ serves as a risk control mechanism for ‘The Fund’ and also assesses the performance of the Norges bank with regards to its management of ‘The Fund’ by comparing actual returns with the returns on the benchmark portfolio. Going by the benchmark, ‘The Fund’ is only invested in the international finance market spreading over various countries and companies abroad. 60 percent of ‘The Fund’ is invested in equities while the 40 percent is invested in bonds. This allows the investment to be diversified thus reducing risk while maximizing expected returns that accrues on ‘The Fund’s investments. Investing ‘The Fund’ abroad also promotes exchange rate stability in the Norwegian economy. Figure 11 below, shows the benchmark of ‘The Fund’:

*Figure 11: Benchmark for the Government Petroleum Fund-Global*

```
(\textbf{Equity index:})
\textbf{FTSE All-Cap Index}
\textbf{Approx. 7000 equities}

(\textbf{Fixed income index:})
\textbf{Lehman Brothers Global Aggregate/Global Real}
\textbf{Government/Agency/Corporate/Securitized}
\textbf{Approx. 7500 bonds}
```

(Source: The Norwegian Ministry of Finance)
ii. Fiscal policy guidelines ("The spending rule")

After the establishment of the Pension fund, it was realized that just establishing a fund alone could not curb spending efficiently especially in times of a boom in oil revenues thus there was the need for some guidelines that could complement ‘The Fund’. The fiscal policy guidelines were put in place in 2001. These guidelines serve as formal guidelines that anchor the use of the petroleum revenues. The fiscal policy guidelines stipulate that;

The use of petroleum revenues over government budget into the economy should be gradually phased, approximately in pace with an estimated 4 percent real return on the assets in the Pension Fund-Global.

Thus fiscal policy shall be geared towards a gradual increase in the use of petroleum revenues. Over time, the structural non-oil central government budget deficit shall correspond to the expected real return, estimated at 4 per cent, on the Government Pension Fund - Global.

- The actual implementation of fiscal policy should, however, take into consideration, the business cycle fluctuations.

This therefore allows fiscal policy to be used actively to counter fluctuations in economic activity. In a cyclical expansion, fiscal policy restraint relative to the spending rule is necessary, whereas in a cyclical downturn higher spending of oil revenues is justified so as to stabilize the economy.

- The automatic stabilizers should have room to work.

The spending rule is based on annual real returns on ‘The Fund’, thus actual realized revenues from the petroleum activities is what is considered and not on uncertain expected revenues. There is some flexibility with the 4 percent spending rule as well. For instance, when the Norwegian economy experienced relatively low capacity utilization in the early 2000s, the structural non-oil budget deficit rose above the 4 percent limit. Then between 2006 and 2008 when there was a cyclical boom, spending of the petroleum revenues was reduced below the 4 percent path. In 2009, due to the financial crisis, there was the need to counter the adverse effects which might result from the crisis on the economy. So the spending limit was increased again above the 4 percent path.
iii. Regulations

(Kolstad and Soreide, 2009) suggest that regulations are very much required in natural resource sectors since the privately beneficial choices commonly deviate from the collectively optimal. It is a trend that in almost all oil-producing countries, oil rents are taken as public property. Therefore lack of clarity in property rights could lead to rent-seeking behaviour which would not augur well for the resourceful use of the oil revenues.

Right from the very beginning of oil and gas exploration, the Norwegian government ensured that it established and defined the Norwegian oil and gas jurisdiction very clearly. Therefore the oil and gas jurisdiction is clearly established as public property and every citizen has legal rights to the oil rents.

Organisation of the activities and the division of roles and responsibilities are clearly stated to ensure that very essential social considerations are safeguarded thus the value created benefits the entire Norwegian public. At the same time, consideration for the external environment, health, working environment and safety is not ignored.

The Petroleum Act (Act of 29 November 1996 No. 72 relating to petroleum activities) provides the general legal basis for the licensing system which regulates Norwegian Petroleum activities (Norwegian Ministry of Finance). This Act establishes that the proprietary right to subsea petroleum deposits on the Norwegian continental shelf is fully vested in the state. Before permission can be awarded for exploration, drilling and production (a production license), the location in question must have already been opened up for such petroleum activities. An impact assessment is also carried out. Production licenses are usually awarded through licensing rounds. Production licenses are awarded on the basis of impartial, objective, non-discriminatory and published criteria. Company applications received by the Ministry of Petroleum and Energy are put together into group of companies for each license or adjustments are made for companies which submitted a joint application. The Ministry of Petroleum and Energy appoints an operator for this partnership. This operator is responsible for carrying out the day to day activities under the terms of the license. There are no upfront payments for the award of a license. The production license regulates the rights and obligations of licensees in relation to the state. It also supplements the provisions of the Petroleum Act and specifies detailed terms for each license. The license provides an exclusive right for exploration, drilling and the production of petroleum within the geographical area specified in the production license. Ownership of the petroleum produced rests with the licensees.
iv. Tax regimes

The instruments for the government’s stake are taxes, the State Direct Financial Interest (SDFI), dividends from ownership in Statoil Hydro, Carbon dioxide tax and area fees. Taxes and the SDFI are by far the most important instruments and in aggregate the two accounts for more than half of the total government take from petroleum activities. Norway has a special system designed to secure state revenues from its petroleum sector.

The petroleum tax system is based on a net surplus taxation and the Norwegian rules for ordinary corporate tax. All relevant expenses are deducted to arrive at taxable net income. The first charge is the ordinary corporate tax of 28 percent which is applicable for all companies in Norway. After subtracting an investment based uplift (or extra depreciation), the adjusted net income is taxed at the Special Tax rate of 50 percent.

The marginal tax rate on Norwegian Shelf income is thus 78 percent. The system has fulfilled its primary task over time of securing income to the state from the petroleum activities. A crucial factor to the success of the tax system has been a 20 efficient tax administration and the stability of the system over time. The Norwegian Oil Taxation Office is very competent and has done an excellent job scrutinizing income returns from the oil companies (Norwegian Ministry of petroleum and energy, 2009). The petroleum tax system has been designed to be neutral, so that an investment project that is profitable for an investor before tax will also be profitable after tax. This allows for the harmonisation of the requirement for significant revenues to the society with the requirement for sufficient post-tax profitability for the companies as well.

The other important source of state revenues from the petroleum sector is the State Direct Financial Interest (SDFI). It is an arrangement whereby the state keeps an interest in a number of oil and gas fields, pipelines and onshore facilities. Each interest is decided at the time when licenses are awarded, and the size of the state interest varies. As one of the several owners, the state pays its share of investments and costs, and receives a corresponding share of the gross income from the production license. The SDFI was established on 1 January 1985. The state-owned trust company Petoro is tasked with the administration of the SDFI portfolio. Petoro is funded by the state budget and does not spend any of the income from the SDFI. As at the beginning of January 2009, the state had direct financial interest in 121 production licenses and 12 joint ventures for pipelines and onshore facilities. The SDFI has continued to take shares in the most promising licenses. The SDFI is, therefore, an important instrument for
increasing the state’s overall take in licenses with high expected profitability and also exactly how much of the value created is devolved on the state.

There are other taxes linked to petroleum activities such as the carbon dioxide (CO2) tax, introduced in 1991 with the aim of reducing CO2 emissions from the petroleum activities, the nitrogen oxides tax and the area fee. The area fee is intended to be an instrument that contributes to efficient exploration of awarded acreage so that potential resources are produced as quickly as possible within a prudent financial framework, as well as to extend the lifetime of existing fields. All proceeds in the taxes from (government take system) flow into the Pension Fund – Global formally through the state budget. In addition, proceeds from sale of government owned shares in Statoil Hydro and sales of SDFI interests are also channeled to ‘The Fund’ to be well distributed.

4.3 Facts about Ghana

4.3.1 A brief review of Ghana’s economy

Ghana is located in West Africa and shares borders with Côte d’Ivoire (Ivory Coast) to the west, Burkina Faso to the north, Togo to the east and the Gulf of Guinea to the south. The economy of Ghana has a diverse and rich resource base. In 2006, the agricultural sector constituted about 37.30% of GDP with 25.30% and 37.50% accruing to industry and services sectors respectively. According to The World Bank 2008 rankings based on GDP (PPP) per capita, Ghana came 140th in the world with US$ 1,452. In the same year, The CIA World Fact Book states that Ghana’s GDP (PPP) was US$ 115.1 billion compared with that of 2007 which stood at US$ 32.55 billion.

GDP

Ghana’s nominal GDP as per UNCTAD records rose from US$ 4.975 in 2000 to an estimated US$ 16.100 billion in 2008. Examination of the country’s nominal GDP shows that GDP has more than tripled over the nine year period 2000-2008. Average growth from 2000-2007 was about 25.64% with 2003 registering the highest annual growth at about 23.81% from 2002. Ghana’s GDP per capita (PPP) compared with that of Angola reveals that the latter’s GDP per capita (PPP) remained higher than that of Ghana throughout the observed period. Table 5 below represents Ghana and Angola’s GDP per capita (PPP) from 2000-2008.
Table 5: GDP per capita (PPP) in US$ for Ghana and Angola from 2000-2008

<table>
<thead>
<tr>
<th>Years</th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ghana</td>
<td>987</td>
<td>1,025</td>
<td>1,062</td>
<td>1,113</td>
<td>1,176</td>
<td>1,251</td>
<td>1,341</td>
<td>1,421</td>
<td>1,518</td>
</tr>
<tr>
<td>Angola</td>
<td>2,624</td>
<td>2,688</td>
<td>3,040</td>
<td>3,117</td>
<td>3,455</td>
<td>3,894</td>
<td>4,631</td>
<td>5,567</td>
<td>6,252</td>
</tr>
</tbody>
</table>

Sources: IMF World Economic Outlook Database, October 2008.

Ghana’s GDP per capita (PPP) grew at an average rate of 54% from 2000 to 2008 whilst that of Angola grew at about 138% for the same period, about 2.5 times more than the figure for Ghana. Ghana registered its highest growth in 2006 with a 7.15% and the lowest growth in 2000 with 3.34%. Angola on the other hand, registered its highest growth in 2007 with 20.20% and the lowest in 2000 with 2.25%.

Balance of payment

Capital goods, crude oil and energy have constituted the most important items of import to Ghana (Oteng-Abeyie and Frimpong, 2008). Ghana reached the enhanced HIPC Initiative decision point on February 2002 and qualified for debt relief under the fiscal / openness and net present value of external debt-to-exports criteria. It was the former criterion that offered significant debt relief of US$ 2.2 billion or in nominal terms US$ 3.7 billion required to lower the net present value of external debt-to-government budget revenue ratio to 250 per cent (Bank of Ghana, 2006). The current account position (including official transfers) moved from a deficit of 6.1% of GDP in 2001 to a deficit of US$ 812.67 million, equivalent to 6.5% of GDP in 2006. Gross international reserves have improved from US$ 233.4 million (0.8 months of imports of goods and services) in 2000 to US$ 2.27 billion (equivalent to 3 months of imports of goods and services) in 2006 (Ministry of Finance and economic planning report, 2008). The above analysis shows that external trade is a key determinant of economic growth and development in Ghana.

Inflation and interest rates

Headline inflation has been reduced from 40.0 per cent in 2000 to just 10.1 per cent at the end of October 2007. Annual average rates of inflation from 2002 to 2006 were 14.8%, 26.7%, 12.6%, 14.4% and 10.5% respectively. Ghana’s economy (particularly inflation rate) is greatly influenced by international oil prices since, as mentioned earlier, crude oil and energy
constitute important component of imports thus exposing the country to imported inflation risks. For instance, at a news conference in November 2009, Governor of The Bank of Ghana, Mr. Kwesi Amisah-Arthur, said the oil import bill at the end of October 2009 had increased to US$ 1.3 billion, but compares with US$ 2.1 billion for the same period in 2008 (joyfmonline.com).

The government of Ghana has been working towards a single digit inflation figure for some time now but this is usually thrown out of gear during election years when government spends indiscriminately on populist projects in order to attract votes. Inflation rates have therefore been cyclical, with high rates during election years and low rates after elections. The cyclical nature is not only dependent on elections but also on international oil prices.

In Ghana, the 91-day government of Ghana Treasury bill rate usually serves as the benchmark interest rate. In 2006, money market interest rates eased downwards, with the 91-day Treasury bill rate dropping from 11.77% at end 2005 to 10.19% at end December 2006. Average base rates of banks also declined steadily from 24% at the beginning of the year to 19% for 2005 and 2006 respectively. The 91-day Treasury bill rate was 24.67% in 2008. Interest rates in Ghana are relatively higher than those in Angola.

General well-being in Ghana from 2000 to 2007, as measured by the UNDP’s Human Development Index (defined earlier in section 4.1.4.3), rose by 0.88% annually from 0.495 to 0.526. The country was ranked 152nd in 2007 out of 182 countries with data.

4.3.2 FDI trend in Ghana compared with Angola

From table 2 in section 4.1.3, Ghana recorded a decline in FDI by about 46.39% in 2001 compared with 2000. This decline continued until 2003 when it registered a growth of about 77.79% from 2002. The growth remained positive throughout the rest of the period (i.e. 2003-2008) with the highest annual growth of about 338.62% in 2006 compared with 2005. Ghana received its highest FDI inflow in 2008 with US$ 2.120 billion and received its lowest flow in 2002 with US$ 59 million. From 2000 to 2008, Ghana’s share of total world FDI inflow remained inconsistent. Figure 10 is a graphical representation of Ghana’s share of total world FDI and FDI as a percentage of GDP.

A comparison of the percentages represented in Figure 12 below and table 1 indicates that Angola’s FDI inflow as a percentage of GDP is relatively higher than that of Ghana. Although both countries recorded varying and fluctuating growth in this regard, Angola registered a record high of 40.73% in 2003 and a record low of 9.62% in 2000 compared with Ghana’s
1.38% and 3.33% for the same periods. A simple interpretation of the above trends is that, the contribution of FDI to Angola’s economy measured as a percentage of GDP is higher than that of Ghana. As per the composition of FDI figures, (as defined by UNCTAD in section 4.1.2) this also means that, foreign capital plays a more significant role in the production of goods and services in Angola than in Ghana. Ghana has however recorded significant improvements in FDI as a percentage of GDP from 2006 (4.93%) to 2008 (13.25%) especially.

**Figure 12: Ghana’s FDI inflow as percentage of GDP and total world FDI inflows.**

Both Ghana and Angola’s share of total world FDI inflows still remain relatively low. Ghana received its highest share of total world FDI inflow in 2008 with 0.13% and Angola’s highest share was in 2003 with 1.01%. The combined percentage share of both countries of total world inflows remained below 1% throughout the observed period except in 2003 (1.03) and 2008 (1.04%).

The Ghana Investment Promotion Centre (hereafter referred to as GIPC) regulates and provides guidelines to all investors (local and foreign) in Ghana. According to the GIPC 2007 3rd Quarter report, the FDI component of all investment projects constituted about US$ 121 million representing 99% of all investments for the quarter. About 3,387 jobs were expected to have been generated from the new projects registered, with about 3,078 (90.87%) constituting Ghanaians and the remaining 309 (9.09%) being expatriates (GIPC, 2007). In the 1st quarter of 2008, the FDI component of the estimated cost total projects is US$2.987 billion which is about 98.5% of the total cost of projects recorded. About 70.5% of these investments went to the building and construction sub-sector. 9,707 job openings were
expected to have been generated from the number of new projects registered in the quarter. 9,085 (93.59%) will be Ghanaians, and the remaining 622 (6.41%) expatriates (GIPC, 2008).

The figures quoted above are a confirmation of the role FDI plays in the economy of Ghana. The jobs created provide income to local labour and the trickling effects of employment are felt in every sector of the economy.

4.3.3 Ghana's oil potential and its implications

Ghana recently found crude oil in June 2007 off the shores of its Western Atlantic Coast. Jubilee field's estimated reserves, as of October 2009, amount to 490 million barrels of high-quality oil and justify commercial exploitation should barrel oil prices exceed US$30. At its peak (mid 2011 - mid 2016), some 120,000 barrels of oil per day could be extracted – making Ghana a net oil exporter for a short while, and the overall period of activity could span over two decades. Ghana's current oil consumption is between 40,000 to 60,000 barrels a day. The implication of this discovery is that, on average, the country would export about 50% or more of its total production into the international market.

4.3.4 Structures within the oil industry in Ghana and current trends

GNPC was established as a State-owned entity and given legal backing by two main statutes i.e. PNDC Laws 64 and 84. The PNDC Law 64 of 1983 mandates the Corporation "to undertake the exploration, development, production and disposal of petroleum" and PNDC Law 84 establishes the legal framework governing the contractual relationship between the State, GNPC and the prospective investor in upstream petroleum operations. These two statues are supplemented by the Petroleum Income Tax Law, PNDC Law 188 of 1987 (GNPC website). The ‘petroleum exploration and production law, 1984 P. N. D.C.L. 84’ regulates all activities of petroleum exploration, extraction and production in Ghana. This law gave authority to the Ghana National Petroleum Corporation (GNPC) and states that no person other than the GNPC shall engage in the exploration, development or production of petroleum except in accordance with the terms of a petroleum agreement entered into between that person, the Republic and the GNPC (PNDCL 84).

In June and September 2007, a consortium of companies comprising Kosmos Energy Ghana (Kosmos), Tullow Ghana Ltd, Anadarko Petroleum Corporation, Sabre Oil and Gas Ltd, the E. O. Group in conjunction with the GNPC announced the discoveries of significant quantities of oil and gas in offshore Deepwater Tano and Cape three point basins (GNPC Status report on Jubilee field oil and gas development). Kosmos, a US oil and gas firm currently has a
working interest of 30.88% in the West Cape Three Points Block. Other partners including Anadarko, with 30.88% working interest; Tullow Oil plc, with 22.90% working interest; Ghana National Petroleum Corporation, 10% participating interest; E.O. Group, 3.5% working interest; and Sabre Oil and Gas Limited, 1.85% working interest. Deep Water Tano Block’s composition of working interests are: Kosmos energy 18%, Tullow Oil plc, 49.95% working interest; Anadarko, 18% working interest; Ghana National Petroleum Corporation, 10% participating interest; Sabre Oil and Gas Limited, 4.05% working interest.

A host of other exploration activities are underway in Ghana aimed at fully exploring the oil potential of the country. All exploration agreements are governed by Petroleum Agreements between the government of Ghana represented by the GNPC and the oil exploration companies. There are currently twelve petroleum exploration agreements namely: Deepwater Tano Block – Tullow, Offshore Cape Three Point – Vitol, South Cape Three Point – Vitol, Offshore Keta Basin – Afren, Offshore Saltpond Basin – Oranto, Offshore Saltpond Basin – Gasop, Saltpond Fields – SOPCL, South Tano -Aker ASA, Tano Shallow Water – Tullow, Deepwater Tano - Hess Corp, and West Cape Three Point – Kosmos agreements. An important point to note is that all these agreements contain a ‘local content clause’ which seeks to ensure local participation in the exploration and production activities. For instance the ‘Jubilee oil field (consisting of the Tano deep water and West cape three points) contains a ‘local content and training clause’ which requires partners to utilize Ghanaian goods and services where they are available in qualities and quantities acceptable in the petroleum industry (GNPC Status report on Jubilee field oil and gas development).

**Fiscal regime**

The current regime in place applies as applied to the consortium in charge of the Jubilee field exploitation comprises the following elements: a 5 percent royalty for oil revenue; a 10 percent tax on petroleum revenue net of royalty and operational expenses (i.e., the oil rent); a share of the oil rent growing with the rent amounts; and 35 percent income tax (The World Bank Africa region report, 2009).

### 4.4 Applying findings in case studies to Ghana

#### 4.4.1 Expectations and the way forward with inference from Angola

**FDI**

Evidence from section 4.1.3 and FDI literature (e.g. Morisset, 2000) suggest that in Africa, countries with abundant natural resources attract more FDI than those with fewer natural resources.
resources. Ghana already possesses a lot of natural wealth which have served as bait for foreign investments. Watts, (2006) states that U.S. oil companies alone have invested more than $40 billion in Africa over the last decade (with another $30 billion expected between 2005 and 2010). Oil investment now represents over 50 percent of all foreign direct investment (FDI) in the continent (and over 60 percent of all FDI in the top four FDI recipient countries), and almost 90 percent of all cross-border mergers and acquisition activity since 2003 has been in the mining and petroleum sector.

With the oil discovery and exploration, FDI is expected to rise in the oil and gas industry and other related sectors of Ghana’s economy. For instance, two multi-national oil field service providers namely Africa Oilfields Service Limited (AOS) and Orwell International (Oil & Gas) Limited, have committed US$ 5 million worth of equipment to Ghana’s oil and gas industry. The two corporate entities plan to grow the investment to US$ 15 million, subject to demand expansion in Ghana.

Ghana’s oil potential is relatively smaller than that of Angola and thus, the effects of oil related activities in attracting FDI and its impact on the economy is expected to be lesser than that experienced in Angola. Analysts have quoted varying oil reserves in Ghana ranging from 1.8 to 5 billion barrels. Angola’s reserve as per 2008 BP Statistical Energy Survey is about 9.035 billion barrels. Putting Ghana’s estimated reserve at an average of 2.5 billion barrels, the benefits accruing to Ghana in terms of FDI inflows and economic development will be 3.6 times less than that accruing to Angola ‘ceteris paribus’. What this means is that, if US$ 3.6 is invested in Angola as a result of its oil wealth, only US$ 1 worth of investment will accrue to Ghana in that regard. The implication is this;

If quantity of oil reserves would be a major determinant of the amount of FDI inflows to the oil sector, a 50% or so of total FDI inflows to Angola going to the oil sector would mean that, about only 14% of all FDI inflows in Ghana would accrue to the oil sector (using simple proportion based on the 3.6:1 ratio deduced from oil reserves). This would mean that the current average growth of 130% in FDI from 2000 to 2008 (as per UNTAD records) is expected to increase to about 144% for the coming years as a result of the extra 14% oil led investments expected.

Ghana’s positions on the IFC and The World Bank’s ‘ease of doing business rankings’ from 2006 to 2010 are 102\textsuperscript{nd}, 94\textsuperscript{th}, 87\textsuperscript{th}, 87\textsuperscript{th} and 92\textsuperscript{nd} respectively. A simple interpretation of the trend observed in these rankings is that it is relatively easier to do business in Ghana in 2010 than in 2006. This may be as a result of Ghana improving its business environment compared
with other countries or as a result of business environments in other countries getting worse. Ghana’s rankings have been consistently lower than that of Angola for the same period. This means that it is relatively easier to conduct business in Ghana than in Angola although Angola has attracted more FDI than Ghana throughout the observed period especially as a result of oil exploration activities (refer to sections 4.1.2 and 4.1.3). It is therefore expected that more FDI flows will be received by Ghana ‘ceteris paribus’ as a result of the oil exploration.

Accra and Tema have traditionally been the recipients of most FDIs in Ghana because Accra is the capital city and Tema is an industrial city and also hosts one of the country’s two major harbours. This trend is however expected to change in favour of the towns near the oil blocks. Angola, as discussed in section 4.1.4.4, benefits from FDI led development in its economy as a result of the country’s attractiveness to FDI basically because of its locational attraction in oil. Areas near oil blocks alone have received about 50% or more of all FDI inflows. A similar trend is expected in Ghana with Secondi/Takoradi and Accra being the most likely to benefit more from oil related investments. The twin cities of the Western region of Ghana, Secondi and Takoradi, are the nearest cities to most of the oil blocks and are thus expected to play host to a lot of oil related investments. Accra on the other hand is the commercial and administrative nerve centre of Ghana and is also expected to benefit directly and indirectly from oil led FDI inflows.

**Local industry**

Local industries will equally receive a boost as a result of these expected oil led investments. Firms in the transport and haulage sector, energy, building and construction, hospitality, food and beverage, etc sectors will provide complementary services to the multinational oil companies. This is expected to revamp some sections of the dormant local energy industry.

Banking and insurance activities are also expected to see a major boost since oil related investments involve huge amounts of financial (capital) transfers and risks. The Bank of Ghana raised the capital requirement of banks in Ghana in order to provide them with the necessary capital base to deal in huge financial transactions. The Ghana National Insurance Commission has followed suit by increasing the capital requirement of insurance companies. Insurance is a vital component of the oil industry due to the risks associated with exploration, production and transportation. International insurance companies have started opening up in Ghana and local insurance companies are expected to compete with as well as learn best international practices from these international insurance companies.
GDP

Taking that about 50% of all FDIs accrue to the oil sector in Angola as per our analysis of available data and taking 2008 FDI and nominal GDP figures (refer to table 1) of Angola into consideration, FDI as a percentage of nominal GDP accrued as a result of oil related investments will amount to about 10.83% of nominal GDP. A further analysis, based on the relative oil reserves of Ghana and Angola above, would mean that if oil related FDI inflows in Angola could amount to about 10.83% of nominal GDP, about 3% (i.e. based on the 3.6:1 ratio above) of Ghana’s nominal GDP could as well accrue from oil related investments if such investments would make up about 50% of future FDI inflows.

With average growth rate of nominal GDP (from 2000-2008) being approximately 24.81% as per UNCTAD records, an additional 3% from oil related FDI inflows would result to about 27.81% growth in nominal GDP for future periods. With government of Ghana’s determination to keep inflation rates low, average inflation rate of 18% (i.e. average inflation rate for Ghana as per IMF records from 2000-2008) would in simple terms mean that real GDP growth would amount to about 9.81% as against the current average of about 5.63% from 2001-2008 as per IMF 2009 World Economic Outlook figures.

The IMF however estimates that real GDP growth is expected to be about 5.8 by 2014. As a compromise between our estimated real GDP growth rate figure of 9.81% and the 5.63% of the IMF (using simple average), we postulate that real GDP growth by 2014 would amount to about 7.8% taking into consideration the expectation that domestic oil production would reduce (to some extent) imported inflation associated with Ghana’s oil import bill and also on condition that the government would work assiduously towards maintaining low inflation rates.

However, as per our analysis using simple proportion based on oil reserves, about only 14% of total FDI to Ghana is expected to accrue to the oil sector. If total FDI inflow as a percentage of nominal GDP is 13.25% in 2008, then oil related FDI inflows as a percentage of nominal GDP would be about 1.86%. With average rate of nominal GDP growth of 24.81 as quoted above, an additional 1.86% would result to about 26.67% for future periods. With an average inflation rate of 18% (as quoted above) would in simple terms result to about 8.67% growth in real GDP. A simple average of this growth rate and that estimated by the World Bank (5.63%) for 2014 would amount to 7.15% expected real GDP growth rate by 2014 ‘ceteris paribus’.
4.4.2 Estimated contribution of oil to Ghana’s economy

Government revenue

Based on the fiscal regime in place, and a price assumption of US$ 75 per barrel, the World Bank’s central estimate puts potential government revenue at US$ 1 billion on average per year between 2011 and 2029. By way of comparison, government revenue in 2008 reached US$3.7 billion (excluding grants) and GDP US$16.1 billion.

The oil revenue estimate is subject to a large sensitivity. A number of parameters could modify this central estimate. Given fixed costs of extraction, higher/lower oil prices would disproportionally affect revenue. At US$ 50 per barrel, government revenue would go down to an average of US$ 0.4 billion per year; at US$ 100 per barrel, government revenue would conversely go up to an average of US$ 1.6 billion per year. Besides, higher cost of extraction could also significantly impact revenue. A 25 percent overrun in cumulated capital costs (estimated at US$3.4 billion over the period 2009-12) would reduce government revenue by 14 percent. A two-year production peak (instead of a five-year peak) could also reduce government revenue to US$ 0.4 billion per year (The World Bank Africa Region report, 2009).

Phase II of the Jubilee field development would be based on a higher proven reserve base than Phase I and could be launched some two to three years after completion of Phase I. The production rate could be double that of Phase I resulting in a peak level of gross revenues of about US$ 7 billion over some five years from as early as 2015. No cost estimates have been provided by the oil consortium but economies of scale and sunk appraisal costs would imply higher pre-tax returns than for Phase I. Because of the progressive structure of the fiscal regime for any price level, the Government share of net cash flow would be higher under Phase II than Phase I (The World Bank Africa Region report, 2009).

With oil comes gas. Gas would be produced in association with oil at a rate of 1000 cubic feet of gas per barrel of oil. Thus, at peak Phase 1 Jubilee production, Ghana could produce 120 million cubic feet of gas per day. Given Ghana’s non-flaring policy, Jubilee production facilities include capacity to re-inject gas. However, plans underway to build pipelines and processing facilities would result in streams of dry processed gas for use in power generation and natural gas liquids (NGL) for export and domestic use. At current world market NGL prices and a dry gas price of US$ 2 per thousand cubic feet, gross revenues would be roughly US$ 260 million per year, that is, less than a tenth of oil gross revenue. In turn, the
combination of corporate taxation and an assumed 50 percent equity ownership for GNPC in the gas infrastructure would generate US$ 120 million per year for the Government. To this figure could be added an implicit rent of US$ 140 million originating from the difference between a dry gas market value of US$ 6 per thousand cubic feet (as measured by the delivered price of gas from the West Africa Gas Pipeline, WAGP) and that of US$ 2 reflecting the cost of extracting, transporting and processing the gas.

When all or about 80% of the expected revenue above is gained by the government of Ghana and channeled into productive sectors of the economy with majority going to develop non-oil sectors of the economy, a moderately sustainable long term economic development could be achieved without ad hoc use and over-dependence on oil revenue to finance government budget deficit, a phenomenon common with some African oil-rich countries.

**Capital flows and wealth accumulation**

Partners to the oil exploration agreements commit capital mostly in relation to the share of interest in a particular basin. The development of ‘Jubilee field’ alone (phase I and II) is expected to cost about US$ 6-8 billion. With the current composition of ownership interests in the field, about 80% or more foreign capital will be invested in the country thus increasing FDI inflows. The result however is that there is the risk of only 20% of returns on these investments being retained in the country with 80% accruing to foreign investors. Recent agreements however saw the proportion accruing to the state, represented by GNPC, increase marginally to about 12.50%.

According to the GNPC’s Jubilee field report, some local investors have also been given the go-ahead to construct dedicated shore base facilities (offshore ports) to support all offshore exploration and production operations. This will enable local investors to commit capital to such investments with the hope of reaping returns later in the future leading to wealth accumulation. More earning in the hands of local investors gives more room for further investments in same sector or other sectors of the economy thereby ensuring economy-wide impact of oil related earnings.

**Fiscal**

As discussed in section 4.3.1, Ghana spent about US$ 1.3 billion at the end of October (only for 2009) to finance its oil import bill. This, as we argued, has the potential of exposing the country to imported inflation in times of price hikes in foreign oil markets. Another observation in Ghana is the disproportional positive relationship between fuel prices and costs of goods and services. An increase of 1% in fuel prices leads to a more than 1% increase in the prices of goods and services. This significantly raises both the consumer (CPI) and
producer (PPI) price indices thereby contributing to high inflation rates. Ghana does not control international crude oil prices and neither will it control it when it starts selling in the international market. However, the haulage and other costs associated with the importation of crude oil could be significantly reduced with domestic exploration. This could (not necessarily) lead to reduced end-user prices since the intermediaries would be able to recover costs at lower per unit prices. The effects would be lower CPI and PPI thus providing better control over inflation rates.

Oil booms could lead to exchange rate appreciation and influence the strength of the Ghana cedi in relation to other major foreign currencies. This has both positive and negative effects. A positive effect could be an improvement in the country’s balance of trade and/ or balance of payment ‘ceteris paribus’. The appreciation could also negatively affect the exportation of agricultural products which have been one of Ghana’s highest contributors to export earnings.

**Jobs and infrastructural development**

The GNPC reports than there is a recruitment committee made up of GNPC and the unit operators (Tullow in the case of Jubilee field) to recruit the staff for the operations. About 60-70% of available places will be filled by Ghanaians. A plan is expected to be drawn up to generally increase the Ghanaian component to about 90% in the next 5-10 years. Jobs will provide incomes to local labour and thus improve living standards of citizens.

Takoradi, the coastal town serving as the host to some of the oil fields, has experienced swift infrastructural developments in terms of roads to sites, office buildings, etc. Social and economic benefits accompany infrastructural development and these are expected to have positive impacts on the living standards of Ghanaians.

Social responsibility activities of firms operating in Ghana especially in the extractive sector have come under strict public scrutiny because of the environmental impact of their activities. The mining companies in Ghana have thus been actively involved in supporting education, health, sanitation, etc especially in their local environment. Firms within the emerging oil and gas sector are also expected to contribute their quota to social development in terms of social responsibility activities.

Ghana has for some time been suffering from cyclical fluctuating power supply. This has been as a result of the country’s over-reliance on the Akosombo hydro electric dam and Takoradi thermal plant for its electricity needs. The thermal plant uses light crude or natural gas as fuel and astronomical fuel prices significantly increase the cost of production and thus affect
supply of electricity. The production of oil and gas would mean that the plant, which is nearer to the oil blocks in the Western region of Ghana, would receive a more consistent and cheaper supply of crude and gas for its operations thus ensuring a more relatively sustainable power supply to ensure regular flow to commercial (production) and domestic consumers.

According to The World Bank, recent drops in Ghana’s fiscal recurrent balance undermines its ability to use oil revenue for financing investment. The report states that in the last four years, Ghana’s recurrent balance declined from 8.3 to 2.1 percent of GDP, mostly as a consequence of increased public sector wages and energy subsidies. The promised single spine payroll reform, pending issues related to payroll management, and the absence of cost-recovery mechanism in the energy sector are all threatening to bring this balance further down. With a recurrent balance at 2 percent and concessional borrowing historically at 5 percent of GDP, Ghana with Development Partners can now finance 7 percent worth of investment expenditure, far below the 10-11 percent needed to rapidly close its infrastructure gap.

Ghana’s reserves are relatively modest by international standards, and will thus not radically transform Ghana’s economy into one where oil becomes the major sector. Nonetheless, they are already large enough to deeply affect the future of the non-oil economy, positively or negatively (The World Bank Africa Region Report on Ghana, 2009).

4.4.3 Lessons from Norway applied to Ghana

Collier (2006) cautions against a one size fits all approach and points out developing countries should guard against adopting a Norway model since they are already resource scarce. We appreciate that there is no ‘one size fits all’ approach when it comes to oil revenue management and also by using Norway as a model, we are not prescribing that Ghana must or should adopt Norway’s model. However, Ghana can learn from Norway’s model and then adapt its model to fit their peculiar circumstance.

As shown from our previous analysis in chapter 4, Norway has become one of the few oil-exporting countries (OECs) which has so far been able to successfully manage its oil wealth to the benefit of its citizens. Although Norway varies greatly from Ghana in so many aspects such as: the level of development, the system of governance, institutional capacity and various macroeconomic factors such as public debt and liquidity position of the two nations as well as corruption levels, this notwithstanding, a lot of lessons can still be drawn from Norway’s oil
sector and revenue management mechanisms. Like the adage, ‘one must always learn from the best’.

The first lesson to be learnt is, when Norway first discovered that it had oil deposits in its continental shelf, it did not immediately rush to start production. Instead, the Norwegian government took full control and got involved in laying down rules and legal rights over the fields. The government clearly defined the jurisdiction of the oil fields. It established a clear legal property rights over the continental shelf entitling to all the Norwegian people, the rights of ownership to the oil fields.

Ghana’s recent discovery of crude off its western coast in 2007 was met with cheers and joy amongst Ghanaians. This is because of the impression that oil production can bring about a transformation in Ghana’s economy. However, along the production of oil and revenues from the production come challenges of various natures. One of which is the challenge of ensuring that the oil resources does not end up in the hands of a few individuals or groups who will merely seek to satisfy their own personal interest rather than the public’s benefit. Therefore before any benefits can be reaped from being involved in oil production, several structures have to be put in place before and during production, starting with the clear definition of the jurisdiction of the oil fields. There must be a legal property rights established over the Jubilee fields. The reason is that the oil fields operate in deep sea and on public land. Ghana’s nautical boundaries must be well defined to avoid international border conflicts with neighbouring countries. Also, resources are extracted from public grounds bringing about depletion of public capital base especially in the case of non-renewable natural resources. Therefore the public needs to be compensated for the loss of these natural resources and the compensation put to good use for public benefit as well as build up other assets that will secure a continuity of income in the event that the current resource gets completely exhausted.

So far, all the fields discovered to have oil deposits, the Ghana government only has about 10 percent working interest in each of the fields while the remaining interest goes to private and mostly foreign partners. Like Norway, efforts should be made by the government of Ghana to increase the state’s interest in the current fields as well as in subsequent discoveries and a jurisdiction clearly defining the fields.

Norway’s highly consensus-oriented political groups, parliamentary institution and interest groups made it possible for Norway to do away with discretionary power and increased transparency in the government. The state has been able to formulate policies with long-term horizon and stick to them, it does not matter which political group is in power. Therefore,
there is stability of goals. Each political group that came took over power saw the need to restrain public spending and at the same time, improve the non-oil tradable sector of the economy. In this respect, Ghana can be successful in emulating Norway. Ghana’s political system is not dominated by any one political party and these political groups are well institutionalized. In addition, the presence of very influential, strong traditional leaders can pave way for restraint by political groups not to pursue policies of self interest and of their discretion only. Thus consensus building among all political groups can pave way good and long-term policies which ensure efficient use of the oil revenues and stable achievements of goals.

When Norway made its discovery in oil, it had absolutely no experience in the operations and management of a petroleum sector. The Norwegian government allowed foreign companies to carry out the petroleum activities with the main objective of training their Norwegian counterparts. Thus partnerships were formed with the foreign companies. Gradually, there was a transfer of knowledge and technology from the foreign partners to the Norwegians gradually strengthening the Norwegian involvement. This policy has enabled Norway to build up its own very competent oil companies and competitive supplier industry.

Currently, the Ghana government is collaborating and relying on several foreign companies to carry out exploration activities and eventually the production of petroleum. These exploration activities are governed by Petroleum Agreements between the Ghana National Petroleum Corporation (GNPC) which is representing the government and these foreign companies. These Agreements contain what is called ‘local content clauses’ seeking to ensure local participation. Most of these clauses require that partners use local goods and services where they are available. We need to emphasise that it is not enough to merely mention in clauses but efforts should be made to ensure and enforce these clauses. High quality training institutions and structures should be established to enable the smooth transfer of knowledge and technologies.

The Ghana National Petroleum Corporation was established as a state-owned entity. It is given the legal right to undertake the exploration, development, production and disposal of petroleum as well as establish the legal framework governing all petroleum contractual relationships between the state and other parties in Ghana. Though the GNPC has for several years been involved in oil exploration activities, it was not until 2007 that oil was found in commercial quantities. We can therefore say that the GNPC is yet to fully utilize its full powers and resources for full time oil production. Learning from the Norwegian case, the
GNPC together with the Ministry of Energy would have to set up organizations to scrutinize well the calibre of companies wanting to participate in the petroleum sector. Division of roles and responsibilities of these organizations and their activities should be clearly stated. By emulating the Norwegian case, the state together with other stakeholders should review and come out with a Petroleum Act (this process is currently underway in Ghana). This act would provide general legal basis for licensing systems and all other petroleum activities with the aim of safeguarding very important social values.

Another set of challenges related to oil production has to do with the management of oil revenues which can be highly uncertain, volatile and exhaustible. Management of the oil revenue is our major focus since Africa is well noted for its ‘paradox of plenty’ situation basically as a result of mismanagement and corruption. The problem of oil-rich African countries is not about the amount of revenue received through the exploration of its natural resources but rather with the allocation and management of the revenues. Norway is deemed as relatively successful in managing its oil revenues to the benefit of the citizenry. The government has been able to restrain government expenditure which is highly likely considering huge inflows of oil revenues. It established a Petroleum Fund aimed at shielding the domestic economy from oil revenue fluctuations and is also used to mitigate exchange rate pressures thus avoiding the Dutch disease and preserving a diversified non-oil sector of the economy.

‘The Fund’ also serves as a means of long-term saving for the benefit of future generation and at the same time too to take care of its large aging population in the form of increased pension. In this respect, the government views the oil wealth as a financial asset rather than an income thus it only spends a tiny proportion of its oil revenues while the larger portion is put into ‘The Fund’ which is then invested abroad.

The integration of ‘The Fund’ with the budget enhances greater efficiency of public spending while coordinating fiscal policy. The transfer of revenues between ‘The Fund’ and the budget is also flexible and always with the stabilization of the economy in mind. The operations of ‘The Fund’ is strictly according to guidelines and rules governing ‘The Fund’ and Government has no sole authority of deciding how to spend from ‘The Fund’. Every transfer into or from ‘The Fund’ comes with the approval of the Parliament, while detailed information about the operations of ‘The Fund’ is made available to the public through quarterly and annual reports. ‘The Fund’s management is therefore transparent and
professional, thus the public also have high level of confidence in the operations of ‘The Fund’.

This has enabled the government to postpone spending since the people do not mind putting away their entitlement of the oil wealth until retirement. What makes the Norwegian Government Pension Fund particularly useful to Ghana’s case is that it falls under the criteria given by an IMF report of an effective oil fund. According to this report, IMF (2007), an effective oil fund should be easily integrated with the budget of the state, it should not have a sole authority to spend, and stringent mechanisms should be put in place to ensure transparency, good governance and accountability. With the proper implementation of such a Fund, Ghana could minimize the impact of some of the challenges of increased public expenditure, appreciation of exchange rate, the Dutch disease phenomenon, improve public benefit while at the same time put the oil revenues to effective use for the benefit of the Ghanaian citizens and save for long-term use.

The first step to ensure appropriate oil wealth management in Ghana is to enact an act of parliament to establish/create a fund similar to the government pension fund of Norway. This act must clearly stipulate the ownership, management, regulation and monitoring activities of ‘The Fund’. Separation of duties and responsibilities at different levels of ‘The Fund’s administration will to some extent reduce the tendency of corrupt practices. ‘The Fund’ must be managed by a separate and new department of the Bank of Ghana or by an independent body established by the fund act. The constitution of the membership of this body must as much as possible be devoid of political affiliations or if so, from different political divides so as to institute automatic internal checks and balances within the board.

The Ministry of Finance and Economic planning must be given oversight responsibility over ‘The Fund’ and be allowed to establish benchmarks, set targets and performance standards in consultation with the Parliamentary sub-committee of Finance and also evaluate performance. Funds must be invested in equities and bonds in foreign capital markets after due risks and return assessment. Any transfers to and from ‘The Fund’ must be communicated and approved by the Ministry of Finance and Economic planning and Parliamentary sub-committee of Finance. The Bank of Ghana must report progress to the Ministry of Finance and Economic planning on monthly basis and the ministry in turn must report to the Parliamentary sub-committee of Finance on quarterly basis and annual reports on the floor of parliament by the minister of finance to update policy makers and the public on the performance of ‘The Fund’.
Like Norway, ‘The Fund’ must be managed at three levels; legislative level by the Parliament of Ghana, principal level by the Ministry of Finance and Economic planning, and management level by the Bank of Ghana. Due to corruption concerns, there must be four total audits annually. At the legislative by Parliamentary Audit committee, at the principal level by the Auditor-General’s department, at the management level by the Bank of Ghana’s audit committee and finally audit of the entire fund by an independent audit firm (e.g. PWC).

All oil related taxes, licence fees, state direct financial interests, etc must be channelled into ‘The Fund’ and must be prescribed by ‘The Fund’ Act. ‘The Fund’ must clearly state the percentage shares to be invested in equities and fixed income assets. The principles of transparency, accountability and professionalism must guide the management of ‘The Fund’ and must be upheld at all times. Strict penal measures must be prescribed for any financial misappropriation related to ‘The Fund’.

The spending rule to be adopted must be clearly stated by ‘The Fund’ Act. Norway has a spending rule of 4% net worth of ‘The Fund’ annually. Ghana however runs huge budget deficits and would thus need to allocate more than 4% at the initial stages of ‘The Fund’ in order to stabilise the economy. This however does not mean that ‘The Fund’ must not have a forward looking intergenerational spending objective. The logic behind our assertion of higher spending rule at the initial stages of ‘The Fund’ is that, making appropriate spending decisions now in order to secure a more stable economy and future income flows is in our opinion more acceptable than accumulating huge budget deficits whilst ‘The Fund’ accumulates wealth. This high spending rule (our recommendation should be between 40 and 60% of net worth) must be reviewed downward by the Parliament amending ‘The Fund’ Act when a relatively stable budget financing is achieved. Ghana would however need to work on its fiscal recurrent balance as its current state might undermine efforts to appropriately invest the revenues from oil.
5 CONCLUSION AND RECOMMENDATIONS

This chapter concludes our research, makes recommendations to the government of Ghana and makes suggestions for further research in the subject area.

The research sought to find out how Ghana’s oil discovery could cause an increase in FDI inflows into the country, contribute to the economic development of Ghana and to also examine appropriate policy for management of the oil revenues.

African countries with abundant natural resources have on average attracted more FDI than their counterparts with fewer natural resources. Our sample of eight African countries (four resource-endowed and four less-resources endowed countries) reveals that FDI inflows to resource-endowed countries in 2008 alone is about 22 times (total) more than their counterparts with fewer natural resources. It has also been observed that, of the two components within the Dunning locational attraction (i.e. natural resource and market size), the natural resource component has the potential of attracting more FDI than market size in the case of Africa.

FDI contributes to the productive capacity of the receiving country. We expect FDI to add to the productive capacity of Ghana and increase the country’s GDP. Ghana is also expected to reduce imported inflation to some extent by receiving crude supplies from domestic production sources. A caveat however is that, inflation may on the other hand be thrown out of control if government spends revenue from oil indiscriminately (i.e. adopting a bird in hand approach without intergenerational considerations) biased towards stimulating demand without corresponding increase in supply leading to a possible over-heating of the economy.

A more balanced approach must be adopted when Ghana starts exporting oil because oil price hikes could appreciate the country’s currency and thus improve its balance of payments. This could however negatively affect the exportation of agricultural products.

As is usually the case in many oil producing countries in Africa and other parts of the world, oil revenues are mismanaged and misused as a result of poor or inappropriate policies strategies. It is in this regard that Norway’s oil management policies were examined. Norway has been one of the few oil producing countries which has been able very cautious in the use of its oil revenues. The government was able to restrain public expenditure despite the large inflows of oil revenue, save away some of the revenue in investment assets via an oil fund and
at the same time promote competitiveness in the other non-oil sectors such as shipping, farming and fishing. This has made Norway stand out among other oil producing countries.

It is true that Norway and Ghana are two very different countries in so many aspects such as socio, political and macroeconomic factors. However, Ghana can emulate some examples from the Norwegian situation and adapt to suit Ghana’s peculiar case. The use of an oil fund that is ideal to the Ghanaian economic situation and fiscal position could be a way of ensuring that the oil revenues are put to good use. For instance, our recommendation of an initial higher spending rule (between 40 to 60% compared with 4% for Norway) and subsequent reduction is meant to reduce the country’s fiscal deficit position and stabilise the economy so as to ensure that future flows to ‘The fund’ would be free from pressure to support budget deficits.

Most oil producing countries establish oil funds with fiscal policy objective. Oil revenues are volatile and can be very uncertain, this in turn affects government expenditure thus with the mechanisms of an oil fund, the government can stabilize the economy while also financing investments for savings purposes. To make the fund efficient, its management should be professional and transparent. The fund should also be governed with rules and guidelines to ensure accountability and which should be flexible for easy adjustments to fit the fiscal policy provisions. This would ensure the moderate and efficient use of the oil revenues which are to the benefit of the whole state thus promoting economic development.

To add to this, legal rights over the oil fields should be clearly established, making sure that the states get a larger of the oil. This can be achieved by improving the government’s negotiation skills. Since Ghana does not have adequate knowledge and technology in oil production, it could formulate procurement policies in the form of local content clauses that would encourage the training and the transfer of skills. This would help build up a competent Ghanaian workforce that would be at the fore front of the petroleum industry and the use of licensing terms that would mandate the use of local goods and services in the activities of the oil sector would also boost Ghanaian goods and retain capital within the country. Retained capital could be invested into the other sectors such as agriculture thereby promoting competitiveness of these other sectors thus creating employment and reducing poverty especially in the rural areas.

For the past two decades, serious environmental effects of human activities have taken a centre stage as a result of the effects of global warming. The 2009 Copenhagen Climate Conference acknowledged through the ‘Copenhagen Accord’ that climate change is one of the
greatest challenges of our time. Non-renewable natural resource extraction is among the activities that degrade the environment. Our thesis only focused on the economic contribution of oil to Ghana’s economy. Analysis of the contribution of oil to Ghana’s economy taking into consideration the environmental effects of the exploration and production activities of oil companies would be an area worth researching.
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