

**ASSESSING AND REMEDYING  
THE NATURAL RESOURCE CURSE  
IN EQUATORIAL GUINEA**

by

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## Abstract

This thesis identifies and studies the effects of the natural resource curse on Equatorial Guinea by applying three typical theoretical phenomena to the Equatoguinean context: Dutch Disease, volatility of prices and institutional effects. The results show that Equatorial Guinea has very weak institutions and suffers from symptoms of Dutch Disease, but that the country so far has managed to avoid the debt burden related to the volatility of oil prices. It is concluded that Equatorial Guinea is negatively affected by the natural resource curse. Finally, possible remedies are discussed and the importance of improving the institutional framework is underlined.

**Keywords:** *natural resource curse, Equatorial Guinea, Dutch Disease, price volatility, institutions, oil shock, real effective exchange rate*

## Résumé

La malédiction des ressources naturelles en Guinée Équatoriale est analysée à partir de trois approches, le syndrome hollandais, la volatilité des prix et la qualité des institutions. L'étude montre que les institutions du pays sont peu développées et que le pays a été victime d'une forme de syndrome hollandais, mais que le gouvernement a réussi à éviter l'augmentation de la dette publique liée à la volatilité des prix des produits exportés. L'étude illustre les conséquences de la malédiction des ressources naturelles en Guinée Équatoriale et propose des remèdes adaptés au contexte du pays.

**Mots-clés :** *ressources naturelles, Guinée Équatoriale, syndrome hollandais, volatilité des prix, institutions, choc pétrolier, taux de change réel effectif*

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Interpretations of facts, conclusions and recommendations are our own.

Lund, January 2010

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## List of Abbreviations

BEAC	Banque des États de l'Afrique Centrale
CFA	Communauté Financière Africaine / Coopération Financière en Afrique Centrale
CPI	Consumer price index
CEMAC	Communauté Économique et Monétaire d'Afrique Centrale
EITI	Extractive Industries Transparency Initiative
ETT	External terms of trade
GDP	Gross domestic product
HDI	Human Development Index
IMF	International Monetary Fund
ITT	Internal terms of trade
OBI	Open Budget Initiative
PIM	Permanent Income Model
PPF	Production possibilities frontier
PPP	Purchasing power parity
NEER	Nominal effective exchange rate
REER	Real effective exchange rate
UDEAC	Union Douanière et Économique de l'Afrique Centrale
UN	United Nations
UNDP	United Nations Development Fund
WPI	Wholesale price index

# 1 Introduction

The geopolitics of economic and human development is changing. With varying results, developing countries have begun to set their own policies and to control their own economies. Colonial rule is at an end and no consensus reached in Washington will ever again be universally accepted. When it comes to natural resources, the largest oil firms in the world no longer come from western countries but are the national oil companies of petro states in the Middle East and Africa.

Every week, the central African countries around the Gulf of Guinea – Angola, Cameroon, Congo, Gabon, Equatorial Guinea, and Nigeria – produce oil that is worth far more than the entire annual global development aid (Shaxson, 2007, p. 5). Yet, these countries are scarcely more developed than those of their neighbours that lack abundant natural resources. If you look a little closer, they all suffer from problems related to their oil wealth: Nigeria and Angola are swarming with rebels; Gabon has suffered the consequences of real exchange rate appreciation; corruption ravages the economy in Cameroon; production has stopped in all but the petrol sector in Equatorial Guinea; and in Congo civil war has cost thousands of lives. These countries have the financing for development, yet they do not progress.

The belief that natural resource wealth is a blessing has been seriously questioned in recent decades as the experiences of the countries around the Gulf of Guinea, and many others, have indicated something else. Empirical studies have repeatedly shown that the large-scale extraction of natural resources in developing countries may sometimes lead to gross domestic product (GDP) growth, but hardly ever to genuine human development. Whether they are torn by civil strife, suffer from real exchange rate appreciation, fail to adjust policies to changing world market prices, or have hopelessly corrupt leaders, these countries suffer from what has become known as the Natural Resource Curse.

With so much money on the table the stakes are high. The effects of the Resource Curse must be understood and the causes of it countered, before time runs out and the

resources are no more. The ambition must be to find ways of turning natural resource abundance into a blessing.

In Equatorial Guinea, large-scale oil and gas production commenced in 1996 and has, since then, transformed the national economy almost completely. Expressions like ‘petrol shock’ and ‘booming economy’ are sometimes used imprudently, but could not be more accurate in the case of Equatorial Guinea. As the following pages will show, there, if anywhere, large natural resource revenues have created a foundation for a better future. The question is whether the destructive Resource Curse can be avoided?

## 1.1 Purpose

The objective of this thesis is to analyse how resource abundance affects institutions and development. This is done through a case study of Equatorial Guinea’s economic development and the institutional changes in the period after large-scale oil extraction began in the mid-1990s.

In particular, the thesis will attempt to answer the following four questions:

- (i) Has Equatorial Guinea been affected by Dutch Disease?
- (ii) Can other symptoms of the Resource Curse be identified?
- (iii) What policies has the government used and what has been their effect?
- (iv) What other policies could be used?

In attempting to answer the first two questions, the thesis will seek to assess and quantify the effects and workings of the Resource Curse in Equatorial Guinea. The last two questions are more open-ended and this thesis will therefore only present and discuss tentative conclusions.

## 1.2 Methodology

In order to answer the above questions both quantitative and qualitative methods will be used. Existing quantitative studies of the link between natural resource abundance and economic development use broad panel data regressions and specific country case studies.

While frequently referring to the results of the former, this study mainly makes use of the methodologies of the latter. As no case study that we are aware of considers the resource curse in Equatorial Guinea using a comprehensive definition of the malady, there is still room for new discoveries using these tested methods. In particular, we use quantitative methods to calculate the real exchange rate, to estimate the impact of oil price fluctuations on growth and to analyse the changing composition of the Equatoguinean economy. A more in-depth description of the methodologies used is given in chapter four.

In answering qualitative questions regarding policies, institutions and desirable changes, information gathered during interviews is primarily used. The ambition has been to collect the views and ideas of a broad group of stakeholders. Accordingly, during the course of seven weeks in December 2009 and January 2010 interviews were conducted in Malabo, Equatorial Guinea, with some 25 representatives from the following types of organizations:

- Government ministries
- International organizations
- Private companies
- Civil society
- Diplomatic missions

The interviews, conducted in French or English in person by the authors, were structured as discussions built on open-ended questions. No permanent questionnaire was used; instead each respondent was allowed to freely elaborate their ideas in view of their personal experiences. Interviews were summarized in written, compared to information collected from other informants, and used as primary sources in the analysis. In order to protect individual interviewees, no names are given out in this thesis.

### **1.3 Delimitations**

The Resource Curse literature of today offers a very large set of theories. However, this thesis will focus solely on the three main paths of causation that most acclaimed sources mention: Dutch Disease, volatility of prices and institutional effects. While this means

that many interesting paths of causation are overlooked in this thesis, some will be briefly considered in the concluding discussion in order to show how continued research on the resource curse in Equatorial Guinea could be conducted.

It should also be noted that this thesis will primarily consider theories and use assumptions applicable in the Equatoguinean context. The section on cures for the curse will for example primarily consider strategies already used in Equatorial Guinea and possible other approaches suitable to the local needs and capabilities.

## **1.4 Outline**

To place the theory and results in their proper context, Chapter Two of this thesis introduces the recent political and economical history of Equatorial Guinea. In Chapter Three the theoretical framework of the Resource Curse is presented. Separate sections are here devoted to Dutch Disease, volatility of prices and institutional effects. Chapter Four follows the same overall structure, but the focus is instead placed on identifying the symptoms of the curse in Equatorial Guinea. In Chapter Five the Equatoguinean policies to manage the resource wealth are reviewed. Chapter Six concludes the study.

## 2 A Country Is Born

In 1778, Equatorial Guinea was ceded from Portugal to Spain in a barter transaction. But the sole sub-Saharan African part of the Spanish empire was never given priority and the 20<sup>th</sup> century colonization process was characterized by administrative problems, resistance from local inhabitants, and an insufficient physical and financial penetration (Sundiata, 1990, pp. 17-52). Thanks to internal pressure from a strong national movement, as well as external pressure from a world community critical of colonialism and reluctant to accept the Spanish Franco regime as a member of the United Nations (Campos, 2003), two centuries of colonial rule came to an end when Macías Nguema was elected president on October 12, 1968 (Heilbrunn, 2007, p. 238).<sup>1</sup>

In its infancy under the newly elected president, Equatorial Guinea almost collapsed. The adopted democratic constitution was quickly rewritten to give the president dictatorial powers and to ban rival political parties; in 1972, Macías Nguema was declared “president for life” (Sundiata, 1990, p. 67). Weak public administration; grave mismanagement of the economy; an extremely violent regime killing a large part of its population, especially the educated; and a non-functioning educational system led to a shattered economy, a starving population and mass flight from the country. One third of the population is supposed to have either fled the country or been killed during Macías Nguema’s horror rule (Toto Same, 2008, pp. 4-5). A Swedish anthropologist conducting a field study in Equatorial Guinea in 1978 reported a suffering country plagued by systematic terror under “the most regressive despotism in Africa” (Klinteberg, 1978, p. v).

The economic breakdown under Macías Nguema was almost complete. Little reliable data is available from this period, but Toto Same (2008, p. 4) estimates that GDP per capita fell by more than 30 percent during the 1970s to US\$ 170 in 1979.<sup>2</sup> Furthermore, as the

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<sup>1</sup> See for example UN Resolution 1514 (XV). Declaration on the granting of independence to colonial countries and peoples from 1960, and UN Resolution 2355 (XXII). Question of Equatorial Guinea from 1967.

<sup>2</sup> According to Sundiata (1990, p. 91), the lack of economic data from this period is due to the regime’s killing of its educated population, including statisticians.

political instability grew after independence, colonial plantation owners fled the country, and with them European capital. The combination of a collapse of the banking system and a decreasing labour force, with migrant workers failing to return to the plantations and the domestic rural population escaping the country or switching over to grow food crops for personal survival, drastically reduced production of the important export goods (Sundiata, 1990, pp. 91-98). From 1968/1969 to 1978/1979, cocoa production, the single most important export good, fell by 80 percent, yet represented no less than 96 percent of Equatorial Guinea's export in 1979 (Sundiata, 1990, pp. 109-111). Coffee exports ceased almost completely during the same time period. Resultantly, the agricultural sector looked vastly different from the days when it dominated the economy; during the colonial era, Equatoguinean cocoa had been highly appreciated for its quality and was an important export good, along with coffee and timber (U.S. Department of State, 2009).

In the end, the chaos proved to be too much for the ruling clan and the nephew of the president, Lieutenant Colonel Teodoro Obiang Nguema Mbasogo, organized a successful coup d'état in August 1979 and took power. Macías Nguema, who had retired to his remote mainland hometown of Mongomo with the entire foreign reserve packed in suitcases, was eventually captured, tried in an ad hoc tribunal in an old cinema in Malabo and executed by a firing squad from the new president's personal guard (Roberts, 2009, pp. 37-40).

## **2.1 A New Beginning**

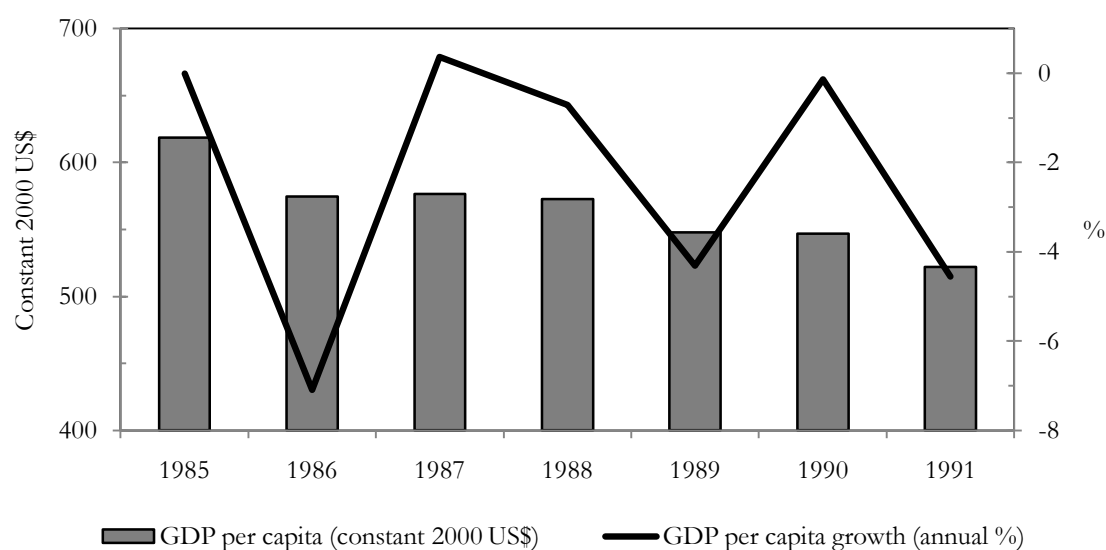
Reconstruction of the legal and administrative frameworks began immediately in order to attract foreign aid and bring the country political stability (Toto Same, 2008, p. 5). A new constitution, prepared with help from the UN Commission on Human Rights, was approved in a 1982 referendum that also served as an approval of Obiang Nguema as president of the republic for the following seven years (U.S. Department of State, 2009).

An economic renewal was also initiated. In the first half of the 1980s, Equatorial Guinea joined the Central African Customs and Economic Union, UDEAC, and in 1985 the country became the sixth member of the Bank of Central African States (BEAC)

(Sundiata, 1990, p. 99). The national currency, the bikwele, was replaced with the Central African CFA franc, at the time pegged to the French franc to a fixed rate of 1 FF = 50 CFA francs. When entering BEAC, Equatorial Guinea accepted monetary and fiscal rules on the yearly inflation rate and total government debt. As Debrun *et al.* (2005) has demonstrated, disciplinary effects caused by central rules in a monetary union can often have a positive impact on individual country's economies by eliminating temptations of excessive inflation to keep up with neighbours.

Not much happened in terms of economic growth, though. The cocoa producers had difficulties attracting labour after the dark years of the 1970s and production remained low during the 1980s. The industrial sector did not grow substantially and private investment stayed low (Toto Same, 2008, p. 6); (Sundiata, 1990, p. 98). From 1985 and on, GDP data for Equatorial Guinea are available through the World Bank Development Indicators (WDI). While the annual real GDP growth between 1985 and 1991 was low but positive, 0.94 percent on average, real GDP per capita, in constant 2000 US\$, actually shrunk from \$640 to \$590 (see Figure 2.1). The structural adjustment programs that were initiated in the early 1990s to restore economic growth had little success in turning this trend (IMF, 1999, p. 6).

**Figure 2.1. Real GDP per capita and real GDP per capita growth, 1985-1991**



Source: Data from WDI Online.



## 2.2 An Expected Treasure

Spain said Equatorial Guinea has no oil. France said Equatorial Guinea has no oil [...] Then the Americans came. (President Obiang Nguema)<sup>3</sup>

Before giving a brief overview of hydrocarbon search attempts in Equatorial Guinea, a few words should be spent on the national geography as this tiny country on central Africa's west coast has rather special national boundaries (Figure A 1.1 in Annex 1 gives a good overview). The continental zone of *Rio Muni*, bounded by Cameroon in the north and by Gabon in the east and the south, makes up the largest portion of the country; its 26,000 km<sup>2</sup> constitutes more than 90 percent of the country's total land area. Five islands in the greater Gulf of Guinea make up the rest of Equatorial Guinea: the islet of *Annobón* is a last outpost far out in the southwest of the bight; *Corisco* and the two *Elobey Islands* are located closer to the mainland in the border area between Equatorial Guinea and Gabon; and *Bioko* is located northwest of Rio Muni in the northern part of the Gulf of Guinea, closer to both Cameroon and Nigeria than to continental Equatorial Guinea. It is on the latter island that Malabo, the national capital, is found. As can be seen on the map over the offshore area (Figure A 1.2 in Annex 1), the scattered country possesses large water and seabed areas.

The search for hydrocarbons had already commenced before independence; in 1965 Spanish and American oil companies prospected for oil with no commercial success (Ministerio de Minas, Industria y Energia, 2005, p. 6). When Macías Nguema's destructive era was over in 1979, searches continued, but now as a joint venture between a Spanish oil company and the Equatoguinean government. In 1983, the Alba field was found. This field is currently one of the most important gas fields – it yields 70,000 barrels of gas per day – but it was first dismissed as being “non-commercial” (*ibid.*)<sup>4</sup> French companies were also involved in prospect drilling in the later 1980s, but without success.

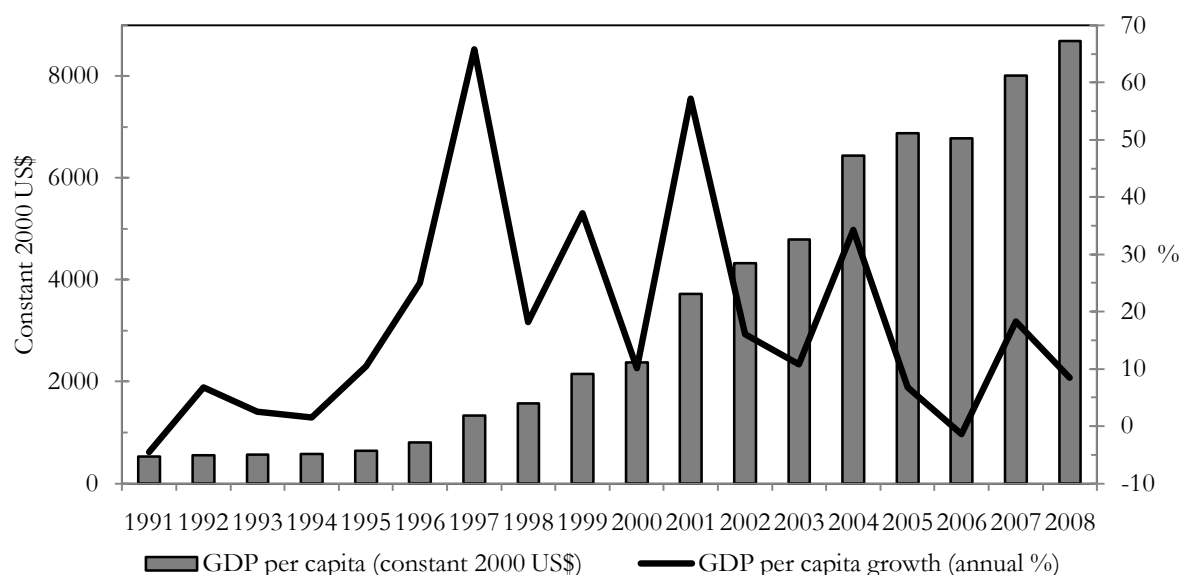
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<sup>3</sup> Said during an interview in Bata in August 2001, quoted in Shaxson (2007, p. 126).

<sup>4</sup> According to the website of the Ministry of Mines, Industry and Energy, retrieved January 5, 2010 from [http://www.equatorialoil.com/pages/Oil\\_production.html](http://www.equatorialoil.com/pages/Oil_production.html).

When the search for offshore hydrocarbons continued in the beginning of the 1990s, American companies were awarded prospecting licenses. Within months new wells were found in the Alba field and commercial gas production started in 1992 (IMF, 1999, p. 12). With the discovery of the oil-rich Zafiro field in 1995, large-scale hydrocarbon extraction began in 1996. This year thus marks the beginning of a period with booming oil revenues and remarkably high GDP growth. Between 1996 and 2008, average annual real GDP per capita growth was 23.6 percent, with peaks at 65.8 percent and 57.2 percent in 1997 and 2001 respectively (See Figure 2.2). Real GDP per capita, in constant 2000 US\$, grew more than 1200 percent between 1995 and 2008 (from \$641 to \$8692).

**Figure 2.2. Real GDP per capita and real GDP per capita growth, 1991-2008**



Source: Data from WDI Online.

### 2.3 Current Political Environment

The constitution was modified in 1991 to allow for more than one political party to contest the elections; however far-reaching powers for the president who is elected by popular vote on a 7-year term with no limits on the number of consecutive terms remained. The president is the Commander in Chief of the armed forces and appoints and dismisses cabinet members, judges of the Supreme Court and the provincial governors; he also negotiates and ratifies treaties, has the authority to dissolve the

parliament and can make laws by decree (Government of Equatorial Guinea, 2002, p. Chapter II).

Four presidential elections have been held since the new constitution was first adopted in 1982 (see Table 2.1). In the 1989 election, the constitution still only allowed for one political party and Obiang Nguema ran unopposed. The opposition parties boycotted the 1996 election while the major opponents withdrew before election day in 2002, alleging fraudulent conditions. While opposing candidates rejected the results as invalid, international observers criticized the election results in milder words. In the last election, held in November 2009, President Obiang Nguema got 95.4 percent of the votes according to the official press release. He will remain the head of state for another seven years. The organization *Reporters Without Borders* condemned the media coverage of the election campaign claiming that it was “totally one-sided” in favour of President Obiang Nguema (Reporters Without Borders, 2009).

**Table 2.1. Presidential elections in Equatorial Guinea, 1968-2009**

Year	Winner	Vote (%)	Note
1968	Francisco Macías Nguema	40/62	1 <sup>st</sup> round/2 <sup>nd</sup> round. Own calculations of percentage figures.
1973	Francisco Macías Nguema	-	No opposing candidates, Macías Nguema declared ‘president for life’ in 1972.
1989	Teodoro Obiang Nguema Mbasogo	99	Single party election, no opponents.
1996	Teodoro Obiang Nguema Mbasogo	97.9	Opposition parties boycotted the election.
2002	Teodoro Obiang Nguema Mbasogo	97.1	Four presidential candidates withdrew alleging fraudulent conditions.
2009	Teodoro Obiang Nguema Mbasogo	95.4*	

Source: African Elections Database, 2006

\* Equatorial Guinea, 3 December, 2009 (official press release)

Four general elections to the national parliament, with increasing dominance for President Obiang Nguema’s ruling party *Partido Democrático de Guinea Ecuatorial* (PDGE), have occurred since the multiparty system was introduced in 1991 (See Table 2.2). The 100-seat Chamber of People’s Representatives, *la Cámara de los Representantes del pueblo*, is elected on 5-year terms by popular vote and holds the legislative powers of the republic. However,

its role is limited due to the strong concentration of power with the president and the parliament's limited interest in acting without presidential endorsement (U.S. Department of State, 2009). In accordance with chapter V of the Constitution of the Republic of Equatorial Guinea, the president annually orders the opening and closing of two one-month sessions, implying that the parliament is on hiatus ten months per year (Government of Equatorial Guinea, 2002).

In the last parliamentary election, in May 2008, PDGE and its allies won 99 out of 100 seats with the major opposition party accusing the government of harassing its party representatives (Election Watch, 2008, p. 176).

**Table 2.2. Parliamentary elections in Equatorial Guinea, 1968-2008**

<b>Year</b>	<b>Number of seats for president's party</b>	<b>Note</b>
1968	8 out of 35 (Popular Idea of Equatorial Guinea, IPGE)	Three other political parties won seats.
1973	All seats (Worker's National United Party, PUNT)	Single party elections.
1983	41 seats (-)	Non-partisan elections.
1988	41 out of 41 (Democratic Party of Equatorial Guinea, PDGE)	Single party elections
1993	68 out of 80 (PDGE)	Three other political parties won seats.
1999	75 out of 80 (PDGE)	Two other political parties won seats.
2004	98 out of 100 (PDGE & Allies)	One other political party won seats.
2008*	99 out of 100 (PDGE & Allies)	

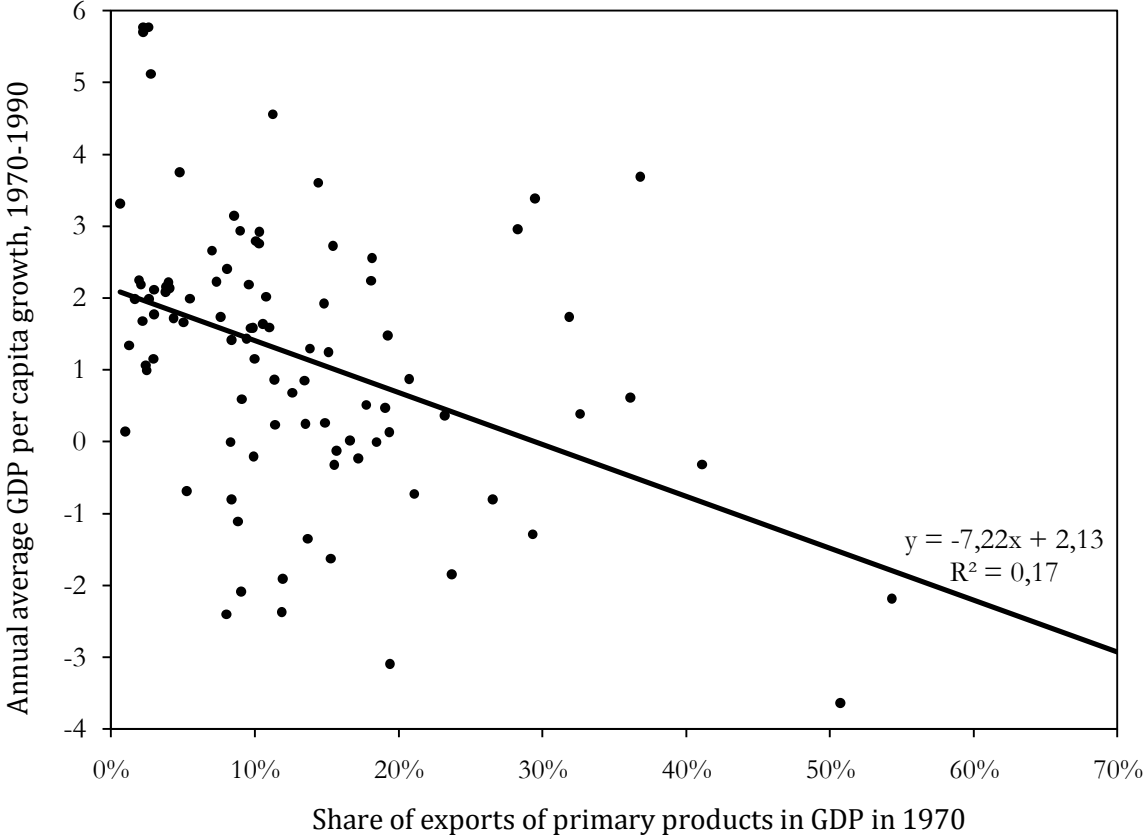
Source: African Elections Database, 2006

\* Election Watch (2008)

### 3 The Natural Resource Curse – Theoretical Framework

The existence of a natural resource curse has been discussed and empirically analyzed in a number of studies over the last three decades. These studies, which include Collier & Hoeffler (2005), Gylfason *et al.* (1999), Sachs & Warner (1999, 2001) and Sala-i-Martin (1997) are quick in diagnosing the disease; however, they often run into difficulties when it comes to identifying its causes. The resource curse is represented using the simplest possible means in Figure 3.1, but the scatter plot still clearly shows why many regression studies have come to the conclusion that the malady is a “demonstrable empirical fact” (Sachs & Warner, 2001).

Figure 3.1. Growth and natural resource abundance



The relationship between natural resource abundance and growth is clearly negative in the sample of countries above.

Source: Data from a dataset by Jeffrey D. Sachs and Andrew M. Warner available at [www.cid.harvard.edu](http://www.cid.harvard.edu)

Paul Collier (2007, pp. 38-42) describes how the theories explaining the resource curse have evolved over the past thirty years. In the 1970s, the theory of Dutch Disease was developed to explain the experiences of the Netherlands after having discovered natural gas in the North Sea.<sup>5</sup> This theory has since been developed into a harmonized framework that is used to analyze diverse types of capital inflows, from natural resources rents, to aid (Rajan & Subramanian, 2005), to emigrants' remittances (Bourdet & Falck, 2006). In the 1980s, the theory of Dutch Disease seemed insufficient as economists turned their attention to price shocks. Natural resource markets are notoriously unstable, and as prices change so does the income of the producing countries. This unpredictability makes revenue management difficult for governments and hard to understand for citizens. For example, Nigeria borrowed to finance wasteful investment programs, with oil as security, in the beginning of the 1980s; however, Nigeria was forced to cut spending dramatically when oil prices plummeted in 1986. With smaller oil revenues and loans to pay back, living standards soon fell to half of their previous level (Collier, 2007, pp. 40-41). With accruing evidence, a new set of theories was developed in the 1990s: governance and corruption became the focus of interest as economists and political scientists joined forces. Without disregarding previous economic explanations, theories now suggested that the special nature of natural resource rents could have strong adverse effects on institutional quality. This chapter will address each of these theories in turn.

This brief introduction has obviously overlooked several of the theories that can be found in the resource curse literature of today. Persistent underinvestment in education (Gylfason, 2001) and civil strife fuelled by the resource rents (Collier, 2007) are just two of the other explanations that have been suggested. However, as has been stated above, such theories fall outside of the limits of this study.

### **3.1 Dutch Disease Theory**

Dutch Disease is a phenomenon that has been documented in great detail. Starting with large inflows of capital and ending with loss of competitiveness, the malady usually brings

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<sup>5</sup> For a substantive account of the Dutch experience see (The Economist, 1977)

about an appreciation of the real exchange rate and overwhelming changes in the sectoral composition of the affected economy.

For the purposes of this study, the Dutch Disease model developed by Corden & Neary (1982) will be used. This model draws on the standard tools of international trade theory, such as the production possibility frontier (PPF) diagram, and focuses merely on real values, thus ignoring monetary issues. As such it is a medium-term model, disregarding short-term domestic price rigidities and international fluctuation. It also disregards long-term concerns for the rate of optimal depletion. The framework of the model is that of a small open economy producing two goods that are traded and one that is not. The prices of the traded goods are set exogenously on the world market, whereas the price of the non-traded good moves to clear the domestic market. To describe the resource curse the sectors can be defined as manufacturing, natural resources and services, but the model could just as easily be used with a different specification. It is also assumed that each sector uses one sector-specific factor and one factor that is mobile between sectors. Following the convention, the specific factors are referred to as capital and the mobile factor as labour.

Before examining the different effects underlying Dutch Disease, the real exchange rate deserves a short introduction. As will be shown below, this measurement is essential both to understand and to diagnose the Dutch Disease. In general, the real exchange rate describes the relationship between domestic and foreign price levels in a single currency or, to be more precise, it is the relative price of domestic goods in terms of foreign goods. It is commonly defined as follows, where  $\sigma$  and  $S$  are the real and nominal exchange rates respectively and  $P^*$  and  $P$  the world and domestic price levels, respectively:

$$\sigma = \frac{P}{P^*/S} = \frac{S \times P}{P^*}$$

Several specifications and adaptations are usually made to this definition for practical reasons. Firstly, as there is no single nominal exchange rate; rather, it is calculated as a weighted average of the exchange rates with the major, if not all, trading partners. Secondly, the price levels require the same kind of treatment, as there is not one single international, or for that matter national, price level. Three different methods are possible

here: the internal terms of trade approach uses the ratio of non-traded to traded goods prices; the external terms of trade method uses the ratio of domestically produced exports to foreign-produced import prices; and the purchasing power approach uses a weighted average of the trading partner's consumer price indices. Each of these methods will be used to estimate the Equatoguinean real exchange rate in Chapter Four, but the internal terms of trade definition will be used for the purposes of the following theoretical discussion, as it is the best for studying the relative effects on different sectors in the domestic economy (Burda & Wyplosz, 2005, pp. 153-156). With this definition in mind, we begin our examination of Dutch Disease.

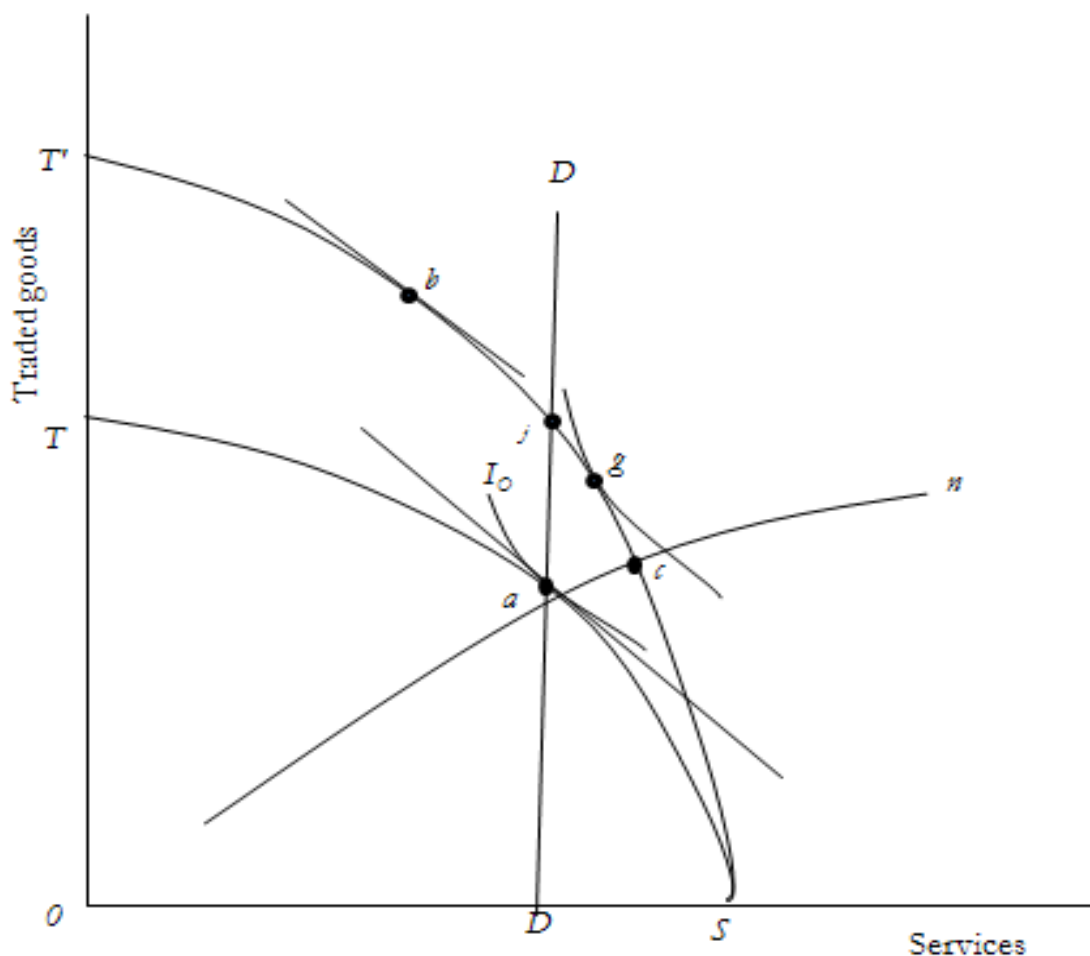
The malady is initially brought about by a boom in one of the traded sectors.<sup>6</sup> Through the *resource movement effect* and the *spending effect* identified by Corden & Neary (1982), this boom causes a shift of factors away from the non-booming traded sector towards the booming and non-traded sectors. This change of composition is, in itself, not necessarily bad for the economy. It is only when there is something special about the disfavoured sector that there is reason for concern. The sector that is being squeezed might make a special contribution to growth, for example by spreading the use of new technologies or reducing poverty in rural areas, without which development would be slower. Under such circumstances, there is good reason to talk of a disease (Sachs, 2007).

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<sup>6</sup> In accordance with Corden & Neary (1982) we assume the boom to be a once-and-for-all Hicks-neutral improvement in technology in the natural resource sector. This implies that the change does not affect the balance of labour and capital in the production function, but only the level of technology.



**Figure 3.2. Production Possibilities Frontier**



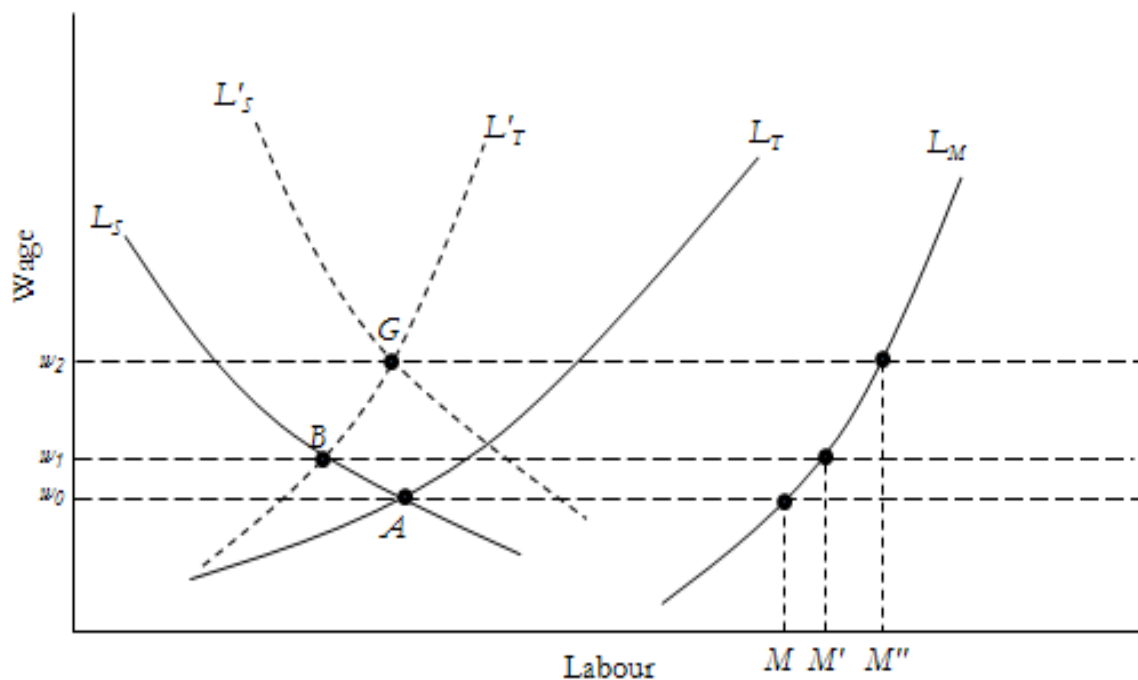
To describe the workings of the resource movement and the spending effects, the equilibrium represented by points *a* and *A* in Figures 3.2 and 3.3, respectively are considered.<sup>7</sup> Figure 3.2 is the customary production possibilities frontier diagram with non-traded goods, in this case services, measured on the horizontal axis and an aggregate of traded goods, that is to say manufacturing and natural resources, on the vertical axis. Before the boom, consumption is at *a* where the PPF is tangent to the highest attainable indifference curve. Figure 3.3 describes the labour market with wages in the two sectors on the vertical axis and total labour supply on the horizontal axis between  $O_S$  and  $O_M$ . Labour demand in the service sector is described by  $L_S$  and in the manufacturing sector by  $L_M$ . The labour demand for the aggregate traded sector,  $L_T$ , is constructed by laterally

<sup>7</sup> The following description of the Dutch Disease model draws heavily on Corden & Neary (1982).

adding the labour demand in the natural resources sector to that of the manufacturing sector. The initial full-employment labour market equilibrium is at  $A$  and the pre-boom wage is  $w_0$  in both sectors.

The two effects mentioned above are looked at separately while studying the boom. Starting with the resource movement effect, a scenario where the real exchange rate is held constant is first considered. The technological improvement causes the labour demand in the natural resource sector to increase as it raises the marginal productivity of labour in that sector. In Figure 3.3 this is represented by a shift in the aggregate labour demand schedule for the traded sectors from  $L_T$  to  $L_T'$ . The elevated wages in the natural resource sector cause labour to move from the other two sectors until a higher-wage equilibrium is restored at  $B$ . Production thus decreases in the non-natural resource sectors as a consequence of the rise in natural resource sector wages. This is sometimes referred to as *direct de-industrialisation*. In Figure 3.2 the technological progress can be illustrated by an asymmetric shift in the production possibilities frontier from  $ST$  to  $ST'$ . Still holding the real exchange rate constant, production will shift from  $a$  to  $b$  reflecting an overall expansion in the production of traded goods but a decline in the production of services.

Figure 3.3. Factor allocation chart



To allow for a freely moving real exchange rate while isolating the effects of resource movements, it is assumed that the income elasticity of demand for services is zero, thereby implying that the income-consumption line can be drawn as  $DD$ . With the booming production initially at  $b$ , there is thus an excess supply of tradable goods that will generate an increase in the price of services, implying a real exchange rate appreciation. Following this, equilibrium will be restored somewhere between  $b$  and  $j$  with the production of services still below its original level.

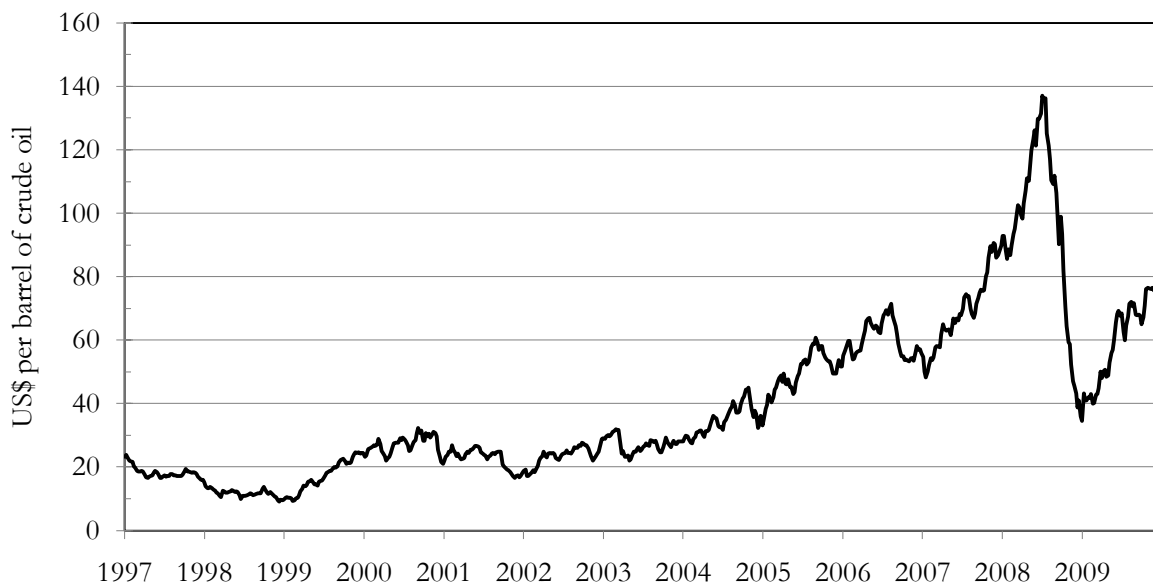
The spending effect can also be considered on its own. To abstract it from the resource movement effect, it is assumed that no domestic labour is used in the natural resource sector and that the demand for services increases with income. This implies that  $n$  is the income-consumption curve for the original real exchange rate. Under these assumptions, the technological progress causes no changes in Figure 3.3, but the production possibility frontier in Figure 3.2 still shifts from  $ST$  to  $ST'$ . Once more, there is initially over production of traded goods at  $b$  necessitating a real appreciation. However, as the relative demand for services increases with national income, the final equilibrium must lie somewhere between  $j$  and  $c$ , implying an increase in the production of services.

Considering the two effects together, it is clear that they both cause a rise in the relative price of services or a real exchange rate appreciation according to the internal terms of trade definition. This price increase causes the  $L_S$  schedule to shift upwards and wages to rise even further, causing what is sometimes referred to as *indirect de-industrialisation* whereby even more labour leaves the manufacturing sector.  $G$  and  $g$  in Figures 3.2 and 3.3 can consequently represent the final general equilibrium. For the manufacturing sector, the implications are clear; both the resource movement effect and the spending effect trigger unfavourable labour movements that lead to a loss in output. In the case of services, the outcome is more ambiguous. While the spending effect increases output, it is simultaneously decreased by the resource movement effect. Which is the stronger cannot be determined a priori, but must be established from case to case.

### 3.2 Volatility of Prices

It is an often-cited fact that commodity prices are extremely volatile (see for example Deaton & Laroque 1992). This is as true for oil as for any other primary product. Figure 3.3 shows the development of the average world price for crude oil over the last thirteen years. Even disregarding the extreme peak and trough of 2008, the oil price has been remarkably unstable. As can be seen, it is not uncommon for changes of more than ten dollars per barrel of oil to occur within a few weeks or for price to double over the course of one year.

**Figure 3.3.** Oil prices 1997-2010



Weekly world spot price FOB for crude oil weighted by estimated export volume.

Source: United States Energy Information Agency, [www.eia.gov](http://www.eia.gov)

This volatility is a source of several difficulties for governments in natural resource abundant countries. First and foremost, it renders long term planning complicated as it generates a high level of uncertainty regarding public revenues. In countries where capital markets are poorly developed this volatility in revenues risks leading to volatility in expenditures as well. When prices are high, governments quickly raise expenditures, but when they fall, deep cuts are necessary. This translates into harmful “boom-bust cycles”. These cycles can even be exacerbated by international borrowing under the worst of circumstances. Using future oil income as a security, governments borrow from abroad in

good times to further increase expenditures, thus augmenting the boom. But, when prices fall and creditors lose confidence, the country is faced with large loans to pay back using smaller revenues. In theory this type of borrowing is not entirely irrational. It makes sense for a country desperately in need of large-scale improvements, in for example infrastructure, to make immediate investments rather than wait until enough capital has accumulated. The problem is that much international borrowing has been wasted or stolen and has not produced the expected improvements in productivity (Humphreys *et al.* (2007).

Two studies by Paul Collier that support the hypothesis that the resource curse is at least partly caused by the volatility of commodity prices are worth mentioning. Firstly, Collier & Dehn (2001) examine both positive and negative export price shocks for a number of primary products using a cross-country panel data regression. They find that while negative shocks have a detrimental effect on growth, positive shocks have no significant effect. This suggests that the large expenditures in good years are often wasted, whereas the cuts in bad years are severely felt. Secondly, Collier & Goderis (2007) use a time series approach to show that price volatility is probably part of the explanation for the resource curse. They conclude however that the curse can be altogether avoided if institutional quality is sufficiently high, which leads us to our next section.

### **3.3 Institutional Effects**

Whereas the Dutch Disease model by Corden and Neary (1982) is quite widely used by scholars, no description of the linkages between natural resource abundance and institutions has yet been commonly accepted. Two broad groups of theories can nevertheless be distinguished in the debate: those who claim that natural resource abundance has adverse effects on institutions and governance; and those who claim that the occurrence of the curse is conditional upon having bad institutions to start with. These two approaches will be described in turn.

Sala-i-Martin & Subramanian (2003) as well as Bulte *et al.* (2005) demonstrate that the main negative impact of natural resources on growth is caused by their detrimental effects on institutions. In practice, both articles first estimate the effect of natural resources on

institutions and find a robust negative relationship. They then move on to show that once this institutional link has been accounted for, natural resources have no effect, or even a positive effect, on growth. To explain the causality behind these findings several models can be used.

First, some theories suggest that the transformation of the structure of revenues can itself lead to a change in institutional structure. The extraction of natural resources generates large rents – excess revenues after production costs have been paid – that governments can easily appropriate. With this easy source of income, states can lower or abolish income and corporate taxes, and dismantle their tax authorities. This in turn engenders two effects. Ross (2001, 2004) evokes the familiar slogan “no taxation without representation” in proposing that when taxes fall, citizens are less prone to hold government accountable for its actions. Both transparency and the quality of public services fall as a consequence. Additionally, Chaudhry (1989) uses a case study of Saudi Arabia and Yemen to show that other institutional problems which impede development soon emerge with weakened tax authorities. Tax authorities do not just collect taxes, they just as often collect valuable data on the structure of the domestic economy, without which “state spending is more likely to be informed by primordial ties and political considerations [...] than by economic rationality” (Chaudhry, 1989). In an analogous manner, businesses can be expected to act more efficiently when corporate tax policy forces them to adopt uniform accounting standards and critically evaluate the costs and benefits of current and future projects (Chaudhry, 1989) .

A second route of causation is institutional patronage. In this context, patronage is defined as the use of public resources to attain personal political power (Kolstad *et al.* (2009). Incentives distorted by large inflows of natural resource rents cause politicians to change their behaviour according to this theory. With increasing resource wealth, the payoff from staying in power grows and politicians change their actions in two ways accordingly. Firstly, government planning is based on an inefficient time-horizon as leaders tend to discount the future using the probability of their remaining in power. Secondly, to prolong their stay in power, politicians are inclined to use the rents inefficiently if it pleases key constituencies, thus effectively buying support. In a similar vein, Robinson & Torvik (2005) define the concept of white elephants as “a project with

a negative social surplus” to show that such wasteful investments may be politically attractive as a means of committing to redistribution. Any politician will implement projects with a positive social surplus, but only those truly committed to redistribution will accept the loss of investing in a white elephant.

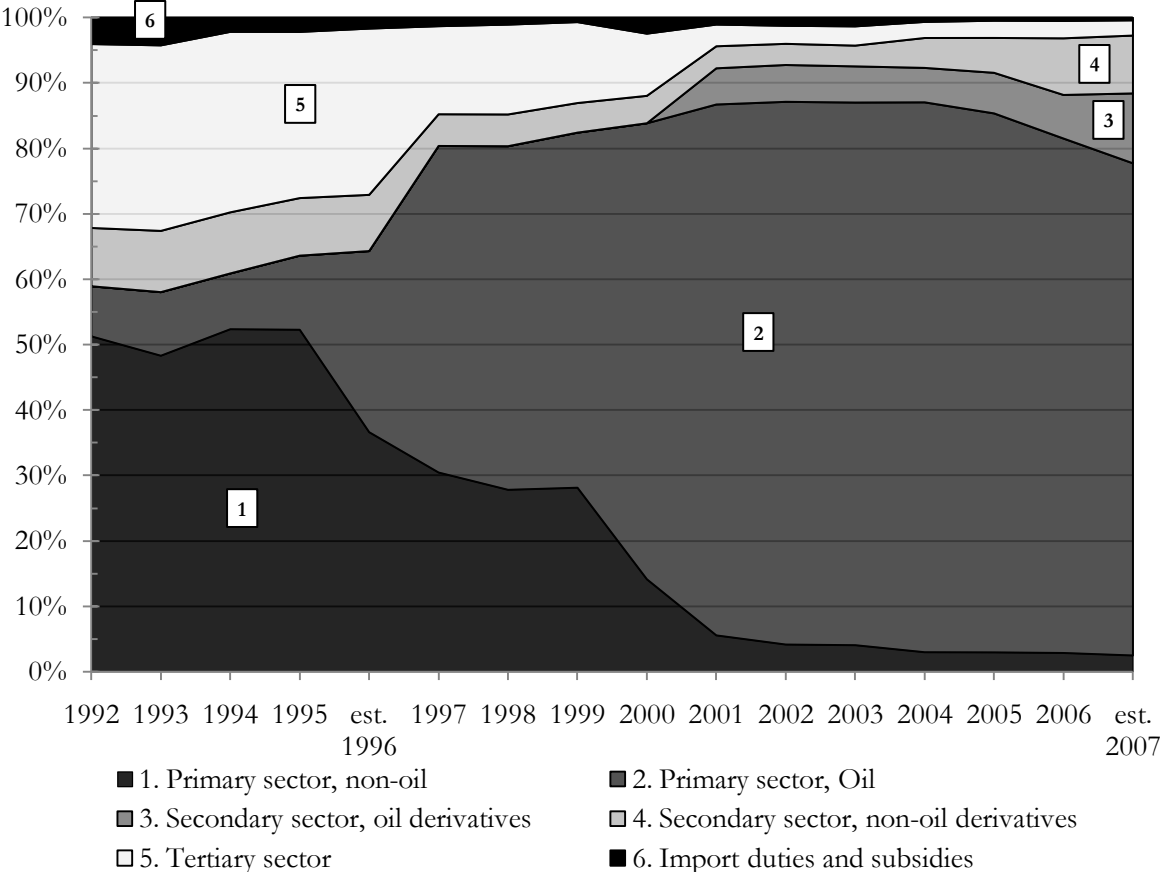
As a third and final mechanism, rent seeking offers an explanation of how natural resource abundance can harm institutions. When large rents become available, entrepreneurs and bureaucrats engage in competition for these rents rather than starting competitive firms or truthfully managing public administration. Skilled agents simply get a greater payoff from rent seeking than from wage labour. Indeed, it is not the competition over the rents itself, so much as the diversion of skilful labour away from entrepreneurial and administrative activities, that causes the greatest harm to society and institutions (Kolstad *et al.*, 2009).

In contrast to the three theories above that suggest a causal link between natural resources and poor institutions, a number of recent studies have suggested that the resource curse is instead conditioned upon having bad institutions. Lane & Tornell (1996) and Tornell & Lane (1999) show that an increase in rents in societies with a few powerful groups, suggesting splintered and unorganized institutions, leads to a more-than-proportional increase in expenditures. This in turn impedes economic growth. This effect, which they call the voracity effect, does not occur in societies with many small groups or where groups manage to coordinate their actions. Building on these conclusions, Mehlum *et al.* (2006) broaden the analysis by introducing the concept of grabber and producer friendly institutions. Under grabber friendly institutions, it is profitable to specialize in unproductive activities and windfall rents may induce spurs of rent seeking. Producer friendly institutions instead make entrepreneurship and innovation more profitable and the occurrence of rents will only boost these activities. The article goes on to show that only countries with grabber friendly institutions experience negative effects of natural resource extraction.

# 4 Diagnosing the Resource Curse in Equatorial Guinea

Equatoguinean dependence on oil has grown almost complete in the last fifteen years (see Figure 4.1). According to IMF estimates, oil and oil derivatives made up 86 percent of GDP in 2007 while agriculture, forestry and fishing (‘Primary sector, non-oil’ in the figure) – which in 1995 represented some 50 percent of GDP – had shrunk to only 2.5 percent of GDP. This dependency on oil and the complete overhaul of the domestic economy are the first signs of a resource curse in Equatorial Guinea.

Figure 4.1. GDP at market prices, by sectoral composition



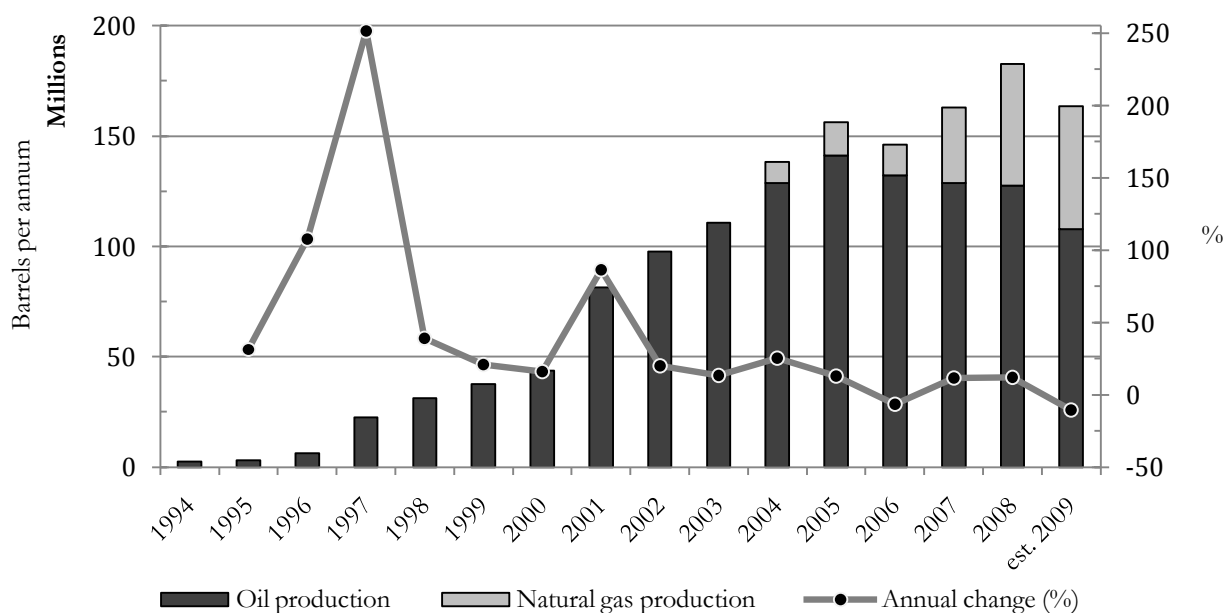
Source: Data is taken from the following reports, IMF (1998), IMF (2003), IMF (2006), IMF (2008) and IMF (2009).

In cases of inconsistencies, data from the latest available report has been given priority.

The production of oil and gas is illustrated in Figure 4.2. Large increases in production volume can be distinguished in 1997 and 2001.



Figure 4.2. Oil and gas production in Equatorial Guinea, 1994-2013



Source: Embassy of France, Malabo. Reconciliation of production data from BEAC, IMF and the World Bank.

The following sections will explore whether this natural resource boom and subsequent change in structural composition can be related to any of the resource curse symptoms presented in Chapter Four.

#### 4.1 The Real Exchange Rate and Dutch Disease

As have been discussed, several methods of calculating the real exchange rate are possible. Three methods in particular have been mentioned and in this section the real exchange rate for Equatorial Guinea will be calculated using, in order, the internal terms of trade, the external terms of trade and finally the purchasing power method.

According to the definition formula presented in Section 3.1, the real exchange rate is the nominal exchange rate adjusted for differences in price levels between the countries. To calculate *one* real exchange rate for Equatorial Guinea vis-à-vis *all* its major trade partners, the first step is to determine a weighted average of the trade partners' nominal exchange rates – the so called nominal effective exchange rate (NEER). The calculation is preferably done through geometric averaging since it eliminates the problem, related to

arithmetic averaging, of asymmetry in exchange rate changes (Coleman, 2008, p. 604). In practice, the index values of the annual bilateral end of period exchange rates raised to the power of the relative weights are multiplied with each other.<sup>8</sup> The nominal effective exchange rate ( $S$ ) formula can therefore be written as:

$$S = \prod_{i=1}^n S_i^{W_i}$$

where  $n$  is the number of trade partners  $i$ ,  $S_i$  represents the nominal bilateral exchange rate, and  $W_i$  is the individual country's relative trade importance. The weights are calculated differently depending on which of the three methods is being used and will therefore be reviewed separately in the following sub-sections.

Trade partners included in the calculations have been selected on the basis of their importance to Equatorial Guinea's trade. Countries representing at least 2 percent of Equatorial Guinea's total exports *or* imports during one or more of the years 1985-2008 have been included in a list of major trade partners. This rather generous definition results in 32 countries; however, the former states of U.S.S.R. and Yugoslavia have been excluded from the analysis due to difficulties in finding data for them. In total, this leaves us with 30 major trade partners representing more than 95 percent of Equatorial Guinea's total trade for each of the years. A comprehensive list is provided in Annex 2.

The trade shares have been normalized to sum to unity; however, the discrepancy between the relative share of the trade and the absolute share of the trade should not be considerable for any individual country because of the high level of trade partner inclusion.

#### 4.1.1 Internal Terms of Trade

The internal terms of trade method, or the price ratio of non-traded to traded goods, has the greatest potential of grasping the origins of Dutch Disease – a relative price increase in the non-traded sector caused by a booming traded natural resource sector. This is

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<sup>8</sup> Exchange rate data has been obtained from IFS and modified into foreign currency per CFA franc, and then indexed with 2000 as base year.

because this method separates the sector that is open to foreign competition from the sector that is protected behind bars of transportations costs, location needs, and production specificities such as simultaneous production and consumption (Corden & Neary, 1982, pp. 827-828); (Burda & Wyplosz, 2005, p. 155).

By slightly adapting the basic formula for calculating the real exchange rate, as presented in Section 3.1, the formula for the internal terms of trade (ITT) real exchange rate becomes:

$$\sigma_{ITT} = \frac{S \cdot P^N}{P^T}$$

where  $S$  is the nominal effective exchange rate and  $P^N$  and  $P^T$  the domestic prices of non-traded goods and traded goods.

Even though this method has a good theoretical potential of identifying Dutch Disease, numerous practical problems with applying this method to the Equatoguinean context exist and these severely limit its reliability. Primarily, there is no official price data available with goods readily divided into groups of non-traded and traded. Moreover, the consumer price data that does exist is deemed to be inadequate for the current conditions in the country. IMF writes that “[t]he weights and composition of the basket of goods and services are outdated, and the geographical coverage is not comprehensive [...]” (IMF, 2009a, p. 6 of the annexes). The National Credit Council of Equatorial Guinea, *le Conseil National du Cr dit*, which is a sub-body to BEAC that studies the conditions of the national financial system (BEAC, 2006, p. 181), states that the weights used to calculate the consumer price index do not reflect the reality of today since they date from 1986, that is from before the oil boom that dramatically changed the economy (Conseil National du Cr dit, 2006, p. 58). Further problems are caused by the difficulties in finding disintegrated CPI data that allows for classification of goods in groups of non-traded and traded.

Despite the known problems, its use along with that of other two available methods will provide a more complete understanding of the situation even if the results cannot be interpreted separately. To define the price levels of non-traded and traded goods, disintegrated CPI data from the IMF Article IV consultation reports have been used. This

was the only disintegrated CPI data available. Given that there is an ill-timed break in the data series in relation to a change in index year, the analysis is limited to the time period 2000-2007. The baskets of goods and services have been divided between non-traded and traded as presented in the following table.

**Table 4.1. Categorization of non-traded and traded goods**

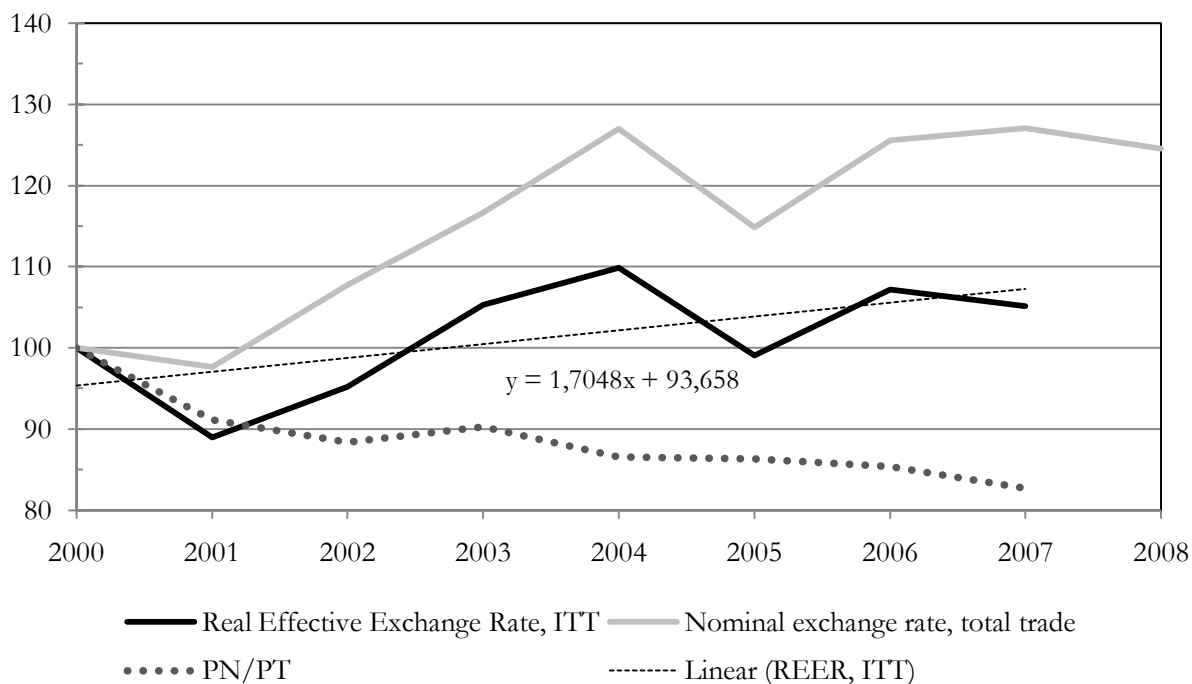
Category	Basket	Weight, 2002-2007	Relative weight, 2002-2007
Traded	Food, beverages and tobacco	59.7	66.7
Traded	Clothing	15.6	17.4
Traded	Furniture and other equipment	9.4	10.5
Traded	Transport	3.5	3.9
Traded	Leisure	1.3	1.5
		<i>89.5</i>	<i>100.0</i>
Non-traded	Housing, water and electricity	5.1	47.7
Non-traded	Health	1.5	14.0
Non-traded	Education	0.1	0.9
Non-traded	Hotels and restaurants	3.2	29.9
Non-traded	Other goods and services	0.8	7.5
		<i>10.7</i>	<i>100.0</i>
	General index	100.2	-

Source: IMF (2005, p. 13) and IMF (2009b, p. 6). Authors own categorization in traded/non-traded goods.

The two categories are assigned new relative weights that sum to unity and indices are calculated for them separately. The ratio of the index value prices of non-traded to traded goods ( $P^N/P^T$ ) is the first step towards the real exchange rate. Then the nominal effective exchange rate,  $S$ , is needed.

Weights assigned to the trade partners are based on their share of Equatorial Guinea's total trade, imports plus exports. The weights are then inserted into the NEER formula and the real effective exchange rate is calculated.

Figure 4.3. Real and nominal exchange rates using the internal terms of trade



Index, 2000 = 100

Source: Authors' own calculations based on data from the Directions of Trade database, IMF (2005) and IMF (2009).

As can be seen, the modest REER increase is caused entirely by a nominal exchange rate appreciation. The relative prices, non-traded to traded goods, have actually declined, contradicting the hypothesis of Dutch Disease and suggesting a decreased demand for non-traded sector goods. Considering this index alone, Equatorial Guinea does not seem to have been harmed by the resource movement or spending effects. The severe data limitations, however, make these conclusions less than certain.

#### 4.1.2 External Terms of Trade

Surrendering the internal terms of trade approach we turn to the second method of calculating the real exchange rate, the ratio of domestically produced exports to foreign-produced imports or the external terms of trade,  $\sigma_{ETT}$ . Formally, the method can be described as follows:

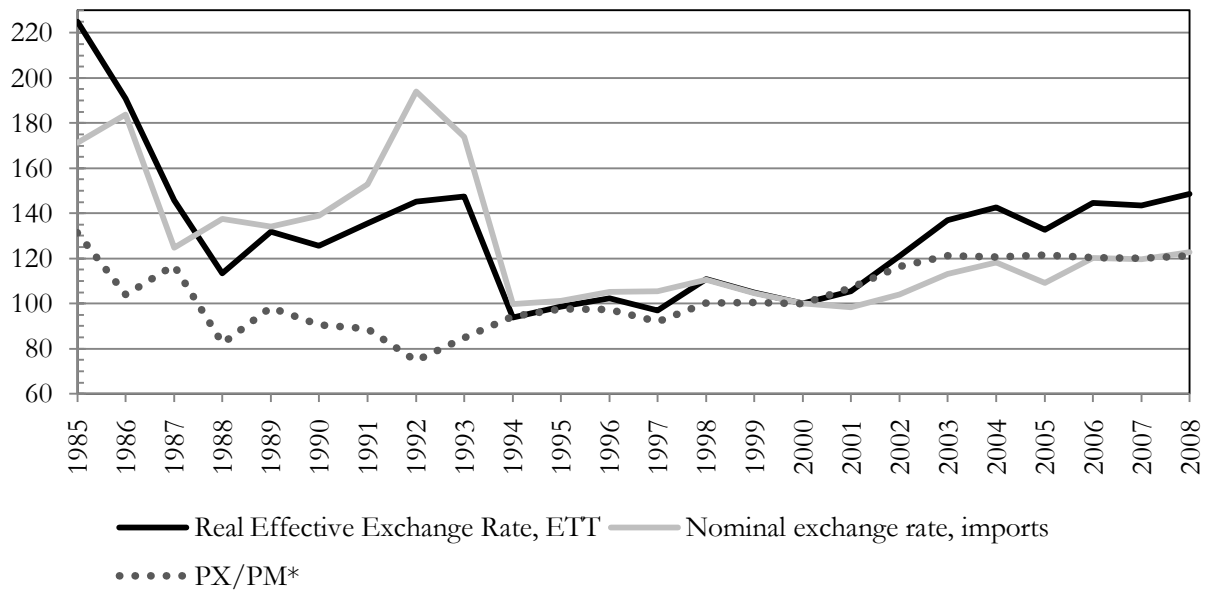
$$\sigma_{ETT} = \frac{S \cdot P^X}{PM^*}$$

where  $P^X$  and  $P^{M*}$  denote the price level of the country's exports and imports respectively. Following Baffes *et al.* (1999) and Coleman (2008), the price level of domestically produced exports is estimated with the CPI, and the price level of foreign-produced imports is estimated with a weighted average of the trade partners' wholesale price index (WPI) using the same kind of geometric averaging as when calculating the NEER. Hence, the price-level of foreign-produced imports,  $P^{M*}$ , is written as:

$$P^{M*} = \prod_{i=1}^n WPI_i^{W_i}$$

where  $n$  is the number of countries  $i$ ,  $WPI_i$  the individual countries' wholesale price index and  $W_i$  the relative trade weight assigned to each country. The problems related to Equatorial Guinea's CPI, which were described in Section 4.1.1, affect the external terms of trade as well and limit the reliability of the results. As Equatorial Guinea's aggregated consumer price index is considered, the longer data series of the WDI is used. The same trade partners as earlier are used; this time, however, the weights – which are applied to the nominal exchange rates as well – are derived from the share of Equatorial Guinea's imports instead of from its total trade. This adjustment is made to assure that the weighted foreign price level accurately represents the price level of Equatoguinean imports. In cases when a trade partner's WPI data is missing for some or all of the years, an estimation of the WPI development has been made.

Figure 4.4. Real and nominal exchange rates using the external terms of trade



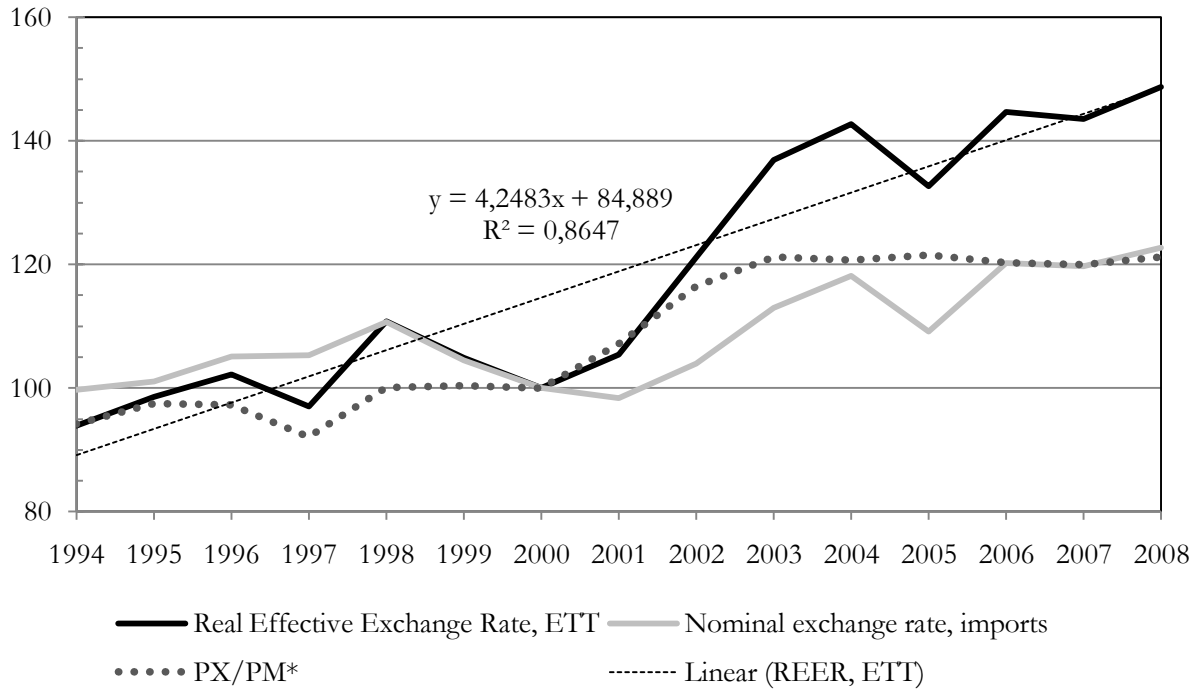
Index, 2000 = 100

Source: Authors' own calculations based on data from DOT and WDI online.

The large depreciation in 1994 was caused by a 50 percent devaluation of the CFA franc imposed by the IMF, the World Bank and the French government to boost the economies of the franc zone (Irving, 1999, p. 26).<sup>9</sup> Since this nominal change does not interact with the real effects of Dutch Disease, the period after the devaluation displayed in Figure 4.4, which coincides with the boom in oil production, is focused upon.

<sup>9</sup> After the devaluation in 1994, 100 CFA franc bought 1 French franc. Since 1999, the CFA franc has been pegged to the euro at the fixed rate of €1 = 655.957 CFA franc.

Figure 4.5. Real and nominal exchange rates using the external terms of trade



Index, 2000 = 100

Source: Authors' own calculations based on data from DOT and WDI online.

The results suggest a 58 percent appreciation of the real exchange rate over the whole period, and a 49 percent increase since 2000. The nominal exchange rate appreciation, directly caused by the appreciation of the euro to which the CFA franc is pegged, is an important explanatory factor of the real appreciation, but also the relative price ( $P^X/P^{M^*}$ ) increased significantly, especially between 2000-2003.

With contradicting results from the internal and external terms of trade approaches, a third and final method of calculating the real effective exchange rate is utilized.

#### 4.1.3 Purchasing Power Approach

Using the relative purchasing power to estimate the price levels, the method is formalized in the following way:

$$\sigma_{PPP} = \frac{S \cdot P}{P^*}$$



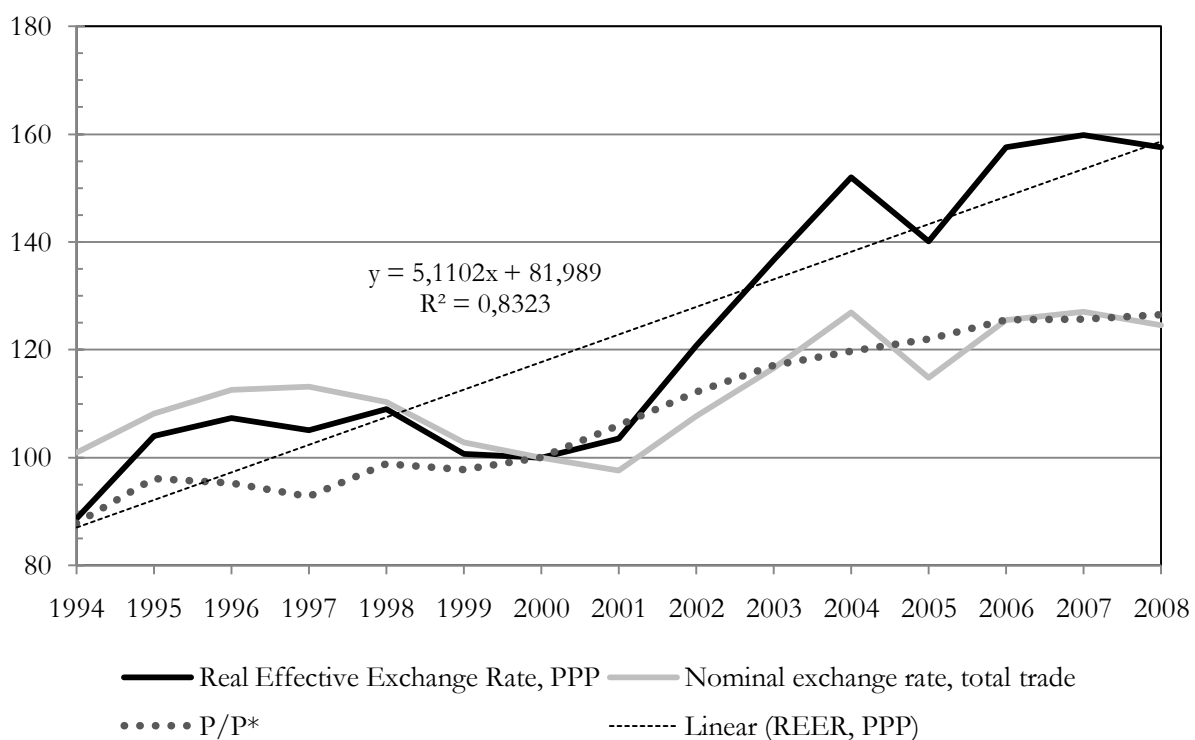
where  $S$  is the nominal effective exchange rate,  $P$  the domestic price level and  $P^*$  the weighted foreign price level.

The weights assigned to each trade partner for the calculation of  $S$  and  $P^*$  are the same as for the internal terms of trade method— the relative share of Equatorial Guinea’s total trade. The calculation of the weighted foreign price level,  $P^*$ , is very similar to the calculation of the price level of foreign-produced imports conducted in the previous section. The formula can be written as:

$$P^* = \prod_{i=1}^n CPI_i^{W_i}$$

where  $n$  is the number of trade partners  $i$ ,  $CPI_i$  and  $W_i$  the individual trade partner’s consumer price index and trade weight, respectively. In cases when CPI data is missing for a partner country, an estimation of the development has been made.

Figure 4.6. Real and nominal exchange rates using the purchasing power parity



Index, 2000 = 100

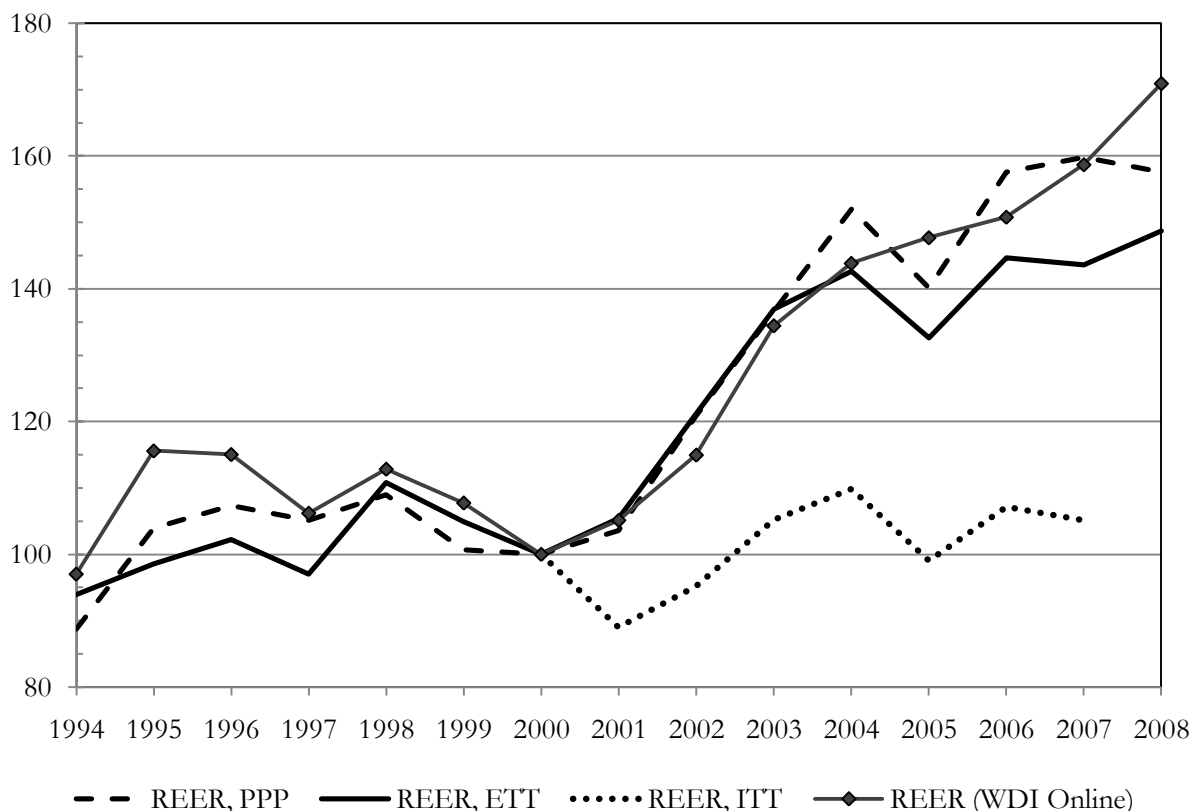
Source: Authors’ own calculations based on data from DOT and WDI online.

The result is fairly similar to what was presented in the previous section, showing strong appreciation since 2000. However, the appreciation is even stronger when the PPP method is used; with this, the real exchange rate appreciated 78 percent during the whole period and 58 percent in the last nine years (2000-2008).

#### **4.1.4 Is Equatorial Guinea Infected by Dutch Disease?**

According to Corden and Neary (1982, p. 825), the phenomenon called the Dutch Disease is the coexistence of booming and lagging sub-sectors within the traded sector. In its original form in the Netherlands in the 1960s, the booming low-tech natural gas sub-sector caused a real exchange rate appreciation that knocked out high-tech manufacturing companies. The direct and indirect effects of ‘de-industrialisation’, caused by the resource movement effect and the real exchange rate appreciation as described in the theory section, were harmful to the Netherlands. To expand, the productive and competitive industrial production sectors that employed many workers were replaced by labour-scarce and low-tech natural gas production with few external benefits.

Figure 4.7. Comparison of real effective exchange rates calculations



Index, 2000 = 100

Source: Authors' own calculations based on data from DOT and WDI online.

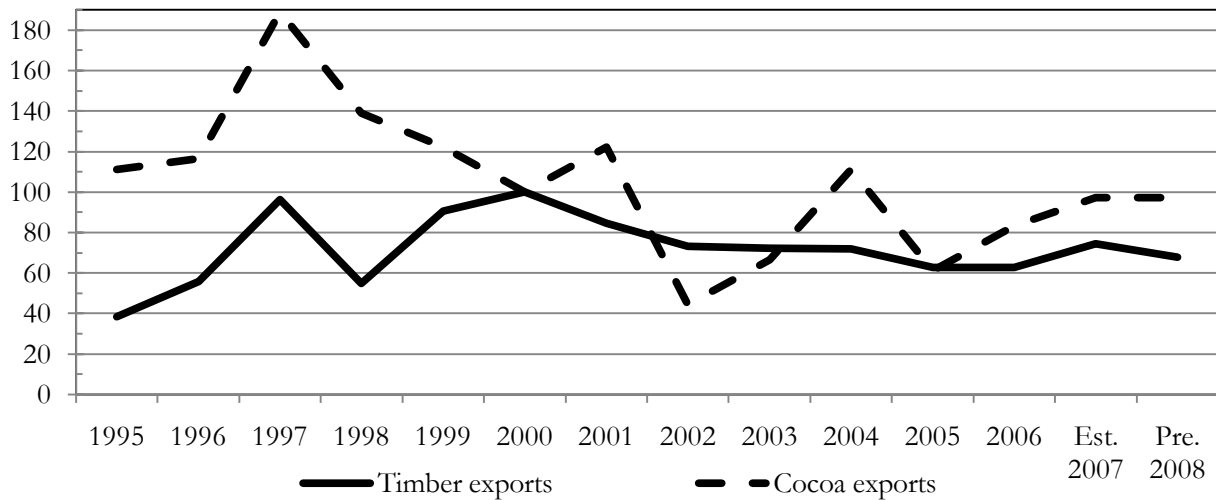
Two of the three calculation methods used have indicated heavy real exchange rate appreciation since the year 2000. This real appreciation has been driven partly by the nominal appreciation of the euro in relation to other important trade partners, but also by the increase in relative prices. Figure 4.7 summarizes the calculations and compares them to the real effective exchange rate calculated by the World Bank.

The internal terms of trade method is the only calculation method that uses two baskets of domestic goods and services and that indicates no real exchange rate appreciation during the limited period available for analysis. The problem with the internal terms of trade method of calculating the exchange rate is that distinction between exports and imports is lost. For a developed country with a high share of intra-trade this limitation might be suitable, but in the case of a natural resource abundant developing country that exports oil and gas and imports everything else, the distinction between imports and exports could be instrumental for an accurate estimation of the real exchange rate (Burda

& Wyplosz, 2005, p. 156). In other words, the absence of signs of appreciation when calculating the real exchange rate with the internal terms of trade method is not completely unexpected, and one might therefore be able to disregard these results. Also, the internal terms of trade results must be interpreted with great caution since several problems with the underlying data exist, even though it is difficult to disregard the decrease in  $P^N/P^T$  that our calculations show. Having said this, without evidence of increasing relative prices of non-traded to traded goods, it is not possible to conclude that the two effects that constitute Dutch Disease – the resource movement effect and the spending effect – have had an observable impact on the Equatoguinean economy.

However, several symptoms of Dutch Disease can be observed: the crowding out effect since the coming of oil is obvious; the absence of manufacturing industry is striking; and the appreciation of the real exchange rate, as two of our calculation methods show, is strong. The external terms of trade method indicates a 49% appreciation of the real exchange rate while the PPP approach suggests a 58% appreciation. This makes domestically-produced traded goods less competitive on the world market and causes a worsening of the primary current account (Burda & Wyplosz, 2005). As the hydrocarbon sector is competitive enough to export its products despite the real exchange rate appreciation, it is the non-oil traded sector that takes the hit. In the case of Equatorial Guinea, no manufacturing export industry existed before the coming of oil and gas, so what have been crowded out, at least in relative terms, are the traditional export goods of cocoa and coffee in the agricultural sector, and timber in the forestry sector. If we look at actual quantities, exports of the two most important non-oil export goods, timber and cocoa, have declined during the 2000s (See Figure 4.8). They represented no more than 0.08% of the exports in 2006 in relative terms. Oil and gas made up the rest.

Figure 4.8. Timber and cocoa exports



Index, 2000 = 100

Sources: BEAC, authors' calculations.

The observed decline in agricultural and forestry output and the absence of any manufacturing industry exports (apart from oil derivatives) demonstrate that the non-oil traded sector is very weak in Equatorial Guinea. As described by many authors, including Corden & Neary (1982) and van Wijnbergen (1984), this is a clear indication of Dutch Disease.

## 4.2 Changing Prices

The government of Equatorial Guinea has grown increasingly dependent on its natural resources. Income from this sector financed more than ninety percent of government spending in 2007 (see Figure 4.9). Given the volatility of oil and gas prices, this of course brings to mind the difficulties of long-term planning and the concern for boom-bust-cycles described by Humphreys *et al.* (2007).

Given that Equatorial Guinea began its oil production well after the first two oil-crises, the first considerable price fluctuations the country experienced was in relation to the global economic downturn in 2008. The difficulties this caused for the government are obvious (see Table 4.2). First, the price escalation in the beginning of 2008 caused the revenues for that year to be 40 percent greater than expected. Then in 2009, the initial

budget had to be revised and projected oil revenues cut in half due to the collapse in oil prices. Based on our estimates, this revision seems to have been a bit premature as oil prices have recovered and profits may now reach the level predicted in the original budget.

**Table 4.2. Predicted and actual oil revenues of the government**

	<b>Budget Law</b>	<b>Executed Budget</b>
2007	2 181 820	2 097 358
2008	2 033 020	2 881 408
2009	2 219 106 / Revised budget law: 1 147 804	2 250 119*
2010	1 616 578	

**Oil revenues in million CFA Francs**

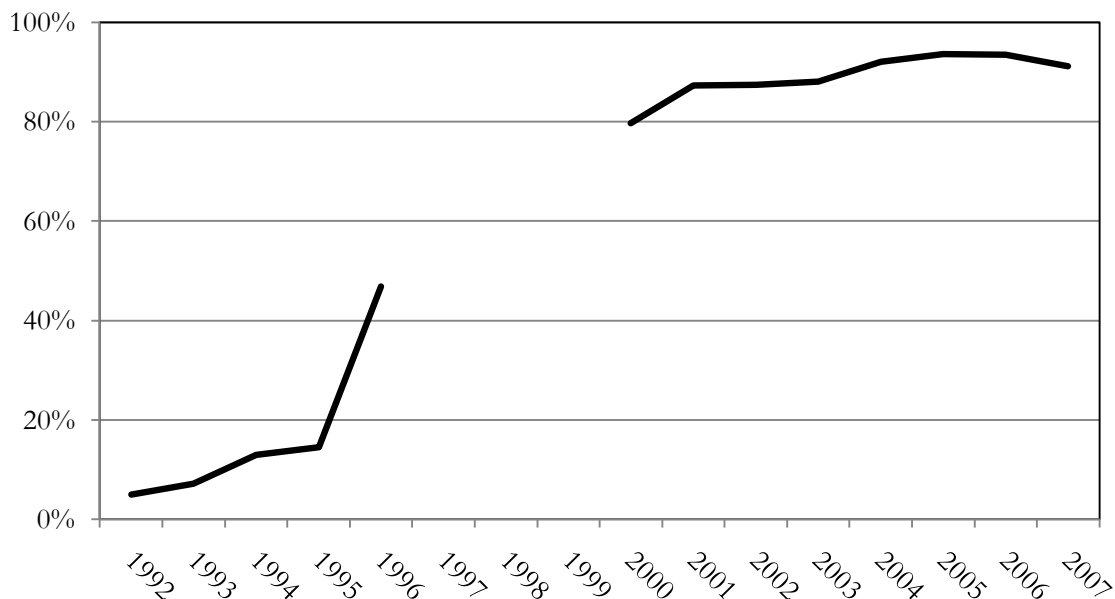
The discrepancies between the predictions in the budget laws and the actual outcomes demonstrate the difficulties involved in long-term planning.

\* Authors' calculations based on data for January to October 2009.

Source: Figures obtained during a personal interview 2010-01-15.

The consequences of the large fall in oil price during the final months of 2008 were undeniably severely felt throughout the economy. No actual GDP data has yet been compiled for 2009, but according to recent IMF forecasts the three largest oil producers in sub-Saharan Africa – Angola, Nigeria and Equatorial Guinea – are expected to “experience the sharpest growth slowdowns [during] 2009” (IMF, 2009c).

**Figure 4.9. Share of hydrocarbons in government income 1992-2007**



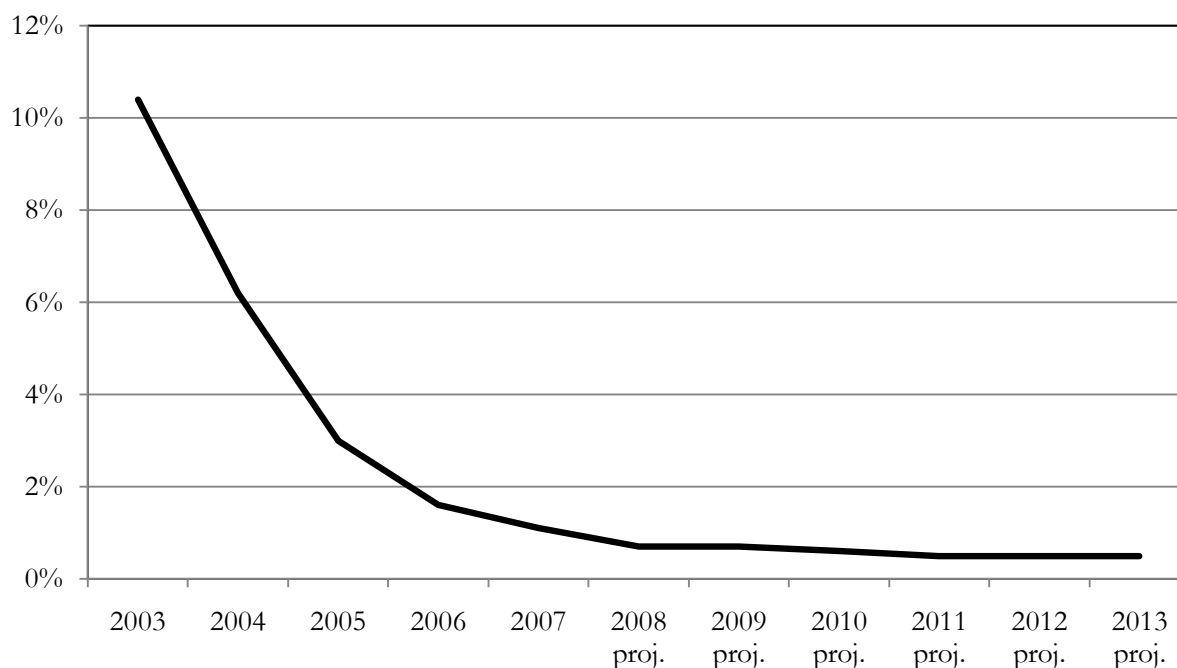
Though the data is limited, the trend is clear: hydrocarbons have gone from representing less than ten percent of government income in 1992 to above ninety percent in 2007.

Source: IMF (1998, 2005, 2009b), authors' calculations.

Humphreys *et al.* (2007) warn that countries dependent on natural resources may aggravate the boom-bust-cycles caused by price volatility through imprudent lending. On this point, the government of Equatorial Guinea deserves credit for its actions thus far. In the period since oil was discovered, the public debt has continuously been paid down and currently corresponds to less than one percent of the GDP. This trend will also continue over the foreseeable future according to an IMF forecast. Thus, sensible policy, and the fact that the country has only some 650,000 people to spend oil money on, has at least somewhat protected the Equatoguinean economy from one of the worst effects of the resource curse. What causes concern for whether or not this prudent financial policy will remain in the future is the lack of transparency in the budget process. The Open Budget Initiative (OBI) is an international programme that evaluates the budget process of governments. Countries are graded based on the information the government makes available to the public throughout the budget process and in the last survey Equatorial Guinea scored 0 points out of 100. There is absolutely no transparency in the budget process, which, to use the words of OBI, “makes it very difficult for citizens to hold

government accountable for its management of the public's money" (Open Budget Initiative, 2009).

**Figure 4.10. External debt of Equatorial Guinea**



Actual and projected external debt as a percentage of real GDP, 2003-2013.

Source: (IMF, 2009a)

Taken together, the volatility of natural resource prices does cause some difficulties for the economy of Equatorial Guinea. As predicted in section 3.2, long-term government planning is rendered difficult and GDP varies with the oil price. However, as will be seen in Chapter Five below, measures to counter these effects are under way and the government has had the good judgement to decrease the public debt.

### 4.3 Institutions, Transparency and Corruption

When institutions are strong, politicians vie for the support and endorsement of interest groups; when institutions are weak, politicians create and control interest groups. When institutions are strong, citizens demand rights; when institutions are weak, citizens beg for favours (Acemoglu, Robinson, & Verdier, 2004).



Despite the good policies of the government on the issue of external debt, institutional failure is undoubtedly one of the characteristics of the resource curse in Equatorial Guinea. The Human Development Index (HDI) is a tool developed by the UNDP to measure human development by combining life expectancy, literacy rate and standard of living. Since large-scale extraction of oil started, Equatorial Guinea's HDI value has increased, but at the same time the country presents the largest gap between HDI value and GDP per capita of all countries in the world.<sup>10</sup> This indicates that the apparent improvement in human development is solely related to the strong economic growth and that health and education are areas lagging behind. In the following sections it will be argued that the discrepancy between economic growth and real human development, this failure of wealth to trickle down, can at least partly be attributed to the failing institutions of Equatorial Guinea. Following the structure of section 3.3, the reasoning circles around three broad arguments: no representation without taxation; political patronage; and rent seeking. The section is summarized through a short discussion on causality versus conditionality.

Starting with the theories related to taxation, Ross (2001, 2004) suggests that natural resource rents reduce the need for taxation and therefore lessen the incentives for citizens to scrutinize and hold the government accountable. Two aspects of this notion can be tested: changes in tax structure and the level of public scrutiny.

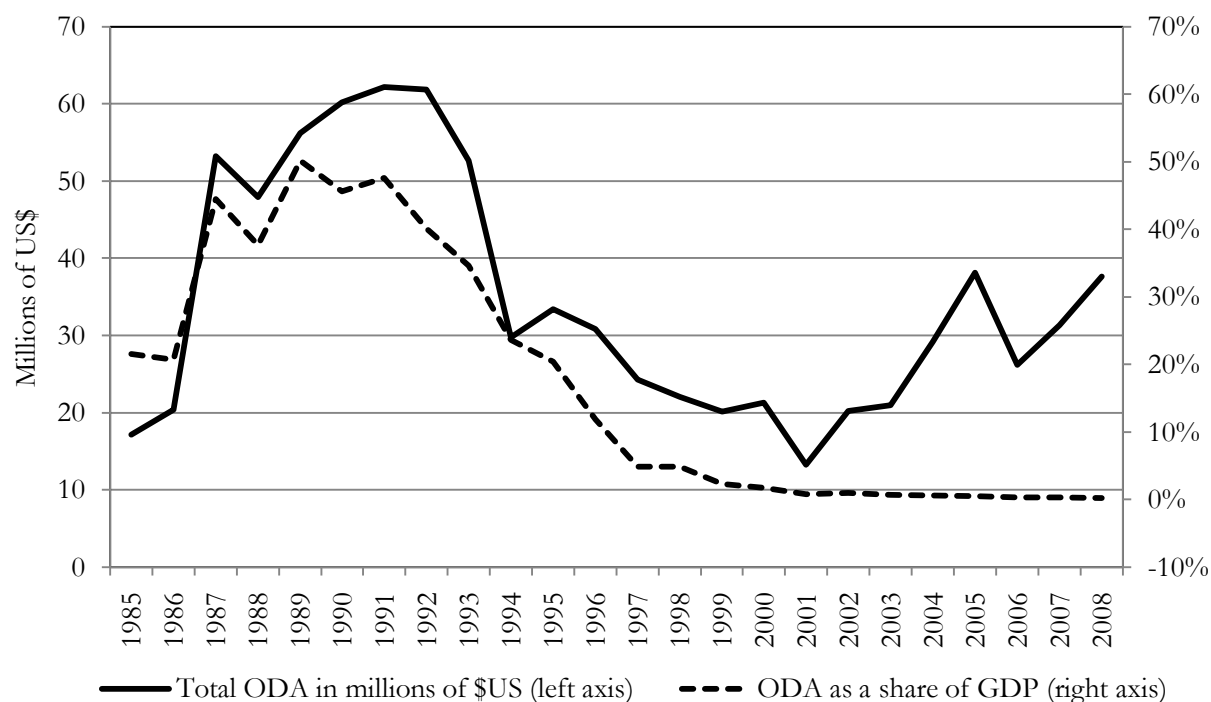
First, no information on the average personal income tax paid by Equatoguinean citizens has been found, but the implications of the theory can still partially be explored by using the standard tax schedule. According to the IMF (1998, 2008) the amount of income exempt from taxation was increased from 200,000 CFA francs in 1998 to 1,000,000 CFA francs in 2008. This is an augmentation that far exceeds the changes in the consumer price index during this period. Indeed, all tax brackets were widened during this period in a manner that does not correspond to the rise in prices, indicating at least a weak support for Ross' (2001, 2004) theories.

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<sup>10</sup> Authors' calculations based on UNDP data. The 2007 list of HDI values included 182 countries in total.

Second, it can easily be demonstrated that public scrutiny of government and other institutions in Equatorial Guinea is almost non-existent. Primarily, Equatoguinean civil society, which will be discussed further in Chapter Five, is extremely frail and has virtually no capacity to monitor or influence the actions of the government. In addition to this, the domestic media is weak and predominantly state-owned. For example, *Reporters Without Borders* criticized the media coverage in the 2009 presidential election campaign claiming that “the state media have sung the president's praises and have taken care to pay little attention to the opposition's activities” (Reporters Without Borders, 2009). The president’s son owns the only television and radio stations not directly controlled by the government; no daily or weekly newspapers are published. An opposition newspaper is supposed to have existed in the past (Human Rights Watch, 2009, pp. 57-59), but during the authors’ field study not a single circulating copy of it was found. Of course, civil society and free media were hardly thriving in Equatorial Guinea even before oil was discovered, but the effects described by Ross (2001, 2004) may in this context well have prevented their further development.

Furthermore, many of the interviewees representing the diplomatic community and international organizations drew an interesting parallel: as Equatorial Guinea receives very little international aid (see Figure 4.11) and has a very small public debt (see Figure 4.10) the international community has little leverage with which to pressure the government to reform. Loans and aid are open to conditionality, but sovereign states are free to spend their resource rents as they wish. Once again, the natural resource rents may thus have prevented a viable civil society from forming, as the international pressure felt by the government has been weak.

**Figure 4.11. Official Development Assistance (ODA) received by Equatorial Guinea 1985-2008**

In both relative and absolute terms Equatorial Guinea today receives less Official Development Assistance than the country did before oil was discovered.

Source: Authors' own calculations based on data from WDI and OECD/DAC.

Turning to the second set of theories related to taxation, McSherry (2006) refers to the work of Chaudhry (1989) in asserting that Equatorial Guinea's tax authorities are incapable of gathering sufficient information about economic activity for the government to make prudent policy decisions. However, in contrast with the Saudi and Yemeni cases investigated by Chaudhry (1989), the Equatoguinean tax authorities were not dismantled following an increase in rents. Rather they were destroyed during the reign of President Macías Nguema and, according to McSherry (2006), never rebuilt. Although collecting sufficient information to confirm this narrative was not possible, there is no reason to doubt the conclusions. Indeed, it seems probable that the natural resource rents have made it unnecessary for the government to rebuild the tax authorities destroyed during the 1970s.

The theories of Chaudhry (1989) and Ross (2001, 2004) on how resource rents lower public scrutiny and reduce the quality of information available to the government are thus

in part supported by the experiences of Equatorial Guinea. However, when we in the following text try to account for the structure of government investments, the theories on patronage and white elephants are more useful to understand the interactions of institutions and natural resource rents.

The government of Equatorial Guinea has spent much of its income on investments meant to raise the productivity of the economy. Whether the selected projects have achieved that target is however less certain. On this issue, IMF (1998, 2005, 2008, 2009a, 2009b) Article IV Consultations make for an interesting read. In the period from 2000 to 2007, the government ran ever-expanding public investment programmes, spending an average of 390 billion CFA Francs per year, or approximately 730 million US dollars.<sup>11</sup> Thus far, these programmes have been unable to stem the decline in production in the traditional exporting sectors – cocoa, coffee, and timber – or bring the amount of non-oil manufacturing to a substantial level. In fact, virtually all interviewees confirmed the general impression that virtually nothing but crude oil and gas is produced in Equatorial Guinea, and that almost everything else is imported. Observations seem to indicate that they are right and even gasoline is imported as no refineries yet exist.

So why have the investments not produced a rise in productivity in the non-hydrocarbon sector? Based on the IMF (2008, 2009b) data, more than 40 percent of the annual investments have been used to improve infrastructure. Many interviewees, especially those representing international organizations and the diplomatic community, have expressed similar views. They all question why so much is spent on infrastructure when the health and education sectors are in such dire need of financing. Vaccination rates have dropped significantly during the 2000s and the large, newly built, hospital in Malabo is neither equipped with a blood bank nor a laboratory for medical testing (personal interview, 2010-01-19). In 2005 a national cholera epidemic, typical for very poor countries, killed 2000 people; in 2008/2009 a measles outbreak took the lives of 500 (*ibid.*). One of the largest private companies operating in the country, the American oil giant Amerada Hess Corporation, runs an educational programme aimed at improving the

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<sup>11</sup> The programmes have of course continued after 2007 and have grown even further according to interviewees, but no official data is yet available.

primary education by training 1200 teachers and equipping and remodelling the pedagogical approach of some forty primary schools (Prodege, n.d.). It is difficult not to wonder why the government of Equatorial Guinea relies on corporate social responsibility initiatives when it comes to improving primary education and why improving Equatoguineans' health is not given a higher priority. Money is not the problem, so for whom the infrastructure for manufacturing is being built is a question that must be raised, since the national labour force lacks the skills and education needed to make efficient use of it.

Merely walking in the city centre of Malabo, examples of investments made more likely with the intention to redistribute money than to increase efficiency abound; a new large party headquarter has been built for the PDGE, but for some reason it has stood empty for several months. In one neighbourhood a roundabout has been decorated with a marble fountain, while the surrounding bumpy roads are made of dirt. The new presidential palace covers an area equivalent to twelve blocks of the surrounding city. Two triumphal arches are under construction in the suburb of *Ela Nguema*, where most other houses are built of leftover planks and corrugated iron. However, the most obvious white elephant can be found on the outskirts of Malabo. A whole new city named *Malabo Dos* (Malabo Two) is being constructed there, but it bears little resemblance to its older namesake. Along a new six-lane highway, modern offices and apartment buildings have been constructed. Some buildings have already been finished, but no one lives there as installing electricity and waterlines was overlooked in the construction process. The government does not try to hide the fact that the houses remain empty; instead, they were displayed alongside pictures of the empty highways and the lavish new boardwalk in Bata on the 2009 election posters of President Obiang Nguema. In the words of Robinson & Torvik (2005), this proud display of empty houses and over-the-top infrastructure projects may be a signal that the president remains committed to the redistribution of the natural resource rents.

The few finished inhabitable houses in Malabo Dos have also been used in a manner indicative of patronage. The apartments were not offered for rent on the open market, but given to senior government officials who then sublet the apartments at a substantial mark-up (personal interview, 2010-01-11). Other more prominent examples of how oil

rents are used for patronage could be seen following the presidential elections campaign of 2009. Visible signs of the money spent are easy to come by; numerous people sport PDGE-distributed t-shirts, caps and notebooks with the president's photo and many walls and palm trees are covered in election posters. One interviewee even gave a more substantial account. As described in Chapter Five below, the IMF has developed a Permanent Income Model (PIM) for the Equatoguinean oil revenues that the government has been implementing since 2008. The model is used to calculate the annual maximum government spending compatible with smooth consumption in the long-run. The model was first implemented in 2008 and the government followed the recommendation on total spending, but double the amount recommended by the model was spent in 2009. One interviewee attributed this to the fact that 2009 was an election year (personal interview, 2010-01-15). Such crowd-pleasing fiscal planning represents the very essence of patronage; politicians spending money to buy votes.

Finally, considering rent seeking, many of the interviewees described the growing occurrence of this phenomenon in Equatorial Guinea. One vividly described how corruption has entered the Equatoguinean society from the upper levels and is now slowly trickling down to public agencies, businesses and people in the streets (Personal interview, 2009-12-09). Indeed, President Obiang Nguema himself implicitly confirms this top-down perspective when he argues that “[c]orruption was unknown in our tradition before [...] bad habits have been introduced by foreigners since oil was found” (Shaxson, 2007, p. 130).

Confirming that natural resource rents are sought for personal consumption at the very highest levels of Equatoguinean society is not difficult. In an article in the Los Angeles Times from 2003 evidence is presented that oil companies active in Equatorial Guinea had made direct payments of at least \$300 million to an account controlled personally by President Obiang Nguema at Riggs Bank in Washington D.C. (Silverstein, 2003). In a subsequent U.S. Senate (2004) investigation it was found that:

Riggs Bank managed more than 60 accounts and certificates of deposit for Equatorial Guinea, its officials, and their family members, with little or no attention to the bank's anti-money laundering obligations, turned a blind eye to evidence suggesting the bank was

handling the proceeds of foreign corruption, and allowed numerous suspicious transactions to take place without notifying law enforcement.

Shaxson (2007, pp. 121-144) draws on several sources to show that money from these accounts, as well as the services of the personal account manager that come with them, have been used for the private benefit of president Obiang Nguema and his family.

In 2006 a business-owner in South Africa initiated a lawsuit against the Equatoguinean government for breaking a multi-million dollar construction contract. Two years earlier, Teodorín Nguema, Minister for Agriculture and President Obiang Nguema's eldest son, had procured two houses in Cape Town. The business-owner claimed that as he had not been paid for the construction work his company had carried out in Equatorial Guinea the two houses, as they had been bought with government funds, could serve as collateral. As an indication of the poor business climate in Equatorial Guinea this lawsuit is bad enough, but it also presents an interesting piece of evidence of rent seeking in the highest levels of government. In a written declaration to the South African court Teodorín Nguema states:

Cabinet Ministers and public servants in Equatorial Guinea are by law allowed to ow[n] companies that, in consortium with a foreign company, can bid for government contracts and should the company be successful, then what percentage of the total cost of the contract the company gets, will depend on the terms negotiated between the parties.

But, in any event, it means that a cabinet minister ends up with a sizeable part of the contract price in his bank account. (High Court of South Africa, 2006, p. 12); (Human Rights Watch, 2009, p. 35)

Other quantitative and qualitative studies confirm that corruption in the form of rent seeking is high in Equatorial Guinea. On Transparency International's *Corruption Perception Index* from 2008, Equatorial Guinea's score of 1.7 on a scale from 0-10 is the fifth lowest among the 47 reviewed sub-Saharan African countries. It was also the ninth lowest out of the 180 reviewed countries in the world (Transparency International, 2008).<sup>12</sup> Heilbrunn (2007) claims that Equatorial Guinea is a clan-based state where nepotism characterizes the public sector and where oil revenues are distributed for personal enrichment within

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<sup>12</sup> Chad, the Sudan, Guinea, and Somalia are the only lower-ranked sub-Saharan African countries.

President Obiang Nguema's own clan. He argues that the democratic constitution is nothing more than a cover for a dictatorship "dependent on the use of nepotism, collusion, corruption, and violence" (Heilbrunn, 2007, p. 244). This strong wording does not entirely reflect the actual situation since Equatorial Guinea probably has one of the lowest levels of visible criminality and violence in Central Africa, but it is obvious that the political situation does not live up to what the democratic constitution promises. The Washington-based advocacy group Freedom House has labelled Equatorial Guinea as "not free" during the entire presidency of Obiang Nguema and gives the country, in its latest report, the lowest possible score in both of its categories – political rights and civil liberties (Freedom House, 2009). The president's control of the government is very strong and little can happen without his direct involvement. For example, all payment claims above 1 million CFA francs are to be approved by the president in person (Toto Same, 2008, pp. 27-31).

Even if the unscrupulous appropriation of rents by prominent people in Equatorial Guinea causes institutional decay and worsens the business climate in itself, as stated in section 3.3 above, it is probably a worse problem when entrepreneurs and administrators on lower levels begin to regard rent seeking as more profitable than innovation and wage labour. Worryingly, tendencies confirming that rent seeking is spreading, or trickling down, are noted by some of our interviewees. An individual on his third visit to the country in as many years noted that the number of people asking for money had slowly increased from each of his visits to the next (personal interview, 2010-01-15).

The same man, the same clan, the same group of people have completely dominated government since well before oil was discovered. In addition to this, President Macías Nguema left a country in complete institutional disarray when his nephew removed him from power. This makes it somewhat difficult to establish whether the Equatoguinean experience with natural resource rents is best explained by causal or conditional theories. As a matter of fact, it seems plausible that each set of theories holds only part of the explanation. The curse was perhaps first brought about by the weak institutional structure – conditionality – but once rents began flowing in, they effectively prevented institutional reform – causality.



#### **4.4 Concluding Diagnosis**

Since large-scale extraction of oil and gas commenced in the middle of the 1990s, production in the extractive industries has far outgrown other production. Traditionally important export goods such as cocoa beans and coffee have been crowded out by the completely dominant oil sector; in volume, exports of the two most important non-oil export goods, timber and cocoa, have decreased the last ten years. The sharp real exchange rate appreciation since 2000 has impaired the competitiveness of the already weak non-oil export sector. Symptoms of Dutch Disease are evident even though a relative price increase in non-traded to traded goods cannot be observed. As the export sector was very small before oil was discovered, the Equatoguinean strain of Dutch Disease can more correctly be blamed for preventing industrialisation than for causing direct de-industrialisation.

The almost complete dependency on oil and gas revenues has left Equatorial Guinea very vulnerable to price changes in the world market. The difficulty for the government to predict revenues has been illustrated by the financial crisis in 2008 and 2009 when the budget had to be dramatically revised. Although the volatility of prices has translated into a volatile GDP, Equatorial Guinea has thus far avoided the dangers of augmenting the boom-bust cycles by excessive public borrowing.

It is only once institutions are examined that the full pathology of the resource curse in Equatorial Guinea becomes visible. Poor institutions impede diversification through promoting inefficient investments, harm innovation by making rent seeking more profitable, and disrupt political competition through patronage. Once again the resource curse cannot be blamed so much for harming institutions - they were bad even before oil was discovered - as for impeding subsequent development.

In the Equatoguinean case the tendencies are clear. Even though Dutch Disease and volatility of prices have caused some ill, it is the exceptionally large harmful interactions between natural resource rents and institutions that pose the greatest problem for human development.

## 5 In Search of a Cure

As the theory on the resource curse has evolved, more cures have been suggested than this thesis can do justice. Setting out from the sets of theories considered above, this chapter will consider three initiatives taken by the Equatoguinean government related to the theoretical framework of this thesis. In turn, the following initiatives will be discussed: the national plan for economic development, *Equatorial Guinea 2020*, related to Dutch Disease; the permanent income model related to the volatility of prices; and the Extractive Industries Transparency Initiative related to the institutional aspect of the Resource Curse.

In the end of the chapter, a set of reforms believed to be well-suited to the Equatoguinean circumstances and within reach given the current institutional framework is briefly discussed.

### 5.1 Diversifying to Avoid Dutch Disease

In documents produced by the government of Equatorial Guinea and by CEMAC, diversifying the economy is mentioned as the most important cure for Dutch Disease (see for example CEMAC, 2009 pp. 54-56). An important step to achieve this goal was taken when a national development plan, *Equatorial Guinea 2020 – Agenda for the diversification of the sources of growth*, was adopted in 2007 (Government of Equatorial Guinea, 2007a, 2007b, 2007c). According to the plan, Equatorial Guinea should diversify into four, new and old, sectors: agriculture; fishing; energy, including oil and gas; and services, in particular tourism and financial services (Government of Equatorial Guinea, 2007a). Some of the privileged sectors are more logical than others. If farmers and fishermen are given the right initial support and training, the potential for agriculture and fishing is great given the country's endowment and the large territorial waters and unexploited land. The energy sector is already thriving with the extraction of hydrocarbons, but the government is right in also seeking to create viable domestic processing plants. Whether the same

potential exists in tourism and financial services is possible, but the potential of these sectors have not previously been exploited.

Little progress has been made to diversify the economy and the question is whether the government will be able to materialize the plan. *Equatorial Guinea 2020* is a beautiful vision for the future, but it lacks operative measures or targets. A special agency has formally been created to implement the plan, but yet – three years after the adoption of the plan – not begun its work. Many foreign, as well as national non-government, interviewees operating in the country confirm the doubts as to whether the plan is operational. Given the slow progress that has been made so far, and the problems of overvalued exchange rates and institutional frailty described above, it is doubtful whether the targets of diversifying the economy will be met. In the case of Equatorial Guinea one must question whether an ambitious program with detailed objectives, but very few specific instructions for the execution, is the best starting point for change. The implementation of piecemeal reforms favourable to business and innovation in general might be a less complicated and more successful way to walk than to try to determine thirteen years in advance what sectors will prosper in the future. One way to do this for Equatorial Guinea would be to establish an operational programme that identifies distinct and realistic reforms that improve the national business climate, in particular through labour market reforms and through facilitating trade with the neighbouring countries and the rest of the world. Practical examples include making it less cumbersome to hire and fire employees, continue the process to establish free movement of goods and persons within CEMAC, and start negotiations for WTO-membership.

## **5.2 Smoothing Consumption in a Volatile World**

The Government of Equatorial Guinea has sought the help of the IMF to develop a permanent income model in an effort to counter the problems of commodity price volatility (personal interview, 2010-01-15). The model, which is a practical application of Milton Friedman's famous permanent income hypothesis, has been implemented since 2008 with mixed results. Using the present value of all resource rents, the model returns an annuity that corresponds to the permanent interest earnings on the total oil revenue thus guaranteeing a perpetual stream of income. Adding this annuity to the projected

non-hydrocarbon incomes of the government an annual public budget constraint is found. The constraint calculated by the model can of course only serve as a recommendation, as public expenditure in the end is a political, as opposed to a technical, decision. If implemented, the model can serve to alleviate the problems associated with dependence on natural resource income and fluctuating prices since it is designed to turn variable oil revenues into a steady stream of income. Indeed, the model for Equatorial Guinea is based on lower-than-usual projections for future oil prices in order to make the projections robust to possible future negative price shocks (personal interview, 2010-01-15).

As mentioned in Section 4.3 the government followed the recommendations generated by the model in the first year it was implemented, but spent close to double the amount in the second year. Such excessive spending, if not founded on prudent economic considerations, is clearly incompatible with sound long term planning and could contribute to the boom-bust cycles. The government can thus be said to have had good intentions in promoting the development of the permanent income model, but must now show that it is willing to implement its recommendations. Giving the recommendations legal standing is probably not feasible in the Equatoguinean context, but the government could take steps to better integrate the implementation of the model in the institutional framework. For example, responsibility for the model could gradually be transferred from the technical assistants of the IMF to actual government staff and the recommendations could be given a more prominent place in the process of preparing the budget.

### **5.3 Increasing Institutional Transparency**

On the issue of institutional reform, Equatorial Guinea has taken an important step that could improve the institutional framework of the country in the long term. As a candidate country of the Extractive Industries Transparency Initiative (EITI), the government of Equatorial Guinea has demonstrated its will to take steps towards increased revenue transparency. EITI is a grand international project once initiated by the former British Prime Minister Tony Blair, but now living its own life with the support of western governments and major international organizations such as the World Bank, the IMF and the African Development Bank. The initiative is to a great extent influenced by the

NGO-driven campaign *Publish what you pay*, an initiative that since 2002 has encouraged oil companies to make information about how much they pay their host governments public (Oranje & Parham, 2009, p. 34). The basic idea of EITI is simple: companies operating in the extractive industries, such as oil and gas companies, release the information on how much they pay national governments, and those governments disclose how much they receive. The figures are reconciled by an independent auditor and made public “to a wide audience” on a regular basis (EITI, 2009, p. 10). A country listed as a candidate for EITI implementation has two years to fulfil the requirements and become a compliant EITI country; validation of Equatorial Guinea is due in March 2010.

The national EITI commission, headed by a high government official, has been responsible for the implementation process. The commission consists of representatives from the government, the oil companies, and civil society, but the list of commission members has so far been held secret. This seems to counteract the purpose of increased transparency and reflects the fact that the EITI process is very little known outside of the group of stakeholders directly involved. A preliminary validation, conducted by an independent validator in December 2009, shows that, in accordance with the requirements, payments and revenues have been disclosed by the private oil and gas companies as well as by the Equatoguinean government. Even though some delays distracted the process, caused by difficulties to obtain the right signatures from within the hierarchical government system (personal interviews, 2009-12-19 and 2009-12-24), the disclosure of hydrocarbon payments and revenues is a great achievement that international organizations and foreign diplomats recognize during interviews. The major problem for EITI implementation in Equatorial Guinea is instead the openness of the process and the participation of civil society. The general weakness of civil society and the often close ties between civil society representatives and the ruling party or government representatives cause problems. EITI is a standardized, detailed process that holds civil society as an important stakeholder. In all phases of the implementation process civil society is involved; its role in evaluating the outcome and driving public debate in light of increased transparency is the sought outcome. In Equatorial Guinea very few non-governmental organizations (NGOs) pursue work; the independent organisations that do exist are not given any financial support by the government and thus have small

resources, weak capacity and little influence (personal interview, 2010-01-05). In the Equatoguinean EITI process, meetings with civil society representatives have not been formalized and organizations involved lack experience and knowledge of evaluative work at a high level. As the rulebook requires formal civil society participation, it is difficult to believe that Equatorial Guinea will fulfil all the requirements to be approved as an EITI compliant country.

An important understanding in this context is that EITI is not an instrument for evaluation of government spending, but a transparency tool that other actors can use in their assessment of how oil revenues are used. In Equatorial Guinea where civil society is very weak, independent media do not exist and elections are a formality, the question arises; in what interest is the government trying to increase revenue transparency? Clearly it is not looking to promote a free debate on economic policy. One interviewee called EITI a false and censured process that the government was using to wash away its bad international reputation (personal interview, 2010-01-05). The picture that emerges from interviews with persons involved in the process is that the government did not know what it was signing up for in 2008, and is now trying to squeeze by validation and obtain international recognition, without making the considerable changes in the institutional structure that are needed.

To be sure, greater transparency of oil revenue management can lead to strengthened governance, wherefore a successful implementation of EITI can contribute to increased long-term economic growth by counterbalancing the negative institutional effects of the resource curse. The government of Equatorial Guinea needs to prove that it has an honest interest in revenue transparency that lasts beyond EITI validation. One good way of doing this would involve making the EITI process a part of the national legislation, thus ensuring that the procedure is the same every year and that it is less dependent upon the current ministerial configuration. Such a move would also signal to the international community that Equatorial Guinea is seriously committed to the EITI and revenue transparency. As per one interviewee, given the role of the president's son Theodorin Obiang within the forestry industry, an important next step for Equatorial Guinea would also involve including that sector in the EITI process.

## 5.4 What Else Is There?

Having thus considered the three major policies implemented by the Equatoguinean government to counter the resource curse, three suggestions, considered by the authors to be well-suited to the national context, are proposed. First, a one-stop-shop for registering new enterprises would help to make the Equatoguinean economy more competitive and diverse. In order to leave the bottom of the World Bank's Doing Business Index, Equatorial Guinea must facilitate the process for starting a business and relax the current strict labour market regulations. At present, there is no fixed procedure for starting a company; a prospective entrepreneur must instead find her way through the bureaucracy independently (personal interview, 2009-12-15). According to the World Bank, the only things more difficult than starting a business in Equatorial Guinea are employing workers and closing a business (DBI 2010). Indeed, the strict labour market legislation, for example requiring a large share of employees to be Equatoguinean nationals, in combination with the lack of qualified workers is one of the greatest obstacles for the formation of new enterprises (personal interviews 2009-12-09, 2009-12-15, 2010-01-08, 2010-01-19). In this context, any improvement in the ease of doing business would have large positive effects, and as a study of how to implement a one-stop-shop has been carried out by the government (personal interview, 2010-01-20), it should be an easy reform to execute.

Second, there is a great potential for growth in the service sector: at present, there are virtually no tourists coming to Equatorial Guinea; citizens do not have access to usual cultural institutions such as cinemas, theatres and bookstores; no other public transportation options than taxis are available.<sup>13</sup> These sectors are today held down by harsh regulations motivated by security and political concerns. Relaxing these regulations, for example making it easier to obtain tourism visas and lifting the ban on cinemas, would probably help to promote the formation of new local enterprises.

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<sup>13</sup> As mentioned above, tourism is already part of the development agenda, but the government has so far failed to identify its strict regulations as one of the main obstacles (Government of Equatorial Guinea, 2007b).

Last, but not least, the government should reassess its current spending policies. Infrastructure has in the past received a disproportionate share of investments, even though, as many interviewees have affirmed, education and health is in a much more dire need of funding. To truly encourage the emergence of a diversified economy, improving the human capital by ensuring that the population is well educated and acquires the right skills is essential.

The government has recently taken several promising steps, but the implementation has thus far left a lot wanting and it seems the government has bitten off far more than it can presently chew. By identifying a list of distinct reforms that would benefit the economy, and by working to implement them a few at a time, the Equatoguinean government could initiate a process to counter the malicious effects of its natural resource abundance.



## 6 Summary and conclusions

This thesis makes use of three encompassing sets of theories that attempt to explain the curse of natural resources. Dutch Disease is caused by an inflow of capital that leads to real exchange rate appreciation and loss of competitiveness of the domestic industry. Price volatility can lead governments to make catastrophic policy decisions, or break good ones. Institutional effects have however recently come to be considered as the prime source of the curse as frail institutions can both cause problems of their own and impede the remedying of others. In the case of Equatorial Guinea, few definitive conclusions can be drawn regarding the combined impact of these three effects.

First, it is clear that the country has experienced a drop in competitiveness associated with Dutch Disease and that the composition of the economy has changed dramatically. However, in contrast to the original malady of the Netherlands, Equatorial Guinea had very few viable industries before oil was discovered. The de facto de-industrialization has therefore been limited, as the disease has rather prevented than reversed the formation of a competitive secondary sector. Secondly, the drop in oil prices, connected to the global economic downturn of 2008, has also severely affected the country, but the government has thus far stayed clear of the debt trap. Finally, the capacity of Equatoguinean institutions to make prudent investment decisions and foster economic diversification is low. As in the case of Dutch Disease it must however be pointed out that institutional quality was low even before oil was discovered, and that the inflow of natural resource rents can therefore only be blamed for having hampered, rather than undone, institutional reforms. Certainly, these are symptoms of the resource curse. At the same time, the national economy has grown tremendously since hydrocarbon extraction began, and some of the riches have undoubtedly trickled down to the population.

It might thus be hard to tell whether oil has been a blessing or a curse for Equatorial Guinea, but it is beyond doubt that that the country has been cursed by bad institutions. It is clear that institutional frailty has up until now prevented Equatorial Guinea from making the most of its revenues. Income, that could have been invested to raise the productivity and increase the diversity of the economy, has been squandered on wasteful

investments, and large sums have been appropriated by the ruling elite. Indeed, the reforms that have been tested by the government – the development plan, the permanent income model, and the EITI – have thus far done very little good, as the leap from plan to action has proven too great for the frail institutions.

Given this context, the government should identify a list of key reforms that can be readily implemented. In this thesis, a one-stop-shop to register companies, service sector liberalization and increased investment in education and health have been suggested as starting critical steps. Further work on the resource curse in Equatorial Guinea is warranted. In particular, given the finding that feeble institutions are the greatest obstacle to genuine development, the causes and nature of this frailty deserve a more profound investigation to answer the questions of what is caused by poor capacity and what is caused by lacking will.

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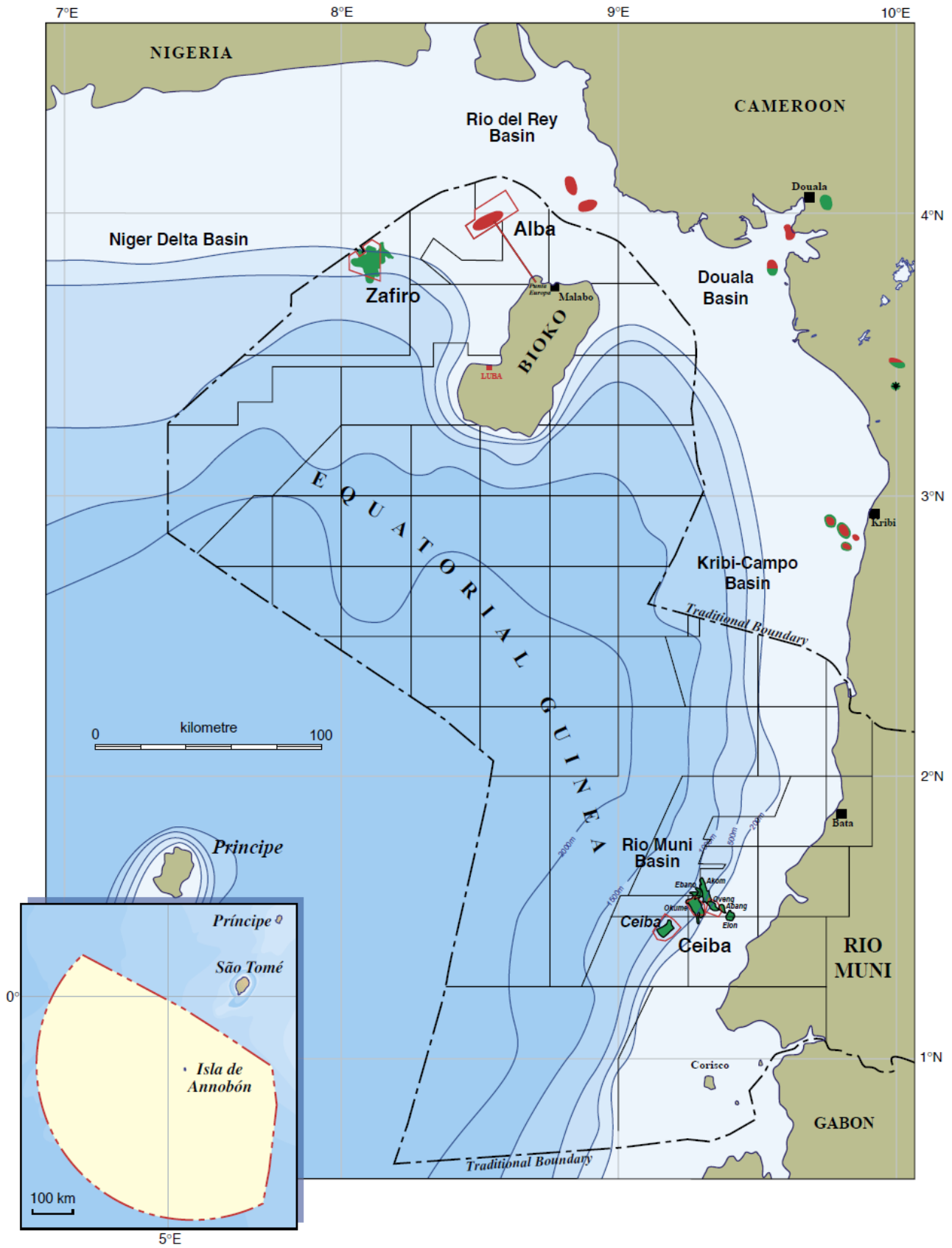
# A1 Maps of Equatorial Guinea

Figure A 1.1. Territorial map of Equatorial Guinea



Source: United Nations, January 2006.

Figure A 1.2. Equatorial Guinea offshore area



Source: República de Guinea Ecuatorial, Ministeria de Minas, Industria y Energía, 2005

## A2 List of Trade Partners

The following countries represented at least 2 percent of Equatorial Guinea's total exports *or* imports during one or more of the years 1985-2008. In the list, the relative share of the total trade (imports plus exports) is presented for selected years. The real exchange rate analysis includes the 30 countries marked with a number.

	1985	1990	1995	2000	2005	2008	(%)
1 Belgium	0.0	0.0	0.0	0.2	0.3	0.3	
Belgium-Luxembourg*	0.2	3.4	1.0	0.0	0.0	0.0	
2 Brazil	0.0	0.1	0.0	0.6	4.3	3.6	
3 Cameroon	1.3	30.4	21.0	2.0	0.0	0.0	
4 Canada	0.0	0.0	0.0	0.0	6.7	0.7	
5 Chile	0.0	0.0	0.0	0.0	0.0	0.0	
6 China: Mainland	0.0	0.1	0.1	0.0	0.0	0.0	
7 China: Hong Kong	14.8	0.5	5.4	17.8	20.1	16.9	
8 Côte d'Ivoire	0.0	0.3	2.0	1.5	1.4	1.8	
9 France	1.3	13.0	5.9	2.6	5.6	9.3	
10 Germany	9.0	4.3	1.6	0.4	0.6	1.2	
11 Greece	0.2	1.3	0.0	0.0	0.0	0.0	
12 Israel	0.0	0.0	0.1	0.0	0.2	0.2	
13 Italy	9.8	15.8	2.1	0.9	6.7	6.7	
14 Japan	0.0	0.2	5.9	3.8	3.1	2.0	
15 Korea, Republic of	0.0	0.4	0.0	0.3	0.0	5.5	
16 Luxembourg	0.0	0.0	0.0	0.0	0.0	0.0	
17 Madagascar	0.0	0.0	0.0	0.0	0.0	0.0	
18 Malaysia	0.0	0.0	0.0	0.0	0.0	0.0	
19 Morocco	0.0	0.0	0.4	0.2	0.2	0.4	
20 Netherlands	20.3	8.6	3.6	0.8	5.2	3.0	
21 Norway	0.0	0.4	0.2	0.4	0.5	0.0	
22 Pakistan	0.0	0.0	0.1	0.0	0.0	0.0	
23 Portugal	0.0	0.2	1.7	0.6	5.0	2.9	
24 South Africa	0.0	0.0	0.6	0.1	0.2	0.1	
25 Spain	31.9	14.6	33.8	45.8	11.7	20.0	
26 Sweden	0.0	0.0	0.0	0.0	0.0	0.0	
27 Tunisia	0.0	2.0	0.0	0.0	0.0	0.0	
28 Turkey	0.0	0.0	0.0	0.1	0.2	0.1	
U.S.S.R.**	1.3	1.2	0.0	0.0	0.0	0.0	
29 United Kingdom	10.0	1.8	0.3	3.6	1.5	0.7	
30 United States	0.0	0.0	14.3	18.0	26.4	24.2	
Yugoslavia, SFR**	0.0	1.7	0.0	0.0	0.0	0.0	

\* Trade data for Belgium and Luxembourg were reported together 1985-1997. For this period the joint relative share is used.

\*\* U.S.S.R. and SFR Yugoslavia have been excluded from the analysis due to insufficient exchange rate and CPI data.

Source: Directions of Trade database.

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