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Incentives for Corruption

The role of the institutional make-up of Sonangol in fostering corruption¹

Abstract

The severity of corruption in the Angolan oil sector begs the question as to which factors in the institutional structure of the state oil company, Sonangol, that have contributed to creating incentives for corrupt behavior. A case study of the activities of the organization highlights the inherent conflicts of interest in its role as a regulator and actor on the market, which has laid the groundwork for a bidding process for contracts as well as a fiscal system that both breed corruption. The situation is further exacerbated by the distinct lack of transparency in the internal accounts of Sonangol. Furthermore, overseas aid to Angola by the Swedish government has taken a partial and therefore insufficient view of these sources of corruption, by focusing undue attention on empowerment at grassroots level.

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1. Introduction

The study of developing countries holds the same appeal as Leo Tolstoy found in unhappy families; they each have their specific reasons for underperforming. One often cited explanation that has enjoyed increasing prominence in recent years is the issue of corruption.

The World Bank has recently put corruption “among the greatest obstacles to economic and social development”.² Under the stewardship of Paul Wolfowitz this preoccupation has been translated into the latter’s well-known penchant for action. Indeed, pervasive corruption has been a major reason for withholding loans to nations in need.³ At the same time the study of corruption is still very much in its infancy and there is as of yet no universally acknowledged system of measuring corruption, much less a coherent and putatively accepted theory of its causes.

In a seminal work on the subject, Samuel Huntington went as far as to proclaim the virtues of corruption in “greasing the wheels of rigid public administration” and suggested that “the only thing worse than a highly corrupt public bureaucracy is an uncorrupt one”.⁴ His main supporting arguments concerned the ability of corruption to circumvent bureaucratic delays as well as to provide financial incentives for government employees to work harder.

Recent studies on the subject have, however, poked various holes in Huntington’s line of argument. Krueger (1993) points out that, while corruption does indeed provide strong incentives for employees to take action, it actually causes them to introduce new regulations and further red tape in order to extract more bribes. Instead of greasing the wheels of public administration, the wheels seem to grind to a halt. A further illustration of bureaucratic controls run amok is provided by Hernando De Soto’s account of the government impediments to starting a business in Peru.⁵ The overall negative impact of corruption has also been empirically illustrated in a wealth of studies. For instance, Kaufman (2003) finds a negative relationship between GDP per capita and corruption.

The point of contention is now oriented more towards the causes of corruption than its perceived negative impact on economic and social development. Recent years have, for example, seen a plethora of studies on the relationship between the “natural resource curse” and corruption. The inception point was the startling finding by Sachs and Warner (1997) that economies with a high ratio of

² World Bank (2001).

³ Economist, The (2006).

⁴ See Huntington (1968) for a further elaboration on these points.

⁵ See De Soto (1989).

natural resource exports to GDP tend to grow at a comparatively slow pace. This naturally begged the question as to what caused the negative relationship between natural resource abundance and economic underperformance.

One common explanation is that wealth which is readily available through the exploitation of natural resources creates opportunities for rent-seeking behavior. The most prominent manifestation of such rent-seeking is corruption.⁶ Resource-rich countries have also received a sizeable chunk of aid from developed nations, aimed at helping them to overcome their vast social difficulties. This has, however, not been able to drag them out of poverty.

In particular, it has been argued that the inability to transform resources into growth stems from malfunctioning government institutions that spread the proceeds from resource extraction to government bureaucrats rather than to invest them in improved living standards and promising investments for the nation as a whole. This follows the increasing importance given to institutions when it comes to laying the groundwork for long-term growth.⁷

Institutional arrangements have therefore been given an important role when it comes to unlocking the potential for growth in resource-rich developing countries. It is with this in mind that the country to be investigated is Angola, one of the most corruption-laden countries on earth according to both Transparency International and Human Rights Watch. It is also a country that is generously endowed with natural resources, most prominently in oil and diamonds. One area of the country's economy that particularly suffers from corruption is the petroleum sector.

The aim will therefore be to illustrate that *the institutional structure of Angola's state-owned oil group, Sonangol, has created incentives for corruption*. Furthermore, it will be argued that *Swedish overseas aid to Angola has not regarded these sources of corruption to a sufficient extent and has therefore not alleviated the problem*.

In order to provide a holistic analysis to support these hypotheses, the study will start off by exploring the sources of corruption that have already been accounted for in economic theory, with a particular emphasis on the institutional factors that provide incentives for corrupt behavior. Then, an account will be provided of the pervasiveness of corruption within Angola's oil sector in general, and within the realm of the state oil group Sonangol in particular. The stress will be on finding an explanation in economic theory for the rampant corruption that the organization suffers from. The final step will be to explore whether overseas aid

⁶ Leite, Weidmann (1999), p. 3.

⁷ See North (1990) and Mauro (1995) for a comprehensive empirical as well as theoretical treatment of the relationship between institutions and growth.

from Sweden has tried to resolve this major impediment to economic development in the country. Unsurprisingly, a conclusion then follows that aims to resolve the stated hypotheses and form as a basis for future research within this area.

2. Methodology

The basis of the analysis will be a case study of the state oil group in Angola, Sonangol. Clearly, the relevance of case studies is inherently clouded by individual factors that may mean that they are not universally explanatory or valid. As Rodrik (2000) has previously argued, however, vital institutional factors are unlikely to be the same in every country and sector, and will therefore not map onto unique policy packages.⁸ It is therefore maintained that the specific factors responsible for corruption in the petroleum sector in Angola will be unlikely to provide a solution to third-world corruption. They will, however, touch upon important issues for unlocking the potential of the most lucrative sector in Angola, a worthwhile aim in itself.⁹

In addition, the approach that will be utilized in the course of this study will build on methodological individualism. In other words, a macro level problem, i.e. corruption, will be analyzed through the study of the particular incentives faced by each individual within the organization that will be looked at. There are, of course, a multitude of other approaches that could also be conceived to possess considerable explanatory power. The reason why this method has been chosen is that it has been utilized in a number of recent studies within the field of economics of organization and in a number of cases it has provided parsimonious explanations for the performance of organizational entities. Indeed, it is the study of how individual preferences generate a complex outcome pattern at a societal level that gave birth to the science of economics to begin with.¹⁰

Furthermore, the study to be undertaken is inherently qualitative, although it will build on quantitative evidence. In short, institutional factors will be analyzed in order to explain rampant corruption in Angola. The rationale for insisting on this type of study will grow all the more apparent further on, as the lack of sufficient reliable data to perform a quantitative analysis is one of the main institutional shortcomings that will be touched on in the qualitative

⁸ Rodrik (2000), p. 3.

⁹ A similar point was made by McMillan (2005), who argued that case studies constitute the only viable manner of approaching the problem of corruption within Angola's petroleum sector.

¹⁰ Buchanan (1986), p. 2.

investigation.¹¹ As has already been mentioned, it is also the case that this type of qualitative approach has previously been put to fruitful usage, for instance by Douglass North¹² and William Baumol.¹³

3. Theoretical and Empirical Background

To set the study in motion and identify the sources of incentives for corrupt behavior within Sonangol, it is necessary to provide a thorough look at how the problem at hand has manifested itself on previous occasions as well as in economic theory. The first step is to explain on what basis certain countries are judged to be more corrupt than others, through a look at some of the main instruments for measuring the extent of the problem. Thereafter, a consideration of the causes of corruption will lead on to an illustration of a formal model, which shows the wide-ranging effects of bribe-giving for buyers and sellers, as well as the country as a whole. Crucially, the model also uncovers some of the institutional structures that underlie the custom of demanding bribes.

It is then time to take a more specific look at the institutional factors that have instigated the problem. The look at the theoretical background subsequently culminates in a discussion on which factors that have been found to be particularly significant when it comes to spurring on corruption.

3.1 Measures of Corruption

In order to be able to back-up any claim that a certain country is more corrupt than others, and that a particular sector within a nation is plagued by the problem to a notably significant extent, it is necessary to clarify which measure of corruption that is being referred to and used.

Three main types of measures have been applied in the economic literature related to cross-country comparisons of levels of corruption. One school of thought, pioneered by Mauro (1995), uses the International Country Risk Guide,¹⁴ assembled by the PRS Group, a private risk-assessment firm. Backers of this indicator claim that it captures the probability that high-ranking government officials will demand bribes, as well as the level of expectation of illegal

¹¹ See International Monetary Fund (2005) for a detailed account of the shortcomings of transparency within Sonangol.

¹² See for instance North (1990).

¹³ See for instance Baumol (1990).

¹⁴ See International Country Risk Guide (2005).

payments in different tiers of government. Critics point out that it focuses on the political risk involved in corruption rather than the level of corruption *per se*. These two factors can vary considerably depending on the extent of public tolerance for graft.¹⁵

One of the most prominent indicators is the one published by the Berlin-based non-governmental organization (NGO) Transparency International (TI). The onus is in this case on perception-based sources that focus on the overall extent of corruption instead of its expected impact. Its flagship indicator is the Corruption Perceptions Index (CPI), which ranks some 150 countries in terms of the degree to which corruption is perceived to exist among public officials and politicians. It is argued by TI that measuring actual levels of corruption is not a reliable way to make comparisons across countries as these can be affected by other factors. For instance, evaluating the number of corrupt bureaucrats that are convicted in court is more a reflection of the country's legal system than the extent of corruption.¹⁶

The perceived levels of corruption are determined by assessments by business experts rather than surveys open to the general public. The measure is also a composite one based on a number of different sources, each of which comes from institutions that TI deem to be reliable. The make-up of the poll varies from year to year, CPI 2005 is based on 16 different surveys from a total of 10 independent institutions.¹⁷

A third measure has been denoted the Control of Corruption Index and is published by the World Bank. This indicator differs from the others primarily to the extent that corruption is defined more broadly and a greater number of cross-country indices reporting some aspect of the extent of the problem are included in the composite index in comparison with CPI.¹⁸

At the end of the day, what are the differences between the results disclosed by the aforementioned measures? Svensson (2005) has found that the simple correlation between the Control of Corruption and the Corruption Perceptions indices lies at 0.97, and at 0.75 between each of these and the International Country Risk Guide.¹⁹ In the end, the results from the three indicators are startlingly similar. The main differences can be found in which countries and years that are covered by each one.

¹⁵ Svensson (2005), p. 22.

¹⁶ Transparency International (2005).

¹⁷ Ibid.

¹⁸ See World Bank (2002).

¹⁹ Svensson (2005), p. 22.

A further issue that should be kept in mind is that each of these are ordinal indices rather than cardinal measures. In other words, a move from 5 to 4 might imply a sharper drop in a given cardinal measure, such as bribes per capita, than a move from 25 to 24. Accordingly, a drop to second from first place in the ranking does not imply a sudden doubling of the level of corruption in a given country.²⁰

In summary, three ordinal measures will be used to account for the extent of corruption in Angola. The indices supplied by the World Bank and Transparency International both paint a comprehensive picture of the magnitude of bribe-giving and are, crucially, based on survey evidence from different sources. The application of both measures will therefore lower the risk of the end result being adversely affected by erroneous information. Furthermore, the International Country Risk Guide will provide a useful complement to these measures, by looking at how the level of corruption has affected investment decisions by enterprises present on the Angolan market.

Equipped with evidence from three credible sources, it will be possible to diagnose the level of corruption in Angola. A clear idea of the scope of the problem will aid the forthcoming discussion on the instigators of corruption that have been accounted for in economic theory, and their relevance for the country in question.

3.2 Corruption: Concept & Connotations

In order to be able to point out which factors within the institutional structure of Sonangol that are most conducive to stimulating corruption, it is first necessary to consider the determinants that can be found in economic theory. What follows will therefore be an account of how economic theory on the subject has progressed, through references to a number of seminal works related to this area.

Corruption, as it will be dealt with in the realm of this study, is an illegal activity and the roots of economic theory on the subject therefore stem from studies trying to explain crime. Becker (1968) stresses that the probability of being caught and the penalty imposed are the prime determinants of the likelihood of committing a criminal act. The key to prevent corruption is, in this line of argument, an effective and credible strategy of deterrence on part of the government. On the one hand, effective legislation will have to be in place in order to punish corrupt officials. On the other hand, an additional prerequisite will have to be political stability, as a volatile system compromises the ability of

²⁰ Rose-Ackerman (2004), p. 4.

rulers to empower judicial institutions. As unstable systems are inherently weak, powerful officials in such situations will count on the ruler's inability to risk his or her political capital in order to punish them, especially when depending on them for surviving in power. In short, an effective institutional structure is the *sine qua non* for any credible effort to banish corruption.

Although Becker's ideas will turn out to form as a useful basis for further thinking about graft, a work that deals with illegal activity in general will inherently fail to capture some of the specificities tied to the problem. In order to develop a more precise theory it is first necessary to provide a concise definition of the concept. The term "corruption" can have a variety of connotations, some of them far away from the realm of economics, such as the corruption of the young from playing computer games. This will obviously not be the meaning of the term that will be problematized in the context of Angola.

Whereas it might seem superfluous to point out that it is the economic meaning of the term that will be utilized, there are further difficulties that concern where exactly to draw the line in order to make this study manageable. To begin with, it is corruption within the government that will be explored. Officials at private enterprises also take kickbacks for performing their functions, but such issues will be left out to delimitate the study.

The conventional definition of government corruption holds that it is the "misuse of public power for private or political gain".²¹ This includes not only outright bribery of officials but also special-interest deals, which may favor a professional group such as the National Rifle Association (NRA) in the United States or an ethnic one such as the Tutsi's in pre-genocide Rwanda. While the latter implication is of undoubted interest and relevance, it is beyond the scope of this project.

Instead, government corruption will henceforth refer to *the sale by government officials of government property for personal gain*. This still includes cases as varied as government officials who accept bribes in order to provide import permits for multinational companies and customs officials who provide immigrants with passports in return for under the table payments.²²

Once the hurdle of providing a parsimonious definition of the term has been overcome, the next step is to develop a formal theory that specifically deals with it. The aforementioned work by Gary Becker set the tone for a principal-agent model of corruption. The preoccupation of this model is the relationship between

²¹ Rose-Ackerman (2004) p. 1.

²² Shleifer, Vishny (1993), p. 599.

the top-level of government (the principal) and an official (the agent), who is willing to accept bribes in exchange for the goods provisioned by the state, thereby putting his or her self-interest above that of the principal. The question is then how the agent can be motivated not to break the law. According to Becker (1968), the solution is to provide a credible threat of severe punishment to deter the official from taking bribes. However, it can also be done through indoctrinating the officials that honest behavior is the path to the fulfillment of a righteous plan or ideology.²³

3.3 Formal Model of Corruption

A formal model which assumes that government officials do indeed enjoy certain property rights over the particular good that is allocated has been developed by Shleifer and Vishny (1993). Their basic model starts from the assumption that an official can restrict supply without any risk of punishment or detection from higher tiers of government, because higher ranking officials actually share in the proceeds. It is also assumed that the provisioned good is homogenous. There are two basic cases:²⁴

3.3.1 Without Theft

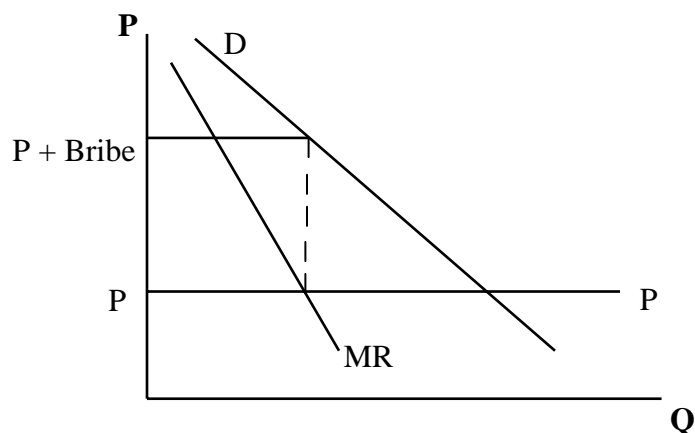
In the first version of the model, the official does not actually steal anything from the government. Instead, he or she turns over the official price of the good to the state. Extra payments in the form of bribes will consequently always be on top of the official price and the good will invariably be more expensive for the consumer than if corruption was absent.

²³ See Klitgaard (1991).

²⁴ The following annotation will be used in Figures 1 and 2:

P: Price	Q: Quantity
D: Demand	MR: Marginal Revenue

*Figure 1: Corruption Without Theft*²⁵



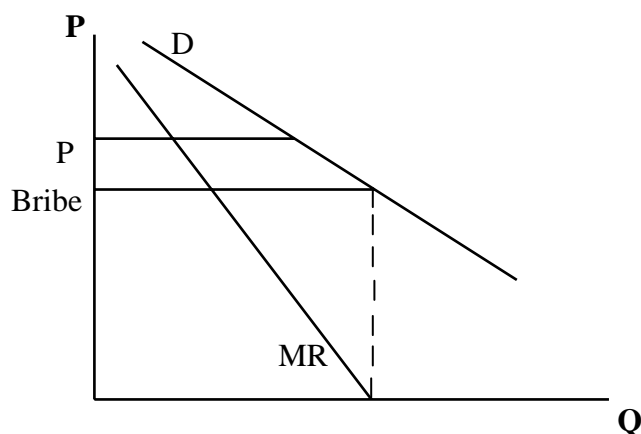
As *Figure 1* illustrates, the bribe will be on top of the official price, P , which the state official subsequently turns over to his or her employer. The marginal cost of provisioning the good for the official is the price, P , as that is the sum that needs to be given to the government each time the good is sold. The buyer will incur a cost consisting of this price as well as the bribe (" $P + \text{Bribe}$ ").

3.3.2 *With Theft*

Here the government official does not provide his or her employer with any proceeds from the sale and simply hides that it has even occurred. This context produces the curious result that, as the buyer only pays for the bribe, the cost for the consumer is probably lower than the official price. Even though it is not always the case that the official price exceeds the bribe, *Figure 2* depicts the price as being higher in order to highlight the difference with the previous case, in which bribes are always to the disadvantage of the consumer. In addition, it will be explained further on that such a depiction is an accurate description of the nature of corruption in Angola.

²⁵ Shleifer, Vishny (1993), p. 602.

Figure 2: Corruption With Theft²⁶



In *Figure 2*, P refers to the price of the good if it is bought from an official who does not accept bribes. In case it is indeed possible to payoff the seller, the price for the buyer will merely be the sum of the bribe. In *Figure 1*, “ $P + \text{Bribe}$ ” is used to denote the price for the buyer as the illegal payment is made on top of the official price, instead of as an alternative to it, as in the current case. It is the separate nature of these two sums that explain why P and “Bribe” are expressed as different entities in *Figure 2*.

From *Figure 2* it is clear why this arrangement can be in the interest of both parties. The buyer merely pays for “Bribe”, which is lower than the official price, P . The seller on its hand does not incur any marginal cost from the sale, as nothing is turned over to the government and the latter incurs the costs of production. This produces a mutually beneficial and therefore stable situation because the interests of buyers and sellers are effectively aligned. Any seller who does not take bribes will not survive in an environment with competing officials who are willing to do so, as customers will flock to the latter to benefit from lower prices.

The limitation is, of course, that such a situation cannot persist when an effective accounting system that records sales by the government is in place. In countries and sectors where certain government bodies do not need to disclose the sources of their income such an arrangement can, however, survive indefinitely, causing extensive plundering of government resources and assets.

²⁶ Ibid, p. 603.

3.3.3 Organization of the Corrupt Network

The basic model that has been applied until now corresponds to one particular structure of the corrupt network, namely one in which corruption is pervasive but where it is also associated with a certain security for the buyer. In other words, where it is clear which person that needs to be bribed and by how much. This implies that the buyer knows that he or she will not need to pay any additional bribes in the future. Such a system is typical of stable dictatorships and police states, such as the Soviet Union and North Korea.

There are two situations in which this basic model will not apply. One simple case is one in which there is no need to bribe officials in order to access goods and services controlled by the government, and where the attempt to is actually associated with severe punishment for the buyer. The polar opposite is when not one but numerous bureaucrats need to be paid off in order to get a government permit or gain access to a good. In this case, typical of failed states in sub-Saharan Africa, to bribe one bureaucrat does not provide any guarantees of another one not demanding an additional one further down the line. Such a situation is often denoted *free-entry into collecting bribes*, as officials can simply change laws and regulations to benefit themselves.

3.3.4 Independent Agencies

Furthermore, the basic model of corruption applies to a situation where the provision of the permit or service is in the hands of one particular government agency which essentially acts a monopolist. There are two examples of how agencies acting independently have vastly different effects on both the revenues collected by the government and the costs accrued by the consumer.

The first case refers to a situation in which two or more agencies supply complementary permits. If each of them act independently and attempt to maximize the revenue of their particular agency taking the output of the other ones as given, the bribes demanded will be set at an inefficiently high level, which leads to a drop in output. The level of bribes will be higher than in the basic model, but the total revenues from corruption will actually drop as a result of the diminishing level of output.²⁷

A useful example in order to clarify the previous point is a hypothetical situation in which two government agencies are involved in awarding visas to foreigners wishing to work in a given country. For simplicity the two entities will be

²⁷ Ibid, p. 606.

referred to as the “embassy” and the “customs”. To be granted a visa, the application will need to be approved by both of these departments: first by the embassy in the home country of the applicant and then by the customs department upon arrival in the adopted nation. If the officials at the embassy demand an extortionate bribe this will most likely lead to a reduction in the number of applications, which will in turn reduce the total volume of bribes collected by the customs officials as well as those employed by the embassy. The same applies in the opposite situation, as the number of applicants who go to the embassy will go down if it becomes known that a substantial bribe will need to be paid to the customs when one arrives in the country. By acting independently rather than colluding, officials at both the customs and the embassy will suffer from lower revenues.

An alternative scenario is one in which an identical permit or product is supplied by more than one government entity. Given that there is no theft on the part of government officials, this produces a very different situation to the previous case as it empowers the consumer to pick and choose the agency that demands the lowest bribes. In the long run, the competition between different government agencies will drive the level of bribes down to zero.²⁸

The latter result is a crucial difference between corruption with and without theft. While both these situations tend to benefit consumers, the latter will lead to a reduction in the level of bribes while the former will imply that all agencies start to demand them. As kickbacks in the case of theft tend to lower the prices paid by consumers, the ability to be selective regarding which government entity that is chosen implies that all competing agencies will need to start robbing money from the government and put the entire bribe in their own pockets. If there is no theft, however, the same selectivity on part of the consumers will lead to a lower incidence of bribery.

3.3.5 Secrecy

Secrecy is what causes corruption to be particularly distortionary. A typical example used to illustrate this point is that governments in poorer countries tend to prefer more advanced technology than what is called for under the relevant circumstances. The reason is that, because competition is less prevalent in high-technology sectors and it is more difficult to benchmark prices, opportunities for corruption are rife.²⁹

²⁸ Ibid, p. 607.

²⁹ Ibid, p. 616.

In addition, secrecy tends to stifle innovation and social development. This effect stems from the necessity of keeping a small and homogenous group in charge of state agencies and private businesses in order to diminish the risk of corruption being uncovered. In this manner, the secrecy of corruption perpetuates stratified social structures in developing regions.³⁰

3.3.6 Implications of the Model

An important result is that the most conducive manner of resolving the issue of corruption is highly contingent on which of the cases that is applicable. In the case of corruption without theft, a viable solution would be to produce competition between bureaucrats in the provision of public services, which will effectively drive bribes down to zero.

If a country is in a situation characterized by bribery with theft, more competition in the provision of services might instead increase pilferage from the government, even as the levels of bribes are reduced. Under such premises, competition in the provision of public services needs to be accompanied by intensive monitoring mechanisms to limit crime.

The general conclusion from the study also concerns the importance of the government and the political process when it comes to determining the level of corruption in different countries. Most importantly, it follows that weak governments that are not able to control their agencies will patently be unable to prevent corruption among their officials. In the end, this resembles a principal-agent problem insofar as agents enjoy discretion and control over property rights and are able to enrich themselves at the expense of the overall good of the organization or country. Such a description is, however, misleading in the case of states in sub-Saharan Africa characterized by *free-entry into collecting bribes*. In the latter, the weak governments in charge also tend to focus more on personal enrichment than long-term development and are therefore more unwilling than unable to prevent bribery.³¹

Furthermore, the lack of control over government agencies in sub-Saharan Africa implies that the countries of the region tend to be characterized by competing entities providing the same good or service, as well as corruption with theft. This leads both to extensive bribe-giving and to a situation in which bribes are lower than the official price, due to the competitive nature of the provision of government goods and services. The situation depicted in *Figure 2* is therefore

³⁰ Ibid, p. 615.

³¹ Examples abound of kleptocratic leaders and governments in this region. An illustrative case is Mobutu Sese Seko's 32-year stint as president of the Democratic Republic of Congo (formerly Zaire).

an appropriate illustration of bribe-giving in sub-Saharan African nations such as Angola.

3.4 Resource Abundance and Corruption

Following this theoretical treatment of the effects of different types of corruption, it is time to switch emphasis to empirical studies that attempt to account for the underlying reasons for why countries end up being plagued by corruption with or without theft. One interesting point concerns the relationship between the presence of lucrative national resources and rent-seeking behavior.

In a landmark study, Sachs and Warner (1997) showed that countries with a high-ratio of natural resource exports to GDP tended to grow slowly during the twenty year period that provided the basis for their work.³² In order to explain this phenomenon it is necessary to divide the impact of natural resources into their direct and indirect consequences.

3.4.1 Direct Effects

The direct impact of natural resource abundance on economic growth is known as the “Dutch disease”, a term which stems from the recession that hit the Netherlands after the discovery of large reserves of natural gas during the 1960s. More specifically, the concept refers to a contraction in the traded goods sector following a sudden increase in revenues originating from a discovery of lucrative resources.

In order to explain the peculiarities of this problem it is useful to divide the economy into three sectors:

1. Tradeable natural resource sector
2. Tradeable manufacturing sector
3. Non-traded sector

Labor and capital are used in the non-traded and manufacturing sectors, while both factors are assumed to be superfluous in the natural resource one. A sudden rise in natural resources produces two mutually reinforcing implications. The boom will result in higher real income which will in turn cause a *spending effect* through higher expenditures on services. This provokes a real appreciation of the exchange rate as the relative price of non-traded relative to traded goods will

³² Sachs, Warner (1997), p. 26.

rise. The latter is known as the *appreciation effect*.³³

These twin effects will subsequently lead to a drop in the amount of capital and labor that is employed in manufacturing. It is this contraction in the manufacturing sector that is termed the “Dutch disease”.

3.4.2 Indirect Effects

There are a number of additional implications which work in tandem with the “Dutch disease”. An important factor is that a sudden windfall originating from resources can act to promote rent-seeking behavior in the economy. This is particularly the case if a previously impoverished nation suddenly finds itself awash in natural resources, causing a “feeding frenzy” whereby competing groups or public officials fight for the proceeds from the resource. In particular, the presence of potentially lucrative natural resources can hurt economic growth by diverting energy into rent-seeking rather than productive activities.³⁴

In other words, the wealth created by an accrual of resources in the hands of the government creates greater incentives for corruption for state officials and politicians. This phenomenon has found particular empirical support in examples of countries that benefit from booms related to a rise in petrol prices.³⁵ Cross-country studies have also shown that capital intensive natural resources are one of the key determinants of corruption.³⁶

Incentives for corruption in resource-rich countries were also found to be accompanied with certain institutional arrangements. A prominent example is that Sachs and Warner (1997) have shown that the most corrupt countries were all “closed economies”,³⁷ with the sole exception of Indonesia. Such results are typically explained by the sudden accrual of “easy money” in the hands of the government, which causes it to put off necessary reforms that would otherwise have promoted growth and wealth creation.³⁸

³³ Corden, Neary (1982), p. 827.

³⁴ See Rose-Ackerman (1999) for further treatment on the diversion of resources to rent-seeking activities.

³⁵ See for instance Khan (1994).

³⁶ Leite, Weidmann (1999), p. 30.

³⁷ According to Sachs, Warner (1997), p. 12, a “closed economy” is one in which any of the following five criteria are met:

1. average tariff rates above 40%
2. more than 40% of imports are covered by non-tariff barriers
3. socialist economic system
4. state monopoly of major exports
5. black-market premium above 20%

³⁸ Ibid, p. 23.

The importance of institutions is particularly palpable in developing countries. The reason is that they play a vital role in the wake of natural resource discoveries. Proper institutions that provide effective support for the rule of law can play an important part when it comes to mitigating the incentives for corruption produced by a sudden windfall from natural resources, by making it more difficult for prominent groups or individuals to lay their hands on key sources of income.³⁹

The identification of institutions as a vital variable when it comes to spurring on the practice of greasing palms is the main lesson that can be drawn from the work by Sachs and Warner. The next step will be to deal more specifically with their influence.

3.5 The Role of Institutions

A crucial point to be taken from the previous section concerns the importance of institutions when it comes to affecting the level of corruption, particularly through the degree of economic openness. It is more than worthwhile to elaborate somewhat on such points in order to obtain a better account of the case for institutions having an important influence on corruption.

There have been a number of attempts at providing empirical demonstrations of the impact of institutions on corruption. A significant strand of literature has made use of historical and social factors that demonstrate this relationship. One prominent study shows that the mortality rates of European settlers have left a lasting heritage. Where the mortality rates were high, resource extraction was favored over building institutions and instituting property rights. High risks of expropriation and indices of corruption today are therefore highly correlated with resistance to colonial conquerors several centuries ago.⁴⁰

A focus on such historical variables might seem discouraging to present day reformers who hope to drag their country out of poverty. For instance, if the extent of corruption is highly contingent on factors such as ethnolinguistic fragmentation, the share of Protestants in the population and French or socialist legal origin,⁴¹ what promise does that hold for change?

³⁹ Leite, Weidmann (1999), p. 31.

⁴⁰ See Acemoglu, Johnson and Robinson (2001).

⁴¹ The importance of these factors was put forward by La Porta, Lopez-de-Silanes, Shleifer and Vishny (1999). In particular, the effect of these points was to impose a more interventionist role for the government, which in turn led to higher indices of corruption.

The point is, however, that these historical variables do not directly determine the quality of government. Instead their influence runs through their effect on underlying institutional structures. The implication is that, while historical factors help to explain the origins and legacies of present institutional structures in developing countries, that does not mean that these cannot change. Such studies are therefore useful in making a diagnosis of the key institutional differences between countries with very different levels of corruption. In particular, they suggest a clear causation between institutions and corruption, as it is difficult to fathom how mortality rates of settlers hundreds of years ago can directly affect levels of corruption today, instead it seems clear that any relationship has to exist via the effect of mortality rates on the type of institutions that were built, the basic structure of which persists until today.

The intimate relationship between corruption and institutions uncovered by the finding of a direct causal relation between the latter and the former explains why the intention from the outset has been to explain why institutional structures create incentives for corruption. It is now time to uncover these structures in greater detail.

3.6 Key Institutional Factors

Given that at least some of the influence of a natural resource boom on corruption runs through the effect of the former on institutions, it is necessary to explore which institutional factors that have a particularly important effect on the level of corruption. Rose-Ackerman (2004) has provided a useful classification and summary of the issues that have been found to be significant. The analysis of the relative importance of each of these points will lay the groundwork for a subsequent look at their respective relevance in the case of Sonangol.

3.6.1 Transparency & Local Empowerment

The first issue concerns the question of government transparency and the role of the involvement of local citizens. Latin America in particular has seen the implementation of a plethora of programs aimed at tackling corruption through empowering citizens and making them more involved in the political process. A success story was the drive to break with clientalist structures in Porto Alegre, Brazil.⁴² The way this was gone about was through increased democratic

⁴² Clientelism refers to a relationship between actors in the political process in which political favors, such as jobs and fiscal benefits, are exchanged for support, primarily in the form of votes. For further

participation, which provided citizens with better information from the government, which in turn augmented the latter's accountability. Crucially, this resulted in a drop in corruption.⁴³

Further studies have continued on the same theme and found a negative relationship between public service delivery and corruption. In particular, bribery was found to be higher in units of government characterized by inferior levels of meritocracy and transparency.⁴⁴

An interesting example concerns an information-based reform in Uganda. Previously, only a fraction of funds from the central government destined for local primary schools managed to reach their intended recipients. The reform entailed a newspaper campaign to publicize funding levels, in order to enable parents to be correctly informed about how much their children's schools were due to receive. Armed with such information, they were able to hold the government accountable and the amount of funds that disappeared quickly dropped.⁴⁵

It is important to clarify, however, that the introduction of greater publicity was accompanied by better enforcement mechanisms. While it is decidedly uncontroversial to advocate greater transparency in government institutions, it is more hazardous to account for a direct relationship between local empowerment and the rate of bribe-giving. Indeed, other studies have found that local control might instead promote local corruption and even organized crime. An effort to decentralize political decision-making in Bangladesh actually ended up increasing corruption.⁴⁶

It appears that transparency and local empowerment need to go hand in hand in order to be effective. Giving more power to local groups without providing them with more information about government activities makes any such reform toothless. Similarly, transparency and publicity also need to be combined with grassroots organizations that actually possess the competence and incentives to act on the information available. As has already been explored, it also matters what type of corruption that plagues the particular country or region.

discussions on the concept's historical evolvement and effect on Brazil's economic and social development, see Carvalho (1999) and Kaufman (1977).

⁴³ See De Sousa Santos (1998).

⁴⁴ See Kaufman, Kraay and Mastruzzi (2003).

⁴⁵ See Reinikka, Svensson (2003) for a complete account.

⁴⁶ See Crook, Manor (1998).

3.6.2 Procurement Practices

The pertinence of empowering local organizations with more information provides a natural starting point for the need to reform public procurement. This issue is intimately related to transparency, as publishing information about how the government goes about its purchases is a central tenant of any system with the ambition of being open. The information provided will also be vital for citizens wanting to put pressure on the government through exercising local power.

The problem of corruption in public procurement is particularly harmful because it tends to lock its victims in a vicious circle, as high indices of corruption are associated with sizeable levels of public investment as a share of GDP. Corrupt governments will typically embark on White Elephant projects, the appeal of which can be explained both through their self-celebratory nature and because they offer ample opportunities for demanding kickbacks in return for lucrative government contracts.⁴⁷

Excessively costly investment projects that hurt tax payers and consumers also have the effect of crowding out private sector projects. This crowding out effect has, for instance, been illustrated in the case of Italy. A contributing factor is that the custom of demanding bribes for government cooperation greatly increases the cost of doing business, apart from making it profitable for the government to overstep its mandate and be involved in more spheres of the economy.⁴⁸

Given the wealth of evidence which points to the importance of reforming public procurement, what policies should be pursued to improve the situation? The key is to consider not only how the government carries out its purchasing activities, but also what it actually buys. In particular, purchases should be concentrated in products for which an international market exists and where it is possible to benchmark prices.

A related policy would be to practice what the World Bank calls International Competitive Bidding (ICB), which requires the acceptance of the lowest “evaluated” bidder in order to be granted loans. This has in turn influenced codes of conduct in public procurement. A problem arises, however, when a project demands technology that is not readily available on the market.⁴⁹

Rather than to follow a rigid system like the ICB it seems more logical for

⁴⁷ A similar line of argument was developed by Tanzi, Davoodi (1997).

⁴⁸ See Golden, Picci (2004).

⁴⁹ See World Bank (2004) for more details about International Competitive Bidding.

organizations to make their purchases open to audits and to make their accounts public. In this way, the public and independent experts can make up their own minds as to whether what the government buys is justified or whether kickbacks are bound to have been involved. This also enables governments to make use of products and services that are custom made to the particular situation in each country rather than off-the-shelf solutions.

3.6.3 Salaries & Job Security

One solution that has been touted to the problem of corruption is to lower the incentives for government officials to participate in it. The argument is that they would be less prone to engage in graft if they received reasonable job protection as well as decent salaries.

In its 1988 constitution, Brazil took this argument to heart and it was argued that greater job security would help to lower corruption. With this in mind, state officials were offered what in practice amounted to life-time employment, as they would have to commit a crime during the exercise of their duties in order to be fired. This has, however, had a negligible impact on bribe-giving and has also contributed to the near legendary inefficiency of Brazilian public administration.⁵⁰

An alternative route is to provide government employees with higher salaries in order to raise the cost for employees to lose their jobs. In addition, the provision of bonuses for desirable and professional behavior could also be conceived to make it less likely to demand bribes. Unfortunately, in practice it has been hard to find examples of raising the salaries of public officials resulting in any significant drop in corruption.⁵¹ Considering the obvious costs of such a policy, the ambiguous results make it patently unattractive.

A related study on the subject that arrived to a somewhat different conclusion concerned hospital procurement in Buenos Aires. In this case, improved wage levels were associated with a drop in corruption. On the other hand, improved financial incentives were accompanied by crackdowns in which the central authorities checked the prices at the hospitals and used high relative prices as indications of potential payoffs. The results show that prices actually declined during the crackdown instead of when wages were improved.⁵² It therefore

⁵⁰ Arretche (1996) and Baer (2001) both provide extensive accounts of the lessons learned from the decentralization effort in Brazil.

⁵¹ Rauch and Evans (2000) refer to a number of studies in which wages have been used as an unsuccessful tool for tackling corruption.

⁵² See Di Tella, Schargrodsky (2002) for the study of hospital procurement in Buenos Aires in its entirety.

seems as if the stick is more efficient than the carrot when it comes to banishing kickbacks.

3.6.4 Public Revenue Collection

While providing incentives for honest behavior among those accepting bribes has a complicated history, there is another side of the coin, namely incentives for offering bribes in the first place. For instance, the level of taxes and duties might be so high that individuals and private businesses are unable to make ends meet by following rules and regulations. A viable solution would therefore be to offer illegal payments in order to speed things up.

In addition, studies of fiscal obfuscation show that the complicated nature of many tax systems makes them difficult to understand for a large portion of the population. This lack of clarity provides tax collectors with a certain leeway to make exceptions for which bribes can be demanded.⁵³

3.6.5 Business Regulation

Vague and complicated legislation spur private businesses as well as individuals to pay bribes. A groundbreaking work on the subject is Hernando de Soto's study of the conditions for doing business in Peru. De Soto argues that the way small businesses, in general, and starting new enterprises, in particular, are regulated make it extremely time-consuming to set up a company by following the letter of the law. To offer a payment on the side can very well be crucial in order to get the company up and running within a reasonable time span.⁵⁴

It is important to clarify that this is not an argument for removing all regulations. Although regulations such as environmental standards can increase incentives for corruption, these need to be balanced against the potential social benefits on offer. In particular the key is not so much to remove regulations but to make them clearer and easier to understand in order to make entry and operation of businesses less costly.⁵⁵

⁵³ Rose-Ackerman (2004), p. 32.

⁵⁴ See De Soto (1989) for a complete account of the cumbersome regulation of enterprises in Peru.

⁵⁵ Rose-Ackerman (2004), p. 34.

3.6.6 Tying the Pieces Together

As should be clear by now, there are a number of different ways to combat corruption. The natural follow up question concerns their relative importance in different situations. Such information is necessary in order to evaluate the policies in corruption-laden nations as well as to be able to articulate prescriptions that will enable them to resolve their problems. It is therefore of interest to evaluate their practical relevance. However, no comprehensive empirical investigation about the success of each policy in different countries exists as of yet, and it is unfortunately beyond the scope of this study to collect such data. The only viable solution is therefore to refer to case studies in which different strategies have been pursued and the effectiveness of each one can be evaluated.

In a landmark study, Benjamin Olken pursued a decidedly hands-on approach to monitoring corruption as well as attempting to diminish its costs, in a field experiment in Indonesia.⁵⁶ The objective of his study was to uncover how much of the money spent on surfacing roads that connect villages and fields on the island of Java that was channeled towards improving vital infrastructure, and how much of it went to kickbacks. In order to get a balanced view of the true cost involved his team built “test roads”, and conducted a variety of practical experiments to find out the exact quantity of each material that was needed in the construction. Such experiments enabled the author to reach the conclusion that a full 28% of spending went “missing”, i.e. ended up in bureaucrats’ pockets rather than on the roads.

After diagnosing the problem, the author proceeded to try two main approaches in order to resolve it. The first one involved efforts to raise grassroots participation among the Javanese villagers by persuading them to attend public hearings in which spending was discussed and scrutinized. In order to bring about a higher participation the author sent out hundreds of invitations to villagers. In the end, this did indeed have the desired effect and attendance at the meetings rose considerably. Unfortunately, this policy experiment had only a negligible impact on the level of corruption in the villages of Java.⁵⁷

The key problem seems to be that greater monitoring by citizens is subject to a free-rider problem. If one person monitors, his fellow citizens will benefit from his or her vigilance and can instead devote their time to more productive activities, effectively free-riding off the one that monitors. The end result is a

⁵⁶ See Olken (2005).

⁵⁷ Ibid, p. 4.

situation in which no one can be bothered to be vigilant as they expect one of their fellow citizens to do the job.⁵⁸

The second strategy involved raising the probability of catching offenders by introducing professional audits. More specifically, each village was informed that certain ones would be randomly selected for audits at the end of the road construction. This turned out to be a more effective option as missing expenditures dropped by around eight percentage points.

There are, however, several drawbacks with bringing about such audits on a full scale. To begin with, they often prove costly, a serious obstacle as many of the governments of the most corruption-laden countries are in dire economic straits. In Olken's study, the cost of each audit amounted to around \$335, making it impossible for the state legislature to credibly threaten to audit a huge number of villages.⁵⁹ Furthermore, previous experiments have showed that auditors themselves are corruptible and often end up colluding with the very subjects they are supposed to control. There are therefore cases in which corruption is indeed exacerbated by audits, as there is now one additional group that demands bribes.

In order to make audits an effective instrument it is, therefore, necessary to justify the underlying investment by creating stronger incentives for lawmakers to put pressure on accountants not to exercise corrupt behavior. In the field-experiment, the threat of an audit proved to be a more effective tool when it was used against heads of villages who were politically insecure; i.e. that only governed based on slim majorities or that had to face reelection within a two-year period from the time of the study.⁶⁰

Olken's findings are therefore related to those of Gary Becker. What matters for reducing crime is a combination of hefty punishment and a probability of being caught. According to this line of argument, the way to bring about a drop in corruption is a thorough audit of the economic activities of each agent, but also to empower citizens to such a degree that they are able to demand that their leaders actually bring corrupt persons to justice, i.e. the threat of being punished must weigh heavier for democratically elected leaders than any economic incentive they may have to collude with corrupt elements of society.

These findings provide a road map from which it will be possible to identify some of the key factors in the institutional structure of Sonangol that have created incentives for corruption. The next step will therefore be to apply these

⁵⁸ Ibid, p. 7.

⁵⁹ Ibid, p. 48.

⁶⁰ Ibid, p. 4.

results to the specific context of Angola in order to evaluate the relative importance of these points for the current case.

4. Corruption in Angola

It is now time to shift focus from a theoretical treatment of the causes and nature of corruption and move onto the specific case of Angola. The first step will be to provide an overview of the state of corruption in the country at the present moment in time, which will then lead on to graft within the country's petroleum sector and a case study of the state-owned oil company.

4.1 Corruption at a National Level

To give an impression of the scale of the problem, it is useful to provide some illustrative, albeit somewhat anecdotal, figures. At the same time as more or less half of the children of Angola suffer from malnourishment, there are 20 Angolans worth more than US\$100 million. While such income inequality is provocative in its own way, the key is the source of the wealth of these individuals. It turns out that working for the Angolan government is a highly lucrative profession, in fact six of the seven richest persons in the country are state officials, and the odd man out had recently retired at the time of collecting the figures.⁶¹

There are a number of reports from myriad sources about the staggering amount of government revenues that simply "go missing" in Angola. The Washington based NGO Human Rights Watch (HRW) has conducted several studies of this area. It finds that between 1997 and 2002 unaccounted for funds amounted to a full US\$4.22 billion.⁶² This implies that the missing funds were equivalent to around a tenth of GDP in each of these years.⁶³

In order to put this figure in perspective, total government spending on health and education as well as humanitarian and social needs, reaches roughly US\$4.27 billion. Unaccounted for funds are therefore comparable to total social spending.⁶⁴ If corruption would be eradicated, the living standards of Angola's population would doubtlessly benefit from a near doubling of government spending in these areas.

⁶¹ Economist, The (2004).

⁶² Human Rights Watch (2004), p. 3.

⁶³ Economist, The (2004).

⁶⁴ Human Rights Watch (2004), 3.

Figures from the International Monetary Fund (IMF) suggest that, if anything, the results arrived at by HRW are understated. An internal report found that in 2001 alone a full US\$1 billion disappeared from the finances of the Angolan government. The document goes on to lament the lack of progress when it comes to improving government and fiscal transparency in the country, which, as has been explained previously, is one factor that tends to exacerbate corruption.⁶⁵

Of course, all “missing funds” are unlikely to have gone to kickbacks. Some of the discrepancies found by HRW and the IMF can probably be explained by the lack of sufficient accounting practices, which are unable to correctly track government revenues and investments. On the other hand, it is precisely this lack of financial management that opens up opportunities for graft. As will be explained and analyzed during the course of this study, insufficient accounting practices are one of the principal culprits for the curse of corruption in the country in general, and within Sonangol in particular.

Despite the clear impressions of the desperate state of corruption in Angola, it is necessary to move away from figures of “missing funds” and utilize the specific measures of corruption that have previously been explored. For this reason, the country’s position in the rankings assembled by Transparency International, the World Bank and the PRS Group will henceforth be presented and analyzed.

4.1.1 Corruption Perceptions Index

Table 1 shows Angola’s position in the Corruption Perceptions Index assembled by the NGO Transparency International. In order to put the country’s position as well as score in perspective, the top-five countries (i.e. the ones with least corruption according to the index) are displayed first, and then the section with the lowest scores, including Angola, are shown.

⁶⁵ Pearce (2002) refers to the undisclosed IMF report.

Table 1: Corruption Perceptions Index⁶⁶

Rank	Country	2005 CPI Score	Confidence Range	Number of Surveys Used ⁶⁷
1	Iceland	9.7	9.5 - 9.7	8
2	Finland	9.6	9.5 - 9.7	9
	New Zealand	9.6	9.5 - 9.7	9
4	Denmark	9.5	9.3 - 9.6	10
5	Singapore	9.4	9.3 - 9.5	12
151	Angola	2.0	1.8 - 2.1	5
152	Cote d'Ivoire	1.9	1.7 - 2.1	4
	Equatorial Guinea	1.9	1.6 - 2.1	3
	Nigeria	1.9	1.7 - 2.0	9
155	Haiti	1.8	1.5 - 2.1	4
	Myanmar	1.8	1.7 - 2.0	4
	Turkmenistan	1.8	1.7 - 2.0	4
158	Bangladesh	1.7	1.4 - 2.0	7
	Chad	1.7	1.3 - 2.1	6

What the table displays with uncomfortable clarity for Angola's government is that the country is ranked 151 out of a grand total of 158, i.e. it is one of the most corrupt countries in the world, or at least of the sizeable proportion of nations that are included in the study. In other words, it is clear that the country is plagued by a tremendously serious problem.

What does the country's position at the foot of this table mean in practice? While the rank of 151 shows that it is highly corrupt in comparison to other countries, the actual score provides a more exact indication of the scale of the problem. It shows that the five surveys used, which have been completed by businessmen and country analysts, illustrate that these groups perceived a high level of corruption in the country. Angola received a score of 2 in a range of 10 (highly clean) and 0 (highly corrupt), which clearly shows that it is considerably corrupt.

The confidence range indicates how the score may vary due to the fact that the precision of the measurements used are not 100% exact. In Angola's case this entails a range between 1.8 and 2.1. This range is wider than, for instance, that of Singapore (which lies in a range of 9.3 and 9.5) because of the comparatively low number of surveys used (5 in the case of Angola). The number is still comfortably above 3, which is the threshold for the country to be included in the table. It seems that the limited number of sources is not a serious problem in this case, as the range of possible scores still puts Angola in dire straits with regards to corruption.

⁶⁶ Transparency International (2005).

⁶⁷ See Appendix for a list of the surveys used.

4.1.2 Control of Corruption

A second measure of the severity of corruption in Angola is provided by the Control of Corruption Index published by the World Bank. This is a composite index created from several hundred variables derived from different data providers, which measure the transparency of governance, public perception of corruption, as well as perceived patterns of nepotism and cronyism. The values from these varying sources are indexed to have a mean of zero and a standard deviation of one index unit. 99% of the values fall between -2.5 and 2.5.⁶⁸

Table 2: Control of Corruption Index

Control of Corruption: Angola	2002	2000	1998	1996
Estimate (-2.5 to + 2.5)	-1.12	-1.38	-1.05	-0.93
Percentile Rank (0-100)	7.2	2.2	4.9	10.0
Standard Deviation	0.17	0.20	0.18	0.24
Number of surveys/polls ⁷⁰	7	6	6	4

As *Table 2* illustrates, corruption is poorly handled in Angola. The score of -1.12 in a possible range of -2.5 and +2.5 puts it among the most corrupt countries in the index. Its performance has been fluctuating between the available years, it got steadily worse between 1996 and 2000, before a slight improvement between 2000 and 2002. Unfortunately, more recent data was not available and it is therefore ambiguous if corruption has dropped according to the index during the past few years.

The number of surveys that have been used when assembling the index is somewhat larger than in the case of CPI. In particular, the increase in the number of surveys used between 1996 and 2002 has produced a steady drop in the standard deviation of the estimated control of corruption.

4.1.3 International Country Risk Guide

The third measure focuses on the political risk resulting from the level of corruption in the country. More specifically, it shows how a certain level of corruption in the political system may distort the economic and financial environment and thereby threaten foreign investment. The measure goes from 0

⁶⁸ See Kaufman, Kraay and Mastruzzi (2003) for an exhaustive description of the underlying methodology.

⁶⁹ World Bank (2002).

⁷⁰ See Appendix for a list of the surveys polled.

to 6, where 6 implies that the level of corruption is a considerable threat to foreign investment.

In April 2006 Angola received a mark of 2.0 out of 6.0, which suggests that the level of corruption does deter the level of foreign investment but that it is not strong enough to firmly block it. This does not necessarily reflect a low level of corruption, however, as it could result from a tolerance and understanding on the part of investors that paying bribes is part and parcel of doing business in the country. This appears to be a more likely explanation than that the Angolan government has severely lowered the level of corruption after the time-periods covered by the other indices.

As has previously been explained, the differences between these measures basically amount to the years and countries covered, and the results at which they arrive are broadly similar. This is reflected in the results of the Control of Corruption Index and that published by Transparency International. The discrepancy between these two and the International Country Risk Guide can largely be explained by the fact that the latter is not a pure measure of corruption, but rather of its perceived effect on foreign investments. Given the unequivocal picture painted by the other two measures it is likely that this is due to a certain acceptance of the level of corruption rather than its limited scope. Indeed, certain firms might even calculate that the possibility to payoff bureaucrats actually works in their favor.

The phenomenon of a country suffering from high levels of bribe-giving at the same time as firms appear to be untroubled by it, is not unique to Angola. The World Bank arrived at a similar finding in a recent study of corruption in ex-communist countries, in which 10,000 firms in 26 countries formerly behind the Iron Curtain were queried about the cost and frequency of corruption. In one of the most corruption-laden nations, Russia, around a fifth of bribe-paying firms reported that they did not regard it as problematic to do so.⁷¹ This lends further weight to the argument that the result of the International Country Risk Guide should not be interpreted as an exoneration of state and business leaders in Angola.

⁷¹ See World Bank (2006).

4.2 Corruption within Angola's Petroleum Sector

Any study of Angola's economy will invariably focus on oil, which accounts for around half of the country's Gross Domestic Product (GDP).⁷² It is therefore inevitable that a study of corruption will focus on the part of the domestic economy where the most wealth is created, and where corruption opportunities are therefore the greatest. In addition, any study of corruption within the realm of petroleum in Angola has to start with its dominant player, the state-owned oil company Sonangol.

To start things off, it is pertinent to consider the role of petroleum during Angola's short history as an independent nation-state. After the country's independence from Portugal in 1975, a civil war that was to last for nearly 30 years quickly commenced. While the two sides, the Movement for the Liberation of Angola (MPLA) and National Union for the Total Independence of Angola (UNITA), were initially divided mainly among ethnic lines, it soon turned into a struggle for control over key natural resources. UNITA gained control over the country's diamond mines which, along with financial support from the USA and South Africa, funded its war effort. On its part, the MPLA benefited from revenues from the oil sector as well as funding from the Soviet Union.

One reason for the MPLA's success in the war was that it proved more viable to curtail UNITA's access to diamonds via international sanctions mandated by the Security Council of the United Nations. As the revenues from the oil sector were flowing into the coffers of an internationally recognized government, the same instruments could not be applied to the MPLA's revenues from the oil fields. Present-day corruption within the oil sector should therefore be understood within the historical context whereby the MPLA used the oil deposits in order to fund its war efforts, through the purchase of illegal arms and equipment.⁷³

Once it emerged victorious from the conflict, the MPLA used its government position to continue to milk the country's oil resources. The revenues accrued ranged between US\$1 billion to US\$3 billion per year in the 1990s, although severe shortcomings in its internal auditing make reaching an exact figure practically impossible. The revenues took three main forms (a further treatment about what these sources of revenues actually mean will follow in the case study of Sonangol):⁷⁴

- Oil taxes, amounting to around \$3.2 billion/year between 2000 and 2001

⁷² International Monetary Fund (2005), p. 6.

⁷³ Boyce (2003), p. 9.

⁷⁴ World Bank (2003), p. 10.

- Signature bonuses, which amounted to \$870 billion in 1999
- Oil-backed loans, \$3.5 billion in 2000-01

The sizeable chunk that consists of loans obtained on the back of oil reserves deserves particular mentioning. International banks were more than willing to provide the country with these loans from the mid-1980s onward due to high-interest rates. Consequently, Sonangol's incomes from oil shipments were typically deposited in offshore accounts and bypassed Angola's financial system. This also contributed heavily to the country's indebtedness; in 1999 these loans constituted a full one-third of total debt. The high-level of indebtedness that this resulted in became particularly acute during the slump in world oil prices at the end of the 1990s. A positive side effect of the drop in prices was an increased willingness on part of the government to bend to outside pressures for reforming Sonangol.⁷⁵

With the historical context in mind, it also grows increasingly apparent how the findings of Sachs, Warner (1997) are applicable to Angola. They found that the "feeding frenzy" that follows the arrival of a sizeable windfall from natural resources in a previously poor country tends to spur on rent-seeking among the population at large. It comes as no surprise that a considerable portion of the Angolan population was destitute at the end of the 30-year civil war. The arrival of more sophisticated technology that was better able to extract its lucrative oil resources, coupled with rising oil prices, brought into effect just the type of "feeding frenzy" prophesized by Sachs and Warner. The pattern of rent-seeking behavior was also recreated in Angola, just as it was in other parts of sub-Saharan Africa analyzed by the aforementioned authors. It is more than worthwhile to keep this historical context and its implications in mind during the forthcoming discussion on the scourge of corruption in the case of Sonangol.

4.3 Sonangol: A Case Study of Corruption

Following the theoretical account of which institutional arrangements that have been found to provoke corruption, as well as the treatment of corruption in the country as whole, what remains is to apply the findings to a specific case study of Sonangol. What follows will therefore be a step by step evaluation of the institutional factors that have allowed bribe-giving to take hold in the organization.

⁷⁵ Boyce (2003), p. 10.

4.3.1 The Bidding Process

The first issue to be dealt with in the incentive structure concerns the way that oil contracts are awarded to foreign enterprises. This constitutes a natural starting point, both because it is the beginning of the process of excavating oil, and because of the enormous sums of cash that the government receives once the firms are granted the right to drill. It goes without saying that the sums of money involved create considerable incentives for government bureaucrats to put at least a portion in their own pockets. At this stage of the process the stakes are also particularly high for the enterprises involved. Foreign companies are aware that the right to drill for oil will bring them a considerable financial windfall. It might therefore be worthwhile to spend some extra money in order to payoff a bureaucrat with particular influence in granting the contract.

There are two basic sources of revenues for the government originating from the contracts signed with foreign companies. The first is the stipulated royalty rate, which provides a stream of revenues over a number of years, as it means that a certain fraction of the profits produced by the company ends up in state coffers. The other source of income is the signature bonus, which differs from the royalty rate in that it is an upfront payment that is only paid once, as its name suggests, at the moment of signing the contract that grants the right to drill for oil.

Angola does not differ from other states to the extent that both signature bonuses and royalties are used in the granting of contracts. What makes Angola stand out is first and foremost the relative size of the bonuses in relation to the royalties. It turns out that the government puts much greater emphasis on ensuring a sizeable chunk of money upfront in the form of a hefty signature bonus, instead of a steady stream of future revenues.⁷⁶

How is it possible to make any such claim regarding the size of the signature bonuses? First of all, it is pertinent to remind oneself that all figures about the Angolan oil sector should be treated with considerable caution. However, the most reliable source of information, the inception report published by KPMG,⁷⁷ does provide a long list of the magnitudes of the sums paid by foreign enterprises.⁷⁸

⁷⁶ McMillan (2005), p. 6.

⁷⁷ On November 16, 2000, the accounting firm KPMG was awarded a US\$1.6 million consulting contract by the Angolan government to conduct a study of how much oil revenue that was being generated in the country and how much of it that was actually deposited in the central bank. The agreement was the result of protracted negotiations between the IMF and the government of Angola. The IMF initially asked for a complete audit of Sonangol as part of a Staff Monitored Program (SMP), but finally had to settle for the diagnostic study conducted by KPMG. The study still represents the most complete and comprehensive analysis to date of the financial dealings of Sonangol.

⁷⁸ See Appendix for a complete account of the signature bonuses paid.

The total size of the signature bonuses paid out between the years 1980 and 2002 reach US\$1487.5 million. Within the vast total sum there are plenty of differences between the individual agreements. In some cases the sums amount to US\$300-400 million, while the bonus is much more marginal in other situations. More recent figures are difficult to get hold of, but there are a couple of high-profile cases. In particular, an agreement between ChevronTexaco and Sonangol in June 2003 included a US\$500 million bonus payment.⁷⁹

Aside from the size of the bonuses, what needs to be investigated is the underlying rationale for demanding them. It is especially important to analyze whether it is actually in the nation's long-term economic interest to receive bonuses rather than royalties. The theory of auctions, as articulated by McAfee and McMillan, holds that royalties tend to even out differences in the perceptions of the bidders of the future value of the contract.⁸⁰ The size of the upfront payment that each party would be willing to offer is highly contingent on the present valuation of the future benefits and it must therefore be judged to be worthwhile to pay a high fee right away. The size of the royalties, on the other hand, depends on future profits. If the profits are surprisingly low, then the payment to the government will also be negligible.

The risk sensed by the bidders may be more marginal if royalties have a higher relative importance to signature bonuses. In the case of a one time payment the cost is induced right away, while considerable revenues will need to arrive in the future to compensate for this loss. When it comes to royalties, however, the price is proportional to the revenues received, thereby bringing about simultaneity in cost and revenues, as well as lowering the financial damage endured by lower than expected revenues.

What is crucial to the state is that even perceptions will make more firms interested in participating in the bidding process. This will, in turn, ensure that the process of bidding for contracts will be more competitive. Fiercer competition for contracts will put the government in the comfortable position of being able to place greater financial demands on the interested parties, which will result in more revenues. This will, at least in theory, create benefits for the population as a whole through government investments in improved standards of living.⁸¹

If the gains to the population at large are greater if more importance is placed on royalties, what is the possible explanation for the emphasis placed on bonuses in Angola? As the key differences from the point of the view of the government

⁷⁹ Human Rights Watch (2004), p. 33.

⁸⁰ See McAfee, McMillan (1986) for a full account of the theory of auctions.

⁸¹ McMillan (2005), p. 6.

concerns the timing of the revenues received, it is the time horizons of the members of the government negotiating the contracts. More specifically, the shorter the time horizon the more likely the government will be to demand higher signature bonuses. One factor that might contribute to such short-term thinking is if the government is in danger of being ousted, this was a very real concern during the 30-year civil war in which the fear of being taken over by the enemy might very well have induced short-term priorities.

A further reason might be related to corruption. While the overall payout could be greater if the officials put a portion of the royalties in their own pockets each time they are paid, such an argument misses the vital point that what the officials are actually doing is committing a crime. Clearly, the risk of getting caught will be higher if the particular crime is committed repeatedly over a lengthy time span than if it is a onetime occurrence. To put it more crudely, if the interest of the officials is to gain large sums of money for themselves rather than to improve the lot of their countrymen, it is better to earn a considerable sum of money straight away and then stack it away in an offshore bank account.

Aside from the division of government revenue between royalties and one-off payments, a crucial predicament concerns where the funds go when they reach the government. This issue exists regardless of the division between the latter two funds, and is therefore not affected by Angola's high signature bonuses *per se*. In order to seek the answer to such a query, it is necessary to analyze the fiscal system in place in Angola.

4.3.2 The Fiscal Regime

There are two different regimens in the fiscal system that governs the oil industry. Around 40% of produce falls under a tax and royalty scheme, via which the government receives income through production taxes (royalties), as well as transaction and income taxes. The other 60% is extracted under Production Sharing Agreements (PSAs), which stipulate that oil companies can retain a fraction of oil (known as cost oil) in order to recover investments and other costs associated with extraction. The rest, profit oil, is shared between the companies and the government. The profit oil that befalls the corporations is subject to income tax.⁸²

The PSAs are the result of a protracted negotiation process that has to be repeated for each new oil company that wants to invest in the country. There is, therefore, no blueprint for how these agreements should be stipulated nor how

⁸² International Monetary Fund (2005), p. 9.

they are in general, as each specific case has been negotiated on its particular premises. This process therefore creates considerable costs for both the Ministry of Petroleum and the Ministry of Finance, as well as for Sonangol itself.⁸³

Crucially, the process of negotiating these agreements is also highly complex. This poses difficulties when it comes to administering revenues and subsequently when it comes to creating a more transparent system. Such complexity will escalate further as the rapid growth of the Angolan oil sector implies a steep rise in the number of agreements that need to be negotiated.⁸⁴

There are several reasons for why this is highly relevant to a discussion of corruption and the incentives that underlie it. This reasoning is related to fiscal obfuscation and the discussion on revenue collection in Rose-Ackerman (2004). In particular, the leeway provided by the complicated nature and specificity of the rules opens up opportunities for officials to demand kickbacks. When it comes to Sonangol, the lack of a model contract that would simplify the system makes it more likely that officials will demand bribes in return for more lenient and financially favorable regulation, as each contract is negotiated specifically for a certain company. The complexity also makes it time-consuming and therefore expensive to understand for the investing enterprises. This makes it more likely that they are outwitted by bureaucrats who have a greater understanding of the specificities of the regulations, as they have articulated them to begin with.

In order to seek the answer to why such a system, marred by inaccuracies and contradictions, has been allowed to take hold in Sonangol, it is pertinent to consider the conflicts between the various roles of the organization. These different roles have provided officials with incentives to compromise transparency and accurate reporting in favor of rent-seeking.

4.3.3 Conflicts of Interest

Sonangol has a variety of responsibilities within a complicated organizational framework. Its activities are concentrated in the area of energy and specifically petroleum, with an exploration and production company as well as a majority holding in downstream oil and gas businesses. Furthermore, it has interests both outside the energy sector, within for example telecommunications, insurance, aviation and banking, and beyond Angola itself. The company is also currently undergoing a period of considerable expansion, with a number of novel activities expected to surge forward within the near future.⁸⁵

⁸³KPMG (2004), p. 13.

⁸⁴Ibid, p. 13.

⁸⁵Ibid, p. 24.

Within the area of petroleum, which is of course the one of interest in the present analysis, Sonangol has two principal roles and responsibilities. To begin with, the organization is an equity partner in oil exploration and as such forms partnerships with foreign companies on an equity basis within the fields of exploration, development and production of oil and gas. Sonangol has a separate company, Sonangol P&P, which has formed several joint partnerships with foreign companies looking to explore the country's energy resources.⁸⁶

Aside from this, Sonangol is also the national concessionaire. As such it retains the rights for all activities related to exploration and production in the country. Furthermore, Sonangol, together with the Ministry of Finance and the central bank, has the responsibility of regulating the petroleum industry and making sure that the laws that govern it are followed. In addition, Sonangol Concessionaire also has equity shares in a number of "blocks", in which petroleum is drilled for. In its activities as a participant in the exploration and production of petroleum, the concessionaire is represented by Sonangol Holding.⁸⁷

The fact that the same organizational entity is both an actor on the market and responsible for regulating it, implies a number of situations which may provoke conflicts of interest. The regulator will have an incentive to implement the law in ways that serve its own interests. Such a process is also facilitated by the lack of a common blueprint for the PSAs, i.e. Sonangol will not even need to change the law to fit its own needs as the rules and regulations are constantly being rewritten from scratch. Such a situation, in which rules can be changed by government officials in order to further benefit themselves, may not merely increase the sums robbed by already corrupt officials, but also enable hitherto innocent individuals to enter the business of demanding bribes.

Such a system is what Shleifer, Vishny (1993) refer to as *free-entry into collecting bribes*, which in the light of the discussion on PSAs seems to be an appropriate description of the case of petroleum in Angola. The latter therefore constitutes an example of the agency fiefdom that the authors identify as typical of corrupt regimes in sub-Saharan Africa, in contrast to police states which could generally be found behind the Iron Curtain, where although corruption was a very real problem, it was at least clear which bureaucrats that needed to be bribed and the rules were stipulated from the highest order.

This situation can also be analyzed through applying a principal-agent model. When the agent, in this case the officials at Sonangol who write contracts with oil

⁸⁶ Ibid, p. 23.

⁸⁷ International Monetary Fund (2005), p. 9.

firms wishing to invest in Angola, has the ability to articulate contracts without being constrained by the rules set by the principal, in this case the government of Angola in conjunction with Sonangol, the balance of power shifts firmly in the direction of the agents. The problem is that the particular agents will have an incentive to use this discretion in order to enrich themselves instead of taking into account the overall well-being of the organization for which they work. Greater power in the hands of the agents will therefore tend to foster corruption.

The immediate retort to the usage of a principal-agent framework in the current case refers to the role of the principal. Specifically, do the principals, i.e. the upper echelons of Sonangol, actively try to banish corruption in the organization or are they actually the chief culprits? This line of argument suggests that the principals might not have an interest in controlling the actions of the agents, thereby rendering the model obsolete.

A more appropriate manner to approach the problem of Sonangol might instead be a situation characterized by what Shleifer and Vishny refer to as “agency fiefdom”. Rather than a command-and-control structure whereby directors and government ministers try to limit the incidence of bribery among lower-ranking officials, Sonangol bears a strong resemblance to a situation in which neither principals nor agents want to diminish corruption and where the overall structure can best be described as anarchy rather than hierarchy. The end result of the preceding analysis is, however, similar, as agents will indeed use their discretion to demand bribes, but so will the principals.

The issue of control can be extended to the question of which institution in Angola that has the power to check the activities of Sonangol? The answer is that in reality no organization can credibly claim to be able to control the activities of Sonangol. This means that bureaucrats within the organization have vast opportunities to receive payments under the table from foreign oil contractors wishing to enter into partnerships with the organization.

Aside from this obvious complication, there are further troubling aspects related to Sonangol’s role as concessionaire. The costs of performing this function mean that the organization is allowed to retain a certain percentage of its revenues in order to cover them. This mechanism is governed by the so-called Decree 15/89 which holds that it can retain 10% of its revenues in order to cover its operational expenditures. What is noteworthy is that the organization does not need to submit any details regarding its actual expenditures to the government.⁸⁸ While the absence of credible figures means that it cannot be confirmed that it actually retains more revenues than it should, what can be confirmed is that the

⁸⁸ KPMG (2004), p. 13.

arrangement provides Sonangol with a considerable leeway to keep more of its profits. Such a situation could easily be overcome by demanding that it submit invoices to inform the government of its actual expenditures. This also means that excess profits are likely to go directly into the pockets of employees of Sonangol, thereby facilitating corruption.

A further manifestation of the problems caused by the conflicts of interest that plague the organization concerns the destination of the country's oil wealth. According to the country's legislation, all oil revenue should be deposited in the *Banco Nacional de Angola*, i.e. the central bank. In reality, however, the oil often ended up in one of two places: the president's office or the state-owned oil company Sonangol.⁸⁹

Therefore, Sonangol itself was *de facto* responsible for a large part of the funds and for providing other agencies with the proceeds. It almost goes without saying that this provides strong incentives for underreporting the earnings, so that the members of one's own organizational body can enjoy the undisclosed earnings. One way to rectify the situation would be to put management of the funds in the hands of the central bank or the Treasury, both of which have greater expertise in this particular area as well as a strong reputation for presenting accurate and trustworthy records.⁹⁰

The underreporting of revenues is one result of the conflicting roles of the organization that deserves particular treatment. It is related to a more wide-ranging and serious shortcoming, namely that of its lack of transparency.

4.3.4 Transparency

To put it crudely, the combining of regulatory powers with the functions of Sonangol as an oil company inherently diminishes the level of transparency. The reason primarily has to do with the fact that the more responsibilities an organization has, the more complex its structure becomes. This will in turn make it more difficult to understand for outsiders, which will lessen the entity's accountability. In the end, this vicious circle tends to compromise transparency.

Indeed, examples abound from other petroleum producing countries in which the regulatory functions have been handed to a different institution than the national oil company. In Norway there is, just like in Angola, a powerful state oil company, in this case known as Statoil. However, the regulatory functions have

⁸⁹ Human Rights Watch (2004), p. 12.

⁹⁰ McMillan (2005), p. 6.

not been handed to Statoil, but instead to the Norwegian Petroleum Directorate, thereby dispelling any fears of conflicts of interest.⁹¹ It is surely no coincidence that this greater transparency has made the Norwegian oil sector much less prone to charges of corruption than that of Angola. Of course, transferring the regulatory functions to a new entity will not by itself resolve the problem in Angola, as corruption might simply move to the new body. It would, however, prevent some of the direct symptoms of the current conflicts of interest from appearing, thereby mitigating the effects of corruption.

As has already been touched upon, one particularly grave problem concerns the lack of an accurate statement of the revenues of Sonangol. Both the central bank and Sonangol present their financial reports in accordance with Angolan accounting standards. While these satisfy the basic fiscal requirements demanded at a local level, they are insufficient when it comes to guaranteeing comprehensive fiscal transparency. This constrains the government's possibilities to make use of international financing that would enable it to reap further proceeds from the vast reserves of petroleum in the country. It also inhibits financial transparency, which makes it difficult to obtain accurate records and therefore practically impossible to adequately infer the level of corruption in Angola.⁹²

The inability of the government to prepare a financial statement in accordance with International Accounting Standards (IAS) brings the discussion to the urgent need of conducting a full audit of the activities of Sonangol. The reason is that the lack of transparency has been manifested in a number of high-profile discrepancies in the financial information published by the organization and the official inquiry into the latter performed by KPMG, and supported by both the government of Angola and the IMF. This incomplete information can be divided into two broad categories:⁹³

- i. The difference between what the Sonangol should have deposited in the *Banco Nacional de Angola* (BNA) and what it actually did.
- ii. Discrepancies between the amounts that varying departments within the Ministry of Finance recorded for the same transactions performed by Sonangol. This includes funds that have illegally bypassed the central bank.

The problem of funds destined for the central bank simply going missing represents a particularly grave concern. The inception report published by

⁹¹ Ibid, p. 23.

⁹² International Monetary Fund (2005), p. 4.

⁹³ Human Rights Watch (2004), p. 20.

KPMG explicitly points out that more than two billion dollars were effectively passed on to other accounts.⁹⁴ The problem is, of course, that not all of these accounts have been found and suspicious voices point to the confirmed tendency for high-ranking Sonangol officials to maintain different bank accounts in several countries.⁹⁵

Such problems are indicative of what Rose-Ackerman (2004) identified as shortcomings within the regulation of public procurement. Not only does the lack of an adequate accounting system make it nearly impossible to account for the scale of government revenues that arise from Angola's petroleum resources, it also makes it extremely laborious to investigate the direction and magnitude of the purchases made by the government.

In addition, as has been elaborated and explained in the theoretical model by Shleifer and Vishny (1993), the absence of comprehensive records leads to a higher level of secrecy in public procurement. It is this secrecy that makes corruption highly distortionary, much more so than taxation, which is conducted in the open. Without adequate information regarding the cost of, for instance, the technological equipment purchased by the state, it is easy for the government to focus its purchases on specific goods and technologies for which it is difficult to benchmark prices and therefore to question the wisdom of what has been bought. This greatly increases the possibilities of manipulating the purchasing price in order to hide the fact that funds have dissipated through kickbacks to key government officials. In the long-term, secrecy will also tend to ensure an overly homogenous power structure, as new representatives will be chosen more on the basis of their commitment to keeping the dealings away from the public eye, than for any innovative ideas when it comes to improving the workings of the organization.

A further crippling effect of the lack of transparency within the Angolan state in general, and in the petroleum sector in particular, is that the government itself does not appear to possess reliable information. This makes it patently unable to reconcile different and conflicting sources of information. In other words, the lack of transparency is owed chiefly to the absence of internal reporting mechanisms, which in itself can be explained by the highly complex organizational structure of government agencies. The case of Sonangol with its variety of different roles, including regulator and oil company, makes it particularly difficult to account for its wide range of activities.

⁹⁴ KPMG (2002), p. 103.

⁹⁵ Economist, The (2004).

It is not so much that the government is withholding information, as that it does not have the information to begin with. In many cases the possibilities on offer for rent-seeking behavior on the part of government officials goes a long way to explain the incentives not to put a system in place for accurately measuring the costs and revenues of the organization. In addition, the problem is compounded by the government's reluctance to publish some of the reports that have been conducted, notably by outside agencies. In particular, refusing to publish the complete version of the oil diagnostic articulated by KPMG stands out as having had a strong negative impact on the provision of reliable information regarding the financial status of Sonangol.

That such a system has been allowed to grow and develop in Angola principally stems from the lack of accountability of lawmakers and state officials, which in turn has been caused by the inherent conflicts of interest present in the roles and responsibilities of Sonangol. The presence of such a conflict is, on its part, a consequence of the anarchy present in Angolan public administration, which has resulted in a situation in which both principals and agents habitually steal from the state and accept bribes.

5. The Relationship between Aid and Corruption

Given the aforementioned incentives for corruption that are present in the case of Sonangol, and that Sweden has been providing considerable aid to the country of Angola, it is of interest to bring the question further and to analyze to what extent the aid effort has considered the issue of corruption. In other words, what will be addressed are the questions if Swedish aid has been completely oblivious to corruption or if it has managed to deal with the issue in such a manner that it has been somewhat alleviated. Furthermore, if it has been considered, has the strategy pursued by the Swedish government been the most suitable one given the incentives for corruption that have already been discussed? What will be looked at is consequently if any plan articulated by the government to reduce corruption can be supported by the economic theory that has been considered up to this point.

5.1 Foreign Aid to Angola: An Historical Perspective

The first step will be to provide some background of the country's previous experience of foreign aid. As has already been touched upon, the country experienced a literally crippling civil war that lasted a full 30 years. This involved the use of its natural resources in order to keep up the war effort. Likewise, it also meant that foreign aid was used for the purpose of supporting and strengthening the factions at war in the country. The allegiances of the Soviet Union to the incumbent government and of the United States to the UNITA rebels implied that Angola became part of the chess game played between the two cold-war superpowers aimed at settling world supremacy. It therefore comes as no surprise that the foreign aid that flooded country at this point reached the armed forces rather than the suffering civilian population. Furthermore, the money flooded particular generals with generous allotments of wealth and in this way exacerbated their corruptive tendencies.

A number of mechanisms were devised during this time in order to compromise the ability of the warring factions to use the sale of Angola's natural resources to friendly governments who supported them, in order to fund their war efforts. In particular, the Security Council of the United Nations mandated a sanctions regime that enjoyed considerable success when it comes cutting off UNITA's access to international markets. These efforts formed part of an overall process aimed at curtailing "conflict diamonds" used to fund armed conflicts, particularly in sub-Saharan Africa. An additional tool that was tried out was that of making aid conditional upon a responsible use of oil resources. "Responsible" in this case broadly refers to making sure that oil improves the overall living conditions of the people of the country instead of enriching the people in power.

Aid conditionality has, however, not enjoyed the success that sanctions have. This failure has to do with the incentives on offer: the revenues from Angola's oil resources greatly exceed any aid effort that has so far been devised. In fact the willingness of the government in Luanda to accommodate donors seems to fluctuate depending on the movements of world oil prices.⁹⁶

5.2 Swedish Aid to Angola

Given the rather unfortunate history of foreign aid in Angola, it is of interest to consider the present-day nature of Swedish assistance to the country. Sweden has previously been one of the main per capita providers of aid aimed to foster economic, social and human development in Angola. This is perhaps

⁹⁶ Boyce (2003), p. 10.

unsurprising given the comparatively high proportion of aid to GNP,⁹⁷ and Sweden's neutrality during the cold war, which made it less conducive to using aid as an exclusively political and military tool. During this period much of aid was specifically directed at alleviating the humanitarian catastrophe that was occurring in the country, including high-infant mortality rates and malnutrition, apart from the huge number of direct casualties of the war effort. In addition, Sweden was one of the first countries to offer support when it comes to building up vital sectors of the economy, such as fishery and energy.

At present Swedish development aid to Angola is, however, negligible. The current figure lies at around SEK 50 million. Added to this is a sum of approximately SEK 30 million that arrives via third countries as part of international cooperation efforts. For obvious reasons, the focus of much of this money is oriented towards alleviating the problem of HIV/Aids, although Angola suffers from much lower infection rates than most of its neighbors in sub-Saharan Africa. Apart from this, the vast majority of aid is directed towards improving the level of health-care on offer in the country.⁹⁸

A considerable number of projects are presently directed at exchanges aimed at improving the level of competence in certain high-technology sectors of the economy, such as telecommunications. This involves support from the Swedish government for courses that improve the expertise of Angolans in these highlighted areas. The "exchange" part of these programs is that they open up possibilities for investments on the part of Swedish companies in Angola, as these are clearly facilitated by the presence of more qualified workers and professionals.

5.3 Aid as a Weapon against Corruption

What part of this seemingly politically neutral support can be said to address the problem of corruption? Perhaps the key element elected by Swedish government is what is popularly labeled "grassroots empowerment". This rather sketchy term refers to improving the potency of civil society when it comes to affecting the work of the state and to influence the decisions of the government. An integral part of such a strategy is typically an effort to decentralize decision-making to lower tiers of government, thereby shortening the distance between

⁹⁷ According to the budget proposal put forward by the Swedish government, overseas aid will rise to around 1% of GNP during 2006. This puts Sweden on parity with Norway as the world's largest provider of foreign aid in relation to GNP. See Swedish International Development Cooperation Agency (2006a) for more details.

⁹⁸ Swedish International Development Cooperation Agency (2006b).

decision-makers and the general public. This would appear to be a rather natural policy given the high-degree of centralization of Angolan public bureaucracy.

The idea is that public outcry over obviously corrupt officials will lead to their removal. Ideally, this would also be accompanied by a possibility of bringing public officials to court over the allegations. Perhaps more importantly, however, is that greater political participation on part of the Angolan public may bring about improved transparency in the business of government, which would provide the public with a much better possibility to, not only bring corrupt officials to court, but to identify the guilty parties to begin with. In other words, this information and a certain degree of transparency of the apparatus of the state are both necessary for a successful anti-corruption effort.

An integral part of the policies aimed at creating more effective mechanisms for public influence at grassroots level is to support the work of non-governmental organizations (NGOs). This means that many of the funds originating from the Swedish government and which are aimed at improving the conditions for economic growth and strengthening the local health care system, are channeled through NGOs and they are the ones who actually do the work on the ground.

In short, Sweden's efforts when it comes to combating corruption in Angola have, albeit indirectly, focused on a bottom-up solution, i.e. they have been oriented towards empowering citizens at a local level so that they can better put pressure on government officials and in this manner bring about a less corrupt system. On the part of the Swedish authorities such a policy has been supported by myriad references to the high-level of centralization of public decision-making in Angola.

While the arguments put forward by the Swedish government certainly have a factual basis, it is also possible to apply a more critical perspective to the strategy pursued. To begin with, a degree of caution should always be exercised when certain political strategies and ideas become overtly "fashionable" to the extent that they reach an almost axiomatic status. One policy that has recently aspired to such status is, incidentally, decentralization. A number of governments in both the developed and developing world have orchestrated far-reaching programs aimed at moving decision-making power to local entities.

Prominent examples include Brazil's 1988 constitution, which turned a centralized bureaucracy into Latin America's first truly federal state. The effects of this policy have been widely debated within the country. On the one hand, it represented a step towards greater public participation and democratization, thereby playing a part in turning a dictatorship with a highly centralized bureaucracy into a more democratic and pluralist society. The implications on

the level corruption were, however, dubious to say the least. Indeed, the President who pushed through the reforms, Fernando Collor de Mello, was later ousted from power on charges of corruption.⁹⁹

Additional examples of the inability of decentralization to resolve the curse of corruption in developing countries are provided by further studies. A particularly noteworthy one was conducted by Crook and Manor (1998) in the Southeast Asian nation of Bangladesh. They found that, not only was the decentralization of decision-making power to lower levels of government insufficient when it comes to combating the problem, it actually ended up raising the levels of corruption in the country and incremented the indices of participation in organized crime.¹⁰⁰

One recent and elucidating analysis of anti-corruption efforts has been provided by Olken (2005). According to his study, grassroots empowerment is by itself insufficient to lower levels of corruption. This inability stems from the presence of a free-rider problem as all citizens will benefit from the efforts of a small group of the population to tackle the problem of corruption. This implies that the benefits are not accrued to the one doing the actual monitoring but rather to a disperse group of the population. The end result is that all citizens have an incentive to leave the work needed to put pressure on decision-makers to someone else, which naturally leads to a situation in which no one invests the necessary time to bring about a lower level of corruption.

Given the practical implications shown by Olken (2005), it is of interest to compare such effects with those in the model devised by Shleifer and Vishny, i.e., does the theoretical model and the practical experiment arrive at contrasting, complementary or identical results? Their model includes two alternative routes, one in which corruption is accompanied by theft and one when it is not. In the case of Angola there are strong incentives for officials to hide the sum which has been received from, for instance, an oil contract being signed with a foreign company. This is particularly the case due to the ad-hoc nature of the regulations governing such contracts. It is therefore reasonable to make the assumption that it is indeed corruption with theft that is being practiced in Angola. This claim is also supported by the examples given of countries characterized by such an arrangement by Shleifer and Vishny, as these are typically nations in sub-Saharan Africa in which officials face few legal constraints from their superiors to behave according to the letter of the law.

⁹⁹ See Arretche (1996) for a complete account of these events.

¹⁰⁰ See Crook, Manor (1998) for a more complete understanding of the effects of decentralization in the case of Bangladesh.

The arrangement of corruption accompanied by theft carries a number of key implications for the effect of a decentralization of decision-making, which is the natural result of local empowerment. Above all it creates a risk of what Shleifer and Vishny label “agency fiefdom” and “agency anarchy”. In effect, these terms refer to a situation in which there is no control of the actions of individual government agencies and the officials and bureaucrats that populate them.

This creates a system in which, as each of the officials in the theoretical world described by the model will demand bribes, the greater the number of officials the more severe is the problem. In essence, an effort oriented towards grassroots participation accompanied by a surge in the number of government agencies through decentralization efforts, will run the risk of creating a higher level of corruption than what was initially the case, i.e. the opposite of what the Swedish government is presumed to have intended.

This does not mean, however, that the efforts oriented towards a greater level of grassroots empowerment are entirely ill-conceived. Rather than being inherently wrong the problem is that they are insufficient. As Olken (2005) explains, what is needed is a strong Audit Office that publishes reports on the extent of corruption. The role of grassroots organizations is subsequently to put pressure on the government bureaucrats that have been singled out as the worst perpetrators in these reports and to lead efforts to bring them to justice. This is supported by Olken’s finding that auditing proved to be most efficient when applied to politically vulnerable officials. This claim is backed-up by Shleifer and Vishny, who show that competition in the provision of public goods can indeed lead to lower corruption, if the policy is accompanied by an intense monitoring of theft.¹⁰¹

A recent study by the World Bank has looked further into the issue of decentralization and corruption through an empirical analysis of a number of countries in which the public administration has gone through a comprehensive process of decentralization. The main finding suggests that placing decision-making powers in lower levels of government tends to alleviate corruption in both developing and developed countries. This conclusion is, however, contingent on an effective legal system being in place. If this is not the case, decentralized government agencies face a greater risk of being captured by local elites and interests. This quasi-feudal power structure is typical of many developing nations, particularly in sub-Saharan Africa, including Angola. It therefore seems possible that such an unintended consequence of provoking more rent-seeking rather than less is a very real possibility in the current case.¹⁰²

¹⁰¹ Shleifer, Vishny (1993), p. 616.

¹⁰² Shah (2006) p. 15.

In effect, the Swedish government is guilty of not supporting the most efficient manner of bringing about lower corruption in Angola. What is needed is a direct link between the private interest and public good for grassroots monitoring to be effective. It is, in other words, vital that there are strong incentives for individuals to monitor the activities of government officials. Incentives to monitor will be enhanced in a system in which politicians are accountable to the electorate to a greater extent, thereby raising the chances of grassroots efforts resulting in tangible changes of leadership. Olken (2005) illustrates this effect, by showing how monitoring efforts by grassroots organizations on Java were more effective in villages in which leaders would soon be held accountable in local elections.

On the other hand, auditing by itself is also insufficient to resolve the plague of corruption in Angola. In order to be effective, the greater transparency brought about by audits needs to be combined with grassroots movements with an incentive to use the information provided and translate it into political demands, the political capital and influence of these organizations are paramount for the audits to have any sort of practical relevance. Either strategy by itself is inherently partial and does not represent a conducive solution to the problem of corruption.

5.4 Can Aid Spur Corruption?

The discussion has up until now been unduly positive when it comes to the relationship between aid and corruption, as it has analyzed whether aid has been more or less effective when it comes to resolving the issue. What needs to be looked at further is, however, if aid can, not only be less effective, but also worsen the problem of corruption. It is probable that the vast amounts of funds that flood developing countries in the form of foreign assistance can bring about further incentives for bribe-giving.

Indeed, bureaucrats at organizations such as Sonangol are not the only ones facing distorted incentives, officials at aid agencies such as SIDA often face incentives that are not conducive to bringing about a reduction in corruption. The reason has to do with the fact that individual officials at aid agencies tend to be rewarded according to the extent that they award grants or make loans. Imposing tough conditions on parties that are wishing to loan money is not something that aid officials receive any personal benefit from doing. In fact, a failure to dispense the funds of the agency often leads to penalties being imposed on particular officials. This means that donors have little or no incentives to make

aid conditional on, for instance, the party wishing to receive money providing adequate proof of being comparatively uncorrupt.¹⁰³

Svensson (1998) has developed a simple game-theoretic model in which social groups compete over common-pool resources, in order to account for the impact of foreign aid on rent-seeking. In the model, government income can be used either to provision public goods or be appropriated by any individual member of the social groups. In short, while it would be in the interest of each group to stop appropriating, it is not in the interest of any individual member to lower their rent-seeking unilaterally. Given these constraints, each individual determines their optimal level of rent-seeking, by balancing the benefit of cooperating with the cost of sustaining the equilibrium. The latter cost takes into account that the reward for opportunistic behavior is greatest when groups cooperate fully and all income is spent on public goods.¹⁰⁴

The introduction of foreign aid to such a model brings some interesting results. If aid is provided without any commitment of its usage, it may indeed lower the provision of public goods, by making opportunistic behavior more rewarding through undermining the enforcement mechanisms in place, which are meant to punish deviations from the cooperative equilibrium. In repeated games, it is the expectation of continued foreign aid in the future which makes it more attractive to appropriate than to cooperate. The results are reversed if the donor is able to enter into a binding policy commitment, inherently constraining access to foreign aid and strengthening the mechanisms that punish opportunism. The incentives for cooperating will now surpass those for rent-seeking.¹⁰⁵

In short, Svensson's model shows that higher government revenues originating from aid do not necessarily translate into a greater provision of public goods. The underlying reason has to do with the increase in rent-seeking, which results from an increased level of expectation of aid in the future. The problem is exacerbated by the fact that donors have not shown any empirically demonstrated tendency to allocate more aid to countries with lower indices of corruption.¹⁰⁶

The verdict is, however, not that foreign aid necessarily leads to increased levels of rent-seeking and corruption. The key is that the donors need to enter into binding commitments in order to reward good performance, such as anti-corruption measures. If this condition is met, rent-seeking activities can actually be lowered in developing countries such as Angola.¹⁰⁷

¹⁰³ Boyce (2003), p. 19.

¹⁰⁴ Svensson (1998), p. 5.

¹⁰⁵ Ibid, p. 13.

¹⁰⁶ Ibid, p. 2.

¹⁰⁷ Ibid, p. 19.

The lesson for the Swedish government is therefore that it needs to put greater pressure on its Angolan counterpart to comply with an audit of government institutions in return for future aid. Clearly, Swedish aid by itself is a drop in the ocean for the Angolan government, in order to be effective such a policy therefore needs to be backed-up by an international consensus behind a stern commitment to work to limit and eventually completely banish graft in recipient countries.

6. Conclusion

The pretension from the outset has been to investigate the incentives for corruption originating from the institutional make-up of Sonangol. The time has now come to recapitulate the main findings and to clarify why the organization and the country in which it operates are both plagued by corruption. Together these seemingly independent factors and phenomena paint a picture of a macro level problem that originates from the particular incentives towards rent-seeking faced by a number of individuals.

In order to lend a touch of credibility to such a study, it was first necessary to show concrete evidence of the extent of corruption. To this end, figures from a number of reputable independent institutions were gathered. Transparency International and the World Bank both concur; Angola really is one of the most corruption-laden countries on earth.

One of the reasons for why the manner of going about explaining the problem of corruption is through a study of incentives is that Angola is a clear example of a country that has found itself awash in financial resources originating from a resource boom. The sudden accrual of vast sums of money through the country's generous allotment of oil resources has created persuasive reasons for individuals, many of whom come from a background of poverty or indeed destitution, to use some of this money for personal enrichment rather than the more long-term goal of promoting positive economic development in the country as a whole.

Without procrastinating further, what are the factors that favor graft in the case of Sonangol? The first and most obvious point is that the institutional make-up of this organizational entity has created profound conflicts of interest. In essence, Sonangol is both an operator on the oil market and a regulator of it. The position of writing the rules at which the game later is to be played lies at the heart of the institutional problems that have contributed to the exacerbation of the plague of corruption in Angola.

Such conflicts of interest have enabled the creation of a system that is riddled with ad-hoc regulations that can be changed at any time to benefit individual officials and bureaucrats at Sonangol. A prominent example is the fiscal system, which has no explicit rules regarding the taxation of Production Sharing Agreements (PSAs) signed with foreign companies. Such contracts can, in principle, be articulated at the whim of the person in charge of each agreement.

Furthermore, it has allowed a particular pattern to emerge when it comes to the sorts of bids that are favored by Sonangol, and according to which the rights to oil exploration are awarded. The tendency towards choosing bids which entail a high signature bonus rather than royalties suggest that the officials at Sonangol have manipulated the institutional structure to their own personal benefit.

Finally, the lack of an adequate system of record-keeping has signaled to the bureaucrats at Sonangol that they can embezzle funds and enrich themselves with impunity. The fact that there is no worthwhile accounting system that is able to inform independent members of the authorities and of civil society of where the country's oil wealth actually ends up, serves to create incentives for bureaucrats to rob the money. In addition, it facilitates the acceptance of bribes and kickbacks as the bureaucrats will not need to explain their bulging bank accounts to their superiors or to the general public.

Each of these points corresponds to factors that the academic literature on the subject have pointed out as the key driving forces when it comes to creating incentives for rent-seeking. In particular, Rose-Ackerman (2004) has assembled these factors in a comprehensive account, in which the issues of transparency, local empowerment, remuneration packages, procurement practices and business regulation, are summoned up to create incentives for honesty and illicit behavior, respectively.

The next step was to investigate if the provision of overseas aid to Angola commissioned on the part of the government of Sweden has taken these factors into account. To put it succinctly, the limited efforts that have been carried out have had the clear focus of improving the system of grassroots monitoring.

The problem is that this only deals with one part of the issue, and may indeed conceivably worsen the situation. The insufficiency of such an approach has been demonstrated theoretically, through the model devised by Shleifer and Vishny, which has shown that when corruption is accompanied by theft, a decentralized system and the greater competition that it produces between the providers of government services may indeed lead to more corruption. Furthermore, a field-study carried out by Benjamin Olken has demonstrated that grassroots

participation needs to be accompanied by an effective system of monitoring in order realize its corruption reducing potential.

The lessons provided bring us back to the original question. More specifically, it means that grassroots participation needs to be accompanied by strong *incentives* in order not to foster free-riding whereby a vast number of people benefit from the monitoring efforts of the few. In order for benefits to be reaped it is therefore necessary for the participation on the part of civil society to be combined with regular audits in which the activities of the elected and unelected members of the public bureaucracy are scrutinized.

These arguments are all supported by practical examples and enjoy a solid foundation in economic theory. On the other hand, there is as of yet no formal model that provides a clear guide to which factors matter and which do not, and that enjoys universal validity. The next, albeit ambitious, step for future research is therefore to develop such a model.

7. References

- Acemoglu, D., Johnson, S, and Robinson, J. (2001), "The Colonial Origins of Comparative Development: An Empirical Investigation". *American Economic Review*, No. 91, pp. 1369-1401.
- Arretche, M. (1996), "Mitos da descentralização: mais democracia e eficiência nas políticas públicas?" *Revista Brasileira de Ciências Sociais*, No. 31, pp. 44-66.
- Baer, W. (2001), *The Brazilian Economy: Growth and Development*. Westport: Praeger Publishers.
- Baumol, W. (1990), "Entrepreneurship: Productive, Unproductive and Destructive". *Journal of Political Economy*, No. 98, pp. 893-921.
- Becker, G. (1968), "Crime and Punishment: An Economic Approach". *Journal of Political Economy*, No. 76, pp. 169-217.
- Boyce, J. (2003), "Aid Conditionality, and War Economies". Political Economy Research Institute, University of Massachusetts Amherst, Working Paper Series, No. 70.
- Buchanan, J. (1986), "The Constitution of Economic Policy", in Mäler, K-G. (ed.) (1992), *Nobel Lectures, Economics 1981-1990*. Singapore: World Scientific Publishing Co.
- Carvalho, J. M.(1999), "Mandonismo, coronelismo, clientelismo: uma discussão conceitual", in *Pontos e bordados: escritos de história e política*. Belo Horizonte: Editora da UFMG.
- Corden, M., and Neary, P. (1982), "Booming Sector and De-Industrialisation in a Small Open Economy". *The Economic Journal*, Vol. 92, No. 368, pp. 825-848.
- Crook, R., and Manor J. (1998), *Democracy and Decentralization in South Asia and West Africa: Participation, Accountability and Performance*. Cambridge: Cambridge University Press.
- De Soto, H. (1989), *El otro sendero: La revolución invisible en el Tercer Mundo*. Bogotá: Oveja Negra.
- De Sousa Santos, B. (1998) "Participatory Budgeting in Porto Alegre: Toward a Redistributive Democracy". *Politics and Society*, No. 26, pp. 461- 510.

Di Tella, R. and Schargrodsky, E. (2003), "The Role of Wages and Auditing During a Crackdown on Corruption in the City of Buenos Aires". *Journal of Law and Economics*, No. 46, pp. 269-292.

Dreher, A., Kotsogiannis, C., and McCorriston, S (2005), "How do institutions affect corruption and the shadow economy?" Copenhagen: Centre for Economic and Business Research.

Economist, The (2004), "The shameless rich and voiceless poor", June 22.

Economist, The (2006), "Digging for Dirt: The depths to which economists go to measure corruption", March 16.

Golden, M., and Picci, L. (2004), "Proposal for a New Measure of Corruption, Illustrated With Italian Data". UCLA and University of Bologna.
Available [online]: <http://www.spbo.unibo.it/picci/article.pdf> [2006-08-23].

Human Rights Watch (2004), *Some Transparency, No Accountability: The Use of Oil Revenue in Angola and Its Impact on Human Rights*. Vol. 16, No. 1 (A). New York: Human Rights Watch.

Huntington, S. (1968), *Political Order in Changing Societies*. New Haven: Yale University Press.

International Country Risk Guide (2005). Available [online]:
<http://www.countrydata.com/> [2006-08-07].

International Monetary Fund (IMF) (2005), *Angola: 2004 Article IV Consultation*. IMF Country Report No. 05/228.

Kaufman, D. (1977), "Corporatism, Clientelism, and Partisan Conflict: A Study of Seven Latin American Countries", in J. M. Malloy (ed.), *Authoritarianism and Corporatism in Latin America*. Pittsburgh: University of Pittsburgh Press.

Kaufman, D. (2003), "Rethinking Governance: Empirical Lessons Challenge Orthodoxy". Discussion draft, World Bank.

Kaufman, D., Kraay, A., and Mastruzzi, M. (2003), "Governance Matters III: Governance Indicators for 1996-2002". World Bank Policy Research Paper No. 3106.

Khan, A. (1994), *The Political Economy of Oil*. Oxford: Oxford University Press.

- Klitgaard, R. (1991), "Gifts and Bribes", in Zeckhauser, R. (ed.), *Strategy and Choice*. Cambridge: MIT Press.
- KPMG (2002), *Current Assessment of the Angolan Petroleum Sector: Inception Report*, July.
- KPMG (2004), *Assessment of the Angolan Petroleum Sector – Final Report*. Vol. 2, March.
- Krueger, A. (1974), "The Political Economy of the Rent-Seeking Society". *American Economic Review*, No. 64, pp. 291-303.
- Krueger, A. (1993), "Virtuous and Vicious Cycles in Economic Development". *Papers and Proceedings of the American Economic Association*, LXXXIII, pp. 351-56.
- La Porta, R., Lopez-de-Silanes, F., Shleifer, A., and Vishny, R. (1999), "The Quality of Government". *Journal of Law, Economics and Organization*, No. 15, pp. 222-279.
- Leite, C. and Weidmann J. (1999), "Does Mother Nature Corrupt? Natural Resources, Corruption and Economic Growth". IMF Working Paper No. 99/85.
- Mauro, P. (1995), "Corruption and Growth". *The Quarterly Journal of Economics*, Vol. 110, No. 3, pp. 681-712.
- McAfee, R. P., and McMillan, J. (1986), "Bidding for Contracts". *Rand Journal of Economics*, No. 17, pp. 326-38.
- McMillan, J. (2005), "'The Main Institution in the Country is Corruption': Creating Transparency in Angola". Center on Democracy, Development and the Rule of Law, Stanford Institute on International Studies, Working Paper No. 36.
- North, D. (1990), *Institutions, Institutional Change and Economic Performance*. Cambridge: Cambridge University Press.
- Olken, B. (2005), "Monitoring Corruption: Evidence from a Field Experiment in Indonesia". Harvard University and National Bureau of Economic Research.
- Pearce, J. (2002), "IMF: Angola's 'missing millions'". *BBC News*, March 14. Available [online]: <http://news.bbc.co.uk/2/hi/africa/2338669.stm> [2006-08-23].

- Rauch, J., and Evans, P. (2000), "Bureaucratic Structure and Bureaucratic Performance in Less Developed Countries". *Journal of Public Economics*, No. 75, pp. 679-705.
- Reinikka, R. and Svensson, J. (2003), "The Power of Information: Evidence from a Newspaper Campaign to Reduce Capture of Public Funds". Working Paper, Institute for International Economic Studies, Stockholm University.
- Rodrik, D. (2000), "Institutions for high-quality growth: what they are and how to acquire them". National Bureau of Economic Research, Working Paper 7540.
- Rose-Ackerman, S. (1999), *Corruption and Government: Causes, Consequences, and Strategies for Reform*. Cambridge: Cambridge University Press.
- Rose-Ackerman, S. (2004), "Governance and Corruption", in B. Lomborg (ed.) *Global Crises, Global Solutions*. Cambridge: Cambridge University Press.
- Sachs, J. and Warner, A. (1997), "Natural resource abundance and economic growth". Center for International Development and Harvard Institute for International Development.
- Shah, A. (2006), "Corruption and Decentralized Public Governance". World Bank Policy Research Working Paper Series 3824.
- Shleifer, A. and Vishny, R. (1993), "Corruption". *The Quarterly Journal of Economics*, Vol. 108, No. 3, pp. 599-617.
- Svensson, J. (1998), "Foreign Aid and Rent-Seeking". World Bank, Policy Research Paper 1880.
- Svensson, J. (2005), "Eight Questions about Corruption". *Journal of Economic Perspectives*, Vol. 19, No. 13, pp. 19-42.
- Swedish International Development Cooperation Agency (SIDA) (2006a), *Sidas bistånd ökar kraftigt 2006 - större satsning på Afrika och katastrofer*. Available [online]: <http://www.sida.se/sida/jsp/sida.jsp?d=137&a=1648&searchWords=Bistånd%20andel%20BNP>. [2006-08-23].
- Swedish International Development Cooperation Agency (SIDA) (2006b), *Varför ger Sverige stöd till Angola?* Available [online]: <http://www.sida.se/sida/jsp/sida.jsp?d=102> [2006-08-23].

Tanzi, V. and Davoodi, H. (1997), "Corruption, Public Investment and Growth". IMF Working Paper No. 97/139.

Transparency International (TI) (2005), *Corruption Perceptions Index*. Berlin: Transparency International. Available [online]: http://www.transparency.org/policy_research/surveys_indices/cpi/2005 [2006-08-23].

World Bank (2001), *Anti-Corruption*. Washington DC: World Bank. Available [online]: <http://www.worldbank.org/publicsector/anticorrupt> [2006-08-23].

World Bank (2002), *Control of Corruption Index*. Washington DC: World Bank. Available [online]: <http://info.worldbank.org/governance/kkz2002/tables.asp> [2006-08-23].

World Bank (2003), *Transitional Support Strategy for the Republic of Angola*. Report No. 25471-ANG. Washington DC: World Bank.

World Bank (2004), *Guidelines Procurement under IBRD Loans and IDA Credits*. Washington DC: World Bank.

World Bank (2006), *Anti-corruption in Transition 3: Who is succeeding and Why?* Washington DC: World Bank. Available [online]: <http://www.worldbank.org/eca/act3> [2006-08-23].

8. Appendix

8.1 Signature Bonus Payments¹⁰⁸

Companies	Year Paid	Amount (US\$ millions)
TotalFinaElf (25%), Petrogal (10%), INA-Naftaplin (7.5%), Naftagas (7.5%)	1982	3.5
ChevronTexaco (20%), Petrobras (27.5%), TotalFinaElf (27.5%), Sonangol (25%)	1980	1.0
TotalFinaElf (53.34%), Agip (16%), Mitsubishi (13.33%), Sonangol (6.67%), INA-Naftaplin (5.33%), Naftagas (5.33%)	1980	1.0
ChevronTexaco (31%), Sonangol (20%), Agip (20%), TotalFinaElf (20%), Petrogal (9%)	1995	12.0
ExxonMobil (40%), BP (26.67%), Agip (20%), Statoil (13.33%)	1994	35.0
Ranger Oil (50%), Odebrecht (30%), Sonangol (20%)	2002	30.0
TotalFinaElf (40%), ExxonMobil (20%), BP (16.67%), Statoil (13.33%), Norsk Hydro (10%)	1993	10.0
BP (50%), Shell (50%)	1996	9.0
TotalFinaElf (30%), Canadian Natural Resources (25%), Sonangol (20%), Ocean Energy (20%), Naphta-Israel (5%)	1998	10.0
BHP (30%), Sonangol (20%), BP (20%), ExxonMobil (20%), Shell (10%)	1998	41.0
BHP (30%), Sonangol (20%), BP (20%), Ocean Energy (15%), Petronas (15%)	1999	69.0
Agip (40%), ExxonMobil (35%), Sonangol (25%)	1999	69.0
BP (26.67%), ExxonMobil (25%), Sonangol (20%), Statoil (13.33%), Maratón Oil (10%), TotalFinaElf (5%)	1999	335.0

¹⁰⁸ KPMG (2002), p. 124.

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TotalFinaElf (30%), Sonangol (20%), Prodev (sold to Marathon Oil, 20%), ExxonMobil (15%), Marathon Oil (15%, now 35% with Prodev acquisition), Petrogal (5%)	1999	231.0
ExxonMobil (45%), Sonangol (20%), TotalFinaElf (15%), Falcon Oil (10%), Naphta-Israel (5%), Petrogal (5%)	1999	300.0
Sonangol (20%), Norsk Hydro (30%), ConocoPhillips (20%), Petrobras (15%), Shell (15%)	2001	400.0
Total 1980-2002		1487.5

8.2 Control of Corruption Index

List of surveys polled:

Source	Publication
Columbia University	State Capacity Project
World Bank	Country Policy and Institutional Assessments
Global Insight's DRI McGraw-Hill	Country Risk Review
Economist Intelligence Unit	Country Risk Service
Political Risk Services	International Country Risk Guide
Business Environment Risk Intelligence	Qualitative Risk Measure in Foreign Lending
World Markets Research Center	World Markets Online

8.3 Corruption Perceptions Index

The 2005 version of the Corruption Perceptions Index published by Transparency International includes data from the following sources:

- **CU**, the State Capacity Survey by the Center for International Earth Science Information Network (CIESIN) at Columbia University, 2003.
- **EIU**, The Economist Intelligence Unit, 2005.
- **FH**, Freedom House Nations in Transit, 2005.
- **II**, Information International, Beirut, Lebanon, 2003.
- **IMD**, The International Institute for Management Development, Lausanne. TI use the three annual publications from 2003-2005.
- **MIG**, Grey Area Dynamics Ratings by the Merchant International Group, 2005.
- **PERC**, The Political and Economic Risk Consultancy, Hong Kong. TI use the three annual publications from 2003-2005.
- **UNECA**, United Nations Economic Commission for Africa, African Governance Report 2005.
- **WEF**, The World Economic Forum. TI uses three annual publications from 2003-2005.
- **WMRC**, The World Markets Research Centre, 2005.

8.4 International Country Risk Guide

Results derived from the International Country Risk Guide:

	Corruption (F):	April
(maximum 6 points) A measure of corruption within the political system that is a threat to foreign investment by distorting the economic and financial environment, reducing the efficiency of government and business by enabling people to assume positions of power through patronage rather than ability, and introducing inherent instability into the political process.		2006:
		2.0