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OIL REVENUES IN ANGOLA

MUCH MORE INFORMATION BUT NOT ENOUGH TRANSPARENCY

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EXECUTIVE SUMMARY

Angola now publishes detailed reports about its earnings from oil, but these reports are not reliable enough to ensure transparency for Angola's citizens.

As a poor developing country recovering from civil war, Angola relies heavily on revenues from oil which accounts for two-thirds of the government's income. But civil society groups, the International Monetary Fund and other observers have long raised concerns about lack of transparency in the government's management of these revenues.

A well-documented history of severe official corruption in Angola has meant that revenues which could have been used to promote the country's development have been siphoned off or wasted. Global Witness has published a series of reports since 1999 raising concerns about corruption in the oil sector. The Open Society Initiative for Southern Africa (OSISA) Angola has long worked for more open and accountable government.

Since 2004, the Angolan government has responded to concerns about its lack of transparency by publishing large amounts of official data about oil production and exports in Angola, and the revenues that flow to the state from oil. The government has taken further steps since signing a three-year, US$1.4 billion loan agreement with the IMF at the end of 2009, notably the publication for the first time of the audited accounts of Sonangol, the powerful state oil company which dominates the public finances of Angola.

There are too many problems for the official data on oil revenues to be accepted as reliable or comprehensive

This report assesses the extensive official data published by the Angolan government in order to answer the question: do these data provide concerned Angolan citizens with a comprehensive and reliable picture of how much revenue the government earns from oil? Without such a picture, it is impossible for citizens to monitor the flow of revenues and press the Angolan government to use these funds in their long-term interest.

The simple answer is that the official data on oil production, exports, domestic sales, prices and above all, revenues, are not reliable. None of the figures appear to be independently verified (with the partial exception of Sonangol's accounts, which are audited by an international accounting firm). Thus even in cases where different agencies' figures are consistent with each other, there is no external assurance that the figures are accurate.

In fact the figures from different agencies show numerous gaps, discrepancies and anomalies which are hard to explain, based on the available

THE MAIN FINDINGS OF THIS REPORT ARE THAT:

- Angola's official figures for oil production and exports in 2008 are not independently verified. The Ministry of Petroleum's figures are roughly comparable to estimates by external agencies. The Ministry of Finance reports a massive 87 million fewer barrels of oil exports than the Ministry of Petroleum, which is not plausible.

- The government publishes several average prices for oil sales in 2008: the price from the Ministry of Petroleum is close to that of credible external estimates but the Finance Ministry has two average prices, one nearly US$10 a barrel higher than the other.

- Sonangol and the ministries publish different figures for the volumes of oil sold by the state oil company, which is Angola's single biggest source of revenue. There is a massive gap, with a nominal value of US$8.55 billion, between the ministries.

- Sonangol's own export data, by volume and value, imply an average oil sale price in 2008 of less than US$49 a barrel, when other agencies were reporting average prices above US$90 a barrel. Sonangol's exports were worth less than US$12 billion or more than US$22 billion, depending which sale prices and exchange rates are used.

- Signature and other bonuses paid by oil companies to the government appear to be poorly reported in official documents. In 2006, the media reported that Angola earned more than US$3 billion in signature bonuses, but a Finance Ministry report only records "oil bonuses and premiums" of just under US$1 billion.

- Sonangol reported earnings of more than a billion dollars in 2008 from price cap excess fees, which are levied on oil companies in Angola when oil prices are higher than expected. These earnings are not separately recorded in government reports, making them impossible to track.

- There is a gap with a notional value of more than a billion dollars between the reports of the Finance and Petroleum Ministries on oil income tax and gaps with a notional value of several hundred million dollars between the ministries' reports on production and transaction taxes paid by oil companies. These figures appear unaudited in any case.

- Sonangol reports that it paid US$436 million in dividends to its shareholder, the Angolan government, in the 2007/8 fiscal year. Neither ministry reports the receipt of dividends on anything like this scale.

- In some cases, figures for oil revenues are published but the underlying data, which determine the size of these flows, is confidential. For example, the government does not appear to publish the fiscal prices at which oil companies' taxes are calculated, or the findings of its cost and tax audits of oil companies.

(The references for these findings appear in the relevant sections of the main text).

information. This report does not allege that the figures show evidence of corruption and fraud and it is possible that, with independent verification, at least some of them could be confirmed as accurate. But at present, there are too many problems for the official data to be accepted as reliable or comprehensive.

The report examined the most detailed reports produced by Angolan government agencies, which include annual oil sector reports from the Ministry of Petroleum, detailed month-by-month oil export and revenue figures from the Ministry of Finance, an annual statistical bulletin published by the same ministry and the audited financial statements of Sonangol. All the data used were from 2008, the most recent year for which all these sources were available at the time this report was completed in late 2010.

The report also examines a key revenue stream, signature or other bonuses paid by oil companies, for 2006 (because several billion dollars were reportedly paid in bonuses in that year, though the sums since then have been much smaller). The report also cites some external sources, mostly agencies that analyse the international energy market, to compare them to the government's figures.

Global Witness has written to the Angolan Ministries of Finance and Petroleum to ask them how their published figures are constructed, and has written to Sonangol on various occasions seeking comment about oil industry issues in Angola, but has not received a response. OSISA Angola and Global Witness would welcome a public discussion with the Angolan government on the findings of this report.

SUMMARY RECOMMENDATIONS

This report recommends that the Angolan government:

1. Commissions and publishes an independent review of the findings of this report.

2. Ensures much more detailed and comprehensive reports on the oil sector by Angolan government agencies, which are independently verified by third parties.

3. Fosters an atmosphere of public debate about the oil sector in Angola, including greater scrutiny of Sonangol by legislators and the public.

4. Scales back the role of Sonangol, to focus on its core activities of oil production and marketing, and creates an independent regulator for the Angolan oil sector.

A full set of detailed recommendations can be found at the end of this report.

INTRODUCTION

Angola, an impoverished former Portuguese colony on the western side of Africa, relies heavily on oil income.

Angola's economic future will depend largely on how effectively the government uses this oil income for investment in the country's economy and people. But Angola has a reputation for severe official corruption and the government's management of the oil sector has long been highly opaque, making it impossible for citizens to be sure that the country's oil income is being well-managed.

Civil society groups, including Global Witness, reported large gaps in the government's published accounts, amounting to billions of dollars in revenue which could not be accounted for. Global Witness' December 1999 report "A Crude Awakening" and its March 2002 sequel, "All the Presidents' Men" raised concerns about the looting of oil revenues by members of the Angolan elite under cover of the country's civil war. "Time for Transparency" (March 2004) cited evidence from the International Monetary Fund and other sources that more than US$1 billion a year of oil revenues could not be accounted-for in Angola's public accounts.[1]

OSISA Angola has worked since 1998 to promote greater transparency in Angola and empower Angolan civil society to monitor and analyse the general budget of the state. But for Angola's citizens to monitor how the oil revenue is used for their country's development, they need to know much revenue the government actually earns. For many years there was little information about exactly how this revenue was worth.

Since 2004, the Angolan government has started to publish significant volumes of information about the production and export of oil and the taxes, royalties and other revenues that flow to the state from the oil sector. This report, produced jointly by Global Witness and OSISA Angola, will assess whether these data published by the government are reliable enough to answer the question: how much revenue does Angola earn from oil?

WHY OIL REVENUE TRANSPARENCY MATTERS IN ANGOLA

As of 2009, Angola's government reported that the country produced 1.8 million barrels per day of oil,[2] making it the second-largest crude oil producer in Africa after Nigeria. The oil industry has been the engine of the Angolan economy for recent decades and in the 2009 fiscal year, it accounted for 59 per cent of government revenues according to the Finance Ministry.[3] This is equivalent to just under US$25 billion in oil revenues according to the government's figures,[4] though, as this report will show, it is difficult to be sure, based on the available public information, how much revenue Angola actually earns from oil. This income is enormously important to Angola's economy: according to another Finance Ministry report, government revenues from the petroleum sector represented 40.8 per cent of Angola's gross domestic product (GDP) in 2008.[5]

Angola's constitution places an onus on the government to manage the country's oil revenues in the interest of its citizens. Article 12, section 2 states that: "The State shall promote the protection and conservation of natural resources guiding the exploitation and use thereof for the benefit of the community as a whole."[6]

But despite the billions of dollars earned by Angola each year from oil, most of its approximately 19 million people[7] continue to be submerged in poverty.

The United Nations Development Programme (UNDP) produces annual Human Development Reports which rank countries according to various indicators of the living standards and wellbeing of their citizens. The 2010 Human Development Report ranked Angola 146th in the world (out of 169 countries),[8] even though the country's (purchasing power parity) per-capita income was ranked much higher at 117th in the world (out of 229 countries and territories) by the CIA World Factbook.[9] This indicates that Angola's people have some of the worst development standards in the world, even though the country's per-capita income is close to that of some middle-income countries, such as Macedonia, Peru and Thailand, when measured in terms of purchasing power parity.[10]

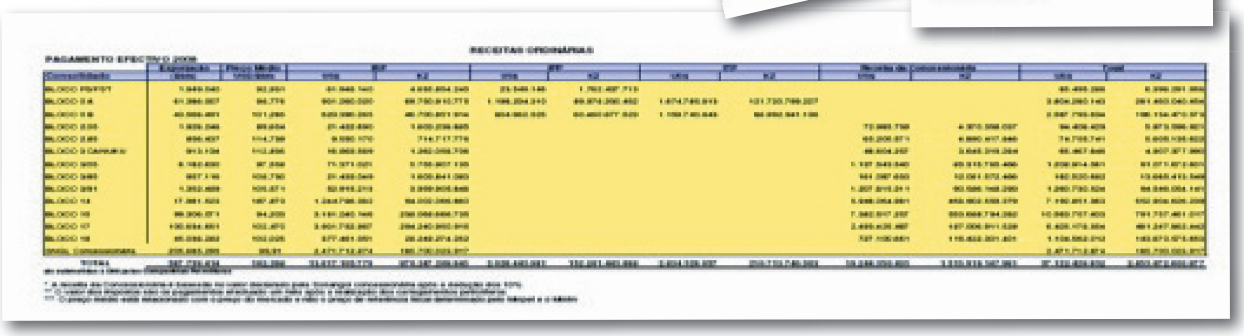
To take one widely-used indicator of poor living conditions, the United Nations' Human Development Index for 2010 puts the life expectancy at birth of Angola's people at 48.1 years, which is an improvement from the start of the decade when life expectancy was a mere 43.6 years, but still puts Angola 146th out of 155 countries, which is lower than most other African countries.[11]

This figure is also partly due to the long civil war in Angola which only ended in 2002. It also reflects the fact that Angola has a very young population with a median age of 18.[12] But persistent poverty and under-development in Angola, despite its oil income, must also be blamed on corrupt rent-seeking stimulated by the large inflow of oil revenues. Angola is widely regarded as one of the world's most corrupt countries and concerns about corruption lie at the heart of calls for increasing transparency in the management of public revenues. Many of the problems of lack of transparency in Angola centre on the state oil company, Sonangol, which (as this report will show) plays a crucial role in earning, managing and spending oil revenues.

The International Monetary Fund (IMF) has been raising concerns since at least the mid-1990s about lack of transparency in Angola's oil sector. The opacity of Angolan oil revenues was also a catalyst for the international Publish What You Pay campaign, initiated by Global Witness and the Open Society Institute, which has grown into a worldwide coalition of civil society groups and led, in turn, to the Extractive Industries Transparency Initiative (EITI), an association of governments, the private sector and civil society (of which Angola itself is not a member). Thus a global movement for greater transparency in the oil and mining industries has some of its roots in the problems of Angola.

Since 2004, the Angolan government has responded to pressure for more transparency by disclosing significant amounts of information on revenue flows to the state from oil. These measures have led some observers to talk as if transparency has indeed improved in Angola. But transparency does not just mean the publication of raw data: it means the publication of data that are comprehensive, reliable, timely and accessible to the public in a useable form, so that concerned citizens can monitor the flow of revenues and call the government to account for their management and use.

This report aims to test whether the data published by the Angolan government are reliable and comprehensive enough to give a trustworthy



SONANGOL'S AUDITED ACCOUNTS AND REPORTS BY THE PETROLEUM AND FINANCE MINISTRIES.

picture of how much money Angola earns from oil and whether all this money reaches the national budget. If the data do not meet this test, then the mere fact of their publication does not amount to a genuine increase in transparency.

The research for this report collected electronic files and other documents, published by Angolan government agencies and other official sources and available on the internet as of October 2010. These government agencies are the Ministry of Finance, the Ministry of Petroleum and Sonangol. Sonangol published its audited financial statements for the first time in mid-2010, covering the years 2007 and 2008, and the report also draws on these statements, particularly the statement for the year 2008 (see illustrations on previous page).

The report also draws on data from the Angolan central bank and, by way of comparison, external bodies such as the IMF, the International Energy Agency, the U.S. Energy Information Administration, the Organisation of the Petroleum Exporting Countries (OPEC), and general and specialised new media sources. These external sources are mostly used for information on Angolan oil production and exports because this information is necessary to determine how much revenue the government should be receiving from the oil industry.

This report concentrates on the year 2008 because this is the year for which there are detailed data from the most sources. Government agencies have published some data for 2009 but Sonangol has not yet published its accounts for this year.

The report will also consider data from 2006 for payments of bonuses to the government by oil companies. Bonuses are non-recurring payments by companies which are usually paid on the signing of an agreement with the government but may be linked to other events in the development of an oil project. In 2006, these signature bonuses were reported to be in the billions of dollars. Angola has not held a bidding round for oil licences since 2006, so there appear to be no significant payments of this kind in 2008, but these types of payments are considered in the report because if the government holds another bidding round in future, the bonus payments could be significant.

ARE THE ANGOLAN GOVERNMENT'S DATA RELIABLE?

There is undoubtedly a lot more official data on the oil sector in the public domain in Angola, as of late 2010 when this report was written, than there was in 2004. This fact is welcome in itself, because it implies that the government recognises that it needs to be seen to be more transparent. This reflects a much wider trend towards transparency of revenue flows from the oil industry. This wider trend is most visibly embodied in the Extractive Industries Transparency Initiative (EITI) and the legislation in the United States, passed in July 2010 as part of the mammoth Wall Street financial reform bill, which will require oil, gas and mining companies regulated in the United States to disclose their revenue payments to governments around the world.

Angola appears to be behind this global curve. The Revenue Watch Index, which was launched in 2010 by the non-profit Revenue Watch Institute and measures public disclosures of oil, gas and mining industry information by governments around the world, placed Angola near the bottom. It gave Angola a score of 34.7 out of a possible 100, below the average for sub-Saharan Africa and right at the bottom of the category of "partial revenue transparency". Only Saudi Arabia and seven other countries were lower, out of 41 countries.[13]

The Angolan government publishes a good deal more data on the oil sector than it did before 2004. But this trend towards relatively greater disclosure immediately raises another question: are the published data reliable? If the data cannot be relied on to give an accurate picture of the underlying financial transactions that they describe, then the mere fact that the data are published will not, in itself, enable citizens to better scrutinise the flow of revenues from the oil sector into the state coffers, as a first step towards ensuring that the money is well-spent.

To get a sense of whether official data is reliable, it is necessary to know how the data were compiled and classified and there should be some assurance, in the form of an audit by an independent third party, that the data are trustworthy. In the case of non-financial oil statistics such as production and exports (which determine a country's earnings from oil), the data themselves may be inherently imprecise. Governments usually derive these statistics from a mixture of obligatory and voluntary company reporting (through surveys and other questionnaires) and the application of statistical methods to these data in order to draw broader conclusions.

The financial statements of Sonangol, like those of multinational oil companies operating in Angola, are independently audited by a recognised accounting firm. But the Ministries of Petroleum and Finance provide very little information to explain how the oil data published on their websites are compiled and their reports do not confirm whether the data are checked by third parties or not. Angola has a separate department for planning and statistics but it is not clear whether, or how, this department is included in the compilation of figures published by the ministries.

Angola also has an independent state audit institution, the Tribunal de Contas (Court of Accounts), which has the authority to conduct audits of public agencies, including the two ministries, but it is not clear whether it has checked the specific reports analysed here. Its website does not provide any confirmation that it has.[14] Global Witness contacted the Tribunal by email and telephone in November 2010 and asked whether it had scrutinised these particular reports, but did not receive a reply. Certain gaps and ambiguities in the Ministry of Finance's files (see 1.c below) suggest that the data contain errors and therefore are unlikely to have been checked by any third party.

SYSTEMIC PROBLEMS WITH THE OFFICIAL DATA

The publication of detailed official data on the oil sector shows a political recognition by the Angolan government that it needs to be seen to be more transparent, but there is generally no evidence that the government data have been independently verified. In fact, due to numerous anomalies, inconsistencies and questions about classification, it would be impossible to verify the data in their present form. Without verification, the concerned citizen or observer is simply faced with an array of figures which are detailed and specific, but which may or may not be accurate.

There are partial exceptions in the form of Sonangol's accounts which are independently audited by an international firm, although the auditors have qualified key aspects of these accounts and this report finds one example, the pricing of Sonangol's crude oil exports, where the data in the

It cannot be said that the official data provide a reliable picture of the flow of oil revenues

audited accounts seem to raise further questions which need to be explained (see page 30). There is also a possibility of rough comparison between some government data on Angolan crude oil prices and external estimates which are based on information from the international oil markets (and may therefore come from credible sources independent of the Angolan government itself).

But beyond these limited areas, it is impossible to assess whether the government's information on oil revenues in 2008 is credible or not, on the basis of the published reports. There are a number of cases, detailed throughout this report, where the data are clearly not credible because of gaps, errors or large discrepancies between reports from different agencies on the same revenue streams.

For these reasons, it cannot be said that the official data provides a reliable picture to Angola's citizens of the flow of oil revenues to the government. The data need to be more comprehensive and consistent, the numerous gaps and anomalies need to be explained and there needs to be more detailed explanation of how the data are collected and constructed by government agencies. Most of all, there needs to be independent verification of their quality, before it can be regarded as providing Angola's people with a truly reliable picture of their government's earnings from oil.

Although Angola has a reputation for severe corruption, this report does not suggest that the official published data on oil revenues have been deliberately falsified, nor that they provide evidence of corruption or fraud. Some of the visible problems with the data could have purely technical explanations, which are not immediately obvious from the information provided in the reports themselves, but which could be explained with better information about how the reports are compiled.

It is conceivable that an independent auditor, given full access to the necessary information from the government and from oil companies which pay the

(continued on page 12)

The reliability of Angola's official data

QUANTITY OF OIL PRODUCED IN ANGOLA	The Ministry of Petroleum's figure for crude production is close to those given by international agencies. But inadequate data on production of other hydrocarbon liquids than crude makes the accuracy of these figures hard to assess.	PAGE 14
QUANTITY OF OIL EXPORTED FROM ANGOLA	There are significant discrepancies between the figures from the Ministry of Petroleum and the Ministry of Finance, which cannot easily be explained.	PAGE 16
PRICES OF ANGOLA'S OIL	There is some agreement between the Ministry of Petroleum and international agencies on average oil prices. Some of the Ministry of Finance's prices seem unlikely to be correct.	PAGE 19
QUANTITY OF OIL SOLD BY THE ANGOLAN GOVERNMENT	There are large differences between the figures given by Sonangol, the Ministry of Petroleum and the Ministry of Finance, which may be due to variance in accounting and classification. However, without more data, this is impossible to assess.	PAGE 22
CONCESSIONARY REVENUE PAYMENTS TO ANGOLAN GOVERNMENT	The sum totals of concessionary payments reported by the Ministry of Finance and Sonangol are similar but, when broken down by block, they disagree wildly in a way which cannot be explained from the reports themselves.	PAGE 26
PRICE CAP EXCESS FEES PAID TO ANGOLAN GOVERNMENT	This figure is reported in Sonangol's financial statements but is not separately reported on by either of the ministries, making it impossible to track into the government's accounts.	PAGE 32
PETROLEUM INCOME TAX PAID TO ANGOLAN GOVERNMENT	There are substantial gaps between the receipts reported for this tax by the two ministries. Both report higher receipts of income tax from Sonangol than Sonangol reports in its own accounts.	PAGE 32
PETROLEUM TRANSACTION TAX PAID TO ANGOLAN GOVERNMENT	There is a large discrepancy between the two ministries' figures for Petroleum Transaction Tax which, in the absence of further information, cannot be explained.	PAGE 34
PETROLEUM PRODUCTION TAX PAID TO ANGOLAN GOVERNMENT	Figures from Sonangol and the Ministry of Petroleum broadly agree. The Ministry of Finance is at variance. There is no way of verifying the accuracy of any of the figures which are given.	PAGE 35
SONANGOL'S DIVIDEND PAYMENTS TO THE GOVERNMENT	Sonangol records large dividend payments which do not appear to be accounted for in other government reports.	PAGE 36
OIL BONUSES PAID TO ANGOLAN GOVERNMENT	Government reporting on bonuses is poor. There was a huge discrepancy in 2006 between signature bonuses reported in the media and recorded in government accounts.	PAGE 37

LESS UNCERTAIN

RELIABILITY OF DATA

MORE UNCERTAIN

COLOURS DENOTE THE INTERNAL CONSISTENCY OF DATA AND HOW FAR IT CAN BE CHECKED AGAINST EXTERNAL SOURCES.

revenues, might be able to confirm that at least some of the official figures are reasonably accurate. But most of the published figures have no such assurance of reliability and contain so many gaps and uncertainties that their accuracy simply cannot be taken on trust.

Global Witness wrote to the Angolan Ministries of Finance and Petroleum in early 2010 to ask them a series of questions about their published data and how they are constructed, but did not receive any response to these letters. Global Witness has written to Sonangol on several occasions in 2009 and 2010, to ask for information and comment on various matters to do with the Angolan oil industry, but has not received responses to these letters either.

OSISA Angola and Global Witness would welcome the opportunity for a public discussion with the Angolan government on the findings of this report.

With sufficient political will on the part of the Angolan government, and with assistance from external experts, the collection and publication of data by the Finance and Petroleum Ministries, and other government bodies, could be made more timely and reliable and published in a form accessible to the newspaper-reading and internet-using public in Angola. These actions would be a welcome step in the direction of greater transparency, but there also needs to be a fundamental change in the way that Sonangol, the state oil company, presents its activities to the Angolan public.

UNDERSTANDING THE OIL REVENUE DATA: HOW MUCH HELP ARE SONANGOL'S ACCOUNTS?

The publication of Sonangol's audited financial statements for 2007 and 2008, which took place for the first time in mid-2010, was politically significant for the reason that Sonangol, which dominates the Angolan oil sector, has historically been highly opaque in its financial dealings. The government had committed itself to publish these accounts as part of its December 2009 loan agreement with the International Monetary Fund.[15]

But in comparing Sonangol's financial statements with the data published by Angolan government ministries, it is important to bear in mind that company accounts and their auditing are designed to serve a substantially different purpose from governmental reports on a country's public finances.

Assuming that Sonangol's accounts have been prepared to international accounting standards, their prime purpose is to provide information to the providers of capital. In Sonangol's case, the company is wholly owned by the Angolan state so in practice this would mean potential providers of capital if Sonangol seeks to list its shares on stock exchanges. The International Accounting Standards Board (IASB) says in its Conceptual Framework for Financial Reporting 2010 that:

"The primary users of general purpose financial reporting are present and potential investors, lenders and other creditors, who use that information to make decisions about buying, selling or holding equity or debt instruments and providing or settling loans or other forms of credit."[16]

The IASB took the view that other stakeholders, including concerned citizens and civil society groups, might benefit from financial reporting but were not its primary users (although this view has been disputed by civil society groups who believe that companies' financial statements should in fact serve the information needs of a wider group of stakeholders, particularly citizens of developing countries like Angola who need to understand the financial impacts of companies' activities on their own societies.)

So it has to be borne in mind, when considering the publication of Sonangol's financial statements, that company accounts are not designed with the information needs of the wider public in mind. That said, this report has attempted to use information from Sonangol's audited accounts to test the data which are published by government ministries. But there is a need for a much more systematic and transparent kind of reporting, which would enable concerned Angolan citizens to monitor the generation and collection of revenues by Sonangol, their transfer to the government and their transparent management within the national budget, for the long-term benefit of Angola's people.

Sonangol is central to the oil sector and therefore to the economic future of Angola and its mainly impoverished people. The company produces and sells oil on behalf of the state, acts as a regulator and collects billions of dollars in oil revenues for the government.

Yet although Sonangol has started to publish its financial statements, which is an improvement on years of very limited disclosure by the state oil company, there are still numerous questions about the meaning of the data in these statements, to be discussed in this report, which would need to be answered (see box on previous page).

More published data do not necessarily equal more transparency, let alone more government accountability to the Angolan people for the management and use of oil revenues

The key message of this report is that in Angola's case, more published data do not necessarily equal more transparency, let alone more government accountability to the Angolan public for the management and use of oil revenues.

The capacity of government ministries to compile and publish data need to be greatly improved and the data themselves need to be opened up to independent verification. There also needs to be a political decision by Angola's rulers to open up Sonangol's finances to greater scrutiny and bring it under proper public control.

1. Understanding the full picture of oil revenue flows

Understanding flows of oil revenue is complex because Angola receives various taxes, royalties and bonuses from oil companies, as well as the proceeds of oil sales and dividends from Sonangol. To understand revenue flows, citizens or observers will also need data on oil production, exports and prices.

For a country whose economy depends so heavily on oil, the essential question is how much revenue the government earns from this source. The Angolan state earns revenue from oil in several different ways. A share of the country's oil production accrues to the state and is sold by Sonangol, generating income directly from the oil market. The government also receives various taxes, royalties and fees from oil companies that operate in Angola, as well as dividends from its ownership of the shares of Sonangol. There are also one-off revenue payments in the form of "signature bonuses" and other bonuses paid by oil companies at particular points in the development of an oil field. Angola imposes taxes on the consumption of petroleum products but these are simply sales taxes and raise a very small amount of revenue compared to what is earned from crude production, so they will not be closely examined in this report.[17]

Any concerned Angolan citizen or observer who wants to know the value of oil revenues paid to the Angolan government will need comprehensive, reliable and accessible information that answers the following questions:

1. **How much oil does Angola produce?**
2. **How much of this oil is exported?**
3. **At what prices is this oil sold?**
4. **What share of this oil is sold by the government?**
5. **What revenue payments do oil companies, including state-owned Sonangol, make to the government in respect of their own share of oil production and sales?**
6. **How much are these company payments worth in any given period?**
7. **Are these payments properly accounted-for in the national budget?**

The first four of these questions relate to the factors that determine the size of oil revenue flows to the Angolan state: in other words, how much oil is produced and sold, at what price, by whom. These four questions are addressed in this chapter. Chapter 2 will briefly describe the major types of revenues that the state receives from the oil industry.

Chapters 3-10 will look in detail at how the flows of income from each of these types of revenue is reported by government agencies, to explain why the current state of official reporting on oil revenue flows still falls well short of being comprehensive and reliable.

1.a HOW MUCH OIL DID ANGOLA PRODUCE IN 2008?

Oil production figures in any country can be inexact. The production figures published by the Ministry of Petroleum for 2008 are close to the estimates of external agencies – within 50,000 barrels per day, out of total production of up to 1.9 million barrels per day. But the ministry's figures are affected by lack of detail about the production of other hydrocarbons than crude oil, such as condensate and natural gas liquids, which could be financially significant.

Measuring the exact amount of oil that is produced in a country in a given year is always a challenge and in many cases, countries lack the capacity to measure their own production and rely on what oil companies tell them, sometimes using random audits to check what companies report. No country has independent government inspectors who are able to constantly monitor production at each and every oil well.

Angola has the advantage of having its production mainly consist of large offshore projects involving a relatively small number of very large companies. Assuming that those companies report accurately to the government (and Sonangol, the state-owned oil company, is itself a participant in many such projects), the figures reported to the government have the potential to be fairly accurate.

But there is an inherent lack of precision in measuring oil production across an entire country. Even so, where external agencies are using data sources that are independent of the Angolan government's figures, then comparison could offer at least a general sense of whether the government data might be reliable or not.

Angola's Ministry of Petroleum publishes figures for Angola's oil production in 2008. Several external agencies also publish estimates of Angola's oil production, which can be used for comparison with the ministry's data. Such comparisons are not completely reliable because it is not clear exactly where these various other agencies get their data from or how accurate those data might be.

Organisations such as the U.S. Energy Information Administration (EIA) and the International Energy Agency (IEA) do create a world petroleum balance, so that if one particular country's statistics were substantially incorrect, it would be noticed because world figures for import and export flows would not match. Many consulting firms that specialise in oil data use insider contacts to obtain non-public estimates. Agencies such as the EIA and IEA look at the estimates produced by such consulting firms. Companies such as BP, which have extensive operations in countries such as Angola, use their own company data and those of their partners in making estimates.

All the external estimates for Angola's oil production in 2008 are close to each other, with a range of no more than 50,000 barrels per day (bpd), out of total production of around 1.8 million barrels per day. These external figures are not vastly different from the figure published by Angola's Ministry of Petroleum, although there is a major question mark about the volumes of production of hydrocarbons other than crude oil, which might be financially significant.

The most detailed source of official data on oil production in Angola in 2008 is the Ministry of Petroleum's *Relatório de Actividades do Sector Petrolífero* (Report on Petroleum Sector Activities) for that year. The ministry has been producing these reports annually since 2007, albeit with a time delay of six to ten months (depending on the year), which are easily available on its website. According to the 2008 report, Angola's crude oil production in that year was 695,708,000 barrels, which is equivalent to 1.906 million barrels per day.[18]

OPEC, of which Angola is a member, assessed Angola's crude oil production in the year at at 1.871 million barrels per day. This figure is based on what OPEC calls "secondary sources".[19] The IEA is an agency of the Organisation for Economic Co-operation and Development (OECD) whose member states, by and large, are major oil-importing countries. The IEA puts Angola's crude oil production for 2008 at 1.85 million barrels per day.[20] The IEA has access to a variety of import and export statistics which it can use to calculate its figures, including from sources outside Angola, which gives a greater possibility that its figures are independent of the Angolan government's data.

The U.S. EIA also gives an estimate for Angolan oil production in 2008, which is 1.891 million barrels per day.[20a] The EIA has access to a variety of sources of oil data in compiling its estimates, including specialised consulting firms which sell such statistics: like the IEA, it uses monthly statistics rather than annual ones because they are more useful for comparing to market conditions. Once again, the fact that the EIA has access to sources of data outside Angola gives greater assurance that its figures are not simply a repackaging of data from the Angolan government, although the lack of clarity about exactly how the figures are obtained and calculated makes a precise comparison with the Angolan government's figure impossible.

Some large oil companies also compile and publish country-level statistics. A well-known publication is BP's "Statistical Review of World Energy." This publication assesses Angola's production at 1.875 million barrels per day, which is very close to the Ministry of Petroleum's own figure.[21] Oil companies usually have access to inside knowledge about oil production statistics in countries where they have significant investments (and BP has shares in four oil exploration or production blocks in Angola).[22] But they are usually reluctant to publish any figures that differ greatly from government figures, for fear of causing friction with the host country. These factors make it difficult to assess, on the basis of the available public information about these data, how valid the comparison might be between BP's figure and the government's.

The IMF also publishes economic statistics on Angola, including on oil production. A 2010 assessment put Angola's 2008 production at 1.906 million barrels per day.[23] It is not clear where the IMF acquired this figure: although the IMF presumably would have gained access to Angolan government information, as part of its decision in November 2009 to lend US$1.4 billion to Angola over three years[24], this figure is slightly different from that published by the Ministry of Petroleum. This implies that the IMF is not simply repackaging the government's data and may be drawing on other sources.

In summary, there are several external agencies whose estimates of Angolan oil production are close to the figure published by the Ministry of Petroleum. The difference between all these figures is no more than 50,000 barrels per day, out of total Angolan oil production of more than 1.8 million barrels per day. This uncertainty is not irrelevant – 50,000 barrels per day, at the 2008 Angolan crude oil export average price of US$92.443 per barrel (according to the Ministry of Petroleum), would amount to nearly US$1.7 billion in oil income for companies and the government. But as a percentage of the total, it is relatively small.

There is uncertainty about the accuracy of all of these figures which partly reflects the inherent difficulty, in any country, of obtaining exact figures for oil production. But it is notable that all the major publicly-available estimates of Angolan oil production from external agencies are close to that of the Ministry of Petroleum, implying that the ministry's figure may be fairly accurate.

However, there is a major weakness in the reporting on oil production by the Ministry of Petroleum which has a significant impact on the usefulness of these production figures if they are being used to work out how much revenue Angola earns from its oil. As well as crude oil, Angola produces various other hydrocarbon liquids, including condensate and natural gas liquids (NGL). The U.S. EIA, for example, states that Angola produced 90,000 barrels per day of condensate in 2008 and about 34,000 barrels per day of natural gas liquids.[25] This is a significant volume of production and since condensate is highly valuable, fetching market prices that are usually in line with the prices of high-quality crude oils, it could amount to several billion dollars in value.

Yet the Ministry of Petroleum does not provide any separate figures for condensate or NGL production in 2008 in the *Relatório.* It only mentions a figure for the production of one particular natural gas liquid, liquefied petroleum gas (LPG), - this figure is 21,037 barrels per day. The report does indicate that condensates are produced in Angola: it refers to the damage caused by a condensate burner being blocked during an incident in August 2008 on Block 18.[26]

The report also refers to exports of propane and butane and there is a reference to the domestic consumption of "gases".

There is a need for more clarity on what hydrocarbons are produced in Angola, other than crude oil. If the figures for production of condensate and natural gas liquids are simply being included by the Ministry within the total figure for crude oil production, then the *Relatório* should say so.

1. b HOW MUCH OIL DID ANGOLA EXPORT IN 2008?

The Ministries of Petroleum and Finance publish data on Angolan oil exports but these data do not appear to be independently verified. There is a huge discrepancy (of 87 million barrels) between the figures published by the two ministries. The Ministry of Finance's figure is too low to be realistic. The Ministry of Petroleum's figure roughly matches an external estimate (from the U.S. government) but there are uncertainties about the accounting for other hydrocarbons than crude oil.

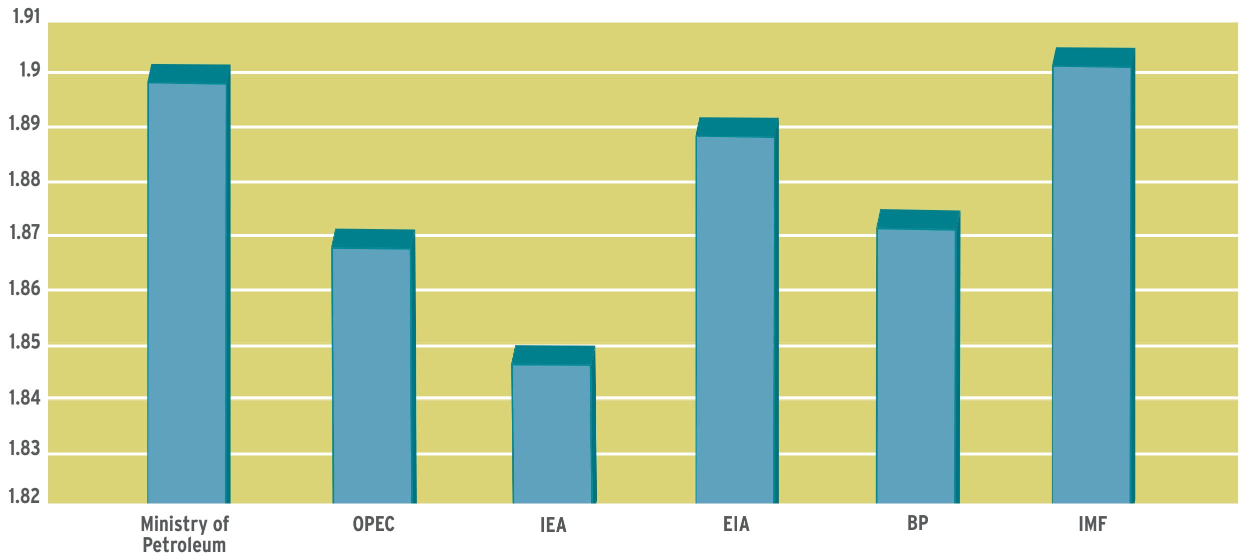
The Ministries of Petroleum and Finance both publish figures for Angolan crude exports in 2008 but there is a huge discrepancy (of some 87 million barrels) between the data published by the two ministries and it is not clear how either collects its data. There are fewer external sources that report Angolan oil exports but where these sources exist, they suggest that the Ministry of Petroleum may be more accurate than the Ministry of Finance.

The Ministry of Petroleum's *Relatório* for 2008 gives a figure for total Angolan crude oil exports in 2008, which is 675.024 million barrels.[27] This export volume would be equivalent to about 1.844 million barrels per day and would represent 97 per cent of the crude oil production reported for the year by the Ministry of Petroleum. The *Relatório* does not say how the Ministry of Petroleum collects these data or what its sources are, and there is no evidence of any independent checks of their reliability. This does not necessarily mean that the data are inaccurate, only that its accuracy cannot be confirmed from the Ministry of Petroleum's own publication.

The *Relatório* says that 13.491 million barrels (or just under 37,000 barrels per day) were sold for refining in 2008.[28] This would leave 7.193 million barrels (about 20,000 barrels per day) that must otherwise be accounted for. The *Relatório* includes a "petroleum balance" (an accounting for all the production and flows of petroleum within a country) which states that there was a "theoretical constitution of crude oil stocks" of 985,000 metric tonnes, which is equivalent to 7.191 million barrels.[29]

The report does not explain what this "theoretical constitution of crude stocks" means, so it is not clear whether this figure refers to an actual volume of crude oil that was held in storage (and therefore not counted as either exports or refinery sales), or is merely

Angolan crude oil production for 2008 in millions of barrels per day



Sources: Ministry of Petroleum, OPEC, International Energy Agency, Energy Information Administration, BP, International Monetary Fund.

There is a discrepancy of some 87 million barrels between the oil export figures of the Petroleum and Finance Ministries

a theoretical figure that was inserted in order to make the data balance (a practice which is sometimes used by agencies that survey oil production to account for small volumes of oil which cannot otherwise be tallied). Given that this is a significant amount of oil, which would be worth about US$665 million at the average export price for 2008 that is given by the Ministry of Petroleum[30], the meaning of this "theoretical constitution of crude stocks" needs to be explained.

The Ministry of Finance also publishes figures for crude oil exports, but for 2008, there is a significant gap between its figures and those of the Ministry of Petroleum. The Finance Ministry's figures are included in a set of monthly and annual tables of oil data which are available on the ministry's website and labelled "Exports and Revenues from Petroleum" *[Exportações e Receitas de Petróleo]*. As with the Ministry of Petroleum's reports, these tables do not explain how their data are collected by the ministry or what its sources are. These tables also include data on oil revenues, which will be discussed later in this report: the tables do give a source for these data, which is declarations provided to Angola's tax directorate by oil companies.

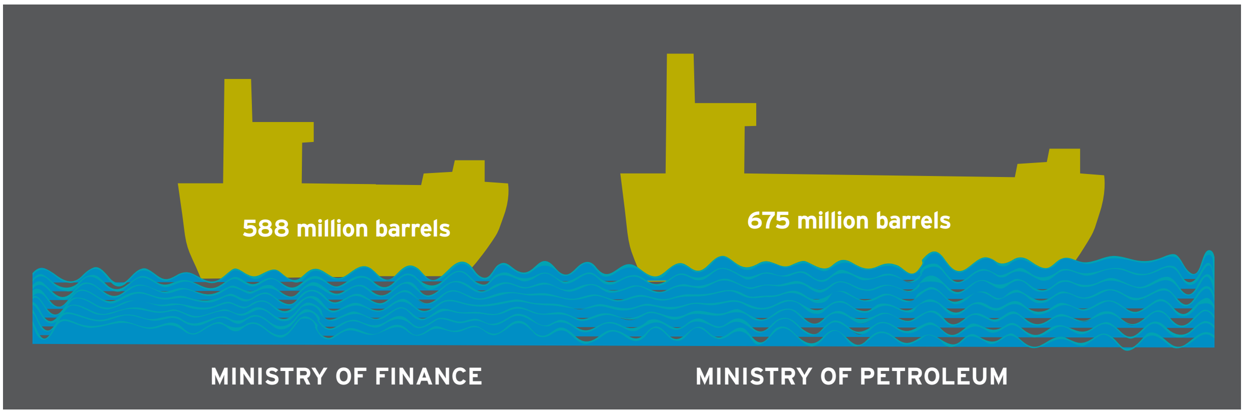
There is a table called *"Receitas Ordinárias"* [Ordinary Revenues] which shows, for 2008, total Angolan crude oil exports of 587.739 million barrels.[31] This is 87.28 million barrels less than the export figure reported by the Petroleum Ministry. There is no immediately obvious reason for this huge discrepancy between the figures produced by the two ministries, which needs to be explained by the Angolan government.

In the case of oil production, as shown above, there are some publicly available statistics from external agencies which cannot be used to corroborate the Angolan government data, but do give the impression that it may be roughly accurate, within a margin of error of about 2.5 per cent. Unfortunately in the case of Angolan oil exports and refinery sales, there are fewer available statistics from external agencies.

For example, OPEC does not publish statistics on oil exports. The U.S. Central Intelligence Agency does, but its latest data are for 2007 and these figures do not distinguish between crude oil and petroleum products. The IEA does have these data but charges a fee for recent data (2009 or later) and for more detailed data, which would be a barrier to access for most individuals.[32] There are figures in metric tonnes for 2008 oil exports, refinery deliveries, and stock changes on an IEA webpage,[33] but the figures on this webpage appear to be sourced directly from the Ministry of Petroleum's figures on page 3 of the *Relatório de Actividades*, as they match perfectly.

Other IEA publications, such as the monthly *Oil Market Report*, appear to have other sources than the Angolan government for their data. BP only provides data on oil trading and refinery throughputs on a regional basis, except for a few large countries (which do not include Angola.)

Angolan crude oil exports, 2008



Sources: Ministry of Finance, Ministry of Petroleum.

The U.S. EIA does publish disaggregated oil export statistics by country. According to the EIA, Angola's 2008 crude oil and lease condensate exports were 1.748 million barrels per day. This is some 96,000 barrels per day below the figure of 1.844 million barrels per day which can be derived from the Petroleum Ministry's data for 2008, as noted above.[34]

Moreover, the EIA figure includes condensate exports, implying that a figure for crude oil exports alone would be even lower than the Petroleum Ministry's. This is a fairly large discrepancy. EIA does not provide statistics on crude oil sales to domestic refineries in Angola and has not published data for refinery outputs and imports and exports of oil products in 2008, which could have been used to give a rough estimate of how much oil passed through Angola's refinery during the year.[35] In addition, the most recent EIA statistics available for Angola's petroleum product exports, when this report was completed in late 2010, is for 2007.

It is possible for a well-resourced observer to tally oil export figures from a country like Angola, and thus to compare them with the government's data, by tracking cargoes of oil tankers, interviewing oil traders and buying data from the various information services companies and news services that track oil exports by country. Foreign governments also track oil exports by non-public means. But these methods will not be easily available to Angola's citizens, even those with access to the internet.

The EIA did not provide complete statistics for 2008 at the time this report was completed.

But the EIA's 2007 figures provides a comparison with the Ministry of Petroleum's figures for the year and indicates some of the same issues that come up in the government data for 2008.

The EIA appears to have used the same figures for petroleum product exports as the Ministry of Petroleum.[36] Government data are lacking for 2007 on the production and export of condensates and for natural gas liquids other than propane/liquefied petroleum gas. (However, the EIA itself does not distinguish between exports of crude oil and condensates). As noted earlier, this gap in the data is significant because the value of condensates produced in Angola might be in the billions of dollars. So even if the data are more or less correct, there is a need for better classification of, and distinction between, production and exports of different hydrocarbons.

Overall, the inconsistencies between the 2008 oil export figures published by the two Angolan ministries raise questions about the reliability of the data themselves, over and above the more general concerns which stem from lack of information about how the data in these reports are collected. The Ministry of Petroleum's figure for Angolan oil exports seems more likely to be correct. The Ministry of Finance's figure is much lower and leaves millions of barrels of oil production unaccounted-for in the export figures. The Ministry of Petroleum's figure is closer to the figure published by the EIA, which is likely to be based on a variety of sources inside and outside Angola and thus more likely to offer a meaningful comparison with the Angolan government's figures.

Production and export figures for hydrocarbon liquids, according to Angolan and U.S. governments

Figures for 2007	Angolan Ministry of Petroleum	U.S EIA
Crude oil production (thousand barrels per day)	1698.16	1683.52
Condensate production (thousand barrels per day)		60.96
Crude oil exports (thousand barrels per day)	1658.85	1694
Natural gas liquids production (barrels per day)	21698	34126
Sales to refineries of crude oil (thousand barrels)	13780.53	
Petroleum product imports (metric tonnes)	1702.21	1800.96
Petroleum product exports (metric tonnes)	1282.87	1282.46
Consumption of petroleum products (thousand metric tonnes)	2631.73	2979.33

Sources: Ministry of Petroleum, U.S. Energy Information Administration. Figures for crude, condensate and NGL production and crude exports are given as annual totals by the ministry and are converted here into barrels per day

1. c. WHAT PRICES DID ANGOLAN OIL SELL FOR IN 2008?

Angolan government agencies publish average oil sale prices for 2008 but these figures do not appear to be verified and it is difficult to check their accuracy.

The prices published by the Ministry of Petroleum are more or less comparable (less than US$2 a barrel) with prices published by Platts, an information service with sources in the oil markets. But the Ministry of Finance publishes two average prices for 2008: one is close to the Ministry of Petroleum's but the other is nearly US$10 higher. Some prices for specific oil blocks from the Ministry of Finance are missing or implausibly high, possibly because of mistakes in data entry.

Crude oil is sold in the international market in US dollars. Hence, whatever revenues the government might obtain from the petroleum industry would be in dollars (except for sales to Angola's refinery in Luanda), though foreign companies could pay their taxes in Angolan kwanza. The government publishes various figures for the average sale prices of Angolan oil. It is hard to determine whether these prices are accurate and in the case of the Ministry of Finance, certain prices are wildly implausible. But there is a fairly close match between the prices published by the Ministry of Petroleum and those of Platts, an information provider whose prices are trusted in the international oil markets.

According to the Law on Taxation of Petroleum Activities, n° 13/04 (art.6), the Concessionary and its associates (in other words, Sonangol and other oil companies) send in reports about the prices they have obtained for Angolan crude in the market. The Ministries of Petroleum and Finance then use these reports to jointly determine a reference price for calculating companies' tax liabilities. This reference price, which in Angolan legislation has the confusing name of "Market Price", is set by the government for each development area or concession area and is used to value "all petroleum produced" in a given quarter of the year.[37]

There are procedures in the law for the Concessionary or any of its associates to ask for revisions of the reference price if they believe that it does not reflect "market conditions".[38] So the reference price for tax purposes is determined by actual prices obtained for Angola's oil in the market, but not in a way that is necessarily fixed or free from interpretation.

To understand how much revenue the government should have earned in a given year, it is necessary to know the price at which Angolan crude oil was sold, for each development area for each quarter of the year, and to know the "Market Price" – that is, the reference price for tax purposes. But according to the law, information provided on the reports used for calculating the "Market Price" is "confidential, unless it is already in the public domain".[39]

The government does publish information on the annual and monthly average prices of Angolan oil but often there is no clarity about whether these are sale prices or fiscal reference prices. The sources of the data are not clear. For all these reasons, it is difficult to compare published prices from different agencies. With this caveat in mind, this report has compared the available prices published by the Ministries of Finance and Petroleum and prices published by the IMF and Platts, a private information service which tracks the oil markets.

Some of the oil prices reported by the Finance Ministry are simply not credible

The comparison shows significant differences between data from the two ministries: the Ministry of Finance's data have internal problems as well. The price figures from the IMF and Platts are fairly close to those published by the Ministry of Petroleum. A major problem is that the price of the crude oil that is sold for refining within Angola is not published.

The Ministry of Petroleum, in its *Relatório* for 2008, states that the average price for Angolan crude oil" over the year was US$92.443.[40] This seems to be the average price for exported crude oil in 2008, because it is the quotient of the value of crude oil exports reported by the Ministry (which is US$62.401 billion) divided by the total number of barrels reportedly exported (which is 675,024,000). This leaves unknown the price of that small, but still material portion of crude oil (two per cent of the total) that was sold to Angola's refinery and then sold on as oil products. The Ministry of Finance has published two different average prices for Angolan oil sales in 2008. The first price, which is US$93.69, appears in its bulletin of budget statistics.[41] The source of this price is identified as the Ministry of Petroleum, though this price is not reported in the *Relatório* for 2008. The Ministry also publishes average oil prices for the year in its "Exports and Revenues from Petroleum" *[Exportações e Receitas de Petróleo]* files that are available on its website and cover the years since 2007. There are monthly as well as annual prices, per oil-producing block. For 2008, the average crude oil export price was given as US$102.208.[42] There are a number of problems with these prices:

- The average 2008 oil price of US$102.208 is substantially higher than the prices reported by the Petroleum Ministry (US$92.443) and the Finance Ministry's budget statistics (US$93.69). The reasons for this gap are not clear.

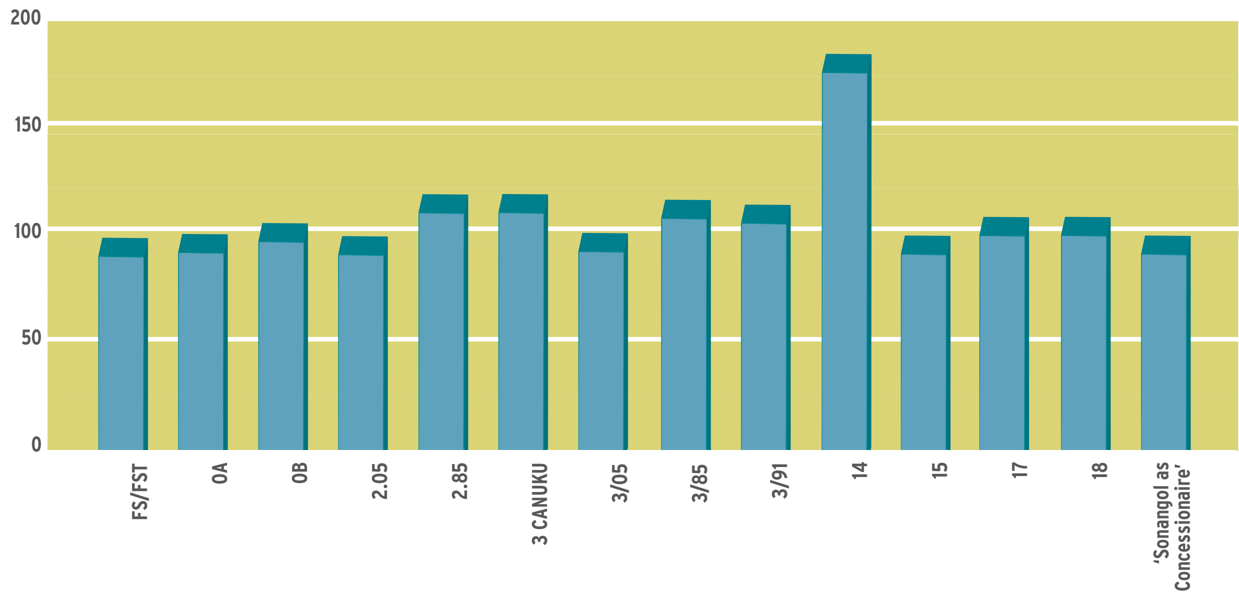
- Some of the 2008 average prices reported for particular oil blocks are simply not credible. The average price for Block 14, for example, is given as US$187.873[43] but no crude oil in the world has ever been sold at that price. Two of the other per-block prices are above US$110 per barrel, which could well have been achieved in certain months during 2008 but seems high as an average for the year.

- In addition to the PDF files published by the Finance Ministry on its website, there is an Excel file which includes annual data.[44] However, the 2008 total in the Excel file has different data from the PDF version. This seems to be the result of an accidental omission of the figures for November and December 2008 data in the Excel file, which affects financial data as well as export data. It is worrisome that this mistake has remained on the Ministry of Finance's website without correction for over a year.

There are other sources for prices for Angolan crude oil in 2008, other than the Angolan government. These are prices for various different grades of crude oil sold by Angola, not average prices for all Angolan crude. One such source is the information services company, Platts, which is used by the US EIA as its source for weekly prices of one of the most important Angolan crude grades, Cabinda. Platts is considered an authoritative source for international oil prices and it has extensive contacts with oil traders. The average of all the weekly prices for Cabinda in 2008 was US$94.88.[45]

This figure is not an exact equivalent for the average price of all Angolan crude because Angola has other grades of crude, the two main grades quoted on oil spot markets being Girassol and Palanca. But because these various grades of crude do not differ greatly in quality (that is, in viscosity and sulphur content),

Average dollar price per barrel, by block, given by the Ministry of Finance for 2008



Source; Ministry of Finance.

their prices are not greatly different from those of Cabinda crude. For example, the biggest differential between Girassol and Cabinda crude prices in 2008 was US$2.10 per barrel.[46]

There is a table in the Ministry of Petroleum's Relatório for 2008 titled "Exportation of Crude Oil by Areas" *[Exportação de Petróleo Bruto por Àreas]* which gives average annual prices by crude grade. According to this table, the average price for Cabinda was US$93.05 per barrel.[47] The difference between this figure and Platts' could be due to the Ministry's average price being weighted, to reflect the fact that the volume of oil sold at any given weekly price will vary, according to the loading schedules of oil tankers. Overall, this implies that the Ministry of Petroleum's average price may be roughly accurate, but the price reported by the Ministry of Finance clearly is not.

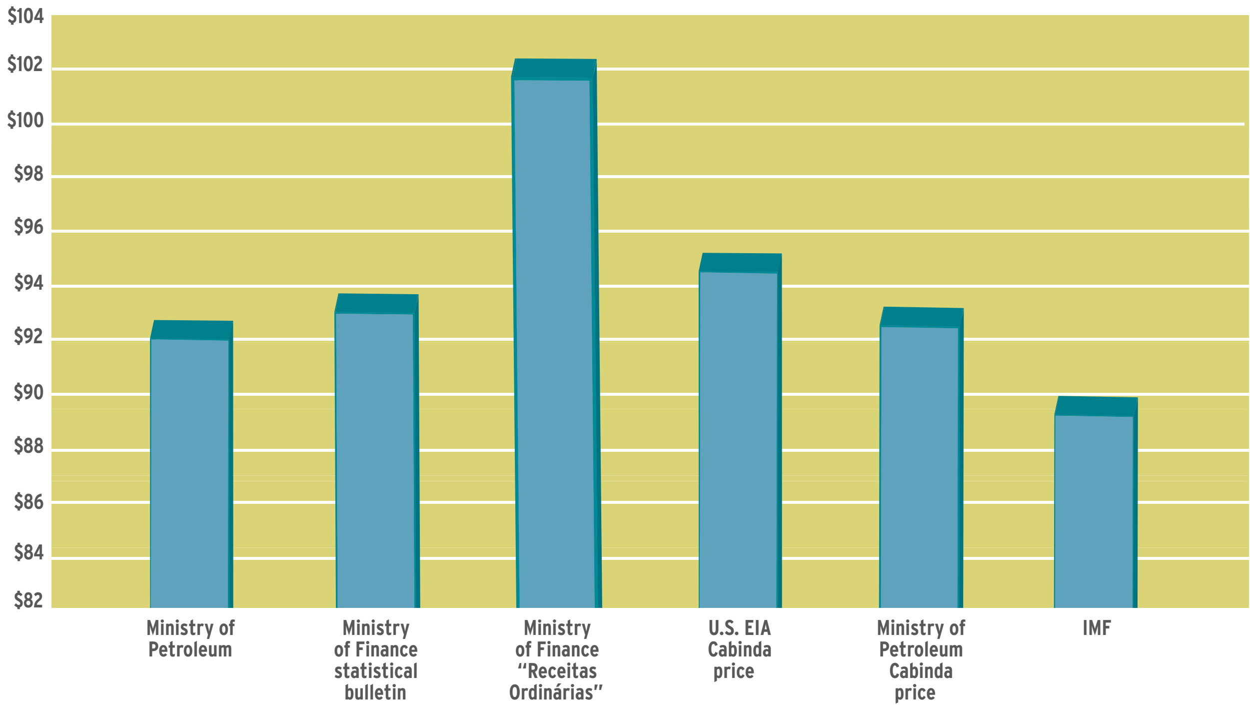
The IMF quotes a lower average price for Angolan crude of US$89.90 per barrel,[48] This is only about US$2.50 different from the Ministry of Petroleum price. It is not clear how the IMF calculates this price and it is possible that it is lower than the ministry's price because it includes crude sales to the Luanda refinery, which might be subsidised. More generally, the Ministry of Petroleum does not disclose which crude grade(s) were purchased by the refinery.

So in summary, the price reported by the Ministry of Finance is too problematic to give any confidence. The Ministry of Petroleum's price is close to the price of a well-known Angolan grade of crude oil which is published by an independent agency (Platts) with good sources in the oil market, implying that the ministry's price may be approximately correct. However, the fact that the IMF quotes a slightly lower average suggests a need for some scepticism about the ministry's figure.

The Angolan government should publish more regular information on the prices which it receives for different grades of crude oil. This would enable observers with access to information sources like Platts to make comparisons and satisfy themselves that the prices reported by the government are roughly accurate, which is clearly of vital importance because the price at which oil is sold will determine the value of the oil revenues, which are the government's most important source of income.

The government should publish more regular information on the prices of different crude grades

Average per barrel price of Angolan crude in 2008, by source



Sources: Ministry of Petroleum, Ministry of Finance, U.S. Energy Information Administration, International Monetary Fund.

1.d HOW MUCH OIL WAS SOLD BY THE ANGOLAN GOVERNMENT IN 2008?

The figures for the volume of oil sold by Sonangol on behalf of the government pose a major problem. Sonangol, the Ministry of Petroleum and the Ministry of Finance all publish such figures but none of them match each other. There is a massive gap, with a nominal value of US$8.55 billion, between the sale volumes published by the two ministries.

These gaps have no obvious explanation and are impossible to assess without more information about how the different agencies are classifying these oil sales and where their data come from. There is a pressing need for more transparency and independent verification of oil sales by Sonangol.

The Angolan government does not just receive revenues from oil in the form of tax and royalty payments, paid in cash by oil companies. It also receives flows of oil, which are marketed by Sonangol on the government's behalf. The state oil company is required to transfer to the government all the income that it makes from oil sales in its capacity as agent of the state, minus up to ten per cent which it can deduct to cover its own costs.[49]

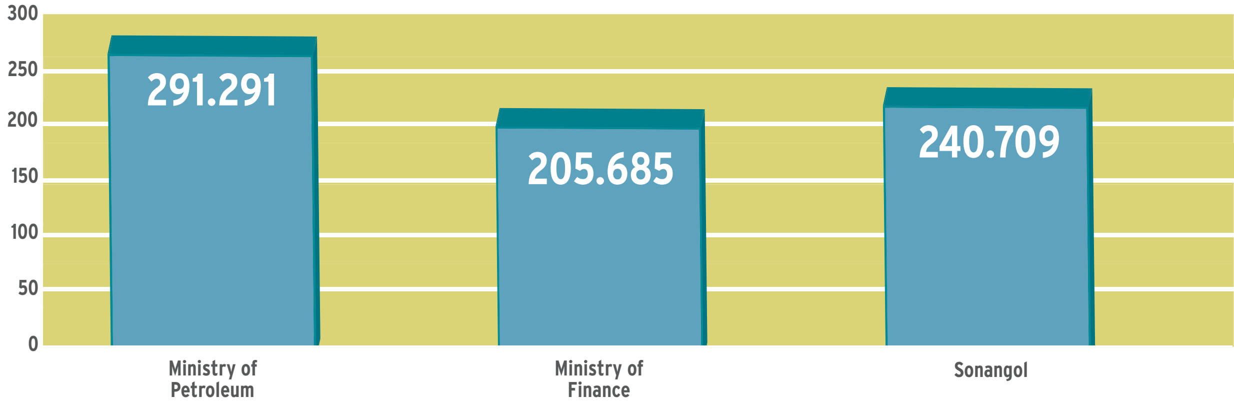
There are two types of oil industry contract in Angola, production-sharing agreements and concession agreement (these are explained in more detail below). The government is entitled to a share of the oil from production-sharing agreements, once companies' costs have been covered, via Sonangol's shares in these agreements. This oil is known as "profit oil" and is marketed by Sonangol on behalf of the government. This revenue stream, known as concessionary revenues, is actually the largest source of earnings for the Angolan government from the oil sector, according to the Ministry of Petroleum in its *Relatório* for 2008.[50]

As well as marketing the government's share of profit oil, Sonangol receives oil as a participant in concessions alongside other oil companies, which it also sells. Its sales of oil as an "associate company" in 2008 were equivalent to about 20 per cent of its sales of oil as an agent of the government.[51] Another flow of oil to the government comes from certain tax payments by oil companies which can be paid in kind (that is, in oil) rather than in cash.[52] It is not always clear, when looking at government reports, whether they cover these different flows of oil sold by Sonangol. The *Relatório* has figures for the volume of crude oil sold by Sonangol in 2008, which was 296.872 million barrels, of which 291.291 million barrels were exported.[53] The difference between the sales and export figures, which is 5.581 million barrels, is not explained but was presumably sold to the refinery in Luanda.

The Ministry of Finance publishes a figure for the number of barrels of oil exported by *"SNGL*

There is a gap, worth a nominal US$8.55 billion, between the two ministries' figures for the volume of Sonangol's oil sales

Crude oil exports by Sonangol, in million barrels



Source: Angolan government agencies.

Concessionária" [that is, Sonangol in its capacity as a concessionary] in its 2008 "Ordinary Revenues" table. This volume is 205,685,295 barrels, which is a massive 85,605,705 barrels smaller than the figure provided by the Ministry of Petroleum.[54] The gap between these two volumes would be equivalent to US$8.553 billion, using the average price of US$99.91 for Sonangol's crude exports which is given in the same table.

This huge discrepancy between the two ministries is difficult to explain. Again, it is not clear exactly what kinds of oil sales are included in these figures, so the gap could be due to differences in classification.

Sonangol's 2008 financial statements include a table which gives a figure for the state oil company's "concessionary exports" of 240,708,876 barrels, which is roughly 50 million barrels less than the figure given by the Ministry of Petroleum but 35 million barrels more than the figure from the Ministry of Finance.[55] It is difficult to explain these huge gaps without much more information about how each figure is constructed and how the different government agencies are classifying the sales of oil with different contractual origins.

Given the huge importance of oil sales by the government to Angola's public finances and economy, there needs to be much more clarity about what kinds of sale each agency is reporting on, in order to make clear exactly how much oil was sold by the government, on what basis, and for what value in revenues.

2. What kinds of payments do oil companies make to the government?

The amount of oil income that flows to the Angolan government is determined by a fiscal regime whose complexity makes it difficult for outsiders to understand, let alone to monitor. This section describes the two different kinds of contract used in the oil sector – production-sharing agreements and concession agreements – and the various types of revenue payments that are made by oil companies to the government. The most important revenue stream is concessionary revenues, which come from sales of oil by Sonangol.

The Angolan government receives several different revenue streams from oil companies, based on two different types of contract. In a Concession Agreement, the government cedes the ownership of the resource to companies in return for royalty payments and income taxes.

In a Production Sharing Agreement (PSA), also referred to as a Production Sharing Contract, the ownership of the resource remains with the government. The oil companies are allowed to deduct a share of the oil that is produced and sell it to cover their own costs ("cost oil"). To add further complication, some of Sonangol's share of the cost of developing oil licences may be "carried" (paid upfront) by other oil companies which can then recoup this money from Sonangol's share of "cost oil".[56]

Angola's oil sector has a complex fiscal regime which is hard for outsiders to understand, let alone monitor

The remaining "profit oil" is shared between the companies and the government, which also receives taxes.[57] In some blocks governed by PSAs, the largest shareholder is Sonangol itself.

Areas governed by Concession Agreements accounted for about 18 per cent of Angola's oil production in 2008, according to analysis of figures published by the Ministry of Petroleum.[58] Other oil-producing blocks are governed by PSAs and accounted for the remaining 82 per cent of production, according to the same figures. This is not to say that the Petroleum Ministry's oil production figures by block are necessarily accurate: they are cited here only to indicate the relative fiscal importance of the two types of contract.

The Angolan government receives several different revenue streams from oil companies which will be described in the following sections.

CONCESSIONARY REVENUES

The revenues from the sale of the government's share of profit oil are often referred to in Angolan official reports as **"concessionary revenue"**, though this does not appear to be a legal definition. This is sometimes referred to as the **Share of Production of Petroleum (PPP)** *["Partilha de Produção do Petróleo"].* Concessionary revenues are by far the most important sources of revenues for the government from oil.

In 2008, more than 80 per cent of Angola's oil output was produced under Production Sharing Agreements (PSAs).[59] The main source of state revenue in this type of contract comes through the government's entitlement to a share of the oil production itself.[60] Sonangol sells this oil and is supposed to pass the receipts on to the government.[61]

Concessionary revenues are hugely important for Angola. The Ministry of Petroleum assesses them at 53.55 per cent of the total value of Angola's state oil revenue.[62] This would make them about a quarter of total government revenues if applied to the fiscal year 2009 budget.[63]

Angolan government agencies classify these revenues in different ways. Sonangol and the Finance Ministry refer to this revenue stream as "concessionary receipts". The Petroleum Ministry refers to a revenue stream called "oil production share" *[partilha de produção do petróleo].*[64] These are clearly alternative names for concessionary revenues because they are reported in the same way in relation to other taxes.

The government's share of profit oil is calculated differently for every development area, varying according to terms of each agreement and to the rate of return achieved in each quarter of the year in each development area.[65]

The calculation is made by deducting the cost oil from the total crude oil produced in a development area and then splitting the remaining oil, the "profit oil", according to the terms of the contract.[66]

Once the government's share of profit oil has been calculated, Sonangol is responsible for selling this oil. Then Sonangol calculates its administrative costs and deducts them from the revenues earned from these sales. The state oil company is allowed to deduct a maximum of 10 per cent of the revenue and appears to regularly deduct this full amount, because the oil revenue files published by the Ministry of Finance (and discussed throughout this report) refer to revenue payments "after the deduction of the 10 per cent."

Sonangol also carries out quasi-fiscal activities on behalf of the government, such as the distribution of subsidised oil products within Angola. The costs of these quasi-fiscal activities are very substantial: the IMF estimated that in 2009 they would amount to 295 billion kwanza, which would be equivalent to US$3.72 billion at the Angolan central bank's average exchange rate for that year.[67] There is currently a lack of clarity about how Sonangol's deduction of costs to cover these activities is accounted for in government reporting of concessionary revenue.

So in order to calculate what value of concessionary revenues should be paid to the Angolan government in any given year, a concerned citizen or observer needs reliable information on all these factors of production shares, pricing and costs.

For more information on this issue, see the text box on Page 28: The difficulties of checking Angolan official data on concessionary revenues.

PRICE CAP EXCESS FEE

Oil companies that operate under Production Sharing Agreements (PSA) also have to pay the Price Cap Excess Fee to Sonangol, which is responsible for transferring the funds to the state.[68] As the name suggests, this fee is intended to increase government revenue when oil prices rise above a certain level. It is charged when the Market Price for oil, which is a reference price set by the government for fiscal purposes,[69] exceeds a price cap calculated according to a formula established in the Production Sharing Agreement (PSA). The excess is then "multiplied by the number of Barrels of Profit Oil which the Contractor Group has lifted each Month."[70]

Angola's law on petroleum taxation of 2004 states that price cap excess fees are paid to the "State Concessionaire" (in other words, Sonangol), which then pays the entire amount to the state treasury.[71]

PETROLEUM INCOME TAX (IRP)

Another major source of oil revenue in Angola is the **Petroleum Income Tax** *(Imposto sobre o Rendimento do Petróleo,* or IRP*),* which is levied on companies engaged in various oil activities, including exploration and production. This tax applies to all blocks and both types of contract.[72]

PETROLEUM TRANSACTION TAX (ITP/TTP)

Companies operating under Concession Agreements are also subject to **Petroleum Transaction Tax** (*"Imposto sobre a Transação do Petróleo"* ITP also known as *"Taxa de Transação do Petróleo"* TTP) which is payable on exploration, production, transport and storage of oil.[73]

PETROLEUM PRODUCTION TAX (IPP/TP)

Under Concession Agreements, the government receives revenue in the form of **Petroleum Production Tax** *("Imposto sobre a Produção do Petróleo"* or IPP, and also known as the *"Taxa de Produção"* or TP) which may be paid in cash or in oil. In the latter case, Sonangol is responsible for selling the oil and delivering the receipts to the government and unlike concessionary revenues, the legislation does not specify that Sonangol can make deductions from these receipts for its own administrative costs.[74]

DIVIDENDS

Sonangol also pays **dividends** to the government. The group holding company of Sonangol, which is called Sonangol EP, is solely owned by the Angolan government.[75]

SIGNATURE AND OTHER BONUSES

Another important revenue stream comes from **Bonuses**, which are one-off payments made by oil companies at various trigger points in the development of a field; companies sometimes make special payments towards social projects that also fall under the bonus category in the Angolan regime. Bonuses appear in various forms such as signature bonuses, exploration bonuses, first oil bonuses and commercial discovery bonuses. There can also be annual production bonuses.

Bonuses are negotiated separately in each contract and their values vary according to the type of bonus as well as the block in question. **Signature bonuses** are the most significant ones and for some blocks, they have reached records of US$1 billion as in the case of the Chinese oil company Sinopec during the 2005/06 Bidding Round.[76] They are paid upon the signing of a contract.

As for other types of bonuses, the IMF reported in 2003 that: "…compared with the signature bonuses, these others are quite small in magnitude. They range from between US$25 million and US$35 million per year."[77] However, in 2004 Chevron disclosed an US$80 million social bonus in return for a contract extension, in addition to a signature bonus.

As this report will show, it is not clear over what time period these bonuses are paid or how they are reported in the executed budget statistics. Angola's 2004 law on petroleum taxation states that bonuses are paid to the "State Concessionaire" (in other words, Sonangol) so these bonuses should be included in Sonangol's financial statements. The law says that these revenues are paid to the state treasury "in their entirety", implying that Sonangol does not deduct money from them for its own costs.

OTHER REVENUE STREAMS

Some taxpayers are also charged the **Surface Tax** *("taxa de superficie"*, which is sometimes referred to as *"renda sobre superficie"* or "surface fee"). This is a fixed rate paid per square kilometre of the area on which oil development and production activities take place.[78] There is also a **Levy for Training of Angolan Personnel**. Both these revenue streams appear to be small and are not analysed in this report.

In summary, companies that produce oil from blocks governed by PSAs would pay Petroleum Income Tax (IRP) and share the profit oil from the block with the government. They might also have to pay a Price Cap Excess Fee and bonuses for the signing of agreements with the government. Companies producing oil under Concession Agreements would be subject to Petroleum Income Tax (IRP), Petroleum Production Tax (IPP) and Petroleum Transaction Tax (ITP).

According to the World Bank, oil companies calculate and pay Petroleum Income Tax, Petroleum Production Tax and Petroleum Transaction Tax on a provisional basis.[79] In other words, they calculate their own tax liabilities, based on a forecast of their taxable income, and these liabilities are then adjusted by a final computation based on their actual income.

This distinction between provisional and final payments is important because at times when oil prices are highly volatile, as they have often been during the 2000s, the difference between what an oil company expects to earn in income from Angola and what it actually earns may be substantial.

This creates a problem in Angola because it is not always clear whether official oil revenue data are provisional or final. So a comparison of two data sets, one of which is actually provisional and the other final, is likely to automatically produce discrepancies. This point will recur during the discussions below.

3. How much Concessionary Revenue did Angola earn in 2008?

Sonangol's 2008 accounts include figures for its receipts as an agent of the state, but its auditors say that they cannot confirm that all this information is correct. The ministries provide similar figures to Sonangol but there is no evidence that their data have been independently verified. The Finance Ministry reports similar figures to Sonangol for total receipts, but different figures for each oil block.

The Petroleum Ministry reported in the *Relatório de Actividades* for 2008 that the government received concessionary revenues of 1,502.410 billion kwanza, which is just over 53 per cent of the total oil revenues of 2,805.383 billion kwanza which are recorded in the report.[80]

The *Relatório* reports that in addition to this concessionary revenue, Sonangol E.P. contributes an additional 5.78 per cent of government petroleum revenue, and Sonangol P&P an additional 0.8 per cent.[81] These are revenues derived from other taxes and might conceivably include any bonuses paid to the government by other oil companies via Sonangol, or dividends paid by Sonangol. However, the *Relatório* does not confirm this. These other revenues need to be more clearly classified because, in value terms, they would amount to 184.594 billion kwanza or nearly US$2.5 billion.

Sonangol and the two ministries publish similar figures for concessionary revenues but these figures are not verified

The Ministry of Finance also publishes figures for Sonangol's contribution to government revenues from *exported* crude oil. In its annual table for 2008, the ministry reports that concessionary revenues were worth 1,515.910 billion kwanza or US$20.22 billion. A footnote states that these values are "based on the declared value by Sonangol Concessionaire after the deduction of the 10 per cent [for Sonangol's costs]."[82]

This figure appears to be incomplete, because it does not account for the value of oil that is sold to the refinery, rather than being exported. In kwanza, it is slightly higher than the figure reported by the Ministry of Petroleum, for reasons which are not clear.

Sonangol provides a third source of data on concessionary revenues in its 2008 financial statements. These financial statements are independently audited, which would appear to provide some assurance of their reliability. However, there are questions about these accounts. As explained in the text box "The difficulties of checking Angolan data on concessionary revenues", Sonangol's figures imply an unrealistically low price per barrel for the sale of profit oil.

A further concern is that Sonangol's auditors, the international firm Ernst & Young, qualified their opinion on the financial statements with the note that Sonangol undertook "agency work" relating to "...contracts that have been signed with groups of contractors that set out financial terms relating to, among other matters, bonuses, provisions for abandoning [projects], outside revenues, and price limits." The auditors were "...unable to establish whether all the transactions, rights and obligations linked to the activity as an agency are correctly reflected in the Company's financial statements."[83]

With these caveats, Sonangol's financial statements provide a provisional figure for total concessionary revenues in 2008 which is identical to the figure provided by the Petroleum Ministry: 1,502.410 billion kwanza.

The fact that these two figures match does not mean that they are accurate: it may be that they are using the same data. Sonangol also provides a final figure for concessionary revenues which is slightly lower at 1,501.362 billion kwanza.[84]

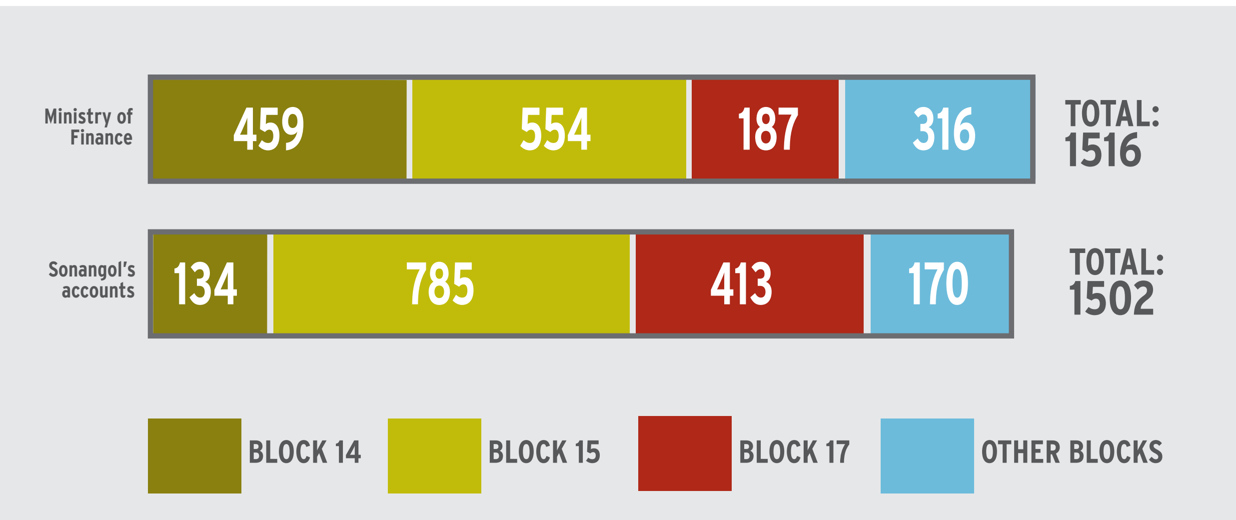
The Ministry of Finance also provides figures for concessionary revenues from Sonangol per block, per month during 2008, in its Exports and Revenues from Petroleum files. The two agencies report completely different figures per month and per block, which makes it striking that the differences between the totals for all blocks turn out to be relatively small, as a proportion of the total.

The published figures for concessionary revenues are relatively close to each other but there are no assurances that any of the figures are accurate

For example, the Ministry of Finance says that concessionary revenues from Block 14 in 2008 were 458.902 billion kwanza, while Sonangol puts the value of concessionary revenues from this block at 133.801 billion kwanza.[85] The two agencies' figures for some other blocks have similarly huge discrepancies on a month-by-month basis, yet the differences between their annual figures (1.516 trillion kwanza for the Finance Ministry versus 1.502 trillion kwanza for Sonangol) are relatively small as a proportion of the whole. The reasons for these differences are not immediately clear.

So although the published government figures for concessionary revenues are relatively close to each other in 2008, there are no assurances that any of the figures are accurate. In order to test these figures, it would be necessary to have reliable data for the underlying factors that determine concessionary revenues, such as production shares, prices and deductions for costs. Most of these data is problematic or unavailable (see text box on Page 28)

Concessionary Revenues by block for 2008, in billions of Angolan kwanza according to the Ministry of Finance and Sonangol's accounts



THE DIFFICULTIES OF CHECKING ANGOLAN OFFICIAL DATA ON CONCESSIONARY REVENUES

Concessionary revenues earned by the Angolan government are a share of oil production from a particular project, minus the "cost oil" that is claimed by companies to cover their expenses, the "profit oil" that accrues to these same companies and any further deductions by Sonangol to cover its expenses.

So a concerned citizen or observer who wanted to test the reliability of the official government reporting of concessionary revenues in 2008 would need information on the following:

1. The total production of each development area, expressed in barrels of oil.

2. The cost oil of each development area, expressed in barrels.

3. The volume of the government's share of profit oil, expressed in barrels.

4. The prices at which these barrels were sold, expressed in US dollars.

5. The value of any deductions to cover Sonangol's administrative costs, or its costs for carrying out quasi-fiscal activities on behalf of the government

6. The exchange rates at which concessionary revenues are converted from US dollars into Angolan kwanza, the currency used in the government's budget reports.

Some of this information is publicly available and some of it is not, meaning that it is not possible for outsiders to assess the accuracy of government reporting on concessionary revenues and confirm that the right amounts have reached the national budget.

1. Oil Production By Development Area, In Barrels

There are data from the Petroleum Ministry on production from each oil block but these data do not appear to be independently verified.

The Petroleum Ministry, in its *Relatório* for 2008, publishes figures for oil production per block in 2008, giving both provisional and final figures. For example, Block 18 was forecast to produce 70.30 million barrels during the year but actually produced 55.42 million barrels.[86] The *Relatório* does not explain how these figures are calculated and there is no visible evidence that they have been checked by a third party, which means there is no way of knowing how accurate they are.

The Ministry of Finance publishes figures for oil exports per block, but not for oil production – the two are not strictly comparable because export figures do not account for domestic refinery sales or oil held in storage.

The oil companies which operate these blocks, including Sonangol in some cases, must have records of how much oil is produced: if these records were published and checked by an independent third party, then they could be used to cross-check the Petroleum Ministry's figures.

2. Cost Oil Per Block, In Barrels

The government's data on cost oil are not published"

The amount of "cost oil" which oil companies can claim will determine how much "profit oil" is left to be shared with the Angolan government. Nonetheless, this information is not published by any government agency. It should be, because oil companies' costs are a sensitive issue in many countries and there is a need to make sure that oil companies are not overstating their costs in order to maximise their own share of oil production from a field, at the government's expense. Sonangol hires international firms to carry out audits of oil companies' costs, for this reason[87] , but the findings of these audits are not published.

3. The Government's Share Of Profit Oil, In Barrels

Different agencies publish different figures for this information and the data are not verified (beyond the fact that Sonangol's financial statements are audited).

As noted in section 1.d in the main text, Sonangol, the Ministry of Petroleum and the Ministry of Finance publish different figures for the volumes of oil sold by Sonangol on behalf of the government: it is not clear why these figures differ or whether they are classified in the same way.

4. The Prices Of Oil Sold By Sonangol

There are no verified official data on these prices. The Finance Ministry's price data include gaps and anomalies which are hard to explain. Sonangol does not publish this price for 2008 and its export value and volume figures imply an average price (US$48.96 per barrel) which is implausibly low given that other agencies were estimating average prices above US$90 a barrel. The Petroleum Ministry's data seem roughly consistent with external estimates of Angolan crude sale prices.

As noted in section 1.c, Angolan government agencies publish average prices for crude oil sold in 2008, but there are credibility problems with some of these prices, especially with some of those published by the Ministry of Finance. These average prices apply to all the Angolan crude oil sold in 2008, not just to oil sold by Sonangol.

The Ministry of Finance is the only agency to publish detailed prices for the oil sold by Sonangol, though such prices could be inferred from the data on volumes and values of oil that are included in Sonangol's financial statements. The PDF versions of the ministry annual Exports and Revenues from Petroleum files for 2008 give an average annual price for oil sold by Sonangol as a concessionary in 2008, which is US$99.91.[88] A footnote on the PDF file explains that the average prices are "related to the market price and the reference price determined by the Ministry of Petroleum and the Ministry of Finance."

The Ministry of Finance also publishes an Excel file for the year 2008 which gives the average price of oil sales by Sonangol as US$102.19.[89] It is not clear why the Finance Ministry has published these two different values for what should be the same price. This Excel file has so many gaps and apparent mistakes, which may be due to clerical error, that it is of little obvious use for analysis.

In addition to the annual files, the Ministry of Finance publishes monthly Exports and Revenue from Petroleum Files for 2008.[90] These give an average oil sale price, per block and per month, and include a separate figure for oil sales by Sonangol from each block. There are anomalies in these files which are hard to explain, unless they are simply mistakes.

For example, the average price earned by Sonangol usually lies somewhere between the lowest and highest oil prices recorded for each block during the year. But in March and April 2008, the prices reported for oil sales by Sonangol for each block are significantly lower than the prices reported for these blocks overall. In April, for example, Sonangol is reported to have sold its oil for an average of US$89.40 per barrel, while the lowest average price for any oil block in that month was $104.53 a barrel (for Block 17).

The PDF files for certain months contain clerical errors. There are missing data for certain blocks in the April 2008 monthly file and these missing data appears to have created an error message "#REF!" for the average price for all blocks for April. This evidence of what appear to be errors in data entry clearly weakens the credibility of the Finance Ministry files.

So although the Finance Ministry publishes detailed data for oil export prices achieved by Sonangol, for each block and each month of 2008, these data do not appear to be reliable.

The Petroleum Ministry does not publish prices for the value of oil sales by Sonangol in 2008. It does publish a figure for Sonangol's gross revenues, which is US$26.96 billion and another figure for the number of barrels of oil exported by Sonangol, which is 291.291 million barrels.[91] Dividing the first figure by the second gives an inferred price per barrel of US$92.55, which is roughly consistent with the average export price published by the ministry for all Angolan oil exports in 2008, which is US$92.443. As noted in section 1.c, this is roughly consistent with prices reported by external agencies.

The ministry does not provide a price for the 5.581 million barrels of oil which were produced by Sonangol in 2008, according to the *Relatório*, but not exported.[92] This oil needs to be accounted for because, if valued at the ministry's export price for the year it would be worth around US$516 million. The lack of detail on refinery sales and revenues is a general problem in the *Relatório*.

Sonangol does not publish an average price for its oil exports in its 2008 financial statements. The state oil company does publish data on volumes and values of its export sales but these imply an average price per barrel which is implausibly low. The state oil company reports that "Sonangol Concessionária" (Sonangol Concessionaire) exported 240.708 million barrels of oil in 2008, and that these exports were worth 884.196 billion kwanza.[93] At the average dollar-kwanza exchange rate provided in Sonangol's financial statements, these exports would be worth US$11.784 billion.[94] This would imply an average price of US$48.96 per barrel which is simply not plausible: even Angola's cheapest crude grade, Saxi Batuque, sold at an average price of US$69.35 per barrel in 2008, according to the Ministry of Petroleum.[95]

The same volume of exports by Sonangol, using the Ministry of Petroleum's average oil price of US$92.443, would be worth US$22.252 billion. This implies a gap of US$11 billion between Sonangol's own valuation of its oil exports, and the valuation which can be calculated using the Ministry's price. This US$11 billion anomaly is deeply troubling, especially as it emerges from data that are included in a company's independently audited financial statements.

These kinds of anomalies need to be explained because they cast doubt on whether the prices at which Sonangol sells its share of Angola's oil are trustworthy or not, which in turn raises questions about the reliability of the official data on concessionary revenues.

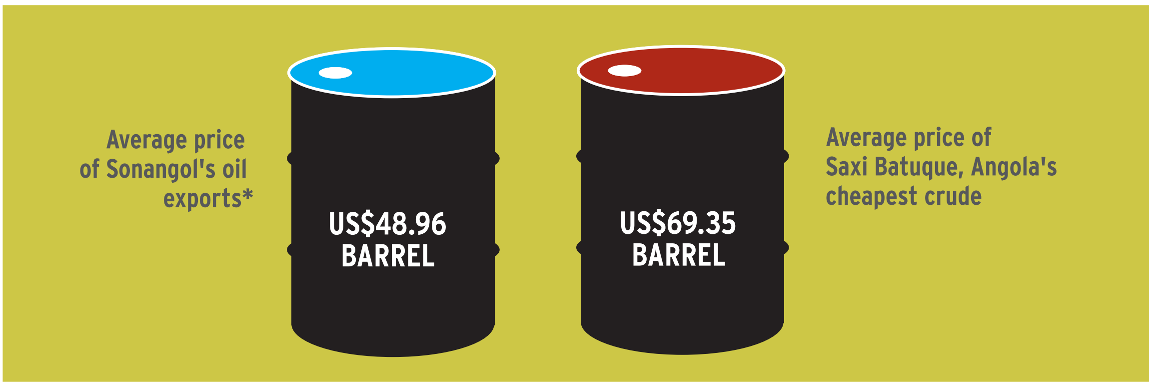
5. The value of Sonangol's costs

Sonangol deducts significant sums from oil revenue to cover its costs, including quasi-fiscal activities on behalf of the government, but it is not clear how these costs are accounted for.

Since costs incurred by Sonangol must be paid out of its income, which would otherwise accrue to the government, it is important to determine what these costs actually amount to. Angolan law allows Sonangol to deduct up to 10 per cent from concessionary revenues to cover its costs. The Finance Ministry's Exports and Revenues from Petroleum files imply that Sonangol deducted the full 10 per cent during 2008, because there is a footnote which says that figures for concessionary revenues are given "after deduction of the 10 per cent."[96]

Sonangol's own financial statements for 2008 also reiterate that the company can deduct up to 10 per cent of concessionary revenues, but do not state whether this full amount was in fact deducted or not.[97] Since this revenue stream accounts for more than half of the Angolan government's income, it is clearly important to confirm exactly how much of the revenue is retained by Sonangol, and to account for the use of these funds by the state oil company.

Another ambiguity is that Sonangol carries out various "quasi-fiscal activities" on behalf of the government, such as distributing subsidised oil products within Angola, and it is unclear whether the value of concessionary revenues is being reported by the ministries before or after Sonangol has deducted the costs of these activities. The process for calculating the cost of these quasi-fiscal activities has been complex and opaque in the past and the IMF has urged Angola to regularise the reporting of these costs and ultimately phase out these activities by Sonangol.[98]



Sources: Sonangol, Ministry of Petroleum
* This is an inferred price calculated from the volume and value (in kwanza) of Sonangol's crude oil exports in 2008.

The World Bank in its country study, "Angola: Oil, Broad-based Growth, and Equity", notes that:

"This complicated relationship between the Government and Sonangol has resulted in payment arrears to the Government and in the appearance of a dual spending system. At the same time that Sonangol performs all of the [quasi-fiscal] operations described above, it is also subject to the taxes and other payment obligations, including production shares, as any other oil company in Angola. Sonangol's record, however, is one of underpayment of taxes and substantial arrears to the Government. This is because the company is often not reimbursed for the cost of carrying out these tasks and, in lieu of reimbursement, the company has offset or claimed credit against its tax liabilities by the amount of such costs."[99]

The lack of certainty about how these major costs are accounted for is a serious problem for the data. Without knowing how much money Sonangol deducts for its own costs, and for the cost of quasi-fiscal activities carried out on the government's behalf, there is no way to be sure that the published figures for concessionary revenues actually make sense.

6. Exchange rates

Sonangol reports an average exchange rate for 2008 and the Ministry of Petroleum appears to use a similar rate, though average rates for a year may not necessarily provide a very accurate picture of the actual rates at which major exchange transactions took place. The Ministry of Finance appears to use different exchange rates for different revenue streams.

Because crude oil is sold internationally in US dollars, it is important to know the kwanza-dollar exchange rate in order to compare oil receipts with revenues recorded in budget documents. Sonangol's financial statements report an average annual exchange rate for 2008 which is 75.034 kwanza to the dollar[100] - that is, US$0.01333 to the kwanza.

The Ministry of Petroleum does not publish an average exchange rate for 2008 in the *Relatório*. An exchange rate can be inferred by comparing those line-items in the report which are recorded in dollars and in kwanza. This inferred exchange rate appears to be consistent: US$0.01334 to the kwanza, which is almost identical to the exchange rate reported in Sonangol's audited financial statements.

The Ministry of Finance, in its 2008 statistical bulletin, uses a different average exchange rate of 77.9 kwanzas to the dollar – that is, US$0.01284.[101] In its Ordinary Receipts files in 2008, which give details on revenues per oil block[102], a calculation using line-items denominated in dollars and kwanza gives different inferred exchange rates for different revenues. For IRP tax, the inferred rate of dollars to kwanza is 0.0133. For concessionary receipts it is 0.01269 and for the total of all payments, it is 0.013002. It is impossible to explain why the ministry appears to be using different average exchange rates for the same year and this finding raises further questions about the accuracy of these files.

To sum up, concessionary revenues are calculated by deducting the cost oil from the total crude oil produced in a development area and then splitting the remaining oil, the "profit oil", according to the terms of the contract between the Angolan government and oil companies. Once the government's share of profit oil has been calculated, Sonangol is responsible for selling this oil. Then Sonangol calculates its administrative costs and deducts them from the revenues earned from these sales, and what remains should be transferred to the government as concessionary revenue.

To determine how much concessionary revenue the government should be earning, it would be necessary to have the figures for all of the factors listed above.

In practice, these data are either unavailable, ambiguous or presented in a way that their accuracy cannot be confirmed. This finding underlines the case for clearer and more comprehensive reporting, and more use of external audits and certification of data, to ensure that the government's reporting on concessionary revenues is accurate.

4. How much did Angola earn from price cap excess fees in 2008?

Sonangol reports that it received more than a billion US dollars from these fees in 2008 but this sum is not reported as a distinct item by the ministries. This means there is no way to follow the flow of this revenue into the national budget.

Companies that operate under Production Sharing Agreements (PSA) also have to pay the Price Cap Excess Fee to Sonangol, which is responsible for transferring the funds to the state. The fee is charged when the Market Price for oil, which is a reference price set by the government for fiscal purposes, exceeds a price cap calculated according to a formula established in the Production Sharing Agreement (PSA). The excess is then "multiplied by the number of Barrels of Profit Oil which the Contractor Group has lifted each Month".[103]

Until Sonangol's financial statements for 2007 and 2008 were published, there was no way to know how much the oil companies were paying each year in Price Cap Excess Fees because these payments are not reported on by either of the ministries.

Sonangol's financial statements state that these fees are very large: in 2008, when oil prices were at historic highs for much of the year, they were worth 84.710 billion kwanza or US$ 1.129 billion.[104] This is a very large number which is found nowhere except in Sonangol's financial statement.

Sonangol reports fees worth US$1.13 billion which are not separately recorded by the ministries

As with bonuses, these sizeable fees do not show up in the Finance Ministry's Exports and Revenues from Petroleum files for 2008, nor are they mentioned as a type of revenue in the same ministry's "Summary of Revenue by Economic Type" *[Resumo da Receita por Natureza Económica]*.[105] This document shows all the various sources of the country's revenues, such as various petroleum taxes, yet omits this revenue source.

These fees do not appear to be specifically reported on in the Finance Ministry's statistical bulletin or the 2008 *Relatório* from the Ministry of Petroleum either. So it is possible that earnings from these fees are lumped together with another revenue stream in the reports by the ministries, such as concessionary revenues. But there is no way to be sure and this ambiguity raises questions about the comprehensiveness of government data on oil revenues.

5. How much Petroleum Income Tax (IRP) did Angola earn in 2008?

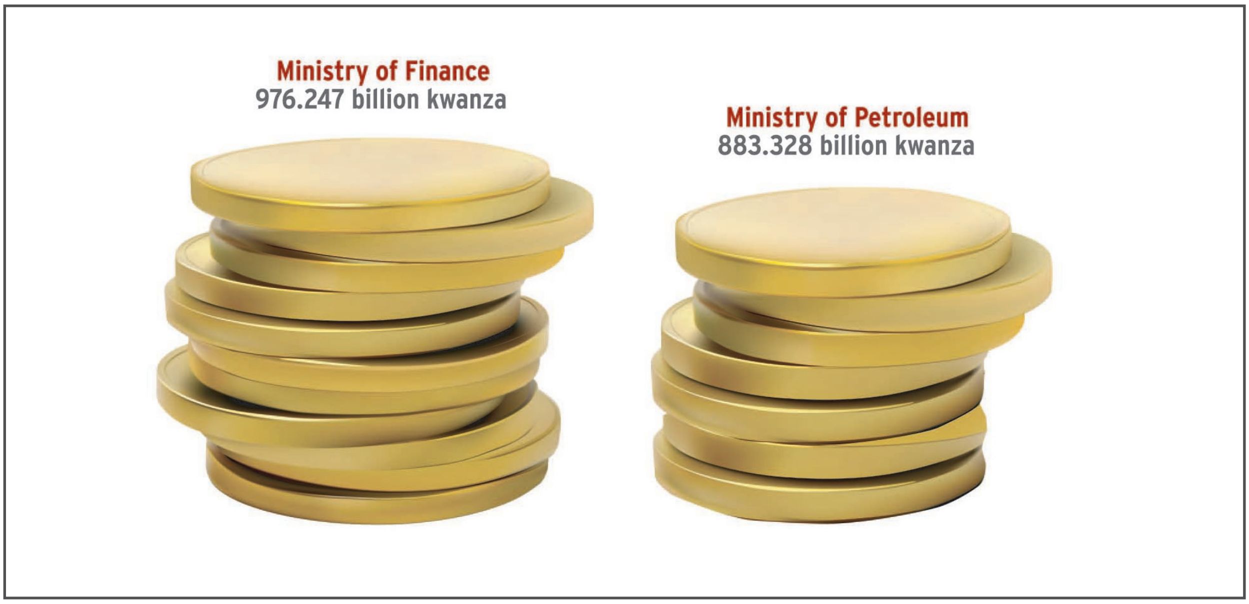
The Ministries of Petroleum and Finance report values for receipts of this tax which have a difference between them of US$1.24 billion. Neither ministry's data are externally verified. Both ministries report a value for payments of this tax by Sonangol which is several times higher than the value which Sonangol reports in its own audited accounts.

The Petroleum Income Tax (IRP) is the tax charged on the income of companies from oil-related activities, ranging from exploration to production, storage, transportation and exports.[106] After concessionary revenues, this tax is the main source of oil revenues in Angola according to Petroleum Ministry figures.[107]

For the government to receive the right amount of tax, the income of oil companies and their tax-deductible costs need to be correctly assessed. In Angola, Law 13/04 on petroleum taxation establishes that taxable income is verified by an assessment committee which consists of an inspector selected by the government, a representative of the taxpayer concerned and a representative from the relevant tax office.[108] According to the World Bank, Sonangol also carries out fiscal and cost audits on oil companies.[109]

But although these procedures exist, there is no way for the public to determine whether or not they are being correctly applied. The assessment committee does not appear make its findings public and the tax law states that all tax data are considered confidential.[110] This means that there is no way of

Petroleum income tax earned by Angola in 2008, by source



Source: Angolan government agencies.

checking whether the published figures for tax receipts match what should have been paid. This reflects a wider problem (for example, in the case of fiscal reference prices for oil taxation) that revenue data may be published but data on the factors that determine the scale of oil revenues are confidential.

Both the Ministry of Petroleum and Ministry of Finance publish figures on this revenue stream but there is a big difference between them. The former reports IRP receipts of 883.328 billion kwanza (US$11.78 billion at the exchange rate that can be inferred from the *Relatório* and the latter 976.247 billion kwanza (US$13.023 billion).

The reason for this very large difference is not immediately clear and, as noted throughout this report, there is no available assurance that either ministry's data have been independently audited or checked, meaning that a comparison between them does not demonstrate whether one or the other figure is more likely to be accurate.

Both ministries also provide figures for IRP payments by block in 2008. The Finance Ministry breaks certain blocks into sub-blocks for reporting purposes, notably Block 0 (which it reports as Block 0 A and B), but this does not cause any comparative problems because it is easy enough to add the values for the sub-blocks together before comparing them to the Petroleum Ministry's per-block data.

The Ministries of Petroleum and Finance report values for receipts of petroleum income tax which have a difference between them of US$1.24 billion.

However, the figures published by the two ministries for each block sometimes vary widely. The two ministries report different values for IRP payments to the state by Sonangol. The Ministry of Petroleum gives per-block figures for this tax for Sonangol (along with other oil companies) which tallied together come to 64.190 billion kwanza.

The Ministry of Finance, in its Ordinary Receipts files, gives a figure of 185.700 billion kwanza for payments of oil income tax by "Sonangol Concessionaire". Sonangol itself reports a much lower 40.655 billion kwanza.

The reason for these differences was not immediately obvious and it is not clear that it could necessarily

Petroleum transaction Tax earned by Angola in 2008, by source

Source: Angolan government agencies

be explained by the distinction between provisional figures for tax and those which are finalised after the end of the year. These differences need to be explained and underline the need for much clearer reporting of oil income tax receipts by Angolan government agencies.

6. How much Petroleum Transaction Tax (TTP/ITP) did Angola earn in 2008?

There is a very significant difference between the value of receipts of this tax as reported by the Petroleum and Finance Ministries: the latter's value is some US$460 million lower than the former's. The reason for this discrepancy is not clear and it needs to be explained.

The Petroleum Transaction Tax *[Imposto de Transação do Petróleo]* is a tax levied on the income from oil production that applies only to concession agreements. As with other revenue streams, there is no independent assurance that the data published on this tax are reliable.

According to the Ministry of Petroleum, companies paid the Angolan government 247.006 billion kwanza (US$3.295 billion) in this tax in 2008.[112] The ministry refers to this tax as *"Taxa de Transação do Petróleo"* (TTP) whereas the Ministry of Finance refers to it as ITP, which is short for *Imposto de Transação do Petróleo*. These names almost certainly refer to the same tax, since *"imposto"* and *"taxa"* are synonyms in Portuguese.

The Finance Ministry reports US$460 million less oil transaction tax than the Ministry of petroleum

But if they are the same tax, it is not clear why the Ministry of Finance reports a dramatically lower figure for 2008 of 210.714 billion kwanza (US$2.835 billion). This very large difference between the two ministries is inexplicable and underlines the concerns about the quality of the data which are discussed throughout this report.

The Ministry of Finance's statistical bulletin for 2008 adds further uncertainty. It reports a much higher figure of 296.595 billion kwanza[113], which would be equivalent to US$3.899 billion at the exchange rate used in this bulletin, for a tax described as *"Imposto sobre rendimento da transacçao do petróleo"*. But the bulletin also reports on *Taxa de transacção de petróleo* (TTP), which would appear to be the same tax, but has a different budget code and is reported with a value of zero.[114]

Sonangol's financial statements say that the state oil company made provisional payments of 52.409 billion kwanza (just under US$700 million) in petroleum transaction tax in 2008.[115] The Ministry of Petroleum reports the same figure for payments of this tax by Sonangol.[116] Sonangol adds that the final amount of tax it paid was actually 46.773 billion kwanza (US$624 million). This difference is not problematic in itself, because tax liabilities may well be adjusted after the end of the financial year, but it underlines that the final amount of tax received by the Angolan government may be significantly different (and in this case lower) than the figures published by the ministries, which are evidently provisional figures.

7. How much Petroleum Production Tax did Angola earn in 2008?

The Ministries of Finance and Petroleum report values for receipts of this tax which have a significant gap of several hundred million dollars between them. The Ministry of Finance, in its budget statistics, reports a figure that is roughly US$700 million higher than the highest of these two values, for reasons that are unclear.

The Ministry of Petroleum records that Sonangol paid no production tax on its participation in Block FST, although its foreign partners did.

The Petroleum Production Tax is referred to as IPP *(Imposto sobre a Produção do Petróleo)* by the Finance Ministry or TP *(Taxa de Produção)* by the Petroleum Ministry. It is a royalty paid by companies operating under concession agreements which is levied on the production of crude oil, natural gas and other substances specified in the Law on Taxation of Petroleum Activities, n° 13/04.[117] The Petroleum Production Tax (IPP/TP) may be paid in cash or in kind. If paid in kind, then the oil is sold by Sonangol, which pays the corresponding revenues in full to the national treasury.[118]

Because this revenue stream is linked to the volume of oil produced, any accounting for its value would rest on the accuracy of the figures for oil production and prices from the concessions which pay this tax. The government does publish its receipts from this tax but, like other receipts, the data do not appear to be independently audited.

According to the Ministry of Petroleum, the amount of this tax paid by companies in 2008 was 172.589 billion kwanza.[119] This would be equivalent to US$2.303 billion, using the exchange rate which can be inferred from the *Relatório*. According to the Ministry of Finance, however, companies paid 152.201 billion kwanza (US$2.026 billion).[120] This is a significant difference which would amount to several hundred million dollars.

The Ministry of Finance' statistical bulletin reports a much larger figure for this tax than either of the other ministry reports: 232.523 billion kwanza (US$3.057 billion using the exchange rate given in the bulletin).[121] It is not at all clear why a report on receipts from this tax into the budget should be so much larger than the other reports.

The Ministry of Petroleum reports that Sonangol paid 68.0 billion kwanza (US$907 million) in 2008, all of it from Block 0. Sonangol's own financial statements report that it provisionally paid 67.803 billion kwanza and that its final payment was 67.935 billion kwanza. The differences between Sonangol and the Ministry of Petroleum are small though there is no immediately clear reason why they should be different at all.

The Finance Ministry reports two different figures for oil production tax with a nominal gap of more than US$1 billion between them

One other peculiarity worth mentioning is that on Block FST (which is also subject to this tax), the Petroleum Ministry shows Sonangol's payment as zero, even though the other two companies on the block, Total and Chevron, each paid substantial amounts (2.203 billion kwanza or US$29.39 million from Total and 2.607 billion kwanza or US$34.78 million from Chevron).[122] Indeed, Sonangol does not appear to pay any tax at all on this block, a matter which should be clearly explained to the Angolan public.

8. Dividends paid to the government by Sonangol

Reports by government agencies only appear to record relatively small sums paid as dividends by Sonangol. This is a major problem which needs to be addressed, because Sonangol's own reporting indicates that dividends are in the low hundreds of millions of dollars a year.

Sonangol says it paid US$201 million in dividends in 2008 but the Finance Ministry does not seem to record this sum in its budget report.

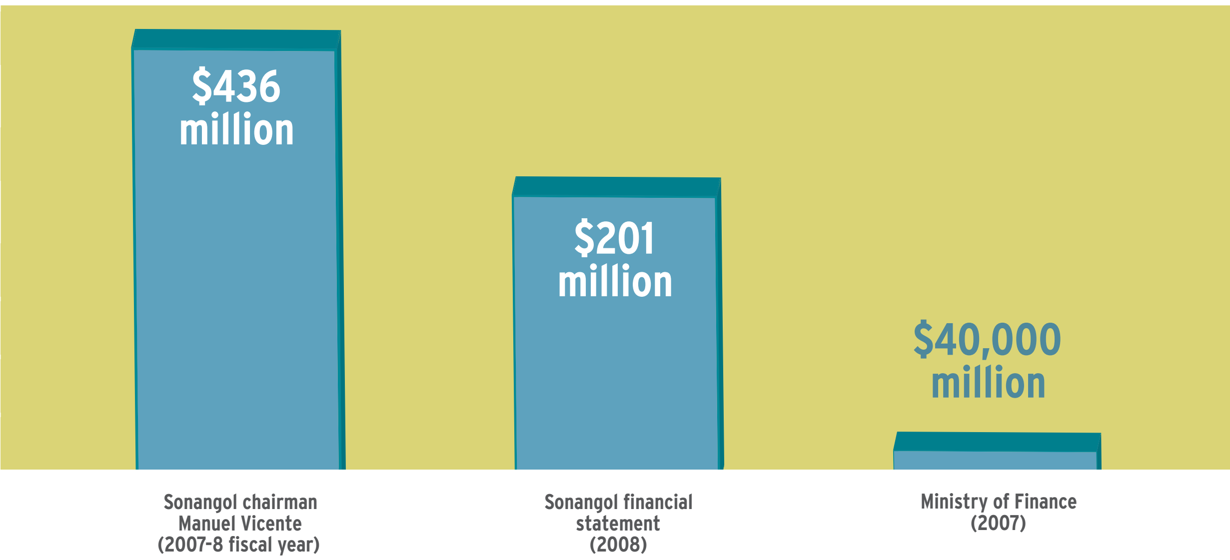
The Angolan government is the sole shareholder of Sonangol EP, which is the holding company of the Sonangol group, and is entitled to all dividends paid by this company. According to its audited financial statements, Sonangol made net profits of 234.137 billion kwanza (US$3.12 billion) in 2008.[123]

This suggests that dividends might be a significant source of revenue for the Angolan government.

Most of Sonangol's shares in oil blocks are controlled by a subsidiary, Sonangol Pesquisa e Produção (Sonangol P&P). One of the revelations from the publication of Sonangol's accounts for 2007/8 is that the Angolan government only owns 80 per cent of Sonangol P&P and the accounts do not say who owns the other 20 per cent.[124]
This revelation is disturbing, unless fully explained by the government, because it means that the ownership of a huge slice of the Angolan upstream oil sector, ostensibly controlled by the Angolan state, is actually owned by parties whose identities are not disclosed in the accounts. Global Witness wrote to Sonangol in October 2010 to ask who owns this 20 per cent stake, amongst other questions, but did not receive a reply. This situation implies that 20 per cent of any dividends paid by Sonangol P&P do not go to the Angolan state (via Sonangol EP), but to these unidentified shareholders.

It is not entirely clear how Sonangol reports on dividend payments to the government. The 2008 financial statements include two different categories of financial flow which may refer to dividends. The first category, OGE-Dividends *("OGE-Dividendos")* is found in section 19.3.2 Breakdown *[Composição]*, subsection Other Obligations *[Outras Obrigações]*. As this is an obligation - that is, a cost - it would seem to be a payment by Sonangol. And, as Sonangol is wholly state-owned, it would seem that that payout would be to the government since "OGE" refers to the *Orçamento Geral do Estado* [General State Budget]. The value given for this payment is

Dividends paid by Sonangol to the Angolan government according to source



15.085 billion kwanza, which is US$201.05 million. This is a relatively small amount compared to, for example, concessionary revenue, but is still a significant amount of money.

There is a second category in the Sonangol financial statement for 2008, *"Rendimentos de participação de capital"*, which could be translated as Earnings on Shareholder Equity, or perhaps Dividends on Shareholding. This category is in section 31.1 Breakdown *[Composição]*, under the heading Profits and Gains *[Proveitos e Ganhos]*.

This appears more likely to refer to Sonangol's earnings from its investments in other companies, rather than a payment to the government by Sonangol. In any case the amount of money involved is 2.868 billion kwanza, or US$38.22 million, using the exchange rate given in Sonangol's financial statements. This is a small amount of money for a company which controls Angola's entire oil sector.

The Ministry of Petroleum makes no mention of dividends paid by Sonangol to the state.

When government reports do mention dividends, they can imply that these payments are very small or non-existent. For example, in the Finance Ministry's statistical bulletin for 2007, there is a figure of 3.06 million kwanza for "dividends." At the central bank's average exchange rate for 2007, which was 76.706 kwanza to the US dollar, this would amount to less than US$40,000. The budget statistics also include a category called "participation in the profit of state-owned companies *(Participação nos lucros de empresas estatais]"*. No values are reported for this category for 2004 or 2007

The equivalent documents for 2008 do not appear to be available on the Ministry of Finance website section holding links to all documents related to the 2008 budget.[125] The 2008 statistical bulletin has a category for receipts of dividends (its budget code is 1.2.2.1) but the value given for this category is zero. In short, if Sonangol paid significant dividends to the state in 2008, then this does not appear to be recorded in the budget statistics.

This absence of proper reporting of dividends from Sonangol in government reports shows a serious lack of transparency which needs to be addressed because Sonangol's own reports suggest that these payments are significant. Sonangol's chairman Manuel Vicente reportedly said in February 2010 that for the 2007-2008 financial [fiscal] year, Sonangol paid the state US$436 million in dividends.[126] This is more than twice as much as the figure given in Sonangol's 2008 financial statements.

Vicente's figure is for the fiscal year and the figure in the financial statements is for the calendar year, so it is not surprising that they differ, but it is not immediately clear why the dividends paid over a 12-month period in 2007/8 should be twice as large as the dividends paid in calendar 2008, especially as oil prices were rising for much of 2008 and the dividend might therefore be expected to be larger.

In summary, the absence of clear reporting by the ministries on the flow of dividends from Sonangol to the state is a serious problem that needs to be remedied by much more comprehensive disclosure of what dividends are paid and received.

9. How much money does Angola receive from oil bonuses?

Angola can earn very large sums from the payment by oil companies of one-off bonuses tied to particular events, notably the signature of contracts. Angola's last bidding round in 2006 reportedly brought in signature bonuses worth more than US$3 billion. But reporting on bonuses by government agencies is very poor, making it impossible to trace the flow of these funds into the national budget, and needs to be greatly improved.

Various types of bonuses are paid to the government by oil companies in Angola at various stages of production. The most significant in financial terms are signature bonuses, which are paid on signing of a contract. From 1986 to 2001, according to the IMF, signature bonuses were worth more than US$1.1 billion to the Angolan government.[127] Between 2001 and 2006, media reports suggest that signature bonuses amounted to at least US$3.4 billion, which is more than the US$2.9 billion in official development assistance that Angola received during the same period, according to the African Development Bank and OECD.[128]

Oil bonuses reportedly paid in 2006

EVENT	Operator	Reported signature bonus (US$)
Concession of relinquished part of Block 15	ENI	902 million
Concession Block 1	TULLOW OIL	10 million
Concession Block 5	VAALCO	21 million
Concession Block 6	PETROBRÁS	50 million
Concession Block 17	TOTAL SA	1,100 million
Concession Block 18	PETROBRÁS	1,100 million
Concession Block 26	PETROBRÁS	50 million

Sources: Petroleum Economist, analysis March 2009; Sonangol Universo (Summer 2006); Deloitte (December 2008): "Doing Business in Angola"

9.a SIGNATURE BONUSES

Signature bonuses appear to be much larger than other types of bonuses and their disclosure has been given political significance in the past as an indicator of improving transparency in Angola. A press release by Chevron in 2004 described Sonangol's decision to let the US company publicly disclose its signature bonus in that year as a "bold move to tackle such a difficult issue as transparency and good governance".[129] This was a curious statement given that the main difficulty with transparency in Angola until that date was Sonangol's own discomfort with it.[130]

Signature bonuses are one-time payments made by a company on the signing of a contract. They reach into the billions of dollars and the government cannot be held accountable for their management and use unless there is clear public information about how large the bonus was, when it was paid by the company and how the money was accounted for in Angola's national budget.

There is some public information about individual signature bonuses paid by companies but this information is mostly available via the press. Sonangol's financial statements do include a figure for bonuses in 2008 of about US$91 million (see below) though as there are no media reports of signature bonuses being paid in that year, the figure may refer to other kinds of bonus. The Finance Ministry did not appear to publish any data on payments of signature bonuses in 2008.

Media reports put signature bonuses in 2006 at more than US$3 billion, but less than US$1 billion are recorded in budget reports

9.b SIGNATURE BONUSES IN 2006

Although Sonangol has awarded licences to oil companies in recent years, the last licensing round involving multiple companies was in 2006, so this report will briefly examine the very large bonus payments that were reportedly made then. The government announced a new bidding round in 2007 but it was later postponed and had not taken place as of early 2010.

The 2005/6 bidding round took place after the Finance Ministry started to publish a certain amount of oil revenue data (this practice appears to have started in 2004) but before the onset of the much more detailed reports from the Finance and Petroleum Ministries discussed above, which are only available since 2007.

The table above, which is based on media reports (including a report from Sonangol's own house magazine), suggests that oil companies offered a total of US$3.233 billion in signature bonuses in 2006. A slightly lower figure can be found in an article published by the Angolan news agency Angonoticias, which reported that Sonangol would collect US$3.100 billion in signature bonuses in December 2006, with a further US$400 million in social bonuses.[131]

According to the "Overall Summary of Revenue Execution by Nature 2006" *(Resumo Geral a Execução da Receita por Natureza 2006)* published by the Finance Ministry, the value of receipts from "Oil bonuses and premiums" in 2006 was 80.272 billion kwanza. Using the average exchange rate published by the central bank for 2006, which was 80.36830 Kwanza to the dollar, this would be equal to US$998.8 million.[132]

Thus there is a gap of more than US$2 billion between the value of signature bonuses pledged to the Angolan government in 2006, as reported in the media, and the amounts reported as having been received into the national budget. The available reports provide no obvious explanation for this gap and without more information, any attempt to explain it can only be speculative. But it is clear that so far, the official data on receipts of signature bonuses have fallen radically short of what would be needed for citizens to have any confidence in the Angolan government's management of this major revenue stream and would need to be improved as a matter of priority.

9.c "SOCIAL BONUSES"

The Angolan government also receives other bonuses such as "social bonuses" and commercial discovery bonuses, among others. In 2003 the IMF estimated the value of these bonuses at US$25-35 million a year,[133] though in 2004 Chevron paid a social bonus of US$80 million on the extension of its licence for Block 0, on top of a signature bonus of US$210 million.[134] The accounting firm KPMG, which carried out a diagnostic study of the Angolan oil sector in the early 2000s, had noted before the payment of this 2004 bonus that the management of social bonuses was opaque: "…the Consultants were unable to find any record of which Community and Social projects benefited from these bonus payments. It is important for transparency that such projects are publicised, and that supporting information is available to back-up the costs of implementing and running these projects."[135]

There has been some improvement in reporting since then. The Ministry of Petroleum's 2008 *Relatório* declared that social projects provided by the oil sector in Angola cost "around" US$38.99 million in 2008.[136] The ministry breaks down the value of projects per contributor and describes the types of projects but does not specify how the money was spent.[137]

9.d SONANGOL'S REPORTING ON BONUSES IN 2008

Sonangol's 2008 financial statements record that bonuses of 6.791 billion kwanza or US$90.51 million were paid to the national treasury in that year.[138] The text says that this payment has three components: a contribution for social projects, for a commercial discovery and for starting production.

It is not clear whether the figure of US$38.99 million, given by the Petroleum Ministry as the cost of social projects, can necessarily be matched with Sonangol's figures for the payments of bonuses to the national treasury (because the costs reported by the ministry may have been paid out of bonuses paid in earlier years).

Bonuses are not mentioned in the Ministry of Finance's "Summary of Revenue by Economic Type", however, and this lack of clarity about how revenues are classified makes it impossible to cross-check Sonangol's figure with the ministry's. This illustrates, once again, the need for much greater transparency in the ways that figures are categorised and reported across government agencies.

10. Tracing oil revenues into the Angolan national budget

Oil tax receipts are reported in detail in the budget statistics of the Finance Ministry in 2008, but the figures do not tally with those reported by the Finance and Petroleum Ministries in their oil sector reports.

Within its annual statistical bulletin for the state budget for 2008, the *Boletim Anual de Estatísticas do Orçamento Geral do Estado,*

Revenues from oil taxes in 2008, according to government reports (in billion kwanza)

TAX	Ministry of Finance: Statistical Bulletin 2008	Ministry of Finance: Ordinary Revenues	Ministry of Petroleum: Sector Report
Imposto sobre rendimentos de Industrias Petroliferas (IRP) **(oil income tax)**	935.927	976.247	883.328
Imposto sobre rendimento da transaccao do petroleo (ITP)/ Taxa de transaccao de petroleo (TTP) **(oil transaction tax)**	296.595	210.714	247.006
Imposto sobre a producao da Industria Petrolifera (IPP) **(oil production tax)**	232.354	152.201	172.589
Partilha de Producao de petroleo (PPP) **("share of oil production")**	757.020	0	1,502.410
Receita da Concessionária **(Receipts of the Concessionaire)**	0	1,515.910	

Sources: 1. Ministry of Finance. Annual Bulletin of Statistics of the General Budget of the State 2008 (Boletim Annual de Estatísticas do Orçamento Geral do Estado). 2. Ministry of Finance. Exports and Receipts from Petroleum 2008. Ordinary Receipts. Consolidated. Exportações e Receitas de Petróleo. Receitas Ordinárias. Consolidado. 3. Ministry of Petroleum. Report on Activities of the Petroleum Sector 2008 (Relatório de Actividades do Sector Petrolífero)

the Ministry of Finance publishes a "summary of revenues by economic type," which gives information on several taxes associated with the petroleum industry. These are oil income tax, oil production and transaction taxes and two categories which appear to include concessionary revenues: "oil production share" and "concessionary income".

The table shows major anomalies, such as the big differences between the ministries' data on oil income tax and, more strikingly, the fact that the receipts from the government's share of oil production in the statistical bulletin are half the value of those reported by the two ministries in their reports on the oil sector. It is not immediately clear what would explain these anomalies. In the second case, it could be speculated that the sharp fall on oil prices recorded in Angolan government documents towards the end of 2008 might have led to final tax receipts being lower than the provisional figures.

But it is hard to see how such factors would explain some of the major anomalies shown in the table, such as the big differences between the ministries' data on oil income tax.

Another problem is that it is hard to tell how (or whether) the statistical bulletin is accounting for major payments by Sonangol which are not taxes, such as bonuses, price cap excess fees and dividends. It is possible that these major sources of income are in fact reported in the budget statistics, but if so, it is not immediately obvious how and where they are reported, even though these are distinct revenue streams which are defined as such in Angolan law and contract.

These figures show that there is still substantial work that the government needs to do to explain how much revenue is earned from the oil sector and how that revenue flows into the national budget, to be spent in the interests of Angola's people.

CONCLUSION AND RECOMMENDATIONS

This report has shown that, although the Angolan government has been publishing much more official data on its earnings from the oil sector since 2004, a lack of independent verification means that in most cases, there is no assurance that the data are accurate.

This doubt is compounded by the many gaps, anomalies and inconsistencies within and between official reports. So although the extent of published official data shows a welcome recognition by the government that it ought to be seen to be more transparent, the actual data, as they stand, cannot be said to provide Angola's citizens with a reliable picture of oil revenue flows to their government, or of the volume of oil production and the prices of oil sales which determine the size of these revenue flows.

Despite Angola's reputation for severe corruption, this report does not suggest that any of the government's figures provide evidence of corruption or fraud. The question is not so much: "Is money missing from the government accounts?" as: "do the official figures provide a reasonably trustworthy account of actual oil revenue flows in Angola?"

It may be that many of the official figures are accurate to some degree. But without independent verification by credible third parties, and without much more transparency about how the official data are constructed, this cannot be taken on trust.

As this report has shown, the complexity of the fiscal regime for the oil industry in Angola is hard for a non-specialist to understand, let alone to monitor from publicly available information. The two different types of contract - concession agreements and production-sharing agreements - between them generate at least seven major revenue streams: concessionary revenues; price cap excess fees; income, production and transaction taxes and dividends payable to the state by Sonangol.

All these revenue streams depend on the volume of oil that is produced from the various oil-producing blocks in Angola (there were fourteen production blocks, as of the end of 2010) and the prices at which this oil is sold. They are also affected by prior deductions for companies' costs and by Sonangol's expenses for quasi-fiscal activities. And there is another revenue stream in the form of occasional bonuses paid by oil companies, which have reached the billions of dollars in the past, though not in 2008. In such a complex system, with so many moving parts, the potential for misreporting (whether accidental or deliberate) is large.

It may be that many of the official figures are accurate to some degree, but this cannot be taken on trust.

THE SPECIFIC FINDINGS OF THIS REPORT ARE THAT:

- None of the official figures published by the government for 2008 appear to be independently verified, with the exception of Sonangol's accounts (which are audited by an international firm that placed some qualifications on its findings).

- The official figures for oil production are unverified but compare roughly (within 50,000 barrels per day) to external estimates based on information from the international oil markets. But lack of detail about the output of other hydrocarbons than crude, such as condensate and natural gas liquids, makes the official figures problematic because these substances could be worth hundreds of millions of dollars.

- The figures for oil exports that are published by the Ministries of Petroleum and Finance are unverified and there is a huge discrepancy of 87 million barrels between their totals for 2008. The Petroleum Ministry's figure roughly matches one external estimate (from the U.S. government) but the Finance Ministry's figure is too low to be plausible. This underlines a wider problem that the Finance Ministry's oil revenue reports sometimes show what look like basic errors in data entry. This undermines the credibility of the ministry's data in general.

- The prices at which oil is sold will determine the state's earnings from its biggest source of income, concessionary revenues. Angolan government agencies publish average oil sale prices for 2008 but these figures do not appear to be verified and it is difficult to check their accuracy. The prices published by the Ministry of Petroleum are more or less comparable (within US$2 a barrel, on prices of roughly US$90 a barrel) with prices published by an independent source, Platts. But the Ministry of Finance publishes two average prices for 2008, one of which is nearly US$10 higher than the other. Some prices for specific oil blocks given by the Ministry of Finance are missing or implausibly high, possibly because of mistakes in data entry.

- Given that the sale of oil by Sonangol provides the Angolan government with its single biggest source of revenue – more than a third of its total income according to the Ministry of Petroleum – it is deeply troubling that Sonangol, the Ministry of Petroleum and the Ministry of Finance all publish different figures for the volume of these sales. There is a massive gap, with a nominal value of more than US$8 billion, between the sale volumes published by the two ministries.

- Sonangol's financial statements provide figures for the volume and value of its oil exports which, when assessed using Sonangol's own average exchange rate, imply an average oil price for the year of only US$48.96 a barrel, at a time when all other sources are publishing average prices above US$90 a barrel. Sonangol's oil exports were worth anything between US$11.78 billion or US$22.25 billion or more in 2008, depending on which average oil prices and exchange rates are used.

- Other problem areas are the payments of dividends and bonuses. According to media reports, oil companies pledged signature bonuses of more than US$3 billion in 2006 but a record of government receipts by the Finance Ministry listed only US$998 million in "oil bonuses and premiums" as having being received. Sonangol says that it paid US$436 million in dividends to the state in 2007/8, but neither the Petroleum nor Finance Ministries have reported receipts of dividends on anything like this scale.

- Price cap excess fees, which earned Sonangol more than a billion dollars in 2008 according to its financial statements, are not separately recorded in government accounts. There are also gaps, with a notional value of several hundred million dollars, between the two ministries' values for transaction and production taxes paid by oil companies.

■ The Ministries of Finance and Petroleum report values for receipts of income tax which have a gap of US$1.24 billion between them. Both ministries record that Sonangol paid more income tax than Sonangol itself reported in its financial statements.

It is very difficult to explain all these major anomalies and gaps in the data. There may be technical or classification issues which explain some of these problems (for example, the difference between provisional tax data and data which are finalised after the end of the financial year). Or it may be that the ability of government agencies to collect and present consistent and accurate data may be very weak.

Until these matters are explained, and until official reporting of the oil sector is made more comprehensive and subjected to external verification, Angola's government will struggle to shed the reputation for mismanagement of oil revenues which it has carried for many years.

Global Witness has written to Angolan government ministries to ask for more information about the data, and has written to Sonangol on various matters, but has yet to receive responses.

OSISA Angola and Global Witness would welcome a public discussion with the Angolan government on the findings of this report and how to address them.

The need for an independent review of oil revenue transparency in Angola

The main recommendation of this report is that the Angolan government should commission an independent review of its findings in order to explain the various gaps and anomalies that have been discussed in detail above.

There is a precedent for such a review: in the early 2000s the government commissioned the consultancy firm KPMG to produce an "oil sector diagnostic", of which only the executive summary was published in 2004. This review recommended various steps which were mainly aimed primarily at improving the government's own internal reporting on production, costs and the flow of revenues, rather than on making the workings of the oil sector more transparent to the Angolan public.

Some of its recommendations appear to have been adopted (such as the creation of model production-sharing agreements, to simplify the process of negotiation between the government and with international oil companies). Others have not, such as the need to create an independent regulatory agency to manage oil revenues, and to transfer Sonangol's regulatory role to a ministry to avoid possible conflicts of interest when the state oil company is making decisions on the oil sector.

OSISA Angola and Global Witness believe that a new independent review needs to be conducted, as the first of seven specific steps which enable the Angolan government to turn the current array of published statistics, which are detailed but of questionable reliability, into a comprehensive and credible record of financial flows from the oil sector to the government.

If all these steps were taken by the Angolan government, they would amount to a very significant improvement in transparency. Nonetheless, they would not in themselves provide a complete solution to the opacity that has long surrounded the Angolan oil sector: a broader solution would require a further three steps which are detailed below.

These last three recommendations do not arise directly from the findings of this report, but from broader observation and research of the workings of the Angolan oil sector by civil society groups such as Global Witness and OSISA Angola.

RECOMMENDATIONS

1 Angola's government should commission an independent review of the findings of this report and publish the conclusions of the review in full.

The Angolan government should commission an independent review to study all aspects of the reporting of oil revenues (and related data, such as oil production, exports, domestic sales and prices) to assess the problems raised in the report and make recommendations for addressing them. This review should draw on independent technical experts and its findings should be published promptly and in full.

2 The Ministry of Petroleum should publish a more detailed petroleum balance which has been independently verified.

The Ministry of Petroleum should create and publish an annual "petroleum balance" which builds on the existing "Report on Activities of the Petroleum Sector" and should include comprehensive figures on:

- Production of crude oil per block, per month, in barrels.
- Production of associated hydrocarbons, i.e. condensate and natural gas liquids, per block, per month, in barrels.
- Exports of oil and associated hydrocarbons, per block and per month and per type of hydrocarbon, in volume (barrels) and value (US dollars/Angolan kwanza), broken down by contractor group or company (including Sonangol).
- Sales of crude oil to Angola's refinery.
- Crude oil and other hydrocarbons in storage at the start and end of each year.
- Production of refined oil products from the refinery, in volume, and for export and domestic sales of these products, in volume and value.
- Weekly and monthly market prices for the main grades of Angolan crude oil (such as Cabinda, Girassol and Palanca) and the fiscal reference prices derived from them.

This annual petroleum balance should be independently checked and certified by a specialist firm with a right to check the underlying data from which the Ministry's statistics are drawn, compare them with information from external sources and to draw conclusions as to its accuracy.

3 The government should publish more details of Sonangol's oil sales.

The details of sales of oil by Sonangol on behalf of the government should be published monthly and annually, including the disclosure of:

- The date of each sale and the price at which the oil was sold.
- The contractual origin of the oil being sold: for example, the government's share of profit oil or revenues paid in kind by oil companies.
- The type of oil sold: for example, crude oil, natural gas liquids or refined products.
- Transactions involving refining and domestic sales of crude or oil products. This information should be independently

checked and certified by a specialist firm with the right to check Sonangol's underlying records, to compare these records with information from external sources and to draw conclusions as to their accuracy.

4 The classification of revenue streams should be harmonised.

The government should adopt a single set of classifications for types of revenue from the oil sector which are standardised across reports by Sonangol and by government ministries, including budget statistics. These classifications should include all the types of revenues discussed in this report so that, for example, Sonangol's earnings from the price cap excess fee, or from signature bonuses, can be traced through to the national budget.

5 The government should publish a full account of oil revenue flows to the state.

The government should publish a full account, at least annually, of flows of funds to the state from the various categories of revenue discussed in this report. This account should:

- Include all revenue payments by type and by company for all oil companies, including Sonangol EP and Sonangol P&P, on a monthly basis. Where payments are in respect of a particular block, the block should be identified.

- Include provisional and final payments of revenues. If final data for a particular revenue stream are not available at the time the account is published, the fact could be noted and the final data published in the subsequent report.

- Include non-recurring payments such as signature bonuses or social payments, as well as royalties and taxes.

- Identify the volume and value of any revenues paid in kind, so that these revenues can be traced from Sonangol's accounts to the government's budget statistics.

- Include a clear accounting for the use of exchange rates to convert receipts in US dollars into Angolan kwanza.

- Clearly account for the value of any deductions by Sonangol to cover its administrative costs and for the cost of quasi-fiscal activities (which should be phased out, as agreed between the Angolan government and the IMF).

This annual account should be independently checked and certified by a specialist firm with the right to check the underlying records, to compare these records with information from external sources and to draw conclusions as to their accuracy.

For example, a law adopted in the United States in July 2010 will require U.S.-regulated oil companies (which includes almost all of the major foreign investors in the Angolan oil sector) to publish their tax and revenue payments to governments around the world in their filings to the U.S. Securities and Exchange Commission. Information provided under this U.S. law could be used by citizens and observers to cross-check Angolan government data.

6 Sonangol should report on its activities to the Angolan public, in an accessible form.

Sonangol should publish an annual report of its activities, in a form more accessible to the general public in Angola than its financial statements, which explains what revenues the company earns for the Angolan state in each year, how much it earns and how it calculates its costs. This report should include information on:

- How Sonangol calculates its own costs and how much revenue it deducts from its transfers to the government to cover these costs.

- How dividends are calculated and paid to the government.

- A complete list of Sonangol's investments in Angola and overseas which provides details of the cost and rationale for these investments, identifies the ultimate beneficial ownership of all its subsidiaries and affiliates and provides full details of any transactions between them and Sonangol during the year.

7 Sonangol's role in the Angolan oil sector should be streamlined.

The government should reduce the opacity surrounding Sonangol's finances, which lingers in many areas despite the publication of its financial statements, by phasing out its quasi-fiscal activities and social investments and publishing full and timely details of any oil-backed borrowings, divestments or acquisitions by Sonangol. Bonuses from oil companies should be paid directly to the national treasury and not to Sonangol itself.

Wider reforms to promote public accountability in the oil sector

To move this vital sector of the Angolan economy onto a footing that is truly transparent and accountable to Angola's people, the following additional steps would be necessary:

8 Fostering public debate on oil-sector management in Angola.
The Angolan government needs to foster, by its words and actions, an atmosphere of public debate that allows citizens to scrutinise the management of oil revenues and raise questions that contribute to government policy-making, without fear of retribution or censorship.

This might make it possible, in the longer term, for Angola to join the Extractive Industries Transparency Initiative (EITI) as a way of improving its international reputation on the issue of oil-sector transparency.

9 Greater public oversight of Sonangol within Angola.

There needs to be more extensive oversight of Sonangol's activities and finances by Angola's legislature, the media and the public, to ensure that its aims and priorities serve the long-term interests of the Angolan people. This oversight needs to include greater public scrutiny of Sonangol's domestic and foreign investments and borrowings and its numerous relationships with subsidiaries and affiliates.

An unbundling of Sonangol's multiple roles as oil producer and exporter, oil-sector regulator and fiscal agent for the government. Sonangol has acted in the past as a parallel treasury for the Angolan government and as a de-facto sovereign wealth fund. Because this breadth of activity is inherently untransparent and hard for parliament and the public to scrutinise, it should be narrowed down so that Sonangol can concentrate on its core role of generating revenues for the state from the oil and gas sector.

10 Creation of an independent regulator for the oil sector.

Angola should move to create an independent regulatory agency to oversee the oil sector, with the funds and the technical expertise to scrutinise Sonangol's activities as well as those of foreign oil companies, and ensure that they serve the long-term interests of the sector and therefore of Angola's people.

The Angolan government needs to foster an atmosphere of public debate that allows citizens to scrutinise the management of oil revenues and raise questions.

ENDNOTES

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