# INTERNATIONAL MONETARY FUND



# Draft Guide on Resource Revenue Transparency

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#### ABBREVIATIONS

CRIRSCO Combined Reserves International Reporting Standards Committee

DFID Department for International Development

DMO Domestic Market Obligations

DPKK Utilization of Expertise and Skill Development Fund

EITI Extractive Industries Transparency Initiative

GDDS General Data Dissemination Standard
IAS International Accounting Standards
IFAC International Federation of Accountants

IPSAS International Public Sector Accounting Standards
IFRS International Financial Reporting Standards

JODI Joint Oil Data Initiative
NOC National oil company
NRC National resource company
NYME New York Mercantile Exchange

OECD Organization for Economic Co-Operation and Development

OTM Over-the-counter market PSC Production Sharing Contract

QFAs Quasi-fiscal activities

ROSC Report on the Observance of Standards and Codes

SDDS Special Data Dissemination Standard SPF Norwegian State Petroleum Fund

UNFAC United Nations Framework Classification

#### INTRODUCTION AND SUMMARY

1. This guide on resource revenue<sup>1</sup> transparency applies the principles of the *Code of Good Practices on Fiscal Transparency* (hereafter, the code) to the unique set of problems faced by countries that derive a significant share of revenues from natural resources. The issues arising from the sheer size of such resources for many countries, combined with the technical complexity and volatility of the transaction flows, demand a more detailed set of guidelines than those provided in the *Manual on Fiscal Transparency* (the manual). This guide gives a framework that covers the resource-specific issues to be considered in a fiscal transparency assessment, for example as part of a fiscal Report on the Observance of Standards and Codes (ROSCs).<sup>2</sup> Equally importantly, it provides a summary overview of generally recognized good or best practices for transparency of resource revenue management that can be used by countries themselves, as well as by the IMF, the World Bank, and others providing technical support.

# The problem of resource riches and the role of fiscal transparency

2. It is often argued that there is an association between resource riches and poor economic performance ("the resource curse"), and a significant body of literature has grown seeking to explain the relationships between resource abundance and economic performance.<sup>3</sup> A key question in this regard is how countries can avoid the resource curse and turn their abundance in resources into a blessing. This question is relevant for a large number of countries. Appendix I, Tables 1 and 2 list over 50 countries that can be designated as rich in hydrocarbon and mineral resources.<sup>4</sup> Many of these are low and middle-income countries in which hydrocarbon or mineral revenue accounts for over 50 percent of government revenue or export proceeds. In addition to the possible adverse impact on growth, resource riches can be a major contributor to corruption and social unrest. In a number of countries, oil, diamonds (and

<sup>&</sup>lt;sup>1</sup> This term is used here to cover revenues derived from natural resource exploitation. As discussed in the text, however, the principal focus of this guide is on revenues from hydrocarbon (oil and gas) and mining. Some of the principles, however, should have wider application.

<sup>&</sup>lt;sup>2</sup> Since starting its work on standards and codes in the late 1990s, the IMF, as of August 2004, had prepared fiscal ROSCs for about 70 countries. Most of these reports have been published. For more information on the IMF's fiscal transparency work see http://www.imf.org/external/np/fad/trans/index.htm.

<sup>&</sup>lt;sup>3</sup> Auty (1997), for instance, examines the relationship between broadly defined resource-rich groups of countries over the period between 1960-90. Sachs and Warner (2000) show a robust inverse relationship between growth and resource riches for a sample of 97 countries over the period 1970-1989. However, the above mentioned view has not remained unchallenged. Hausman and Rigobon (2003), while supporting the generally inverse relationship, point out that oil-rich countries performed well economically in the 1980s when oil was doing well—contrary to what would be expected under the "dutch disease" hypothesis. Also, Lederman and Maloney (2003) have raised doubts about the robustness of the Sachs and Warner findings.

<sup>&</sup>lt;sup>4</sup> A country is considered rich in hydrocarbons and/or mineral resources on the basis of the following criteria: (i) an average share of hydrocarbon and/or mineral fiscal revenues in total fiscal revenue of at least 25 percent during the period 2000-2003 or (ii) an average share of hydrocarbon and/or mineral export proceeds in total export proceeds of at least 25 percent during the period 2000-2003.

timber) are associated with causing and financing of civil war with its attendant social and economic costs.<sup>5</sup> While a completely satisfactory explanation for this particular type of "resource curse" is not available, the potential costs are well documented. On the other side, a range of countries (including Botswana, Canada, and Norway) appear to have avoided these problems through prudent and transparent management practices.<sup>6</sup>

- 3. Given the potentially substantial costs of nontransparent practices, institutional strengthening to improve transparency in vulnerable resource-rich countries should provide an ample pay-off for a relatively modest investment. Many analysts have emphasized the essential role played by fiscal transparency in improving resource revenue management. In the last several years, moreover, considerable agreement has been reached on a wide variety of good resource (particularly oil and gas) revenue management practices. This guide draws heavily upon this body of work and integrates transparency-related recommendations from this source with the code framework.
- 4. The guide focuses on revenues from non-renewable resources, and especially on oil and gas. Oil production provides the most dramatic illustration of the problems posed by resource riches for developing countries: very large, quickly growing, but time-limited production and revenue flows, combined with a high degree of volatility as a result of fluctuating world prices. When combined with weak administration, ownership of such wealth provides ample scope for inefficient policies, discretionary behavior, and outright corruption, all of which could contribute to poor growth performance and eventual dissipation of national oil wealth.<sup>9</sup>

<sup>&</sup>lt;sup>5</sup> See Collier (1999) for a discussion of the costs of civil conflict. Collier and Hoeffler (2004) discuss the substantial net pay-off from increased transparency through its impact on conflict prevention.

<sup>&</sup>lt;sup>6</sup> The importance of institutions as an explanatory variable is stressed by Sala-i-Martin and Subramanian (2003) who provide evidence to show (both in a cross-section study and in the case of Nigeria) that the impact of resource wealth is strongly linked to its impairment of institutional quality, and that little of the effects arise from natural resources per se.

<sup>&</sup>lt;sup>7</sup> See Katz et al (2004) for an analysis of key issues and a general application of the fiscal transparency code to Sub-Saharan African oil rich countries. Birdsall and Subramanian (2004), while arguing for a direct distribution of a portion of oil proceeds to the population in the case of Iraq, also stress the need for a comprehensive policy by the international community to establish transparency and governance standards.

<sup>&</sup>lt;sup>8</sup> Key analytical studies are: Davis, Jeffrey et al., *Stabilization and Savings Funds for Nonrenewable Resources: Experience and Fiscal Policy Implications*, IMF Occasional Paper No. 205, Washington, 2001; and Davis, Jeffrey et al. (eds.), *Fiscal Policy Formulation and Implementation in Oil-Producing Countries*, IMF 2003; World Bank, *Petroleum Revenue Management Workshop* proceedings, 2004. IMF operational work includes technical assistance for Timor-Leste, a conference on fiscal policy in oil-producing countries held in Washington in June 2002, and the workshops on macroeconomic policies and governance in African oil exporting countries that took place in Douala on April 2003 and in Libreville in January 2004.

<sup>&</sup>lt;sup>9</sup> In Transparency International's Corruption Perception Index a number of oil-rich countries have rather low scores. For the results of the 2004 survey see <a href="http://www.transparency.org/cpi/2004/cpi2004.en.html">http://www.transparency.org/cpi/2004/cpi2004.en.html</a>.

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- 5. Similar concerns, albeit usually on a lesser scale, can arise in managing other non-renewable resources (e.g., diamonds, gold). Most of the practices suggested in the guide therefore apply with similar force to other extractive industries. Specific problems differ for each type of industry, and even within the hydrocarbon sector issues faced in natural gas development differ significantly from those of the oil industry, and special factors need to be considered in various mining industry sectors. The guide focuses on the common need among these sectors to manage resource asset wealth and revenues in a transparent way, but also notes some of the distinctive industry-specific concerns that need to be considered across the variety of extractive industries.
- 6. Some of the practices suggested in this guide for the petroleum and mining industries are also applicable at a very general level to renewable resource assets, such as forestry and fisheries, particularly with regard to openness of the legal framework and fiscal regime, clear documentation of resource revenues, and effective accounting and audit of revenue flows. However, the magnitude of resource revenue flows to government in these industries often does not pose the kind of "resource curse" problem posed by large hydrocarbon resources. The primary concerns for these industries are ones of managing a common pool resource, taking effective account of environmental costs, and establishing prudential rules. Fiscal transparency is an important element of the management regime, but can be largely handled as an element of general fiscal transparency. Industry-specific transparency concerns of forests and fisheries are beyond the scope of this guide.

# Recent work by the IMF, the World Bank, and other agencies

- 7. From the late 1990s the IMF has promoted fiscal transparency in member countries through fiscal ROSCs, including several for large oil exporters (e.g., Azerbaijan, Iran, Mexico, Kazakhstan, Russia) and mineral producers (e.g., Ghana, Papua New Guinea). These studies lend support to the need for further examination of resource-specific issues in these and other countries. In its core activities, the Fund has intensified its operational involvement in many resource-rich countries, particularly in Africa and the Middle East, through policy advice, surveillance, and technical assistance, seeking to help them deal better with oil price volatility and associated macroeconomic and fiscal policy challenges. The IMF also encourages countries to participate in its General and Special Data Dissemination Standards (GDDS and SDDS) which imply, for example, the public dissemination of monthly or quarterly oil production data.
- 8. The World Bank is active in its mining and oil sector and country work promoting more effective resource management practices by both national companies and governments. Following a review of its lending and support activities in oil gas, and mining production, the Bank will, among other things, place considerable emphasis on revenue transparency as a

 $<sup>^{10}</sup>$  Resource-rich countries for which fiscal ROSCs have been published are highlighted in Tables 1 and 2.

<sup>11</sup> See <a href="http://www.imf.org/external/standards/index.htm">http://www.imf.org/external/standards/index.htm</a>.

basis for its continuing involvement in such projects. <sup>12</sup> Fund and Bank teams have worked very closely on a number of resource-rich countries, such as Azerbaijan and Nigeria.

- 9. Outside the Bretton Woods institutions, the UK Department for International Development (DFID) in 2002 launched the Extractive Industries Transparency Initiative (EITI) which is now supported by a range of governments in both developed and developing countries, civil society groups, <sup>13</sup> and industry. In his address to the Governors at the October 2004 IMF/World Bank Annual Meetings, the IMF's Managing Director commended the governments that have shown a commitment to transparency through their participation in EITI. <sup>14</sup> Under this initiative, aggregate payments to government reported by companies (including state-owned resource companies) and aggregate payments received by government from companies are published, thus making discrepancies transparent. <sup>15</sup> As part of the EITI, draft reporting guidelines and reporting templates for country governments and international and national companies have been prepared. Separately, the G8 has started a broader transparency and anti-corruption initiative. <sup>16</sup> Finally, at a global level, the Joint Oil Data Initiative (JODI) aims at improving the quality of oil market data. <sup>17</sup>
- 10. The EITI and the proposals from civil society groups have focused principally on transparency of revenue payments and receipts. The fiscal transparency code supports these elements, but in addition provides a broader and deeper framework for considering fiscal transparency when there are large and volatile resource revenue flows. This guide, and assessments of practices in resource-rich countries through ROSCs or other instruments, is consistent with other initiatives and should help establish better standards for resource revenue transparency.

<sup>&</sup>lt;sup>12</sup> See http://www.eireview.org.

<sup>&</sup>lt;sup>13</sup> Global Witness and a coalition of other NGOs launched a campaign called *Publish What You Pay* (PWYP) in 2001 (see <a href="http://www.publishwhatyoupay.org">http://www.publishwhatyoupay.org</a>). A central aim was to oblige market-quoted international oil and gas companies publish their payments to individual governments on a contract by contract basis. In 2002, the Soros Foundation's Open Society Institute became a part of the coalition. Subsequently, both groups, as well as Transparency International, have supported the EITI.

<sup>&</sup>lt;sup>14</sup> See http://www.imf.org/external/np/speeches/2004/100304.htm.

<sup>&</sup>lt;sup>15</sup> See <a href="http://www.DFID.gov.uk">http://www.DFID.gov.uk</a> and <a href="http://www.eitransparency.org/about.htm">http://www.eitransparency.org/about.htm</a> for details.

<sup>&</sup>lt;sup>16</sup> The 2003 Evian G8 Declaration: *Fighting Corruption and Improving Transparency* encouraged participation and publication of fiscal transparency ROSCs as an important tool. (see <a href="http://www.g8.fr/evian/english/navigation/2003\_g8\_summit/summit\_documents/fighting\_corruption\_and\_improving\_transparency\_a\_g8\_declaration.html">http://www.g8.fr/evian/english/navigation/2003\_g8\_summit/summit\_documents/fighting\_corruption\_and\_improving\_transparency\_a\_g8\_declaration.html</a>). This position was further reiterated at the 2004 Sea Island Summit, and four countries (Georgia, Nicaragua, Nigeria, and Peru) came forward with compacts declaring their intention to implement these goals (see <a href="http://g8usa.gov/d\_061004e.htm">http://g8usa.gov/d\_061004e.htm</a>).

<sup>&</sup>lt;sup>17</sup> The initiative was started in 2001 by several international organizations. See <a href="http://www.oil-data-transparency.org/FileZ/ODTmain.htm">http://www.oil-data-transparency.org/FileZ/ODTmain.htm</a>.

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#### Approach and structure of the guide

- 11. The guide follows the structure of the code, which defines transparency in terms of (i) clarity of roles and responsibilities; (ii) public availability of information; (iii) open budget preparation, execution, and reporting; and (iv) assurances of integrity. Under these broad principles, it applies those elements of the code most relevant to resource revenues. Resource-specific practices are listed under headings that relate to the general practices identified in the code and developed in detail in the manual. The relevant 3-digit code reference is given for each heading. Country illustrations of practices and issues that arise in implementing these are drawn from a range of recent literature on these topics and directly from country experience, much of which is now posted on websites (which are referenced in the text to provide direct access to more detailed information).
- 12. The guide should be used in a similar way as the manual (see particularly manual paragraphs 6-11). Most importantly, *implementation is voluntary*. Resource-rich countries will, of course, be encouraged to implement practices if they are not already doing so. As is current practice, staff of the IMF, the World Bank, and others would discuss various practices outlined with country authorities as part of their policy dialogue, technical assistance, and other activities with a view to improve resource revenue transparency and management. To assist such discussions, the guide provides a comprehensive overview of all major aspects of resource revenue transparency. It should thus be helpful in encouraging more complete analyses and discussions, both internally and in relations between country authorities and external agencies. Also, participation in a fiscal ROSC as part of IMF surveillance on a voluntary basis will provide an opportunity for countries to demonstrate their commitment to fiscal transparency.
- 13. The guide will supplement the fiscal transparency manual for fiscal ROSCs conducted in resource-rich countries. The methodology of fiscal transparency assessment will remain the same—and will continue to *focus only on transparency* as defined in the fiscal transparency code (see Appendix II). However, the guide identifies specific resource-related practices that need to be considered by resource-rich countries alongside the general transparency good and best practices covered already in the manual. For resource-rich countries, as for others, participation in a fiscal ROSC, which covers all elements of the code, will be an important step to assist countries identify areas in which they already meet good and best practices and where there are significant weaknesses, as well as to signal a commitment to reform.

<sup>18</sup> For instance, 1.2.2 and 1.1.5 and the heading **Legal framework for resource revenues** in this guide refer to the general good practices in the code under 1.2.2 (*Taxes, duties, fees, and charges, should have an explicit legal basis. Tax laws and regulations should be easily accessible and understandable, and clear criteria should guide any administrative discretion in their application) and 1.1.5 (<i>Government involvement in the private sector (e.g., through regulation and equity ownership) should be conducted in an open and public manner, and on the basis of clear rules and procedures that are applied in a nondiscriminatory way*). The manual develops more specific guidelines (including reference to practices that extend beyond the basic good practices identified) but does not give specific guidance on the legal framework issues related to resource revenues. The guide therefore defines three areas of good practice related to this aspect of resource revenue transparency. Similar principles are applied throughout for all relevant sections of the code. Of course, other elements of the code are also relevant for an overall assessment of fiscal transparency.

- 14. It is particularly important to recognize the *diversity of country backgrounds* in promoting resource revenue transparency. The combination of resource riches on the one hand and weak governance and limited administrative capacity on the other has proven to be disastrous for many countries. Addressing these weaknesses, however, will require time, sustained commitment, and a close linkage between fiscal transparency assessments, country administrative reform, and carefully designed technical support from international and bilateral agencies. The guide should not be interpreted as "setting the bar" too high; it allows countries to assess where they stand relative to recognized good practice. But the pace of reform must be according to individual country circumstances. Recommended practices, drawn mainly from the experience of advanced economies and some developing countries that are improving transparency standards, are outlined at various points in the guide. These provide appropriate long-term points of reference. For many developing countries, however, it is recognized that underlying capacity constraints have to be overcome before such standards could be attained.
- 15. It will be necessary therefore to establish priorities among the suggested practices both over time and according to country-specific circumstances. A high immediate priority should be given to improving the quality and public disclosure of data on resource revenue transactions, using either templates recommended as part of the EITI or alternative formats that provide adequate assurance of data quality. Transparency of current revenue transactions is an area in which many low and middle income countries can make immediate visible progress, if necessary with technical support. An equally high priority should be given to establishing clear policies for the use of resource revenues. The need to preserve the value of the finite resource assets and the wise use of proceeds from selling these assets should be clearly recognized in fiscal policy frameworks. Addressing other issues is more difficult and progress will necessarily be slower. For instance, there are high degrees of uncertainty over the value of resource assets owned by governments, while methodological and measurement problems complicate the estimation of resource asset worth. It is recognized, therefore, that progress in implementing the recommended transparency practices on resource asset estimates and their integration into government balance sheets and net worth calculations will be limited over the short term, especially in low and middle income countries.
- 16. Resource revenue transparency, though similar to other areas of the transparency code in its initial focus on transparency of *general government*, necessitates a broader review of public sector activities because of the often dominant activities of state-owned resource companies. <sup>19</sup> Moreover, because of the magnitude of resource-related transactions, and because project-by-project negotiations are the general rule in many developing countries, issues of transparency of *international companies* and *lenders*, and *collective action* by stakeholders are also important. While some of these activities fall outside the code's direct

<sup>19</sup> See the manual pp 50-51 and Box 18 for a discussion of 3.2.4 of the code. While the use of a public sector balance is difficult, fiscal activities of state-owned resource companies need to be clearly identified and considered in fiscal policy.

application, as in the case of the manual,<sup>20</sup> the guide references other relevant initiatives. These seek to directly address the collective action issues involved by fostering voluntary agreement among groups of stakeholders on a country-by-country basis. The guide aims to support such initiatives by providing a detailed coverage of relevant good practices of revenue transparency that can be applied by such countries.

17. The remainder of the guide is organized as follows. A summary of resource revenue-specific fiscal transparency good practice is given immediately below. The following four sections discuss these practices and related issues in more detail. Section 1 deals with the application of the code principles on clarity of roles and responsibilities of government to resource revenues. Section 2 focuses on public availability of information, including the application of EITI guidelines. Section 3 discusses issues related to open budget preparation, execution, and reporting, with an emphasis on the need to link resource revenues clearly to the overall goals of fiscal stabilization and long-term sustainability. Section 4 focuses on the issues of auditing resource revenue transactions to provide overall assurances of integrity.

<sup>&</sup>lt;sup>20</sup> The manual for instance draws on the OECD Principles of Corporate Governance with regard to public enterprise reporting (see Box 3 p. 15), the UN Code of Conduct for Public Officials (Box 6, p. 21) and the UN Fundamental Principles of Official Statistics (Box 25, p. 70).

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# **Summary of Good Fiscal Transparency Practices for Resource Revenue Management**

- 18. As noted above, good practices of resource revenue transparency are considered under the broad structure and general practices of the code. The summary below gives an overview of the good practices that are suggested as the basis for voluntary compliance. Each point summarizes a practice that is consistent with the general practices of the code elements referenced in the heading. Similar to the manual, practices are defined in more detail than the code element referenced, and address the specific issues of transparency in resource revenue management. As previously indicated—and again similar to the manual, a few draw on standards (e.g., international accounting and auditing standards) that are complementary to the code. No modification to the code itself is intended or implied. As in the manual, a range of practices are described to cover the variety of experience among countries. While the good practices suggested should be helpful to resource transparency issues in their own right, all practices should be interpreted in the context of the overall fiscal transparency code and manual (see Appendix II).
- Many of the practices summarized below give considerable detail on the nature of good practices that would be required to meet the code standard. In a few cases, the suggested practices in the guide specifically discuss the relations between the government and private companies in significantly greater detail than the code and the manual. This is necessary because of the particular types of issue that arise in resource revenue management. For example, private resource companies often play a significant role with respect to social or environmental expenditure. While code element 1.1.4 requires only that relations between government and nongovernmental public sector agencies should be based on clear arrangements, the guide suggests that arrangements with international companies should also be clear regarding social or environmental expenditure, considering that code element 1.1.5 advocates clarity in the relations with the private sector. In line with the manual's code element 1.1.5, the guide in this context emphasizes the need for a nondiscriminatory treatment between companies regardless of their origin (domestic or foreign). Also, while code element 2.1.1 broadly requires comprehensive coverage of fiscal activity in budget and accounts documents, the guide specifies a need for governments to disclose company resource revenue payments. This is widely recognized as a specific need for resource-related transactions, and it is also advocated under the EITI initiative. Finally, the guide advocates that international and national resource companies be required to comply fully with international accounting and audit standards. In doing so, the guide goes beyond the fiscal transparency code by identifying best practices that are part of the OECD Principles of Corporate Governance and recommended at several points in the manual as relevant to areas where the government deals with commercial enterprise-related transactions. Broad transparency in this area is also advocated in the EITI initiative.

<sup>&</sup>lt;sup>21</sup> The good practices described in the guide are ones that country experience suggest are essential elements of resource revenue transparency and which all countries should take into account in designing fiscal management and reporting systems. For expositional purposes, the elements of good practice are presented to highlight key resource industry issues rather than following the code sequence in strict order.

# 1. Clarity of Roles and Responsibilities

# Legal framework for resource revenues

1.1.5

The government's ownership of resources in the ground is clearly established in law and the power to grant rights to explore, produce, and sell these resources is well established in laws, regulations, and procedures that cover all stages of resource development.

The government's policy framework and legal basis for taxation or production sharing agreements with resource companies are presented to the public clearly and comprehensively.

Fiscal authority over resource-related revenue and borrowing is clearly specified in the law. Legislation includes a requirement for full disclosure of all resource-related revenue, loan receipts and liabilities, and asset holdings.

# **Equity participation**

1.1.5

Government involvement in the resource sector through equity participation is fully disclosed and the implications explained to the public.

# Resource-related extrabudgetary funds

1.1.3

Mechanisms for coordinating the operations of any extrabudgetary funds established for resource revenue management with other fiscal activities are clearly specified.

# **National resource companies**

1.1.4/1.1.5

Ownership structures of national resource companies and their fiscal role vis-à-vis the resource sector ministry and the finance ministry are clearly defined.

Commercial responsibilities are clearly distinguished from policy, regulatory, and social obligations.

# Quasi-fiscal activities (QFAs) of resource companies

1.1.4/1.1.5

Arrangements whereby international or national resource companies undertake social or environmental expenditure or provide subsidies to producers or consumers without explicit budget support are clearly defined and described in the budget documents.

# Subnational government and resource revenues

1.1.2

Arrangements to assign or share resource revenues between central and subnational levels of government are well defined and explicitly reflect national fiscal policy and macroeconomic objectives.

# 2. Public Availability of Information

# Budget documentation of resource revenues and spending

2.1.1

All resource revenue-related transactions, including through extrabudgetary funds, are clearly identified, described, and reported in the budget process and final accounts documents.

# Reporting on company resource revenue payments

2.1.1

Reports on government receipts of company resource revenue payments are made publicly available as part of the government budget and accounting process.

# Reporting on resource-related debt

2.1.4

The government's published debt reports identify any direct or indirect collaterization of future resource production, for instance through pre-commitment of production to lenders. All government contractual risks and obligations arising from such debt are disclosed.

# Reporting on resource-related assets

2.1.4

All financial assets held by government domestically or abroad as a result of resource-related savings are fully disclosed in government financial statements.

# **Estimating resource asset worth**

2.1.4/3.1.1

Estimates of resource asset worth based on probable production streams, clearly disclosing assumptions, should be prepared as a basis for fiscal policy.

# Reporting off-budget activity

2 1 3

Government contingent liabilities and the cost of resource company quasi-fiscal activities arising from resource-related contracts are reported in budget accounts or other relevant documents in a form that helps assess fiscal risks and the full extent of fiscal activity.

# 3. Open Budget Preparation, Execution, and Reporting

# Fiscal policy and resource revenues

3.1.1

The budget framework incorporates a clear policy statement on the rate of exploitation of natural resources and the management of resource revenues, referring to the government's overall fiscal and economic objectives, including long-term fiscal sustainability.

# Resource funds and fiscal rules

3.1.2

Rules applied to resource-related extrabudgetary funds are clearly stated as part of an overall fiscal policy framework.

# Fiscal policy and asset management

3.1.1

The investment policies for assets accumulated through resource revenue savings are clearly stated, including through a statement in the annual budget documents.

**Fiscal balance** 3.2.3/3.2.4

The (primary) non-resource fiscal balance is presented in budget documents as an indicator of the macroeconomic impact and sustainability of fiscal policy, in addition to the overall balance and other relevant fiscal indicators.

Fiscal risks 3.1.5

Risks associated with resource revenue, particularly price risks and contingent liabilities, are explicitly considered in annual budget documents and measures taken to address them are explained and their performance monitored.

# **Accounting for resource revenues**

3.3.1

The government accounting system or special fund arrangements clearly identify all government resource revenue receipts and enable issuance of timely, comprehensive, and regular reports to the public, ideally as part of a comprehensive budget execution report. The reports are based on a clear statement of the accounting basis (cash or accrual) and policies.

#### Internal control and audit of resource revenues

3.3.3

Internal control and audit procedures for handling resource revenue receipts through government accounts or special fund arrangements and any spending of such receipts through special funds are clearly described and disclosed to the public.

#### Tax administration openness

3.3.4

Tax administration is conducted in a way to ensure that resource companies understand their obligations, entitlements, and rights. The scope for discretionary action by tax officials clearly defined in law and regulations, and the adequacy of sector skills and standard or sector-specific procedures are open to review.

# 4. Assurances of Integrity

#### **Company oversight**

1.1.4/1.1.5

International and national resource companies comply fully with internationally accepted standards for accounting, auditing, and publication of accounts.

# Oversight of company/government revenue flows

4.2.1

A national audit office or other independent organization reports regularly to parliament on the revenue flows between international and national companies and the government and on any discrepancies between different sets of data on these flows.

# 1

# **Clarity of Roles and Responsibilities**

- 20. Relationships between the government, national resource companies (NRCs), and international companies must be clearly defined for all stages of resource development. Extractive industries can impact the economy or environment at any stage from exploration through to abandonment. Exploration is usually the highest risk element of any extractive industry project, though there is a difference in this respect between mining and petroleum, and substantial expenditure is generally required before a discovery is confirmed. Government policies on encouraging investment by international companies or using NRCs at various stages of development should be clear. In the petroleum industry, particular emphasis needs to be placed on clarifying the role of the national oil companies (NOCs). These still produce much of the world's oil and often play a strong policy role relative to the rest of government.
- 21. Achieving transparency in all aspects of these relationships is both complex and administratively demanding. Key fiscal transparency practices are examined in the following sections. First, three elements (broadly covered by fiscal transparency code element 1.2.2) of particular significance to the clarity of the basic legal framework are examined. These are: licensing procedures; the clarity and openness of the fiscal regime determining resource revenue flows between the government and companies; and the question of clarity of legal authority over resource-related revenue and borrowing. Second, the fiscal regime in a broader sense may involve government equity participation (1.1.5 of the code). Third, the pivotal policy role often played by NRCs, and covered by element 1.1.4 of the code, is a central topic. This, in turn links to the question of QFAs—various forms of noncommercial activity, including environmental protection, that are conducted outside the formal budget process. NRCs often play a major role in providing or promoting such noncommercial activities. Finally, the clarity of revenue sharing arrangements between different levels of government (1.1.2 of the code) is often of crucial importance, with implications also for transparency and effectiveness of macroeconomic management.

#### **Legal framework for resource revenues**

1.1.5

The government's ownership of resources in the ground is clearly established in law and the power to grant rights to explore, produce, and sell these resources is well established in laws, regulations, and procedures that cover all stages of resource development.

# The basic legal framework

22. Legal title to the nation's resources in the ground is established through the constitution and national laws, as well as subnational laws in some cases. The power to grant rights to explore, produce, and sell these resources should be clearly established in laws,

<sup>22</sup> It is more common for mining projects to fail at the development and production stage (something that is highly unusual in petroleum); the ratio of exploration to development outlays tends to be lower in mining.

regulations, and procedures covering all stages of resource development. The legal framework needs to establish a basis for reconciling the divergent interests of four stakeholder groups: the state; private investors; owners of surface land rights; and other parties that can be affected by the social and environmental impact of extractive industries. In terms of fiscal transparency, particular emphasis needs to be given to the clarity of the framework for relationships between the government and (private) investors, since many transactions arising from these relationships have fiscal implications. Also, transparency of the legal framework provides an important safeguard for foreign investors and should help ensure effective use of the resources for public benefit.

- 23. The constitutional foundation is an important factor, but constitutions differ significantly in the degree to which they:
- recognize or guarantee private property rights or prohibit private parties or foreigners from acquiring property rights in general and mineral rights in particular;
- vest the authority to grant mineral or hydrocarbon rights in subnational governments or agencies rather than the national government; and
- vest the authority to regulate specific matters in special agencies in the executive branch (for example, taxation, foreign exchange, employment, environmental protection) or in the judiciary (settlement of disputes).
- 24. The legal framework should define which political entity and official has the authority to grant mineral or hydrocarbon rights and regulate their use. In most countries, the sovereign state is the owner of the resource and can grant rights to private parties. Often, this authority is exercised through a sector ministry, which is likely to have power over the application of relevant laws and policies, and the implementation of the government's decisions on the pace of, say, petroleum sector development by making available areas for exploration, and granting licenses. In some countries (such as Azerbaijan, and Egypt), licenses are ratified by the legislative branch of the government, <sup>23</sup> although this does not necessarily mean the contracts, or summaries thereof, are disseminated to the public. Given the typically significant macroeconomic impact of hydrocarbons in particular, national policy-makers normally prefer to retain authority at the national level (see discussion of subnational government authority further below).
- 25. Modern legal frameworks for resource industries tend to emphasize an environment that is friendly to foreign investors, while establishing clear state authority over all stages of development from access to blocks for exploration to production and site abandonment. Two central features of the framework in terms of transparency are: (i) avoidance of excessive complexity and opportunities for official discretion in implementation; and (ii) encouragement of disclosure of fiscal and quasi-fiscal arrangements. Best practices for such legislation in this respect are: (i) standard agreements and terms for exploration, development and production,

<sup>&</sup>lt;sup>23</sup> In Yemen, individual PSCs become law by virtue of a presidential decree.

with minimum discretion for officials, though these terms may vary over time; (ii) licensing procedures are clear and open; (iii) disputes are open to (international) arbitration; and (iv) individual agreements and contracts regarding production from a license or contract area are disclosed. These practices are relatively standard in the advanced economies, but, in part because of limited administrative capacity, they are not well observed in many developing countries. Application of these principles of transparency will be examined further, first with respect to licensing procedures, and then in relation to the fiscal regime.

# Licensing procedures

26. Clarity and openness of licensing procedures are fundamental to achieving transparency during subsequent stages of development. Taking the petroleum industry as an example, licensing practices vary both in the complexity of terms and disclosure practices.<sup>24</sup> They can be grouped in three broad categories in line with these criteria:

# *Open bid—fixed terms*

27. Open tendering with clearly defined procedures and sealed bids constitutes best practice. A sealed bid license round with fixed terms is used in the United Kingdom, New Zealand, Ireland, Norway, and Australia. The royalties and taxes are not biddable, but set by law. Licenses are awarded on the basis of work program (or sometimes expenditure) bids. Bids received and final contract awards are disclosed publicly. Ultimately the seismic data and drilling data from the successful bidder will also become public. The US uses open bidding for offshore projects, with relatively fixed terms, and publishes the bids and license awards, but allocates licenses on the basis of signature bonus bidding (that is, a variable term, as discussed below).

#### *Open bid—variable terms*

28. Some countries have significant variation in their terms. Licenses may be allocated in a sealed bid process based upon various bid parameters which might include such elements as: work program, bonuses, royalty rates, profit oil splits, cost recovery limits, and possibly even tax rates. As a general rule, corporate income tax is legislated and not a bid item. Disclosure of

<sup>24</sup> However, in mining, rights are often subject to a "first come, first served" principle that almost never applies to petroleum licensing.

<sup>&</sup>lt;sup>25</sup> In work program bids, companies interested in a particular block will submit a proposal that is typically denominated in terms of the number of wells it will drill and/or a quantity of seismic data it will acquire. Furthermore, the depth of the wells and the nature of the seismic data to be acquired, processed, and interpreted will be included. There is a case, particularly in mining, for allocating areas by minimum expenditure bid, since the nature of a required work program may be more uncertain for a mineral deposit.

<sup>&</sup>lt;sup>26</sup> Data acquired by an operator within the scope of its license are made public either when the exploration, development, or production contract terminates or after a certain number of years (8 years in Australia, 35 years for US operations in the Gulf of Mexico). Multiclient data (acquired by a service company on a risk basis to assist the government in promoting their prospects) are normally marketed by the service company for around 8-10 years, after which they become public.

winning bids and contracts is an important element of transparency in these cases—although interpretation becomes increasingly complex with the number of bid parameters. For some contracts, Nigeria has established relatively good practice standards in this respect: the basic terms (what might be considered a "model contract") are well known and published, and bids received and license awards are published. However, such practices are not yet universally applied in Nigeria.

# Negotiated deals

- 29. Negotiated deals are characterized by the lack of sealed bids and a firm bid deadline, and, most often, considerable discretion on the part of the government agent (e.g., the Ministry of Energy or the NOC). Disclosure of winning bids is also not a necessary part of the process. Though some terms may be fixed, generally a wide range are subject to negotiation. Companies will make proposals to the government authority, which will ultimately award the licenses to those companies submitting the most competitive proposals. This approach can be fairly efficient but carries a greater risk of corruption. Good practice as far as disclosure is concerned would at least include ex post publication of contract awards and terms. Egypt provides an example of good practice in this respect: all contracts are made public although licenses may be awarded either through negotiated deals or bid rounds.
- 30. In the current petroleum industry environment, there are many situations that do not lend themselves to open tendering and competitive bidding. Most of the world's geological basins have matured to the point that significant new discovery expectations are much lower than in earlier eras. International companies, particularly the smaller ones, are not in a position to invest in exploration or release ideas about prospects to either licensing authorities or competitors. An ordinary tender for bids in the early stages of exploration of frontier or gasprone regions (see discussion of natural gas in Box 1 below), for instance, is thus likely to fail because of the high risks and up-front costs. Negotiated deals are thus common in these situations. Good practice for transparency, however, would require that all signed contracts should be published.

# **Box 1. Natural Gas and Fiscal Transparency**<sup>27</sup>

Natural gas has become an increasingly important global energy source. It is attractive from an environmental point of view, demand is foreseen to grow rapidly, and supply appears adequate to meet the demand for several decades. Nonetheless, its development faces some unique difficulties, quite distinct from crude oil projects, largely because of its heavy dependence on costly transport infrastructure. Aside from the economic consequences of the nature of gas supply, these features pose particular difficulties for the establishment of a transparent fiscal and pricing regime and are more likely to be subject to quasi-fiscal operations through noncommercial pricing than petroleum product operations.

Natural gas, which may be non-associated or associated with crude oil in a reservoir, is transported by pipeline or over longer distances by tanker as liquefied natural gas (LNG). The application of gas-to-liquid (GTL) technology is increasingly seen as a viable alternative to LNG for processing of remote gas. LNG contracts raise different considerations than pipeline gas contracts, which often involve multilateral negotiations over transit rights. Moreover, the LNG contract chain (production and liquefaction, transportation, and receiving terminal) can be broken down into independent segments, allowing financing to proceed on a modular basis. In the context of developed market economies in North America and Europe, deregulation aimed at encouraging competition in each segment of the gas contract chain, combined with increased trade of gas, appears to have been relatively successful, resulting in generally lower but also more volatile gas prices. Associated gas presents particular difficulties for refining, and is frequently simply flared.

Much of the world's natural gas reserves are considered "stranded" because remote locations, high transportation costs, and often high political risks make their exploitation commercially not viable. However, prospects of commercial exploitation of these "stranded" resources improve if gas prices rise and with technological progress progressively lowering the costs of LNG and GTL plants.

These locational conditions, combined with the lumpiness of investments and the interdependence of segments of the contract chain (for instance, except for the very largest companies, a production contract cannot be securely completed until the tanker transportation has been arranged), have tended to lead to an environment favoring negotiated deals rather than open bidding for contracts.

Where domestic consumption is an important element of natural gas projects, gas consumer prices should be based at least on full cost recovery—and preferably linked to international prices. Otherwise, quasi-fiscal subsidies of domestic use of natural gas will understate government activity, distort energy demand, and limit the attractiveness of the resource to private sector investors. Large quasi-fiscal activities have, for example, been identified in the case of transit gas from Russia in the Ukraine (Petri et al. 2002).

<sup>&</sup>lt;sup>27</sup> Based largely on Okogu (2002).

31. An often expressed concern with regard to open tendering processes is that both government and companies may lose competitive advantage by public disclosure of winning contracts. For reasons of commercial confidentiality, therefore, negotiated contracts with nondisclosure clauses are the practice in a number of countries. The reason usually advanced by governments (and to some extent by companies) is that in case of disclosure their bargaining power for future contracts would be eroded. In practice, however, the contract terms are likely to be widely known within the industry soon after signing. Little by way of strategic advantage thus seems to be lost through publication of contracts. Indeed, it could be argued that the obligation to publish contracts should in fact strengthen the hand of the government in negotiations, since it has to disclose the outcome to the legislature and the general public. Where conditions do not permit disclosure of contracts or individual company payments, an option could be the disclosure of individual company payments to an independent third party (e.g., the aggregator approach as suggested by the EITI). <sup>28</sup>

Fiscal regime 1.2.2

The government's policy framework and legal basis for taxation or production sharing agreements with resource companies are presented to the public clearly and comprehensively.

- The high risks, high returns, and prolonged development of extractive industries mean that the fiscal regime for these sectors has many unique features, is generally complex, and, as indicated above, often has significant scope for discretionary arrangements in individual agreements. Ideally, a government will wish to establish a regime that is both attractive to potential investors and gains a fair share of resource rent. The fiscal regime should be clearly and comprehensively set out in government policy statements and incorporated in the resource and tax laws.
- 33. In the petroleum industry, <sup>29</sup> apart from the substantial amount of production under direct state ownership, <sup>30</sup> there are two broad types of fiscal regime used to determine shares of resource rent between the government and investors: (i) a tax/royalty system, where companies are licensed to explore, exploit, and sell the oil, and are subject to a range of tax (as well as non tax) instruments; (ii) a production sharing contract (PSC) arrangement, whereby the company is contracted to extract and develop the resource in return for a share of the

<sup>28</sup> In individual contract cases, key fiscal terms may be stipulated in side letters that may remain confidential even though contracts are published. In such cases, the basic objective of transparency may best be met by governments and companies agreeing on certified publication of all fiscal policy terms of a contract without publication of commercially sensitive information. For further discussion of the aggregator approach see sections 2 and 4.

<sup>30</sup> Daniel (2002a) notes that out of a total production of about 75 million barrels per day in the year 2000, some 23 million were produced by Middle Eastern OPEC countries (including Iran, Kuwait, and Saudi Arabia) under partial or total state ownership.

<sup>&</sup>lt;sup>29</sup> The use of PSCs is not common in hard rock mining (see Kumar, op cit, p. 12).

production.<sup>31</sup> The PSCs may also embody some tax or royalty elements but best practice would limit these to assurances of fiscal stability. And even under a PSC regime it is common for the contractor to pay corporate income tax under general tax legislation, either directly or indirectly through a mechanism involving the state partner (usually the NOC). This practice has evolved largely in response to companies' concerns to achieve foreign tax credits in their home jurisdictions. Either regime can be designed to achieve identical ends with regard to revenue shares and risk-reward mix. Although the greatest part of world oil production does not occur under PSCs, these have become the main system of choice for many developing countries, particularly those opening up new areas or remodeling their arrangements.<sup>32</sup>

#### **PSCs**

- 34. By definition PSCs are in principle individually designed and the general underlying policies may be less clearly described in government policy statements or laws. As a practical matter, however, governments (or NOCs) usually make contracts under powers granted by general petroleum legislation and frequently negotiate and base their contracts on some form of model contract. It is possible for parameters in such contracts to remain undefined and thus open for bidding or negotiation, and many important elements of contract language are subject to case-by-case adjustment. Publication of model contracts may thus be of limited value in defining the fiscal regime, unless governed by clear policy statements or limitations in legislation regarding the variability of contracts. Publication of actual contracts will provide more definitive information, subject to the constraints outlined under *licensing procedures* above.
- 35. The main parameters of PSCs are the *cost oil* retained by the contractor to cover cost, *profit oil*, which covers the remaining production, and an agreed formula for dividing profit oil between the government (and/or NOC) and the contractor. The latter may be fixed or may be progressive according to production, price, or profitability criteria. Policy transparency would require that, where PSCs are the central instrument of the fiscal regime, all of the key PSC parameters should be available to the public in the same way as tax rates, exemptions, and deductions.

<sup>31</sup> Resources in the ground are usually the property of the state, except in a few countries (e.g., the US) where private ownership of minerals in the ground is legal. Title to petroleum usually passes to the licensee or contractor at the "delivery point;" under a license with tax and royalty system the licensee will obtain title to all the petroleum at that point, under a PSC the contractor obtains title to the contractor's share. The EITI draft reporting guidelines (2003, p. 4) use the terms *concessionary* and *contractual* to distinguish tax/royalty and PSCs respectively.

<sup>&</sup>lt;sup>32</sup> See Johnston (2003) and Sunley, Baunsgaard, and Simard (2003) for more details on the instruments used under each type of regime. The latter indicate that two thirds of the 40 developing countries and emerging markets surveyed applied PSCs, generally combined with some form of royalty or income tax.

<sup>&</sup>lt;sup>33</sup> Indonesia pioneered the use of PSCs in the oil sector, on the basis of a model contract and certain economic parameters biddable or negotiable. Indonesian PSCs have not changed significantly from one case to another, but following periodic revisions different "generations" of model contracts have evolved.

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#### Tax/royalty systems

- 36. Industrialized countries have tended to rely more on tax/royalty systems. As a rule, these countries build on the basic corporation tax regime, and so have a solid basis in general taxation law. Each type of system, however, poses transparency challenges, and there are many complexities introduced to resource taxation because of the nature of the investment. The main elements of tax/royalty regimes are described below. Practical approaches to assess government/industry "take," which aim at providing a summary indicator encompassing many aspects of the fiscal regime in the petroleum industry, are described in Box 2.
- 37. The normal range of tax instruments can be applied to resource industries—and it is vital that the definition of the industry fiscal regime cover all instruments actually applied. Questions of profitability and risk are likely to lead to special rates being applied and an industry-specific, multi-instrument regime designed to meet the needs of government and the industry. In principle, policies underlying such a regime should be stated openly to the public and the tax treatment of the industry should be subject to normal budgetary and public scrutiny. In practice, a wide spectrum of regimes are in place. At one end, as envisaged by Cordes (1995), resource companies are subject to the same regime as other industries with the addition only of some form of additional profits tax (such as a "resource rent tax,") geared to high profitability, and some form of royalty equivalent to ensure a minimum revenue flow. At the other extreme, various instruments and rates may be used in a case-by-case approach attempting to optimize government returns relative to risks. The more complex and discretionary the system, the more difficult will it be to define the basic fiscal regime and achieve better transparency.<sup>34</sup>
- 38. At the best practice end of the spectrum, it should be possible to define the resource industry tax baseline regime in terms of normal taxes applied to all corporations, but including a few policy variations (royalties, additional profit tax) as an integral element of the regime. Any special concessions beyond these should be identified and reported as *tax expenditures*. For many countries, however, the regime itself is inherently complex and discretionary. The

<sup>35</sup> Norway provides an example of best practice in this respect. The Ministry of Petroleum provides regular publications on the internet including regularly updated fact sheets on the Norwegian petroleum sector covering the regulatory and fiscal framework (see <a href="http://odin.dep.no/oed/engelsk/p10002017/index-b-n-a.html">http://odin.dep.no/oed/engelsk/p10002017/index-b-n-a.html</a>). The tax/royalty regime builds on the normal corporation tax (in 2003, 28 percent) and adds a special tax of 50 percent. The policy on depreciation and deductions allowed in calculating ordinary and special tax are clearly specified. In addition, companies pay royalty on production (but this is being phased out), area fees, and carbon tax. The government also receives dividend income from equity holdings (in most petroleum fields and transport systems on the continental shelf).

<sup>&</sup>lt;sup>34</sup> For a summary discussion of petroleum tax regimes see Daniel (2002b).

<sup>&</sup>lt;sup>36</sup> See the general discussion of tax expenditures in paragraphs 67-9 of the manual. Defining the tax baseline for resource revenues is particularly difficult due to the special tax arrangements (e.g., additional profit tax, royalties). It may therefore be best to consider the sector separately with a unique baseline. On this basis, tax deductibility of mandated social and environmental expenses will likely constitute the major element of state support through the tax system.

overriding transparency objective in such systems should be to move toward a clear definition of the fiscal regime, as well as reducing discretionary options.

39. In addition to PSCs, which are integral to many systems, elements that could be considered part of the overall policy framework include ring-fencing, indirect taxes, various forms of bonus and other nontax payments, fiscal stability clauses, and equity participation. These elements are discussed below.

# Ring-fencing

40. An important feature of the fiscal regime is the extent to which the government applies *ring-fencing* (a limitation on taxpayers' ability to consolidate income or deductions for tax purposes across different activities, projects, or license areas). Ring-fencing has important implications for revenue flows and investor incentives. Its absence can postpone government revenue flows, since deductions from new projects can be offset against earnings from current production. But ring-fencing, in appropriate circumstances, can also help level the playing field for new entrants to a maturing resource project. In the longer-term, absence of ring-fencing may yield higher government revenue by encouraging more exploration and development, at the cost of some additional risk to government revenue and some possible postponement of early revenues. From a transparency point of view, it is important that the government policies in this regard are clearly stated and the system is applied in a uniform and open way.

#### Indirect taxes

41. Indirect taxes may also play an important role in the fiscal regime. Resource sectors are often treated differently from other economic activities either because of their special nature, or as a fiscal incentive to attract investors. Indirect taxes provide an important source of early revenue to the government, but by the same token they are also an attractive investment incentive. For fiscal transparency purposes the costs of any incentives provided through indirect tax exemptions should be clearly recognized, whether as part of the overall fiscal regime, or separately calculated as tax expenditures.

# Box 2. The Fiscal Regime and Government "Take"

Because of the complexity of country-specific fiscal regimes, a common analytical technique applied to PSCs and other arrangements is to prepare a summary estimate of the projected overall division of rents between company and government resulting from all instruments. This is often referred to as the government "take" (see Johnston 2004, and Kumar 1995). Effectively, the estimation collapses all of the rent extraction mechanisms into the equivalent of a single cashflow-based tax taken over the life of the project.

Particularly for frontier regions following an initial discovery, very little information is generally available, and both government and company negotiators will necessarily build a variety of risk assumptions into the projections. After a contract is signed, however, provided that risks are clearly stated, an overall summary of the projections and relative take could be an important element of disclosure. Indeed, without a summary overview, disclosure of contract terms is likely to be quite difficult to interpret. Data on government take across countries and projects are relatively readily available in the industry, but their potential significance for transparency has not yet been particularly emphasized.

A summary at this level does, however, have obvious limitations, as stressed by Johnston (op cit). Among other things, a single statistic cannot capture the differing share of risks that may emerge from any particular fiscal regime, and coverage may not be comprehensive (e.g., quasi-fiscal activities (QFAs) such as the provision of social services through resource companies are often not included). Moreover, such data do not reveal differences due to the structure of the fiscal regime (such as presence or absence of ringfencing) and the availability of home-country tax credits to foreign investors.

Better standardization of methodology would seem necessary to improve transparency. In this regard, the following should be considered:

- Assumptions underlying the projections and estimates should be clearly stated.
- Sensitivity of results to changes in key variables (e.g., oil price) should be shown.
- Take should be shown in terms of discounted as well as undiscounted cash flow.
- The effective royalty rate (or the minimum share the government may expect in any given accounting period) should be estimated.
- Ex-post take estimates as well as ex-ante take projections should be made available to the general public.

Disclosure of take analysis results by company or field will encounter various legal barriers at company level. So for both technical and administrative reasons, implementation of reforms along these lines may be slow. However, where take projections and estimates can be easily prepared, their disclosure could be a good prima facie indicator of transparency. Take projections and estimates, it should nonetheless be emphasized, say nothing about the relative profitability of fields and should not be interpreted as setting a negotiating standard. Rather, making such data available to the general public could form one useful element of overall disclosure, which, along with other measures should help improve transparency of the fiscal regime.

42. VAT refunds present special problems. As Sunley et al. (2003) point out, zero-rating exports under a destination-based VAT will lead to continuous net refunding to exporters, which puts pressure on weak tax administrations, particularly in periods of high investment. Allowing VAT exemptions for imported capital goods and other inputs to the industry is therefore used by a number of countries to avoid the administrative burden of refunding, although it is difficult, especially for weak tax administrations, to separate inputs used by the resource industry from those used in other sectors of the economy. For practical purposes, exemptions of this kind would be regarded as part of the fiscal regime, and not as tax expenditures.

# Bonuses and nontax payments

43. Various types of bonus payment are used by many countries to collect early revenue from a project with little administrative effort. As indicated earlier, signature bonuses can be a key element of the fiscal regime at the licensing stage, and they are an effective tool for generating revenue early on. Where projects are high-risk and license deals are primarily negotiated, however, implicitly such payments are likely to be offset by concessions elsewhere (and this trade-off may well be justified in terms of government risk management). Bonuses paid prior to project development thus may have some of the characteristics of oil-backed loans, with an implicit repayment through future favorable tax treatment. Disclosure of contract terms in some form is therefore a necessary part of transparency. Various other forms of nontax instruments, such as license, rental, or lease fees are also used, but generally these appear to be relatively minor components of the overall fiscal regime.

# Fiscal stability clauses

44. Investors naturally want to get as much assurance as possible that they will not be subject to unfavorable changes in the fiscal regime. To meet this requirement, many project agreements include fiscal stability clauses. There are various forms of such clauses, such as "freezing" the tax system at the time of the agreement or guaranteeing the investor take by compensatory adjustments to tax changes (for example, in production shares). On the one hand, such clauses can be administratively cumbersome and limit tax policy flexibility, although fiscal stability provisions can be designed to minimize the general tax policy impact. They also impair parliament's normal authority to pass fiscal legislation. On the other hand, they may be necessary in high-risk environments, and may increase the overall government take if they reduce investor risk premium. They may also make tougher policies elsewhere in the regime more acceptable than otherwise. At any rate, both the existence of such clauses and their potential implications should be clearly explained to the public.

<sup>&</sup>lt;sup>37</sup> Sunley et al. also outlined the special problems faced in the countries of the Commonwealth of Independent States, which used to apply origin-based VAT for oil and gas trade within the Commonwealth of Independent States but destination-based VAT for other sectors. However, changes to these practices are under consideration.

# Authority over revenue flows and borrowing

1.2.2

Fiscal authority over resource-related revenue and borrowing is clearly specified in the law. Legislation includes a requirement for full disclosure of all resource-related revenue, loan receipts and liabilities, and asset holdings.

- 45. Resource-related revenues should be handled through the budget process in a similar way to other government revenues, and any law governing the receipt of such revenues and appropriation for spending should be consistent with the law governing the government budget. In practice, it is often the case that laws governing company payments are executed in the first instance outside the finance ministry. For example, a royalty is usually imposed by petroleum or mining legislation and collected by the ministry or agency responsible for the legislation; similarly, an oil PSC is made either with the petroleum ministry or with the NOC. The ministry responsible for fiscal policy, however, should have a guiding influence on the level of such payments and the design of the overall fiscal regime. Moreover, resource industry laws should be consistent with general budget and tax laws.
- 46. To the extent that resource revenue payments are received by an NRC, an extrabudgetary fund, or local governments, the rationale for such arrangements should be made clear and good practices of fiscal transparency applicable to such entities should apply (see 1.1.3 and 1.1.2 below). Good practice is that all such revenues should flow to the government budget before being appropriated for spending purposes.
- 47. Rights to borrow for public purposes should ideally be under the authority of the finance ministry on behalf of the government. Receipt of such borrowings should be credited to a bank account under the control of the finance ministry or its treasury, with the balances credited, liabilities incurred, and terms of loans being fully disclosed to the public. In some resource-rich countries, however, loans may be made on the basis of future production collateral, generally on a negotiated rather than open tender basis. The terms of loans are often not fully available to the public, and the authority for such borrowing may not be subject to the usual rules of financial management and oversight by the finance ministry and the national audit office. Transparency in this regard is based, first, on an adequate legal framework that specifies authority to borrow clearly and requires adequate disclosure and oversight mechanisms. Second, the legal framework must be adequately observed and oversight bodies should have adequate authority and capacity to administer the law. Borrowing or collateralization by an NRC should be similarly transparent, given the likely significant fiscal implications of such borrowings.
- 48. Resource-related asset holdings should also be subject to clear rules for disclosure, regardless whether they are held by the finance ministry, a separate resource fund (see below), or otherwise. Equally importantly, these assets should be considered as part of government's overall financial assets, with changes considered as part of the overall fiscal balance (see

Section 3). To the extent that a full government balance sheet is maintained, the assets should be reported as part of the consolidated government balance sheet.<sup>38</sup>

# **Equity participation**

1.1.5

Government involvement in the resource sector through equity participation is fully disclosed and the implications explained to the public.

- 49. As indicated above, direct government equity participation in projects to develop resource sectors is an important element of the fiscal regime in a number of resource-rich countries. Sunley, Baunsgaard, and Simard (op cit) indicate that 18 of the 40 emerging or developing countries covered by their survey participated, or had the right to participate, directly in resource ventures. Maximum equity stakes in these countries ranged from 5-50 percent. Equity can be acquired under normal commercial terms or various forms of concessionary purchase, including tax swapped for equity, and so-called "free" equity. A common way is through what is called a "carry"—where the government "carried" equity interest is financed by private investors, but, after commerciality has been established, the government contributes to sunk project costs to a varying extent from its share of the profits or profit oil. <sup>39</sup> In addition, some systems allow the government an option to buy into a project at the time of discovery. As a general rule, however, favorable terms for the government's participation involve some form of offsetting reduction elsewhere in the fiscal regime. It is important that all such concessions and their costs be disclosed as completely as possible.
- 50. If, as is commonly the case, the government has the right to take up a working interest through the NRC (in some cases paid by the NRC share of profit oil) or the resource ministry there should be full disclosure of the form of payment and ownership arrangement.<sup>40</sup>
- Where the bulk of production is under direct state control, payments to the budget would occur both as taxes and dividends or other forms of income, including the proceeds from direct domestic and external sales of oil or any other resource products. Good corporate governance practice would require that NRC accounts statements should be available to the public and the policy on dividends would be disclosed. As discussed further below, however, few NRCs currently meet these standards. Compliance with EITI would require considerably more effort to apply these.

<sup>38</sup> These recommended practices are in line with the requirements under the Government Finance Statistics Manual (2001) statistical framework.

<sup>39</sup> Daniel (1995b) notes that carried interest is under certain assumptions fiscally equivalent to a resource rent tax, and, more generally, describes the fiscal equivalence of various forms of state equity participation and production sharing arrangements.

<sup>&</sup>lt;sup>40</sup> In a few countries, the working interest share granted to the "government" is actually held by individuals (typically government officials). Such a delegation appears prima facie inherently transparent, and the rationale for such practices should be fully disclosed.

# Resource-related extrabudgetary funds

1.1.3

Mechanisms for coordinating the operations of any extrabudgetary funds established for resource revenue management with other fiscal activities are clearly specified.

- 52. Extrabudgetary funds usually present a number of transparency problems and are not recommended as a necessary contribution to resource revenue transparency (see further discussion in section 3 in the context of fiscal policy coordination). However, a number of countries have set up extrabudgetary funds purportedly to help protect the budget and economy from the volatility of resource revenue flows, to save for future generations, or for other purposes (e.g., development funds). Best practice for such funds is that no moneys may be spent directly from such funds; any use of such funds should be through the government budget and subject to normal budget appropriation processes. Such rules are applied especially well by Norway (see discussion in section 3).
- 53. Any form of direct spending from a resource-related (or indeed any other) extrabudgetary fund risks the creation of a dual budget and earmarking of revenues for specific purposes, with undesirable consequences for both transparency and efficiency of budgetary spending. However, in some countries funds have been set up with legal authority for own spending rather than through normal budget processes. In such cases, the law governing extrabudgetary spending should clearly specify the purpose and encourage parliamentary scrutiny. Whether or not such spending occurs, good transparency practice would require that projections of transactions should be given to the parliament as part of the budget process, and accounts giving details of actual spending and fund assets and liabilities should be presented along with standard budget reports and accounts to parliament, or preferably as part of consolidated government accounts.

#### National resource companies

1.1.4/1.1.5

Ownership structures of national resource companies and their fiscal role vis-à-vis the resource sector ministry and the finance ministry are clearly defined.

Commercial responsibilities are clearly distinguished from policy, regulatory, and social obligations.

54. NRCs have become increasingly important players, especially in the oil sector. 42 Government ownership and control of resources gained increasing importance in the 1970s,

<sup>&</sup>lt;sup>41</sup> Ghana's Mineral Development Fund is a case in point. It is funded with earmarked royalty revenue and expected to pay for repairs of environmental damages and development projects for mining communities. However, its appropriation and disbursement arrangements are complex and not transparent. Payments tend to be made with delay, or not for the intended purpose. See *Ghana: Fiscal Transparency Report on the Observance of Standards and Codes* (http://www.imf.org/external/pubs/ft/scr/2004/cr04203.pdf).

<sup>&</sup>lt;sup>42</sup> For example, McPherson (2003) notes that NOCs control 90 percent of world oil reserves and account for 73 percent of production.

with an initial focus on nationalization and control of upstream activities. Subsequently, governments of both oil-exporting and oil-importing countries began creating national companies to promote downstream activity, with a key aim of getting control over the petroleum retail pricing. This led to a rapid expansion of the role of national companies in petroleum policy setting, including the adoption of a variety of noncommercial policies usually associated with the government. The ability of these companies to attract available local (as well as international) expertise, and the greater flexibility of company structures, led in many countries to a corresponding decline in the quality and authority of traditional general government. Although in more recent years, there has been a critical re-evaluation of the role of NOCs in recognition of their manifold weaknesses, they continue to have a powerful influence on policy in many developing and transition countries. As discussed in section 3 (under 3.2.3/3.2.4 of the code), there may be a case in some countries for considering a broad public sector balance including the NRC as a key indicator of fiscal policy.

- 55. McPherson (op cit) notes a number of critical issues in relation to NOCs that need to be addressed. Two of these, in particular, are applicable to resource industries in general, and have a direct bearing on fiscal transparency:
- Commercial and noncommercial activities should be clearly separated. Poor commercial performance may in part be attributed to poor governance and lack of competition, but the companies' substantial role in promoting a variety of noncommercial/quasi-fiscal activities reduces managerial accountability for both types of activity. Provision of noncommercial services is primarily a government responsibility, and clarity of fiscal policy requires that the extent of such activities should be overseen by the finance ministry.<sup>43</sup>
- Clarity is also required in defining the policy and regulatory role of NOCs vis-à-vis the sectoral ministry and the finance ministry. These problems are minimized where these companies focus primarily on commercial activities.
  - 56. Substantial reform of management of NOCs/NRCs is needed to address these issues adequately. At the same time, better disclosure of ownership structures of these companies and their subsidiaries is a central element of corporate governance, 44 including, if applicable, share participation of government officials and more general governance issues (e.g., composition of board, audit practices). At the same time, the government's policy and administrative roles generally need to be more clearly defined. In many developing countries this means that a strong capacity building effort is required. Addressing capacity and institutional constraints in these areas is critical for reform of resource transparency and management in developing countries. The "Norwegian Trinity Model" provides one model of clear definition of roles in

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<sup>&</sup>lt;sup>43</sup> For transparency, this need not preclude that NRCs undertake such activities, only that they be clearly described and their role in overall fiscal policy explained. While the Norwegian model described below offers one example of clarity, it is not suggested that this is the only possible transparent arrangement. Specific examples of quasi-fiscal activities carried out by NRCs are discussed in the next section.

<sup>&</sup>lt;sup>44</sup> See discussion of OECD Principles of Corporate Governance in Box 3, p. 15 of the manual.

these respects.<sup>45</sup> In many ways, this area of reform is central to implementation of improvements to many other elements of transparency and resource management, most of which rely on establishing clear lines of accountability.

# Quasi-fiscal activities (QFAs) of resource companies

1.1.4/1.1.5

Arrangements whereby international or national resource companies undertake social or environmental expenditure or provide subsidies to producers or consumers without explicit budget support are clearly defined and described in the budget documents.

# Economic and social QFAs

- 57. State-owned enterprises, government institutions as well as the central bank can undertake quasi-fiscal activities (QFAs). The existence of QFAs means that the budget gives a misleading picture of the actual extent of fiscal activity, and, as discussed above, leads to a confusion of responsibility between the government and state-owned enterprises. With respect to resource sectors, the main types of QFAs include:
- Requirements for NRCs to provide products (particularly energy) at less than cost recovery or market price for domestic consumption;
- Requirements for NRCs or international companies to provide social or other services normally provided by general government;
- Provision of employment in NRCs and other activities and requirements that go beyond of what would be done if companies were run on a purely commercial basis; and
- Use of company leverage to borrow on behalf of government.
  - 58. The first type of QFAs causes market distortions and understates the size of government activity and the size of the budget deficit, which should take account of the implicit subsidy. In particular, providing energy at low prices represents an implicit, untargeted subsidy that invites overconsumption and waste by households, enterprises, and other users, with a potentially large adverse environmental impact. Maintaining such subsidies

<sup>45</sup> Policy and licensing as well as petroleum taxation and related fiscal issues are the responsibility of the government (i.e., Ministries of Petroleum, Ministry of Finance). The Petroleum Directorate provides advice to the Ministry of Petroleum (to which it reports) on technical matters, manages technical data, and enforces technical regulations. The NOC (Statoil) is focusing on commercial operations, a role recently reinforced through partial privatization. See McPherson (op cit., p. 200).

<sup>&</sup>lt;sup>46</sup> For a general discussion of quasi-fiscal activities see the manual, paragraph 31. A broad definition would include all operations that could in principle be duplicated by specific budgetary measures in the form of an explicit subsidy or direct expenditure. Typical QFAs with critical macroeconomic significance include multiple exchange rate regimes, the provision of exchange rate guarantees, non-tariff trade barriers, credit rationing and directed lending at below-market interest rates, and the provision of goods and services by state-owned enterprises at below-market or cost recovery prices.

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also risks the creation of an unsustainable dependence on continuing low energy prices. Such QFAs are prevalent in many energy-rich countries. The consequences in terms of reducing managerial accountability for both commercial and noncommercial activities have been discussed above.

- as NRCs. Generally, most important among these is, as indicated above, the provision of petroleum or other energy products through state-owned enterprises at nonmarket prices that, in some cases, do not cover even operating costs. The Sometimes, de facto subsidies to consumers are even higher if energy parastatals tolerate the accrual of arrears by consumers. In the oil sector, a particular type of QFAs are what is called "Domestic Market Obligations (DMOs)." These often require (foreign) oil companies to sell a certain share of crude oil production domestically at prices that are below the market price. Such arrangements should be disclosed as part of the government's energy price policy, which often also include administrative pricing rules for petroleum and other products. Energy QFAs due to low prices and the toleration of arrears can be very large. For example, implicit subsidies of petroleum products because of unduly low prices were estimated at 3.5 percent of GDP on average in 1999 for a group of 15 oil-exporting countries, with wide variations across countries. Some of the highest oil-related implicit subsidies were measured for Iran (17 percent of GDP in 1999-2001) and over 20 percent of GDP in Azerbaijan in 2000.
- 60. The second type of QFAs involves national resource companies or international companies taking responsibility for services that are normally considered part of general government. In many respects, these activities represent a desirable partnership between companies and government to serve the needs of communities. In some cases, it can be argued that a company is better placed to provide services to, say, remote communities than is the government. Moreover, companies themselves may enjoy benefits through better reception by the communities affected by the resource development. Such activities, however, are rarely reported clearly or comprehensively. The extent of government fiscal activity is thereby understated, which may also generate inefficiencies.
- 61. The main transparency point is that the extent of such type of activities and their justification should be clearly explained in the budget process. Budget documents should explain clearly the nature of the expenditures and how costs are shared between the

<sup>47</sup> Analytically, an important distinction needs to be made between short-run marginal costs and long-run marginal costs (i.e., including investment). Ideally, tariffs should be determined on the basis of the latter.

<sup>&</sup>lt;sup>48</sup> This has been a common feature in a number of energy-rich Former Soviet Union countries. For detailed analyses of energy sector quasi-fiscal activities due to implicit subsidization of oil and other energy products see, for example, Petri et al. (2002).

<sup>&</sup>lt;sup>49</sup> See Gupta et al. (2003), Petri et al. (2002), and Taube (2001).

- 62. government and companies—including through the tax treatment of such expenses.<sup>50</sup> Coverage and explanations of QFAs in budget documents should be nondiscriminatory, i.e., relevant activities should be covered regardless of company ownership (private or stateowned).
- 63. The financing and provision of social services (e.g., local schools or health clinics), infrastructure, or other services for local communities may or may not be fixed in contracts between the government and individual companies. Such spending may be beneficial from a development perspective as it helps fight poverty and improve infrastructure, especially in regions and sectors where government implementation capacities are weak. However, it may also result in direct costs for the government (e.g., recurrent costs after the end of the mining project) and could distort overall public spending priorities.
- 64. To the extent that spending for such programs is cost recoverable or tax deductible by resource companies, the government is burdened with part of the costs for these activities. For instance, if 40 percent of all spending on social and community programs by a resource company project is tax deductible, the government effectively and implicitly subsidizes these activities to this extent through foregone revenue (see paragraph 34). A case in point is the "Infrastructure Tax Credit Scheme" for mining companies in Papua New Guinea. In recognition of limited implementation capacity of local governments to implement social service and infrastructure projects, it was agreed that licensed mining companies would finance and implement development projects (e.g., schools, health facilities, roads) up to a maximum amount (0.75 percent of the value of gross sales) and receive in exchange an income tax credit for these expenses.
- 65. The third type of QFA is similar but involves less easily defined costs and social aims. For example, Angola's SONANGOL has been heavily involved in the procurement of goods and services on behalf of the government. These purchases are not reflected in government accounts and they are offset by noncollection of tax payments from the company. Another fairly common example is the provision of employment opportunities in NRCs over and above what would seem required for commercially run enterprises. Azerbaijan's SOCAR is a case in point: reportedly it is heavily overstaffed with a total number of employees of over 50,000. The requirement for national or international companies to provide training to local counterparts, hiring quotas as well as local content requirements can also be considered quasi-

<sup>50</sup> On this point, two kinds of relationship can be distinguished: (i) it may be agreed that the provision of, say, schools and health facilities for company employees in remote areas is a necessary business expense and tax deductible; or (ii) government and companies may agree as a matter of policy that companies should provide certain social services normally considered a government responsibility, and either costs are tax deductible or a tax credit is given (as in the case of Papua New Guinea described below). Both types of arrangement should be reported as part of overall fiscal activity. In the second case, revenue foregone by government should be estimated and reported as a tax expenditure in the budget documents.

<sup>&</sup>lt;sup>51</sup> However, a case could be made that only expenditure that is carried out by the resource company on specific demand by the government is considered a tax expenditure, while such spending would not be a tax expenditure if it would not be undertaken without the project. At the microeconomic or project level, many of these activities are likely to be disclosed as part of analyses of economic and social rates of return.

fiscal activities since they result in higher costs and hidden taxes for companies than under a pure market environment. 52

66. The last type of QFA—the use of market leverage of a national resource company to borrow on behalf of government<sup>53</sup>—is equally an extension of fiscal authority outside normal channels. The costs, however, are in terms of diffusion of financial management authority and hard to quantify. Such arrangements signify a need to clarify the relative roles of the national resource company and the finance ministry.

#### Environmental and site abandonment issues

- 67. Extractive industries invariably have a significant impact on the environment. Environmental expenses differ from QFAs in that they are seen as a partial obligation of the resource companies because they are fundamentally linked to the production process. Nonetheless, at least part of these expenses will be tax deductible and hence the costs partially borne by the state; it is important that the level of expenditure on environmental protection be captured in fiscal documents alongside other public spending. Increasingly, these concerns are being built into general and industry-specific legislation as well as individual contracts. While, a decade ago, oil PSCs often did not include proper site restoration and cleanup provisions, these are becoming standard features.
- 68. In many respects, however, such issues are but one facet of the overall negotiations between governments and companies. Ownership of the resource ultimately generally rests with the government, and from a purely commercial company perspective, the cost of protecting the environment or restoring the site is both a government responsibility and part of the overall cost structure. For any company, this component must therefore be included in overall project costs and thus taken into account in profit calculations. The question is how such costs are shared between the company and the government, through cost recovery or tax deduction, and over what period of time. Socially, and environmentally, it is, of course, essential that such costs be clearly recognized and that steps to address the issues be built systematically into individual project design—with appropriate and efficient sharing of costs between the government and companies. In advanced countries these factors are reflected in the legislation and applied through the general tax system and specific project agreements<sup>54</sup>—

<sup>52</sup> For example, as part of the development of the Indonesian oil sector, a Utilization of Expertise and Skill Development Fund (DPKK) was established with the objective of encouraging hire of local manpower. The fund is financed with obligatory payments of \$100/month for each expatriate employee.

<sup>&</sup>lt;sup>53</sup> McPherson (op cit) cites Angola's SONANGOL as an example. The Global Witness report "Time for Transparency" provides examples also from other countries (Global Witness 2004).

<sup>&</sup>lt;sup>54</sup> Norway again provides a good example of a comprehensive approach. The Norwegian government cooperates closely with the industry to ensure development is associated with environmental protection at all stages of development. Norway accepts its obligations under the Kyoto protocol and is applying a range of instruments accordingly. See <a href="http://odin.dep.no/filarkiy/204754/Miljo Engelsk04.pdf">http://odin.dep.no/filarkiy/204754/Miljo Engelsk04.pdf</a>

though even in such countries, there is often scope to improve reporting on implicit state support of environmental spending through the tax system.<sup>55</sup>

#### Subnational government and resource revenues

1.1.2

Arrangements to assign or share resource revenues between central and subnational levels of government are well defined and national fiscal policy and macroeconomic objectives are taken into account within constitutional limits.

69. The assignment of taxation powers and expenditure responsibilities to central and subnational governments should be based on stable principles and agreed formulae, which should be clearly and transparently formulated, and implemented as legally prescribed, in an open and consistent manner. These general requirements are particularly important in large, diverse, decentralized countries that have sizable oil or other natural resource revenues. At the same time, however, when subnational jurisdictions are fiscally important and enjoy a large degree of independence from the central government, it is a considerable challenge to establish a sound and transparent subnational revenue sharing system. This challenge is much greater in such countries when state and local government fiscal operations do not provide good fiscal data regularly and in a timely manner. The stable of the principles and agreed formulae, which subnational sevenues are particularly important in large, diverse, decentralized countries that have sizable oil or other natural resource revenues. At the same time, however, when subnational jurisdictions are fiscally important and enjoy a large degree of independence from the central government, it is a considerable challenge to establish a sound and transparent subnational revenue sharing system. This challenge is much greater in such countries when state and local government fiscal operations do not provide good fiscal data regularly and in a timely manner.

# Economic and fiscal policy considerations

70. Economic theory suggests a number of reservations with regard to giving oil or other large natural resource revenue to local governments, in particular if combined with resource-related taxation powers. In practice, however, resource revenues are playing an increasing role in financing subnational governments worldwide. Assigning revenue to subnational governments is generally considered likely to improve accountability and the quality of spending because local governments can determine better than central governments the needs and requirements of their populations. Equally, however, the "resource curse" arguments advanced at a national level (see paragraphs 2-3 above) are likely to apply equally, if not more strongly, to weak subnational governments. From a macroeconomic and sustainability perspective, the most important argument is that a central government will be able to exercise the needed authority to strictly control spending and save windfall revenue.<sup>58</sup> Another

<sup>57</sup> For example, in Nigeria the States and local governments are not required to report budgets and their execution to the Federal government. Data on subnational government activities are available only through an annual survey carried out by the Central Bank of Nigeria, and the quality of these data is limited.

<sup>&</sup>lt;sup>55</sup> Contract provisions often allow for the accrual of an abandonment fund during the life of a project. Responsibility for site restoration should be clearly specified, and for transparency purposes contracts should specify the starting point (e.g., after 30 percent depletion), time profile of payments, accrual mechanism (e.g., through an escrow account), and make provision for re-assessment of the restoration liability. These practices are increasingly recognized as necessary company costs of resource extraction.

<sup>&</sup>lt;sup>56</sup> See the manual, paragraph 20.

<sup>&</sup>lt;sup>58</sup> Allied to this point, it will be difficult for subnational governments to coordinate macroeconomic policy for stabilization and savings (see 3.1.1(a)).

argument in support of natural resource revenue accrual at central government level is the need for policy coherence; since energy sector policies are usually under the jurisdiction of the central government, government tax and expenditure policies related to natural resources should also be determined at this level.

- 71. Other measures can be taken to balance centralization of resource revenue collection. For example, non-resource taxes can be assigned to subnational governments to provide them with some autonomy. Also, a transfer system should be put in place to address vertical imbalances between the central and local governments as well as horizontal imbalances across local governments (Ahmad and Mottu 2003).
- 72. However, despite such arguments in favor of centralized management of natural resource revenue, such arrangements are not universally applied. In some countries, subnational governments own the natural resources. <sup>59</sup> In others, constitutions or basic legislation require that natural resource revenue is shared with subnational governments, often reflecting political economy considerations. This is of particular relevance in resource-rich developing countries in which centrifugal forces are at play. <sup>60</sup>
- 73. Where natural resource revenues are shared with subnational governments, the issue of horizontal equity arises. Since natural resources tend to be distributed highly unevenly across regions, it is difficult to base horizontal revenue allocation on the "origin principle" as this would intensify regional imbalances. The following examples illustrate these difficulties. In Indonesia, implementing this principle would imply that districts in five provinces would likely receive 80 percent of the local share in oil and gas revenue, while those in the remaining 25 provinces would each receive very little. In Argentina, one province (with only 1.5 percent of the population) produces more than one-third of total oil output. Some similar factors apply in Russia, where the five oil-richest regions have only six percent of the population, but collect over 50 percent of all subnational government revenue related to natural resources (Martinez-Vazquez and Boex 2000). In this last case, however, more than 90 percent of oil revenues is assigned to the federal government. The need for equalization transfers into non-resource producing regions needs to be examined in the context of the overall assignment of oil revenues in each country. 61

<sup>59</sup> For instance, Australia, Canada and the U.S., where provinces or states and (in some cases) private landowners can possess natural resources. In these countries strong measures of control and transparent practices at the subnational level have contributed to the successful management of resource revenues.

<sup>&</sup>lt;sup>60</sup> In a number of countries, oil-producing regions have pushed for independence over this issue, which at times has resulted in unrest, war, and secession (e.g., the Biafra war in Nigeria, Aceh in Indonesia). As a result of these conflicts and continued tension, both the Nigerian and Indonesian central governments were forced to agree to establish natural resource revenue sharing arrangements. Nigeria now distributes 13 percent of oil revenue to oil-producing States. Indonesia allocates 55 percent of oil revenue and 40 percent of gas revenue to Aceh Province. In Chad, 5 percent of oil revenue is assigned to oil-producing regions.

<sup>&</sup>lt;sup>61</sup> Ahmad and Mansoor (2001) describe such a horizontal equalization scheme for Indonesia.

- Existing revenue sharing systems can be categorized within a spectrum ranging from 74. full centralization to full decentralization, with a variety of tax and revenue sharing arrangements in between. 62 Also, revenue sharing can be applied (i) across taxes (e.g., assigning of all royalties to provinces in Papua New Guinea), (ii) on the basis of providing a share of all resource-related revenue, or (iii) on the basis of expenditure needs of local governments. While smaller countries tend to fully centralize oil revenue, larger countries, especially those with a federal structure, typically adopt some form of subnational revenue sharing arrangement (e.g., Colombia, Ecuador, Indonesia, Kazakhstan, Mexico, Nigeria, Russia, and Venezuela). <sup>63</sup> Mexico has established a revenue sharing formula that has a broader revenue base, i.e., it includes not only natural resource revenue sources but also indirect taxes.
- Generally, there appears to be a trend towards an intensified use of subnational revenue sharing, as is demonstrated for example in Indonesia, which changed from a centralized model to a decentralized revenue-sharing model in 2001. Other countries, including Papua New Guinea, the Philippines, and Nigeria, have introduced subnational revenue sharing systems earlier. In Bolivia, there is strong pressure to change the existing hydrocarbon revenue allocation system in favor of a higher revenue allocation to provinces, especially to those that do not produce oil and gas.

### Fiscal transparency guidelines

- 76 Regardless of the subnational revenue sharing arrangement chosen, it should be based on clear rules and principles. These should not only include understandings between the various levels of government on the original arrangement, but also rules and procedures for modifying it. As regards the latter, Brosio (2003) has for example suggested the sound rule that as long as renegotiations of the subnational revenue sharing system take place, the original system continues to be in place and no party holding a stake should have a veto power to stop the existing system from functioning.
- 77. A clearly articulated system of revenue sharing with subnational governments would be expected to take into account macroeconomic considerations and national fiscal policy objectives. This could entail setting fiscal deficit targets and expenditure ceilings for subnational governments to curtail demand in periods when large natural resource revenue spikes occur. This could be achieved through fiscal responsibility laws, internal stability pacts or other institutional arrangements that seek to coordinate fiscal management of central and local governments. In Nigeria, for example, establishing such an intergovernmental regime would require supplementing the existing subnational oil revenue sharing mechanism with a requirement to limit spending financed from oil revenue windfalls also at the subnational (State) level. This is intended to be achieved through the Fiscal Responsibility Bill which is

<sup>&</sup>lt;sup>62</sup> For oil-producing countries, these systems are analyzed in detail by Ahmad and Mottu (2003).

<sup>&</sup>lt;sup>63</sup> There is also the special case of the "full decentralization model" in the UAE. Oil revenue accrues to the individual Emirates, and is then upwardly shared with the UAE government based on a negotiated formula. Canada and the U.S. share revenue bases between provinces and states on the one hand and the federal government on the other hand.

under preparation. However, experience has shown that such systems may not be easy to implement, particularly in large federal countries with numerous and strong subnational governments.<sup>64</sup>

78. Transparency considerations require that tax powers, revenue sharing arrangements, and expenditure responsibilities are based on stable principles and agreed formulae that should be developed and exercised in an open and consistent manner. <sup>65</sup> The above mentioned example of Mexico seems to be a good case in point, as the sharing of revenue is not only based on a broad pool of revenue sources, but also on a transparent formula, with clear and frequent reporting on actual revenue distribution. As a result, oil revenue sharing in Mexico between different levels of government has been relatively uncontroversial.

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<sup>&</sup>lt;sup>64</sup> Brazil is a noteworthy exception. It has put in place a widely commended Fiscal Responsibility Law that exerts fiscal discipline and limits fiscal deficits and debt also at both the federal and regional (State) level.

<sup>&</sup>lt;sup>65</sup> Where possible, decisions on the formula to allocate natural resource revenues are best developed and agreed upon before the natural resource is exploited and revenue starts to flow, i.e., while it is still uncertain how much revenue can be expected. McLure (2003) calls this "behind the veil of ignorance."

# 2

## **Public Availability of Information**

79. The public availability of information on all resource-related transactions is central to fiscal transparency. Failure in this respect has been a continuing source of concern and given rise to a number of international initiatives aimed at promoting greater public availability of these data. The EITI is a significant new initiative which promotes, on a voluntary basis, the publication of company payments to the government as well as government resource revenue receipts. Beyond current revenue transactions, however, it is important that the government reports adequately on spending of such receipts, on any debt or contingent liabilities contracted against resource collateral, on its resource reserves, and on QFAs incurred in association with resource developments.<sup>66</sup>

### Budget documentation of resource revenues and spending

2.1.1

All resource revenue-related transactions, including through extrabudgetary funds, are clearly identified, described, and reported in the budget process and final accounts documents.

80. As indicated in the previous section, governments may receive resource revenues through a variety of tax or equivalent instruments. In some cases, receipts may be directly placed in a resource fund. In other cases, such as the Norwegian State Petroleum Fund SPF), all petroleum revenues and expenditures are recorded in the budget, and net proceeds are transferred to the fund. Thereafter, the necessary funds to finance the nonoil budget deficit are transferred back from the SPF to the budget.<sup>67</sup> In other countries, such as the UK, the government receives all payments directly through the revenue authorities, and these are recorded against each type of revenue instrument. In the aggregate budget documents, such receipts are not separately identified, but detailed reports on such resource revenues by type of tax or other levy are regularly produced (in the case of the UK, by National Statistics<sup>68</sup>). A basic principle in each case is that the tax payments are under the supervision of the relevant tax authorities, and all transactions are included in the budget (or related) analytical presentations. In advanced countries, wellestablished government tax administration and reporting and auditing procedures give credibility to reported data. Some developing countries also publish basic data on oil

<sup>&</sup>lt;sup>66</sup> General considerations defined in the code and the manual would also apply to reporting of tax expenditures benefiting the resource sector, but as discussed in section 1, these should be estimated against a baseline of the fiscal regime applicable to the resource sector—and defining that regime clearly is the highest priority for improving transparency in many countries.

<sup>&</sup>lt;sup>67</sup> See <a href="http://www.statsbudsjett.no/2004/english.asp">http://www.statsbudsjett.no/2004/english.asp</a>.

<sup>&</sup>lt;sup>68</sup> See http://www.inlandrevenue.gov.uk/stats/corporate\_tax/table11-11.pdf

revenues in their budget documents. However, systematic monitoring and verification of data are often not adequately in place.<sup>69</sup>

### Reporting on company resource revenue payments

2.1.1

Reports on government receipts of company resource revenue payments are made publicly available as part of the government budget and accounting process.

- The EITI has initiated standard reporting procedures and templates (henceforth, 81. "guidelines") that will help give assurance that revenue receipts from natural resources are fully accountable. The EITI is aimed particularly at developing countries where general revenue and budget administration controls are usually inadequate to ensure the timely, comprehensive, and reliable accounting reports that provide a solid basis for monitoring all forms of government transactions in advanced countries. It is recommended that governments of these countries encourage companies to comply with reporting requirements under the EITI, and lift any confidentiality provisions, if necessary, that would impede reporting of resource revenue payments. It is important, in this context, to emphasize that mere completion of the EITI templates will be inadequate unless there is adequate assurance of data quality. In principle, governments in such countries should establish strong administrative structures as a priority, but they should also assess compliance against other relevant standards defined in the code (and practices described in this guide) and in the OECD Principles of Corporate Governance. The EITI guidelines, however, are a big step forward in establishing key elements of standards for the unique requirements of extractive industry reporting. The basic standards and procedures for companies and governments to follow in reporting resource revenue flows under the EITI are as follows:
- Reporting by host governments in line with a standard government reporting template;
- Reporting by companies in line with a standard company reporting template; and
- The aggregation and analysis of data disclosed in host government and company reporting templates by an independent third party.
- 82. The EITI guidelines are applied only to *upstream activities* (that is, all activities up to the first point of marketable production (wellhead or mine gate, i.e., the first point of saleable production) and are designed only for extractive industries, such as metal ores, gemstones, crude oil, and natural gas. Reporting covers benefit streams that

<sup>69</sup> Nigeria includes considerable amounts of data on oil and gas revenue flows in the budget presentation. The authorities now also publish monthly reports on oil revenue accrued to the Federal government and the States (see <a href="http://www.fmf.gov.ng/Presentaion%20on%20the%20appropriation%20bill.PDF">http://www.fmf.gov.ng/Presentaion%20on%20the%20appropriation%20bill.PDF</a>).

<sup>&</sup>lt;sup>70</sup> See *Revised Draft Reporting Guidelines: Extractive Industries Transparency Initiative*, 23 May 2003, at http://www.dfid.gov.uk/News/News/files/eiti\_draft\_report\_guidelines.pdf

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correspond to those described under the fiscal regime (see 1.2.2). QFAs (see 1.1.4) are excluded. To accommodate government accounting practices, and to promote reconciliation among the parties to EITI reporting, all benefit streams are reported on a consolidated cash basis.

- 83. Although the guidelines cover only a narrow range of resource-related fiscal activity, they provide an important framework around which governments and companies can build a credible reporting base. Establishing a government commitment at this level and agreeing with companies on compliance with EITI reporting guidelines is an important first step towards the broader goal of transparent resource revenue management.
- 84. Significant challenges have to be overcome, however, to put the EITI templates firmly in place. A number of countries are beginning to participate at various levels in the EITI. Ghana, for instance, has initiated some work toward meeting EITI reporting standards. Weaknesses in the government accounting system need to be addressed for the EITI templates to work effectively, and the government is continuing its efforts to implement these changes. <sup>71</sup> Nigeria is also participating in the initiative, but is modifying the templates to meet the specific needs of reporting. In that country, however, the immediate need is to establish a stronger legal framework for the fiscal regime and to build capacity and strengthen relationships among the many government departments and agencies involved (including the Nigerian National Petroleum Company) to improve reporting in a sustainable way. The Kyrgyz Republic agreed in May 2004 to participate in the EITI and has introduced legislation to implement measures to implement appropriate measures to cover transparency in the mining sector. 72 Other countries that have expressed an interest in participating in EITI include Azerbaijan, Chad, Republic of Congo (Brazzaville), Gabon, Niger, Timor-Leste, and Trinidad and Tobago.
- 85. The Republic of Congo (Brazzaville) took steps in 2004 to publicly certify oil revenues in a way that moves toward substantively meeting EITI reporting requirements. As part of an economic reform program monitored by the IMF, the authorities asked the Paris office of KPMG to carry out an independent certification of oil revenues. The objective is to establish, in a manner consistent with international auditing standards, that oil revenue due to the government on the basis of the production sharing contracts and actual production had indeed been received. The reports have certified the company payments and treasury receipts associated with current production, identifying discrepancies that can be explained and rectified.<sup>73</sup> This has prompted the government to undertake a number of measures to strengthen the revenue collection process. The

<sup>&</sup>lt;sup>71</sup> See fiscal ROSC for Ghana (op cit).

<sup>&</sup>lt;sup>72</sup> See Government of the Kyrgyz, On Measures for Mining Sector Activity Transparency Improvement, Resolution 361 of May 14, 2004.

<sup>&</sup>lt;sup>73</sup> The reports have been posted on the government's official website (<a href="http://www.congo-site.cg">http://www.congo-site.cg</a>). The Ministry of Finance has also published relevant materials on its website (<a href="http://www.mefb-cg.org">www.mefb-cg.org</a>).

quarterly certification process will continue until these measures have succeeded in enhancing the effectiveness and integrity of the revenue collection administration.

### Reporting on resource-related debt

2.1.4

The government's published debt reports identify any direct or indirect collaterization of future resource production, for instance through pre-commitment of production to lenders.

All government contractual risks and obligations arising from such debt are disclosed.

- 86. Open and timely disclosure of all contracted debt and contingent obligations is another essential element of public information. Such a disclosure provides an added assurance of transaction flow data—deficit/surplus data should fully reconcile with accumulated debt. Full disclosure of all liabilities and contingent liabilities is essential to assessing fiscal sustainability and setting medium- and long-term fiscal policy.
- 87. The extensive abuse in several resource-rich countries of borrowing by collateralizing future production is documented in Global Witness (2004). As noted in section 1, the legal framework should carefully define proper authority to contract such loans and require public disclosure of loan terms. But this framework needs to be supported by strong requirements for reporting by both borrowers and lenders. Clear standards for reporting debt are applied in many countries and this aspect is covered in the fiscal transparency manual (see manual paragraphs 78-80). Governance and capacity issues must be addressed in those countries that do not at present comply with basic requirements in this regard. Measures are also needed to improve disclosure by the lenders who are involved in these transactions.

### Reporting on resource-related assets

2.1.4

All financial assets held by government domestically or abroad as a result of resource-related savings are fully disclosed in government financial statements.

88. The standard requirements outlined in paragraphs 81-84 of the manual apply to questions of disclosure of government financial assets. Two specific issues arise in connection with assets related to resource revenues in developing countries. First, such assets are often held in a separate fund with disclosure requirements that may differ from those of general government. Second, in many developing countries, and indeed a number of emerging markets and some advanced countries, requirements for disclosure of financial assets are not in compliance with the code's good practices.

<sup>&</sup>lt;sup>74</sup> Reporting on debt and assets (including contingencies) is, of course a central feature of the code and the manual that applies to all sectors. The 2001 Government Finance Statistics Manual (GFSM 2001) provides a framework that encourages integrated reporting of transactions, other economic flows, and assets and liabilities.

- 89. Where assets are held in a separate fund, best practice (as in the case of Norway, see section 3) is to set clear published guidelines for asset management and report on assets and asset management performance. Attainment of the basic elements of disclosure along these lines should be the goal of all countries—although the technical standards applied in advanced countries may not be achievable for developing countries in the near term. If assets are held simply as part of overall government assets, as is the case in the U.K., reporting on financial assets becomes part of the government's overall financial reporting to the extent that reporting on financial assets has been established.<sup>75</sup>
- 90. Priority should be given by resource-rich countries to implementing appropriate practices for asset disclosure as soon as practicable. Tracking asset worth is a central element of a savings policy for long-term sustainability of fiscal policy. Some capacity building may be needed in this regard, but the benefits should greatly outweigh the costs.

### **Estimating resource asset worth**

2.1.4/3.1.1

Estimates of resource asset worth based on probable production streams, clearly disclosing assumptions, should be prepared as a basis for fiscal policy.

91. If net worth of public assets is a central fiscal policy concern, an estimate of resource asset worth is a key input. As yet, however, countries do not systematically include clear statements of estimated value of natural resources in their budget or accounting statements, reflecting measurement difficulties, uncertainty over physical volumes and prices, and the lack of current standards even for advanced countries. <sup>76</sup> The practice suggested above, therefore, sets a very high standard, which will be difficult to implement even for industrial countries. This guide therefore recommends a pragmatic approach toward implementing a basic standard for low and middle income countries with significant new resource discoveries—essentially building on effective revenue forecasting methodology (see Box 3) and focusing on the government's share of asset value. An explicit calculation of resource asset worth will be an important step toward transparency, and will provide an important basis for long-term policy. Ideally, such calculations should be published in the budget documents. The high level of uncertainty associated with such estimates, however, suggests caution in publishing quantitative estimates, given possibilities of misinterpretation. Published documents should give

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<sup>&</sup>lt;sup>75</sup> Where accrual accounts are maintained, as in the U.K., these will be reported as part of the government's financial accounts (<a href="http://www.hm-treasury.gov.uk/media/70A0A/DebtManageRpt03to04.pdf#page=15">http://www.hm-treasury.gov.uk/media/70A0A/DebtManageRpt03to04.pdf#page=15</a>). The practice of reporting on financial assets even under cash basis accounting is recommended as a disclosure practice in the fiscal transparency code and by the Cash Basis International Public Sector Accounting Standard (IPSAS) issued by IFAC in January 2003.

<sup>&</sup>lt;sup>76</sup> Few industrial countries prepare estimates of natural asset wealth. The US Government includes some statements in its budget documents (*Analytical Perspectives*) on the value of mineral rights. Stewardship assets are covered in the *Financial Report of the United States Government*, but mineral rights are not yet identified as an asset, in part because of concerns over the parameters for recognition of such assets in accounting statements. This difference in treatment reflects the different perspectives of budget and accounting policy, as discussed further below.

assurance that fiscal policy is based on sound evaluation methodology, and progressively move to more detailed quantification as production becomes established.

### **Box 3. Elements of Asset Worth Estimation for Developing Countries**

Considerable uncertainties underlie medium-to long-term revenue projections of resource revenues, particularly for countries at an early stage of development of oil or mineral resources. Technical advice to countries in these situations has largely emphasized conservative approaches to forecasting prices and revenue, and building a detailed analysis of field-by-field production estimates and the applicable fiscal regime, while also explaining how the baseline price assumption has been determined. Such an approach can be extended over the lifetime of mines or fields and flows discounted to present value to give a working estimate of resource wealth that can be used as a basis for fiscal policy formulation. Fiscal transparency principles would require that these estimates and the underlying model and assumptions should be published in the policy analysis document supporting the budget. Key elements of such an approach would include:

- A clear statement of the principle of "asset recognition" (for instance, a conservative policy could be to include only those projects that have approved development plans and where a lease has been granted. As new developments proceed, these would be added to the economic asset inventory).
- Technical production characteristics separately specified for each field or mine (these would be government estimates that would need to be periodically calibrated against actual company production).
- Specification of the fiscal regime parameters and any exemptions applicable to each field or mine
- A sensitivity analysis to show likely changes in asset worth as a result of changes in key parameters, such as the baseline oil or mineral price.
- 92. In the longer-term, international standards for reserve estimates could establish relevant standards for country estimates of resource asset worth. As described in Box 4, however, development of comprehensive international standards for estimating reserves poses a host of complex technical and collective action problems. Individual country action should not, however, be delayed because of the absence of a fully agreed standard. On the contrary, positive action by individual countries will help provide a basis for standards of wider applicability. Moreover, the basic elements of such practices should be applied irrespective of the level of economic development—a concern with asset worth is at least as important for developing as for advanced countries.
- 93. In developing such standards, there is an important distinction that must be drawn between the use of asset worth statements for accounting or financial reports and that for budget and long-term policy purposes. Most work at the international level to date has been oriented toward the former purpose, possibly being driven primarily by company stock exchange listing requirements. For this purpose, while uncertainty is

acknowledged, accounting reports<sup>77</sup> are obliged to set strict (and generally conservative) criteria for asset recognition. As Box 4 indicates, work is continuing to establish an International Financial Reporting Standard (IFRS).<sup>78</sup>

94. Reserves estimates based on IFRS or another national reporting standard, however, are of limited utility for purposes of setting national budget policy or exploring broader questions such as limits to world nonrenewable energy resources. Rather than determining an agreed point value for resource assets to construct a balance sheet summary, long-term policy-making should be primarily concerned with potential responses to changing economic circumstances. Budget documents and other fiscal policy statements should thus clearly state the assumptions on which projections and estimates are based, and they should show the sensitivity of projections and estimates to changes in key parameters (with the resource price obviously being key, particularly in the case of oil). Similar technical and economic assumptions will underlie projections and estimates included in government or company financial statements and budget statements of reserves. It is essential, however, that the differing uses of these data be clearly recognized in the respective statements. More work seems required in both areas.

<sup>&</sup>lt;sup>77</sup> Statistical reports also generally accept accounting criteria of asset recognition (GFSM 2001).

<sup>&</sup>lt;sup>78</sup> See also the 2003 version of Integrated Environmental and Economic Accounting statistical volume at <a href="http://unstats.un.org/unsd/envAccounting/seea.htm">http://unstats.un.org/unsd/envAccounting/seea.htm</a>

### Box 4. International Resource Reserves Reporting—Emerging Standards

With respect to hydrocarbons, reports on reserves are required for listed companies by the U.S. Securities Exchange Commission and by the relevant stock exchange authority in other countries. While the technical definitions of reserves (promulgated by the Society of Petroleum Engineers, the World Petroleum Congresses, and the American Association of Petroleum Geologists)<sup>79</sup> are generally accepted, financial reporting standards still vary somewhat. The U.S. Financial Accounting Standards Board Statement No. 69,<sup>80</sup> which applies to companies listed on the U.S. stock exchange, is generally seen as requiring some review to take greater account of changing technology (such as allowing estimates based on seismic imaging techniques). In line with standards applied in Australia, Canada, and the UK, the U.S. stock exchange also requires estimates of probable as well as proved reserves. A greater emphasis on third party review of reserves estimates, for example through specialized companies, could also help enhance reliability of reserves reporting.

Very similar concerns of technical and economic uncertainty apply to estimates of mineral resources and reserves. The Australian mining industry Joint Ore Reserves Committee code, developed in 1989 partly in response to the preceding mining booms and busts of the 1960s in that country, has become the foundation for most recent national codes. The Combined Reserves International Reporting Standards Committee (CRIRSCO), initially set up in 1994, has developed a fairly standard set of definitions of resources and reserves.

The United Nations Framework Classification (UNFC)<sup>82</sup> for energy and mineral resources has been developed as a generally applicable system harmonized with the technical standards listed above. It classifies resources in terms of three criteria: economic and commercial viability; field project status and feasibility; and geological knowledge. Reserves can then be classified in each of these dimensions in a three digit code: 1.1.1 would signify a resource that is commercially recoverable, has been justified by a feasibility study, and is based on reasonably assured geology. In principle, the UNFC classification provides a more uniform basis for both accounting and budget statements of reserves. In 2005, the International Accounting Standards Board will be considering development of IFRS applicable to all listed companies taking into account the UNFC criteria.

<sup>&</sup>lt;sup>79</sup> See <a href="http://www.spe.org/spe/jsp/basic/0,2396,1104\_12171\_0,00.html">http://www.spe.org/spe/jsp/basic/0,2396,1104\_12171\_0,00.html</a>. Reserves at a particular date are defined as those quantities of petroleum which are anticipated to be commercially recovered from known accumulations. Proved reserves are limited to those quantities that are commercial under current economic conditions—and there is an expectation that they will be developed and placed on production on a reasonable timeframe. Proved developed reserves are those that can be expected to be recovered through existing wells with existing equipment and operating methods. Probable and possible reserves are subject to a greater degree of technical and economic uncertainty. Proved reserve estimates are referred to as 1P, proved plus probable as 2P, and proved plus probable plus possible as 3P.

<sup>&</sup>lt;sup>80</sup> See http://www.fasb.org/st/summary/stsum69.shtml

<sup>81</sup> See <a href="http://www.jorc.org/pdf/miskellv1.pdf">http://www.jorc.org/pdf/miskellv1.pdf</a>

<sup>82</sup> See <a href="http://www.unece.org/ie/se/reserves.html">http://www.unece.org/ie/se/reserves.html</a>

Government contingent liabilities and the cost of resource company quasi-fiscal activities arising from resource-related contracts are reported in budget accounts or other relevant documents in a form that helps assess fiscal risks and the full extent of fiscal activity.

- 95. Any contingent liabilities arising from resource contracts should be disclosed in budget and accounts documents. A budget annex dealing with fiscal risk (see below) could be an appropriate form of disclosure for these and other forms of contingent liability. Government guarantees should be listed in government reports on debt (but separately identified as contingent debt).
- 96. As described above, energy QFAs can be very large. These QFAs deserve more analytical attention than they have received in the past as their existence, if unreported, masks the true extent of government activity in the resource sector and the economy as a whole. As far as social spending by NRCs or other companies is concerned, governments of low-income countries should have a particular interest in presenting such spending to parliament and the public as they could demonstrate that pro-poor spending is actually greater than what is reported in government budgets and accounts. Companies should also benefit from comprehensive and detailed disclosure of data and information on such spending as evidence for their corporate social responsibility. At any rate, the various mechanisms and types of QFAs outlined in section 1 should be explained and disclosed in government budgets (e.g., as an annex to the budget) and other documents. In countries with very active NRCs and large QFAs it may be useful to consolidate the fiscal reports of the government with that of the NRC and publish a consolidated fiscal report covering the public sector (see also discussion under 3.2.3/3.2.4 below).
- 97. Further assurance of the quality of reporting could be achieved if resource company reports also reported such activities clearly and in detail—particularly if these elements are subject to audit. Governments and energy companies should, as far as possible, analyze, quantitatively estimate, and regularly report the size of such activities. In the first instance, such data is likely to be most readily available through international and national company reports. Companies should be encouraged to disclose this information comprehensively and regularly through their annual reports, and should make the basis of estimation clear and available to the government and the public. Government budget documents should derive information from these sources and regularly and systematically report on all such QFAs. These reports could be supported by analytical comments on the impact of such activities and future policies toward them.

# 3

# Open Budget Preparation, Execution, and Reporting

- 98. Processes for planning, allocating, spending, and reporting of resource revenues should be governed by similar principles of transparency as are recommended for other parts of the government budget. The special features of resource revenue, however, require that guidelines for good practice be specified more precisely in the areas of clarity of policy, explicit treatment of risks to the fiscal position arising from resource revenue, and transparency of accounting and control of receipts and spending.
- 99. The government needs to give assurances to the general public that resource revenues are being used effectively to meet social and economic policy goals. Several policy objectives need to be addressed, particularly smoothing the impact of volatility of revenue flows and long-term fiscal sustainability. A basic good practice requirement, therefore, is that the government make a clear statement of its policies with respect to the rate of exploitation of resources and the use of resource revenues so that spending financed from these revenues can be seen as consistent with overall fiscal policy. Savings or stabilization funds, while sometimes seen as necessary, should be integral part of the overall fiscal policy framework. Their asset holdings should be fully disclosed and asset management policies open. The (primary) non-resource fiscal balance <sup>83</sup> is a key indicator of the fiscal position that can help to ensure a consistent direction for fiscal policy. These and other good practices that will help to ensure a consistent application of fiscal policy in resource-rich countries are discussed below.

### Fiscal policy and resource revenues

3.1.1

The budget framework incorporates a clear policy statement on the rate of exploitation of natural resources and the management of resource revenues, referring to the government's overall fiscal and economic objectives, including long-term fiscal sustainability.

100. Governments benefiting from large flows of revenue from exploitation of natural resources need to address several important issues. First, they need to take measures to stabilize the budgetary and liquidity impact of revenues, which are subject to high and unpredictable price volatility or other fluctuations. Second, since the resources are finite, policy should take account of the intergenerational distribution of income flows, as well as the distribution of spending and the immediate social impact of resource industries. Third, the impact of large inflows of resource revenues on exchange rate developments and the nonresource tradable sector needs to be carefully considered. "Dutch Disease" (characterized by an appreciating real exchange rate and the associated

<sup>&</sup>lt;sup>83</sup> Following Barnett and Ossowski (2003), who were concerned specifically with the oil sector, this general concept is defined to exclude interest payments and all resource revenue and expenditure, with the exception of excises and other taxes on refined products sold domestically.

adverse impact on the nonresource tradable sector of the economy) is an important issue for resource-rich countries. A clear policy framework that recognizes all of these issues is an essential basis for design of an effective and transparent fiscal management system in resource-rich countries.

### Resource funds and fiscal rules

3.1.2

Rules applied to resource-related extrabudgetary funds are clearly stated as part of an overall fiscal policy framework.

- Many countries have established separate funds for resource revenues purportedly to tackle some or all of the above problems. As Davis et al (2003) argue, however, establishment of a resource fund is neither a necessary nor a sufficient condition to address these problems adequately. It is not necessary because, in principle, all of the issues can be tackled as integral elements of government budget and fiscal policy. A number of countries, including Australia and the UK, have demonstrated quite successfully that it is possible to deal with large and volatile resource revenues without any stabilization and savings fund. Such funds by themselves are not sufficient because attaining policy objectives invariably requires additional fiscal policy decisions, especially with regard to controlling spending and borrowing. For instance, a fund that smoothes revenue resources available to the budget will not ensure stable spending patterns unless borrowing is also controlled.
- 102 However, there are also examples of countries that have operated stabilization and savings funds successfully and transparently, especially Botswana for diamonds (Box 5) and Norway for oil (Box 6). 84 The operations of the Norwegian SPF can be considered as best practice as they are part of a coherent fiscal policy strategy which has two central pillars: First, fiscal policy aims at smoothing public spending over time and decoupling it from volatile oil revenue. Second, it seeks to replace oil wealth with financial assets, which are in fact expected to grow in value over time so as to be able to deal with the expected increase in public spending associated with an aging population (Scancke 2003). Importantly, Norway's fiscal policy drives petroleum fund operations rather than vice versa. The SPF accumulates all oil revenue and returns on financial investments, and transfers from the SPF to the budget are only made to the extent necessary to finance the non-oil deficit, with the size of the nonoil deficit determined by annual, medium-term and long-term fiscal policy objectives (see further discussion under 3.2.3 below). Norway's well established institutional framework, its long tradition of transparency for both fiscal policy and central bank operations, and its broad revenue base (with oil revenue accounting for typically less than 15 percent of total fiscal revenues) together are cited as the major factors permitting resource revenue to be managed transparently as part of an integrated fiscal management system.<sup>85</sup>

<sup>84</sup> Alaska in the US and Alberta in Canada are additional examples of successful operations of oil funds. For a discussion of these funds see, for example, Hannesson (2001).

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<sup>&</sup>lt;sup>85</sup> See Davis et al (2003) and Scancke (2003).

- 103. Not all countries have such advantages. Wakeman-Linn et al. (2003) outline the political economy case that appears to have been used in Azerbaijan and Kazakhstan (and likely more generally) for setting up funds that, to a greater or lesser extent, quarantine resource revenues from the rest of the budget. Essentially, the argument is that a separate fund with clearly defined policy objectives can protect some portion of resource revenue more effectively from political pressure and potential waste and corruption than the government budget. Where the budget environment is nontransparent and administration is weak, such an argument has some merit, but whether it is more effective to set up a resource fund rather than improve overall transparency is arguable. Most importantly, if such a fund is set up, it should be transparent in all respects and a clear statement of policy with regard to use of resource revenue should be established. And good practice should aim at integrating their operations as much as possible with the overall fiscal policy framework. Specifically:
- There should be a clear specification of responsibilities over spending and borrowing by resource funds. 87
- The fund revenues, expenses, and balance sheet should be presented to the legislature and the public together with the annual budget (see section 1.2.2), and an analytical table, preferably in consolidated form, should be presented showing the overall balance as well as the non-resource balance (see discussion under 3.2.3 below).
- Fund activities should be regularly reported to parliament and the public and externally audited by an independent auditor, and reports and audit results should be published.
- An independent supervisory board should be appointed to give assurance of good governance. 88

<sup>86</sup> The need to develop a viable nonoil enterprise sector and avoid Dutch disease was also seen as particularly important in these transition economies.

<sup>&</sup>lt;sup>87</sup> See the discussion of legal frameworks and extrabudgetary funds in subsections 1.2.2 and 1.1.3 above. Problems arising from extrabudgetary fund spending in the cases of Nigeria and Venezuela are illustrated in Davis et al (op cit, Box 11.1, p. 293). Clarity is also necessary for provisions that allow extra spending when the oil price exceeds a certain level. Leaving aside that these should ideally be avoided on economic policy grounds because they are pro-cyclical, they are difficult to implement in a transparent manner.

<sup>&</sup>lt;sup>88</sup> Wakeman-Linn et al. (2003) (Box 13.1, pp. 354-5) note that funds in both Azerbaijan and Kazakhstan are subject to independent audits by an international accounting firm and the audit reports, in principle, are published. In Azerbaijan, the supervisory board is appointed with a six-month rotation of the chairmanship; in Kazakhstan, the board is chaired by the country's President.

### Box 5. Botswana's Prudent Management of Mineral Wealth

Diamond mining in Botswana started in the early 1970s, and the country has been a key player on the world diamond market since the 1980s. Diamonds are Botswana's major natural resource, accounting for around a third of GDP, three fourths of exports and over half of government revenue. Diamond mining is carried out by the private sector, but with significant government shareholdings in mining ventures, with foreign investors the other major shareholders. Mining agreements typically last for 25 years, and sales marketing arrangements for 5-year periods, providing a stable and reliable framework for investors and the government. By some estimates, Botswana's government takes about 75 percent of diamond mining profits through taxes, royalties, and dividends. The tax legislation is considered transparent, relatively simple, and characterized by low tax rates (e.g., the corporate tax rate has been reduced to 15 percent).

Botswana has achieved strong real GDP growth over a prolonged period of time (on average, almost 9 percent since the 1970s), reaching a per capita income of \$3,500 in 2000. Inflation has generally been low, and large fiscal and current account surpluses have been recorded in many years. Foreign exchange reserves have been rising to over \$5 billion and despite some decline in recent years still amount to about 2 years of imports, while external debt is below 10 percent of GDP. Botswana has been awarded investment-grade sovereign debt ratings. Political and economic stability has helped greatly to attract substantial foreign direct investment across major economic sectors (Basu and Srinivasan 2002). Prudent policies have also helped in recent years to master external shocks such as a regional drought, a decline in diamond demand, and a significant depreciation of the South African rand, the currency of Botswana's biggest trading partner.

Within a stable political system, Botswana has pursued broadly coherent and prudent economic policies over long periods of time, dealing effectively with large, variable diamond revenues, thereby avoiding the "resource curse" (Acemoglu et al. 2003). Mostly appropriate monetary policies have contained inflation and stabilized the exchange rate, helping avoid real appreciation and a loss in competitiveness ("Dutch Disease"). Fiscal policy has been the main tool for macroeconomic management. Public spending has increased strongly in many years, but these increases have not generally been excessive. Significant shares of diamond revenues have been saved over many years, adding to the country's foreign exchange reserves and effectively sterilizing the liquidity impact of large external diamond revenue inflows. The government's external reserves are managed prudently and transparently by the central bank and invested through the Pula Fund (80 percent) in long-term assets and the Liquidity Fund (20 percent) in the money market and short-term bonds.

Medium-term National Development Plans (NDPs) have been a key fiscal policy instrument for channeling diamond revenues into capital investments. The NDPs have some features of medium-term expenditure frameworks (MTEFs). They have generally been implemented in a disciplined fashion. Through public and private investments the country has significantly expanded its physical infrastructure. (e.g., roads, energy, health facilities, schools), although public investments have not always been good quality. Before the HIV/AIDS pandemic began to spread, remarkable progress in social development had been made. NDPs have generally been formulated with a view to maintaining a sustainable fiscal position, as measured by the "sustainability ratio" (Modise 2000, IMF 2004), defined as the ratio of non-investment current spending (excluding health and education, which are considered as investment in human capital) to non-mineral revenue.

The investment policies for assets accumulated through resource revenue savings are clearly stated including through a statement in the annual budget documents.

- 104. For resource-rich countries that are accumulating financial assets from savings of resource revenue, establishing a sound asset management strategy becomes an important element of fiscal policy. The strategy should reflect the fund's objectives, such as the relative importance of savings and stabilization objectives, and macroeconomic considerations, such as the desire to avoid exchange rate appreciation. It is essential that the separate asset management function be carried out under clear investment guidelines that are available to the public, and that fund managers are accountable for investment performance. The guidelines should provide clear guidance on risks versus returns, types of assets allowed for investment, and geographical and currency composition of assets. Asset management formulation should be in hands of the finance ministry to ensure coordination with overall fiscal policies; and changes to asset management policies should be clearly and publicly stated. The operational management could be delegated to the central bank or tendered to professional investment companies. Norway again provides a best practice example in asset management of an oil fund (Box 6).
- 105. As demonstrated by the Norwegian example, such best practices can be applied in more advanced economies. In some other countries, political economy arguments are being used to limit public access to information on resource-related asset holdings. Such prohibitions are likely to limit transparency and governance, and, where applied, should not preclude giving adequate assurance to the public regarding overall asset performance, including comparisons of actual performance against pre-identified benchmarks.

<sup>89</sup> For example, Davis et al (op cit, p 308) cite the case of Kuwait which prohibits the provision of information to the public on the assets of the Kuwait Reserve Fund for Future Generations, partly with the motivation to insulate the fund from spending pressure.

### Box 6. Norway's Petroleum Fund—Best Practice Asset Management

Norway has a well-formulated and transparent asset management strategy for its State Petroleum Fund (SPF). The Ministry of Finance bears overall responsibility for the SPF's asset management and devising the investment strategy, but has delegated the task of the operational asset management to the central bank (Norges Bank). Norges Bank, in turn, has set up a separate unit for investment management (Norges Bank Investment Management, NBIM) to ensure independence from the central bank's monetary policy.

The NBIM relies on professional investment companies to manage the equity portfolio of the Fund, while the bond portfolio is essentially managed by NBIM itself. Annual and quarterly reports are published in a timely fashion, including on the central bank's website (<a href="http://www.norges-bank.no/english/petroleum\_fund">http://www.norges-bank.no/english/petroleum\_fund</a>). These reports provide detailed information about recent changes in the management of the SPF, transfers from/to the budget, market trends, returns on investments and income, trends regarding risk exposure, and administrative costs. In addition, the central bank regularly issues press releases, summarizing the fund's quarterly financial performance. Its accounts are audited by a state-authorized public accountant.

According to the SPF's investment guidelines, all assets are invested abroad in foreign equities and fixed-income instruments. SPF assets are treated separately from Norway's official foreign exchange reserves. Originally, investments were limited to low-risk interest-bearing financial instruments such as bonds and bills issued by other governments or highly-rated international institutions, with the currency composition of the portfolio defined by Norway's import weights. In recent years, both bond and equity investment portfolios have been diversified, allowing a broader regional distribution (Europe 50 percent, North America 30 percent, and Asia and Oceania 20 percent), with specified allocations for 21 individual countries with well-established financial markets. The investment guidelines have also been revised to reflect environmental considerations.

**Fiscal balance** 3.2.3/3.2.4

The (primary) non-resource fiscal balance is presented in budget documents as an indicator of the macroeconomic impact and sustainability of fiscal policy, in addition to the overall balance and other relevant fiscal indicators.

106. A central issue for resource rich countries is how best to use their natural resource assets over time. Barnett and Ossowski (2003) have developed a framework for formulating fiscal policy in annual, medium, and long term horizons. Two basic propositions underlie their approach: first, in what is becoming the standard treatment, resource riches are treated as wealth rather than income. Second, in line with the permanent income concept, a fundamental objective in each period should be to limit consumption to permanent income expectations. Within this framework, when formulating fiscal policy natural resources such as oil are treated as part of national wealth and the revenue derived from the exploitation of this resource is treated as financing rather than as revenue. As outlined in section 2 above, there are of course huge

difficulties in estimating resource wealth, given the uncertainties prevailing in most extractive industry markets. Such estimates will therefore need to be periodically reappraised to allow policies to be appropriately adjusted over time. While technically difficult, the analytical framework can play an important role in better informing the public and politicians on the police choices that impact on future generations and equity across generations. <sup>90</sup>

107. Within this framework, a separate fiscal policy decision needs to be made about the extent to which oil wealth could be replaced by financial wealth and other assets. For example, governments in resource-rich poor countries may argue that, considering the existence of widespread poverty, low human capital, and inadequate physical infrastructure, there is a case for using revenue from oil or other natural resources for investments in schools, health clinics, and rural access roads. This approach would effectively offset the decline in oil wealth with an increase in human and physical capital. However, the absorptive capacity for such investments may be limited, especially in low-income countries, and it is often difficult to assess the effectiveness of government real asset investment decisions. The accumulation of financial assets for ensuring medium and long term sustainability thus merits explicit consideration as an integral part of fiscal policy for resource-rich countries.

108. Uncertainties notwithstanding, these considerations lead to the conclusion that the non-resource (primary) fiscal balance is an important indicator for measuring the direction and sustainability of fiscal policy in resource-rich countries. <sup>92</sup> A key element of sustainability is that the government will need to accumulate assets to maintain its wealth and to sustain the non-resource fiscal balance when the resource has been depleted. The level of the non-resource deficit should be set at a level which allows maintenance of government wealth over time. It is essential that this balance be estimated and used as a basis for determining fiscal policy. As Barnett and Ossowski (op cit, p 51) point out with respect to oil producing countries, however, few highlight the non-oil balance in their budgets—and it is likely that a similar observation would apply to mineral-rich countries.

<sup>&</sup>lt;sup>90</sup> The principle remains relevant even for those states with massive reserves and where oil revenue constitutes around 90 percent of total revenue. For such countries, however, the formal balance estimation becomes somewhat academic.

<sup>&</sup>lt;sup>91</sup> See Katz et al. (2004) for a more detailed discussion.

<sup>&</sup>lt;sup>92</sup> To avoid misinterpretations due to the effect of oil price and exchange rate changes on overall GDP, it would be useful to consider non-oil fiscal balances relative to non-oil GDP. Also, interest earnings and capital gains on assets originating from resource revenues should be excluded from the calculation of non-resource fiscal balances. However, to gauge the macroeconomic impact of fiscal policies it is also important to consider other indicators, such as the overall government budget balance or, in some cases, the public sector balance. Note that there may also be specific circumstances in which the non-resource balance may not adequately reflect the demand impact of fiscal policy actions. For example, a hike in resource taxes and their full saving is contractionary but would have little impact on the non-resource balance. Similarly, spending of resource revenues that would remove infrastructure bottlenecks or lead to the discovery of new natural resources would cause a deterioration in the non-resource balance while exaggerating its stimulus impact.

With respect to oil-producing countries, the IMF increasingly includes measures of the non-oil (primary) balance in country documents, and advises country authorities to focus on such measures in budget and other fiscal policy documents.

109. Broader concepts of the fiscal balance may also be appropriate in countries where the NRC plays a large fiscal role. To the extent that NRCs have a dominant role in fiscal policy and carry out QFAs, there is a reasonable case to consider their inclusion in a broad public sector balance for purposes of fiscal policy management. The general case for applying such a balance is recommended under 3.2.4 of the code and described in the manual (pp50-52, and Box 18). These considerations are particularly relevant to fiscal management mechanisms in a number of resource-rich countries.

Fiscal risks 3.1.5

Risks associated with resource revenue, particularly price risks and contingent liabilities, should be explicitly considered in annual budget documents and measures taken to address them are explained and their performance monitored.

- 110. Resource-rich countries are prone to large, sudden, and unexpected changes in output prices, especially in the case of oil. Such price changes give rise to potentially large forecasting risks for revenue and other variables, both directly and indirectly. For example, a large change in the oil price would not only affect oil revenue directly, but could also trigger changes in other key variables such as the exchange rate and interest rates, which in turn could affect expenditure and financing projections, both in the short and medium term. Annual budget documents should transparently show the baseline price assumption and how it was determined. Moreover, sensitivity analyses should be carried out to address forecasting risks, especially for the oil price assumption, and their results should be disclosed to the general public and external experts for scrutiny.
- 111. Governments of resource-rich countries need to have clear procedures in place to deal with cases of sudden, large positive or negative shocks to resource revenues. For example, spending financed from oil revenue windfalls should be justified in terms of an adjustment to overall fiscal policy and appropriated either through a supplementary budget or other law—in either case subject to parliamentary scrutiny. Following approval by the legislature, supplementary budgets should be published and spending should be subject to the same monitoring and reporting requirements as outlays appropriated under the annual budget. The procedures and timelines for supplementary budgets or trigger mechanisms to deal with resource revenue windfalls should be clearly described in the budget system law or other relevant legislation. While the manual advises against the practice of multiple supplementary budgets within a budget year since this is testimony of poor budget preparation, especially if this is a chronic feature (paragraph 153), there may be a case for multiple supplementary budgets in resource-rich countries in case of consecutive large shocks.
- 112. The manual advocates publication of a statement as part of the budget (e.g., an annex) that systematically describes risks to the fiscal position associated with the budget estimates of revenue, expenditure, and the deficit (manual paragraph 110 and box 16).

For resource-rich countries, risks that should be addressed in such a statement could include guarantees on loans or commitments for environmental clean up operations, other contingent liabilities, the holding of inventories, unforeseen shocks to costs and output variations (for example in the case of oil mandated through OPEC), unclear expenditure commitments or otherwise imprecisely defined fiscal policies. There may be implicit as well as explicit contingent liabilities. For instance, NRCs or other state-owned enterprises involved in resource exploitation or trading may have incurred liabilities (including labor-related expenditures and contingencies) that ultimately are likely to be served by the government. Risks from unclear expenditure commitments or imprecisely defined fiscal policies could include budgetary contingency clauses that allow higher than budgeted spending if the oil price exceeds a certain trigger level. <sup>93</sup>

- 113. Measures to manage such risks should also be clearly explained. These measures could include provisions in government budgets or financial plans of NRCs. Governments should, at a minimum, appropriate the expected cash costs of payments on called guarantees in the next budget year. If an oil price contingency rule exists, the trigger price should be clearly established ex ante, and procedures should also be established ex ante that set possible limitations of the contingency spending and determine the budget formulation and decision processes to be used prior to authorizing any contingency spending.
- 114. Governments may use market-based hedging strategies to help manage their oil price risk. 94 Such strategies involve locking in the price of future production now or insuring against large price falls, or both. 95 In this way, rather than trying to cope with a volatile and unpredictable revenue stream, the revenue stream itself is made more stable and predictable. Hedging, however, may be constrained by political concerns, lack of implementation capacity and creditworthiness. Full transparency in implementing such strategies also presents difficulties for major exporters because of market sensitivity to such information.
- 115. The development of a hedging strategy and individual hedging decisions should be based on the general principle of conservatism, and a clear set of rules and institutional responsibilities. For example, hedging by NRCs beyond that of short-term

<sup>&</sup>lt;sup>93</sup> Iran introduced such a contingency clause in its 2000/01 budget, allowing higher spending than originally budgeted if the average crude oil price exceeded the assumed average price per barrel.

Mexico is quoted as an example of a country that hedged oil price risk successfully in 1990 and 1991 during the Gulf war to mitigate against the risk of a price drop for its 1991 budget.

<sup>&</sup>lt;sup>95</sup> Governments (or NRCs) can either hedge through established markets (e.g., the New York Mercantile Exchange, NYME) or bilateral, tailor-made arrangements with financial intermediaries that are commonly referred to as over-the-counter (OTM) market instruments. The most liquid part of the forward market is near term (up to 18 months), which should be sufficient to hedge against the oil price risk for one budget year in advance. However, hedging large quantities would appear more difficult for longer periods ahead. See Daniel (2003) for a detailed discussion.

(1-2 months) commercial purposes and hedging of the government should be based on the same rules as far as accountability is concerned. Governments that are using hedging strategies to mitigate against price risk should inform the general public about the advantages (e.g., price and revenue stability, reduced risk of revenue shortfalls) as well as the costs (e.g., premia, margin requirements) and risks (including the risks of doing nothing). An explicit budget provision indicating broad estimates of these costs and benefits—but without revealing market-sensitive information—may be an appropriate method for governments to transparently insure against price risks over the budget year. Governments should also report publicly and regularly ex post about hedging activities of NRCs to the extent these go beyond short-term hedging and are not undertaken for the purpose of hedging the government budget price and revenue risk.

116. Hedging generally involves complex strategies and transactions, requiring a certain level of institutional capacity to ensure adequate management and administration, including recording, reporting, internal control, and evaluation and audit mechanisms to protect against speculative transactions or mistakes. Countries that do not have adequate capacity in these respects should seek support to strengthen the key institutions before engaging in hedging strategies.

### **Accounting for resource revenues**

3.3.1

The government accounting system or special fund arrangements clearly identify all government resource revenue receipts and enable issuance of timely, comprehensive, and regular reports to the public, ideally as part of a comprehensive budget execution report. The reports are based on a clear statement of the accounting basis (cash or accrual) and policies.

- 117. Resource revenues should be accounted for under the same system and rules as other revenue and expenditure, with the accounting system based on a well-established internal control system. Best practice is provided by an accounting system that allows accounting and reporting both on an accrual and cash basis. <sup>97</sup> This requirement is not easy to implement, considering that various types of resource revenues (e.g., signature bonuses, royalties, profit shares, corporate profit tax payments, indirect tax revenue) and recipient institutions (e.g., resource ministry, NRC, tax administration) may be involved. As a result, there may be a need for specific verification and reconciliation mechanisms and institutions.
- 118. In resource sectors such as oil, however, it may not be sufficient to use the existing accounting and internal control framework. It may be necessary to establish

<sup>96</sup> Which was, for example, not the case in the oil sector in Venezuela in the early 1990s, when the government could only undertake hedging operations with parliamentary approval, while the national oil company could hedge without such approval (Claessens and Varangis 1994).

<sup>&</sup>lt;sup>97</sup> Also, accounts should be prepared on a gross basis, i.e., dissecting any netting operations. For further details on accounting see the fiscal transparency manual, paragraphs 128-31.

specific verification and reconciliation mechanisms and institutions to improve transparency in the flows of resource-related revenue. For example, as discussed in Section 2, the EITI encourages governments and companies to use reporting templates that would ensure consistency and transparency in resource revenue flows between companies and host governments

### Internal control and audit of resource revenues

3.3.3

Internal control and audit procedures for handling resource revenue receipts through government accounts or special fund arrangements and any spending of such receipts through special funds are clearly described and disclosed to the public.

119. Internal control and audit of resource revenue flows, and activities financed by such revenues, should be subject to the standard rules and procedures that are in place for the government as a whole. These should apply, for example, to extrabudgetary stabilization and savings funds in the same manner as they apply to ministries and other government bodies.

## Tax administration openness

3.3.4

Tax administration is conducted in a way to ensure that resource companies understand their obligations, entitlements, and rights. The scope for discretionary action by tax officials clearly defined in law and regulations, and the adequacy of sector skills and standard or sector-specific procedures are open to review.

- 120. General transparency considerations suggest the need for a tax administration framework that is clear, understandable, and covering all procedural aspects related to taxpayers' rights and obligations, revenue administration powers, and adequate dispute resolution processes. Within this general framework, tax administration for resource companies are often best centralized in a large taxpayer unit; specialized sectors within such a unit would usually be organized along clear functional lines and with a sector-based audit program emphasizing field audits.
- 121. Staff working in such specialized units should be well qualified to deal with complex sector-specific issues, including for example transfer pricing, and they should work closely with industry representatives to identify and resolve uncertainties in the application of relevant tax laws, which may also involve explaining the administration's views through public rulings or education programs. While some scope for discretionary action by tax administrators is necessary given the complex environment of major resource development, <sup>98</sup> this should be clearly defined in law and regulations to avoid

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<sup>&</sup>lt;sup>98</sup> For example, many tax laws base provisional tax payments on the previous year's assessment. However, this is irrelevant in the start-up phase of a mining or petroleum project. The tax legal framework should include provisions allowing the tax administration to determine when the previous year's assessment should be used and when a forward estimate of income should be used.

corruption initiated by companies on the one hand and unduly aggressive assessments of resource companies by tax officials on the other. Strengthening dispute resolution mechanisms, both at the administrative level and through the courts, is necessary to address the latter problem. Finally, tax administration staff should be able to offer professional service, advice, and assistance to help taxpayers understand their rights, obligations, and entitlements under the tax laws. Service and other standards that taxpayers can expect to be met should be published.

- Tax information systems need to be in place and maintained centrally to allow tax officials and others, for example any reconciliation office or aggregating body (see above), to reconcile tax office data on company resource revenue and costs with data from other sources. Moreover, it is important to ensure a regular flow of relevant data and information on resource revenue from other organizations to the tax office (and vice versa) to keep all relevant government offices promptly and comprehensively informed about recent developments. At the same time, tax administrations should keep information it holds about a taxpayer confidential in accordance with the law, although under certain limited circumstances the law may permit the tax administration to disclose taxpayer information to other government agencies (e.g., for law enforcement or statistical purposes).
- 123. The tax administrations' work plans and performance indicators, including those for the specialized unit dealing with resource revenue companies, should be published ex ante, and ex post annual reports should be provided to the legislature on performance during the year. Both ex ante and ex post reports should be available to the public.

# 4

## **Assurances of Integrity**

124. The standard requirements for assurance of integrity described in the manual apply to resource-related transactions: that data should meet accepted criteria of quality and there should be adequate oversight mechanisms in place. The need to have adequate oversight of accounts of NRCs and other relevant companies, as well as government accounts, is of specific importance to resource-related transactions. Oversight of these transactions is particularly emphasized under the EITI.

Company oversight 1.1.4/1.1.5

International and national resource companies comply fully with internationally accepted standards for accounting, auditing, and publication of accounts.

- 125. International companies can be expected to observe the audit-related transparency and disclosure requirements under the OECD's Principles of Corporate Governance. These suggest that annual audits should be conducted by an independent, competent and qualified auditor to provide an external and objective assurance to the board and shareholders that the financial statements fairly represent the financial position and performance of the company in all material respects. Phase, these companies will be obliged to comply with internationally accepted accounting and audit standards, including, for example, the recommendations of the Statement of Recommended Practice of the Oil Industry Accounting Committee (2001). These company accounting and audit requirements go beyond the fiscal transparency code, but can be considered best practice and are hence referred to in this guide. While international resource companies generally do comply with International Accounting Standards (IAS), this is often not the case for NRCs in low and middle income countries. Therefore, one of the first requirements for national NRCs is that they need to apply IAS, including to the consolidated accounts that cover all of their subsidiaries.
- 126. The international dimension of company operations, however, requires coordinated action to ensure that internal and national oversight mechanisms are effective. Increasing concern with corruption in international business dealings has led to the development of

<sup>99</sup> See OECD (2004), page 22. See also the OECD Guidelines for Multinational Enterprises (OECD2000).

<sup>&</sup>lt;sup>100</sup> Note also that IAS do not require reporting of country-specific data. Improvement in this respect will be an important element of EITI implementation. Where NRCs have international operations, similar considerations may be relevant.

<sup>&</sup>lt;sup>101</sup> For general fiscal transparency issues related to national accounting policies in the government sector see the manual, paragraph 154.

national laws and international agreements to help oversee and control such practices. The U.S. Foreign Corrupt Practices Act (US Code 15, 78 dd et seq.) passed by the U.S. Congress in 1977 was the first major piece of legislation of this kind. The 1997 OECD Convention on Combating Bribery of Foreign Public Officials in International Business Transactions, represents a widely supported effort (with 35 signatories) to establish similar legislation as a standard feature for developed countries. The 2004 Transparency International global corruption report, however, notes that while all of the signatories have passed laws making foreign bribery a crime, few national governments have enforced the new laws, with the U.S. being a notable exception. In Implementation of the convention is being monitored by the OECD Working Group on Bribery and, from 2001, phase II monitoring has been concerned with effectiveness of national enforcement.

127. NRCs should be made subject to standard company audit requirements, and there may also be a case for oversight by the national audit office (the government external auditor), particularly where the national audit office has a mandate and capacity to audit state-owned enterprises. And there may be cases that require special audits of NRCs. Auditing of NRCs, however, is often a critical weakness, which has in a number of countries led to requirements under IMF-supported programs to undertake such audits. <sup>103</sup> In this context, the selection of independent auditing companies should be based on a transparent tendering and selection process. Tax administrations and other agencies receiving resource revenue payments need to be made subject to the standard external auditing requirements prescribed. External audit of government agencies and state-owned enterprises is often found to be a particularly weak area of fiscal transparency in developing countries, special efforts to improve resource revenue transparency could usefully be combined with training and technical assistance.

### Oversight of company/government revenue flows

4.2.1

A national audit office or other independent organization reports regularly on the revenue flows between international and national companies and the government and on any discrepancies between different sets of data on these flows.

128. It normally falls within the mandate of the national audit office to provide assurance of the integrity of government revenue flows. The general provisions of the fiscal transparency code should apply equally to resource revenues. However, in many cases, the national audit office lacks the mandate or expertise to audit such revenues, particularly where a significant portion of revenues flow through NRCs/NOCs. The task of auditing by a national audit agency will be facilitated the more that practices outlined elsewhere in this

<sup>&</sup>lt;sup>102</sup> See <a href="http://www.globalcorruptionreport.org/">http://www.globalcorruptionreport.org/</a>

<sup>&</sup>lt;sup>103</sup> The Republic of Congo (Brazzaville) is a case in point. In Azerbaijan, the NRC SOCAR is required to prepare, as part of a wider financial restructuring plan, annual consolidated financial statements in accordance with IAS. These accounts are to be made subject to audits by international reputable auditing firms.

guide are followed. In particular, reporting systems should be established to disclose the flow of funds from resource activities from the point of taxation or production sharing to the point of expenditure through the budget or deposit in an extrabudgetary fund (see paragraphs 74-78 above). <sup>104</sup>

129. The EITI has recommended that participating countries should establish an "aggregating body" that would be responsible for compiling and reconciling resource revenue flows between companies and the government. The EITI guidelines set out a number of procedures whereby reconciliation of different data sets can take place. For example, the EITI requests governments and companies to report on a cash basis for this purpose (since most governments use cash basis accounting), to report all payments and receipts in the local language of the country, and to include in-kind payments in the reporting. The "aggregator" approach appears to be one useful option for countries in which national institutional capacity is limited and some outside help through technical assistance would be required. However, some further work seems required to define the precise role of such a body and how the approach could be implemented. Augmenting the capacity of national audit bodies seems an equally valid approach, in line with sovereign responsibilities

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 $<sup>^{104}</sup>$  See also Daniel (2002b), who emphasizes the importance of flow of funds analysis as a check that the "fiscal system delivers what it should."

<sup>&</sup>lt;sup>105</sup> See EITI (2003).

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Table 1. Hydrocarbon-Rich Countries, 2000-2003 1/2/

	_	Average Annual Hydrocarbon Revenues 2000-2003		Average Annual Hydrocarbon Exports 2000-2003	
Country	In percent of total fiscal Revenue 3/	In percent of GDP	In percent of total exports	In percent of GDP	In % of GNI
Algeria *	69.9	25.8	97.1	35.5	33.4
Angola	80.9	33.9	90.3	67.9	36.3
Azerbaijan *	47.0	11.9	88.3	32.0	38.7
Bahrain	71.2	23.5	72.1	49.3	
Brunei Darussalam	85.8	52.7	88.2	80.0	
Cameroon *	26.6	5.3	44.9	9.7	6.2
Colombia *	9.0	2.7	27.8	44.6	6.5
Congo, Republic of	70.6	20.2	89.5	67.1	47.4
Ecuador	26.4	6.9	43.5	10.6	13.8
Equatorial Guinea	84.0	21.6	93.4	89.0	
Gabon	60.5	19.6	79.9	45.3	27.8
Indonesia	31.3	6.1	22.6	8.1	8.6
Iran *	59.3	16.8	82.0	19.9	29.7
Iraq 5/	58.4	93.1			
•					
Kazakhstan *	21.0	5.1	49.7	22.3	33.4
Kuwait	68.4	47.6	91.9	45.9	42.2
Libya	72.5	36.1	97.0	36.6	
Mexico *	32.2	7.0	14.9	2.5	4.9
Nigeria	77.2	32.6	95.8	43.8	38.7
Norway	24.4	13.3	43.2	18.8	•••
Oman	78.3	32.4	80.1	43.9	40.3
Qatar	71.3	25.3	83.0	54.8	
Russia *	39.7	6.8	52.8	17.5	25.5
Saudi Arabia	81.6	27.4	89.2	35.2	42.2
Sudan	43.0	4.6	73.3	10.6	
Syria	45.7	13.4	69.5	18.9	27.5
Trinidad and Tobago	27.4	6.6	60.6	29.3	21.9
Turkmenistan	42.8	8.7	83.6	35.0	53.6
United Arab Emirates	76.1	32.4	49.1	35.1	
Uzbekistan					51.7
Venezuela	52.7	14.3	79.9	21.3	27.0
Vietnam	31.8	7.1	21.4	10.4	6.7
Yemen	68.6	25.0	91.5	34.0	36.0
Average	52.7	20.8	67.2	33.7	28.4
Memorandum item:					
Countries with potentially large me	dium- and long-term hydroc	arbon revenue			
Bolivia					5.9
Chad					
Mauritania *					
Sao Tome and Principe					
Timor-Leste					

Sources: Executive Board documents, WEO database, and IMF staff estimates; World Bank Development Indicators.

<sup>1/</sup> For countries with an asterisk (\*), a fiscal Report on the Observance of Standards and Codes (ROSC) has been prepared and published by the IMF.

<sup>2/</sup> Tables 1 and 2 include all countries that are considered rich in hydrocarbons and/or mineral resources on the basis of the following criteria: (i) an average share of hydrocarbon and/or mineral fiscal revenues in total fiscal revenue of at least 25 percent during the period 2000-2003 or (ii) an average share of hydrocarbon and/or mineral export proceeds in total export proceeds of at least 25 percent during the period 2000-2003.

 $<sup>3/\</sup> Revenues$  including grants.

<sup>4/</sup> World Bank Development Indicators definition. Energy depletion is equal to the product of unit resource rents and the physical quantities of energy extracted. It covers coal, crude oil, and natural gas.

<sup>5/</sup> IMF Staff projection for 2004.

Table 2. Mineral-Rich Countries, 2000-2003 1/2/

		Average Annual Mineral Revenues 2000-2003		Average Annual Mineral Exports 2000-2003		Mineral Depletion 2002 4/
Country	Major mineral resource	In percent of total fiscal revenue 3/	In percent of GDP	In percent of total exports	In percent of GDP	In % of GNI
Botswana 5/	Diamonds	56.2	24.8	75.5	38.8	0.2
Chile *	Copper	3.9	0.8	36.0	9.8	4.7
Dem. Republic of Congo	Diamonds			50.3	10.6	
Ghana *	Gold			34.3	12.2	1.2
Guinea	Bauxite/alumina	18.3	2.6	94.4	19.6	1.7
Indonesia	Tin, copper, gold, silver			7.1	0.9	1.2
Jordan	Phosphates, potash	1.6	0.5	13.1	3.6	1.1
Kyrgyz Republic *	Gold	4.1	0.9	40.5	13.2	0.0
Liberia	Diamonds					0.2
Mauritania	Iron ore	10.6	1.5	55.6	18.1	20.5
Mongolia *	Copper, gold	6.1	2.3	46.4	24.2	2.3
Namibia 6/	Diamonds	10.0	3.2	61.9	23.2	0.4
Peru *	Gold, copper, silver			48.6	8.4	1.4
Papua New Guinea 7/*	Gold	16.1	5.2	79.8	52.5	4.2
Sierra Leone 8/	Diamonds, bauxite, rutile	0.5	0.1	94.2	3.2	
South Africa 9/*	Gold, platinum, coal			23.5	7.1	1.2
Uzbekistan	Gold			30.4	13.7	
Zambia	Copper			64.3	15.8	1.1
Average		12.7	4.2	50.4	16.2	2.7

Sources: Executive Board documents, WEO database, and IMF staff estimates; World Bank Development Indicators.

<sup>1/</sup> For countries with an asterisk (\*), a fiscal Report on the Observance of Standards and Codes (ROSC) has been prepared and published by the IMF.

<sup>2/</sup> Tables 1 and 2 include all countries that are considered rich in hydrocarbons and/or mineral resources on the basis of the following criteria: (i) an average share of hydrocarbon and/or mineral fiscal revenues in total fiscal revenue of at least 25 percent during the period 2000-2003 or (ii) an average share of hydrocarbon and/or mineral export proceeds in total export proceeds of at least 25 percent during the period 2000-2003.

<sup>3/</sup> Revenues including grants.

<sup>4/</sup> World Bank Development Indicators definition. Mineral depletion is equal to the product of unit resource rents and the physical quantities of minerals extracted. It refers to tin, gold, lead, zinc, iron, copper, nickel, silver, bauxite, and phosphate.

<sup>5/</sup> Data only available for 2000-2002.

 $<sup>6/\</sup> Data$  only available for 2000 and 2001.

<sup>7/</sup> Figures include the petroleum sector.

<sup>8/</sup> Data only available for 2000-2002.

<sup>9/</sup> Data only available for 2000-2002.

# Code of Good Practices on Fiscal Transparency<sup>106</sup>

(Updated on February 28, 2001)

### I. CLARITY OF ROLES AND RESPONSIBILITIES

- The government sector should be distinguished from the rest of the public sector and from the rest of the economy, and policy and management roles within the public sector should be clear and publicly disclosed.
- 1.1.1 The structure and functions of government should be clearly specified.
- 1.1.2 The responsibilities of different levels of government, and of the executive branch, the legislative branch, and the judiciary, should be well defined.
- Clear mechanisms for the coordination and management of budgetary and extrabudgetary activities should be established.
- 1.1.4 Relations between the government and nongovernment public sector agencies (i.e., the central bank, public financial institutions, and nonfinancial public enterprises) should be based on clear arrangements.
- 1.1.5 Government involvement in the private sector (e.g., through regulation and equity ownership) should be conducted in an open and public manner, and on the basis of clear rules and procedures that are applied in a nondiscriminatory way.
- 1 2 There should be a clear legal and administrative framework for fiscal management.
- Any commitment or expenditure of public funds should be governed by comprehensive budget laws and openly available administrative rules.
- Taxes, duties, fees, and charges should have an explicit legal basis. Tax laws and regulations should be easily accessible and understandable, and clear criteria should guide any administrative discretion in their application.
- Ethical standards of behavior for public servants should be clear and well publicized.

 $<sup>^{106}</sup>$  The code provides the basis for assessing and improving fiscal transparency relative to international good practice and for participating in fiscal transparency ROSCs. Code elements of particular relevance to resource revenue management are highlighted, but ROSCs for such countries should apply all code elements.

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### II. PUBLIC AVAILABILITY OF INFORMATION

- 2.1 The public should be provided with full information on the past, current, and projected fiscal activity of government.
- 2.1.1 The budget documentation, final accounts, and other fiscal reports for the public should cover all budgetary and extrabudgetary activities of the central government, and the consolidated fiscal position of the central government should be published.
- 2.1.2 Information comparable to -that in the annual budget should be provided for the outturns of the two preceding fiscal years, together with forecasts of the main budget aggregates for two years following the budget.
- 2.1.3 Statements describing the nature and fiscal significance of central government contingent liabilities and tax expenditures, and of quasi-fiscal activities, should be part of the budget documentation.
- 2.1.4 The central government should publish full information on the level and composition of its debt and financial assets.
- 2.1.5 Where subnational levels of government are significant, their combined fiscal position and the consolidated fiscal position of the general government should be published.
- 2.2 A commitment should be made to the timely publication of fiscal information.
- 2.2.1 The publication of fiscal information should be a legal obligation of government.
- 2.2.2 Advance release date calendars for fiscal information should be announced.

### III. OPEN BUDGET PREPARATION, EXECUTION, AND REPORTING

- 3.1 The budget documentation should specify fiscal policy objectives, the macroeconomic framework, the policy basis for the budget, and identifiable major fiscal risks.
- 3.1.1 A statement of fiscal policy objectives and an assessment of fiscal sustainability should provide the framework for the annual budget.
- 3.1.2 Any fiscal rules that have been adopted (e.g., a balanced budget requirement or borrowing limits for subnational levels of government) should be clearly specified.
- 3.1.3 The annual budget should be prepared and presented within a comprehensive and consistent quantitative macroeconomic framework, and the main assumptions underlying the budget should be provided.
- 3.1.4 New policies being introduced in the annual budget should be clearly described.

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- 3.1.5 Major fiscal risks should be identified and quantified where possible, including variations in economic assumptions and the uncertain costs of specific expenditure commitments (e.g., financial restructuring).
- 3.2 Budget information should be presented in a way that facilitates policy analysis and promotes accountability.
- 3.2.1 Budget data should be reported on a gross basis, distinguishing revenue, expenditure, and financing, with expenditure classified by economic, functional, and administrative category. Data on extrabudgetary activities should be reported on the same basis.
- 3.2.2 A statement of objectives to be achieved by major budget programs (e.g., improvement in relevant social indicators) should be provided.
- 3.2.3 The overall balance of the general government should be a standard summary indicator of the government's fiscal position. It should be supplemented where appropriate by other fiscal indicators for the general government (e.g., the operational balance, the structural balance, or the primary balance).
- 3.2.4 The public sector balance should be reported when nongovernment public sector agencies undertake significant quasi-fiscal activities.
- 3.3 Procedures for the execution and monitoring of approved expenditure and for collecting revenue should be clearly specified.
- 3.3.1 There should be a comprehensive, integrated accounting system which provides a reliable basis for assessing payment arrears.
- 3.3.2 Procurement and employment regulations should be standardized and accessible to all interested parties.
- 3.3.3 Budget execution should be internally audited, and audit procedures should be open to review.
- 3.3.4 The national tax administration should be legally protected from political direction and should report regularly to the public on its activities.
- 3.4 There should be regular fiscal reporting to the legislature and the public.
- 3.4.1 A mid-year report on budget developments should be presented to the legislature. More frequent (at least quarterly) reports should also be published.
- 3.4.2 Final accounts should be presented to the legislature within a year of the end of the

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fiscal year.

3.4.3 Results achieved relative to the objectives of major budget programs should be presented to the legislature annually.

### IV. ASSURANCES OF INTEGRITY

- 4.1 Fiscal data should meet accepted data quality standards.
- 4.1.1 Budget data should reflect recent revenue and expenditure trends, underlying macroeconomic developments, and well-defined policy commitments.
- 4.1.2 The annual budget and final accounts should indicate the accounting basis (e.g., cash or accrual) and standards used in the compilation and presentation of budget data.
- 4.1.3 Specific assurances should be provided as to the quality of fiscal data. In particular, it should be indicated whether data in fiscal reports are internally consistent and have been reconciled with relevant data from other sources.
- 4.2 Fiscal information should be subjected to independent scrutiny.
- 4.2.1 A national audit body or equivalent organization, which is independent of the executive, should provide timely reports for the legislature and public on the financial integrity of government accounts.
- 4.2.2 Independent experts should be invited to assess fiscal forecasts, the macroeconomic forecasts on which they are based, and all underlying assumptions.
- 4.2.3 A national statistics agency should be provided with the institutional independence to verify the quality of fiscal data.

### References

Acemoglu, Daron et al., 2003, "An African Success Story: Botswana," in: In Search of Prosperity. Analytical Narratives on Economic Growth, ed. By Dani Rodrik, Princeton University Press.

Ahmad, Ehtisham and Ali Mansoor, 2002, "Indonesia: Managing Decentralization," in Fiscal Decentralization, ed. by Ehtisham Ahmad and Vito Tanzi (New York: Routledge).

Ahmad, Ehtisham and Eric Mottu, 2003, "Oil Revenue Assignments: Country Experiences and Issues," in Fiscal Policy Formation and Implementation in Oil-Producing Countries, ed. by J.M. Davis, R. Ossowski and A. Fedelino (Washington: International Monetary Fund).

Auty, Richard M., 1997, "Natural Resource Endowment, The State and Development Strategy," in The Journal of International Development, Vol. 9, No. 4, 651-663.

Barnett, Steven and Rolando Ossowski, "Operational Aspects of Fiscal Policy in Oil-Producing Countries," in Davis et al. 2003.

Basu, Anupam and Krsishna Srinivasan, "Foreign Direct Investment in Africa—Some Case Studies," IMF Working Paper 02/61, Washington, D.C.

Birdsall, Nancy and Arvind Subramanium, "Saving Iraq From Its Oil," in: Foreign Affairs, Volume 83, No. 4, July/August 2004

Brosio, Giorgio, 2003, "Oil Revenue and Fiscal Federalism," in Davis et al. 2003.

Claessens, Stijn and Panos Varangis, 1994, "Oil Price Instability, Hedging, and an Oil Stabilization Fund. The Case of Venezuela," World Bank Policy Research Working Paper 1290 (Washington: World Bank).

Collier, Paul, 1999, "On the Economic Consequences of Civil War," Oxford University Papers 51 (Oxford: Oxford University Press).

Collier, Paul and Anke Hoeffler, 2004, "The Challenge of Reducing the Global Incidence of Civil War," Centre for the Study of African Economies, Department of Economics, Oxford University, presented at Copenhagen Consensus 2004.

Cordes, John A., 1995, "An Introduction to the Taxation of Mineral Rents," in *The Taxation of Mineral Enterprises*, ed. by James Otto (London: Graham & Trotman/Martinus Nijhoff), 1995.

Daniel, James A., 2003, "Hedging Government Oil Price Risk," in Davis et al. 2003.

Daniel, Philip, 2002a, "Discussion Paper," presented at the Conference on Fiscal Policy and Implementation in Oil-Producing Countries at the International Monetary Fund, Washington DC, June 2002

Daniel, Philip, 2002b, "Petroleum Revenue Management. An Overview," Paper prepared for the World Bank, Washington DC, June 2002.

Daniel, Philip, 1995, "Evaluating State Participation in Mineral Projects: Equity, Infrastructure and Taxation," in Otto, 1995.

Davis, Jeffrey, Rolando Ossowski, James A. Daniel, and Steven Barnett, 2003, "Stabilization and Savings Funds for Nonrenewable Resources: Experience and Fiscal Policy Implications," in: Davis et al. 2003.

Davis, Jeffrey, Rolando Ossowski, Annalisa Fedelino (eds.), 2003, "Fiscal Policy Formulation and Implementation in Oil-Producing Countries," (Washington, D.C. IMF)

EITI, 2003, Revised Reporting Guidelines, May 2003, draft, unpublished.

Global Witness, 2004, Time for Transparency: Coming Clean on Oil, Mining and Gas Revenues (Washington: Global Witness Publishing Inc.).

Gupta, Sanjeev, Ben Clements, Kevin Fletcher, and Gabriela Inchauste, 2003, "Issues in Domestic Petroleum Pricing in Oil-Producing Countries," in Davis et al. 2003.

Hannesson, Rögnvaldur, 2001, Investing for Sustainability. The Management of Mineral Wealth (Boston: Kluiwer).

International Monetary Fund, 2001, Manual on Fiscal Transparency (Washington, D.C.).

International Monetary Fund, 2004, *Botswana. Selected Issues*, IMF Country Report 04/212, July (Washington, D.C.)

Johnston, Daniel, 2004, "Petroleum Contract Analysis and Design State-of-the Art—State-of-the-Art Industry," in Petroleum Revenue Management Workshop, Joint UNDP/World Bank Energy Sector Management Assistance Program (Washington: The World Bank).

Katz, Menachem, Ulrich Bartsch, Harinder Malothra, Milan Cuc, eds., 2004, Lifting the Oil Curse: Improving Petroleum Revenue Management in Sub-Saharan Africa (Washington: International Monetary Fund).

Kumar, Raj, 1995, "Mine Taxation: The Evolution of Fiscal Regimes," in Otto, 1995.

Lederman, Daniel and William F. Maloney, 2003, "Trade Structure and Growth," World Bank Policy Research Working Paper 3025, April (Washington, D.C.: World Bank)

Martinez-Vazquez, Jorge and Jameson Boex, 2000, Russia's Transition to a New Federalism (Washington, D.C.: World Bank).

McLure, Charles E. Jr., 2003, "The Assignment of Oil Tax Revenue," in Davis et al. 2003.

McPherson, Charles, 2003, "National Oil Companies: Evolution, Issues, Outlook," in Davis et al. 2003.

Modise, Modise D., 2000, "Management of Mineral Revenues: The Botswana Experience," Paper presented at the Workshop on Growth and Diversification in Mineral Economies (organized by UNCTAD), Cape Town, South Africa, November 2000.

Oil Industry Accounting Committee, 2001, "Statement of Recommended Practice. Accounting for Oil and Gas Exploration, Development, Production and Decommissioning Activities," June 2001.

Okogu, Bright, E., 2002, "Issues in Global Natural Gas: A Primer and Analysis", International Monetary Fund Working Paper (WP/02/40), Washington DC.

OECD, 2000, The OECD Guidelines for Multinational Enterprises (Paris)

OECD, 2004, OECD Principles of Corporate Governance (Paris)

Petri, Martin, Günther Taube and Aleh Tysvinski, 2003, "Energy Sector Quasi-Fiscal Activities in the Countries of the Former Soviet Union," in: Davis et al. 2003.

Sachs, Jeffrey D. and Andrew M. Warner, 2000 "Natural Resource Abundance and Economic Growth," in Leading Issues in Economic Development (Seventh Edition), ed. by Gerald M. Meier and James E. Rauch (New York: Oxford University Press).

Sala-i-Martin, Xavier and Arvind Subramanian, 2003, "Addressing the Natural Resource Curse: an Illustration from Nigeria," NBER Working Paper 9804, Cambridge, MA,.

Scancke, Martin, 2003, "Fiscal Policy and Petroleum Fund Management in Norway," in: Davis et al. 2003.

Sunley, Emil, Thomas Baunsgaard, and Dominique Simard, 2003, "Revenue from the Oil and Gas Sector: Issues and Country Experience," in: Davis et al. 2003.

Tanzi, Vito, 2002, "Pitfalls on the road to fiscal decentralization," in: Managing Fiscal Decentralization, ed. by Ehtisham Ahmad and Vito Tanzi (London: Routledge).

Taube, Günther, 2001, "Fiscal Policy and Quasi-Fiscal Activities in the Islamic Republic of Iran," Paper Presented at a Conference at the Central Bank of Iran, Tehran, May 2001

Wakemann-Linn, John, Paul Mathieu, and Bert van Selm, 2003, "Oil Funds in Transition Economies: Azerbaijan and Kazakhstan," in: Davis et al. 2003.

### Website References

#### Australia

Australasian Joint Ore Reserves Committee (JORC): <a href="http://www.jorc.org/main.php">http://www.jorc.org/main.php</a>

### Nigeria

Government of Nigeria: <a href="http://www.nigeria.gov.ng/">http://www.nigeria.gov.ng/</a>

### Norway

Ministry of Finance (Budget): <a href="http://www.statsbudsjett.no/2004/english.asp">http://www.statsbudsjett.no/2004/english.asp</a> Ministry of Petroleum: <a href="http://odin.dep.no/oed/engelsk/index-b-n-a.html">http://odin.dep.no/oed/engelsk/index-b-n-a.html</a>

### Republic of Congo

Government: www.congo-site.com

Ministry of Finance: www.mefb-cg.org

## **United Kingdom**

Department for International Development (DFID): http://www.dfid.gov.uk/

HM Treasury: http://www.hm-treasury.gov.uk

Inland Revenue: <a href="http://www.inlandrevenue.gov.uk/home.htm">http://www.inlandrevenue.gov.uk/home.htm</a>

### **United States**

Financial Accounting Standards Board: http://www.fasb.org

### Various

Extractive Industries Transparency Initiative: <a href="http://www.eitransparency.org/about.htm">http://www.eitransparency.org/about.htm</a> and <a href="http://www.DFID.gov.uk">http://www.DFID.gov.uk</a>

Global Corruption Report: http://www.globalcorruptionreport.org/

IMF Standards and Codes, including Fiscal Transparency Code: http://www.imf.org/external/np/fad/trans/index.htm

Joint Oil Data Initiative (JODI):

http://www.oil-data-transparency.org/FileZ/ODTmain.htm.

Publish What You Pay: <a href="http://www.publishwhatyoupay.org/">http://www.publishwhatyoupay.org/</a>

Society of Petroleum Engineers (SPE):

http://www.spe.org/spe/jsp/basic/0,2396,1104\_12171\_0,00.html

Transparency International's 2004 Corruption Perception Index: <a href="http://www.transparency.org/cpi/2004/cpi2004.en.html">http://www.transparency.org/cpi/2004/cpi2004.en.html</a>

World Bank: Extractive Industries Review: <a href="http://www.eireview.org/">http://www.eireview.org/</a>

2003 Evian G8 Declaration: Fighting Corruption and Improving Transparency:

<a href="http://www.g8.fr/evian/english/navigation/2003\_g8\_summit/summit\_documents/fighting\_corruption\_and\_improving\_transparency - a\_g8\_declaration.html">a\_g8\_declaration.html</a>