

## Fiscal Regime Design

### What Revenues the Government Will be Entitled to Collect

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#### KEY MESSAGES:

- The fiscal regime is the set of tools that determine how the revenues from oil and mining projects are shared between the government and companies.
- There are a variety of fiscal tools that can be used to create a fiscal regime to govern oil and mining projects, including royalties, taxes, production sharing, and bonuses.
- Which fiscal tools a government chooses to employ for its oil or mining sectors depends on balancing a number of factors, including when the state hopes to receive the revenues, how to share the investment risk, how to respond to changes in profitability, and how strongly to promote new investments.
- Some companies, like many taxpayers, use loopholes to try to lessen the amount they are required to pay to the government. A strong fiscal regime can be designed to avoid some of these loopholes.

*“Natural resource development may provide employment and other returns, but its principal benefit is the generation of government revenues to support development and the well-being of citizens. Realizing these revenues requires a well-designed fiscal system that takes into account the nature of extractive resources, the considerable uncertainties inherent in their exploration, and the capacities of the government.”*

– Natural Resource Charter, Precept 4

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#### FISCAL REGIMES FOR OIL AND MINERALS

A *fiscal regime* is the set of instruments or tools (taxes, royalties, dividends, etc.) that determine how the revenues from oil and mining projects are shared between the state and companies. This reader discusses the factors governments consider when selecting fiscal tools, what types of fiscal tools governments often use, and the common loopholes or pitfalls with different fiscal tools.

The details of what fiscal tools are used and how they are applied to a particular mining or oil project are part of a country’s *legal framework*, which includes the laws, regulations and contracts. There are many considerations a country makes in determining which fiscal tools to use and how to use them. While the government may have preferences, it must also respond to the needs of the companies if the state wants to attract investment. Some of the broad considerations include:

- **What is the timing of the revenues?** Some fiscal tools provide governments with more money early in the life cycle of an extractive project, while others do not deliver significant revenues until the project has already turned a profit, which can take years. For example, signature bonuses represent revenues early in the extraction project, called *front-end loaded*, while profit-based taxes tend to be *back-loaded*.

This reader is intended for use in conjunction with Precept 4 of the Natural Resource Charter.

- **How does the government revenue change when profitability changes?**

As commodity prices, production techniques and production rates change over time, so does the profit margin for the project. The impact that a fiscal tool has on government share of the profits when the project's profit margin increases can be placed into one of three categories. *Neutral* fiscal tools give the state the same share of revenue whether profitability increases or decreases. *Progressive* fiscal tools give the government a larger share of the profit when profits increase. *Regressive* fiscal tools give the government a lesser share as profits increase.

Each option can be beneficial depending on the desired outcome. The steady flows of revenues that come from neutral or regressive fiscal tools can help governments with weak auditing capacity increase collection and ensure that they receive revenues earlier in the project life cycle. However, regressive or neutral tools can discourage investment, particularly for projects with small profit margins, because they require companies to pay the state even when the costs of extraction are greater than revenues. Progressive fiscal tools, by contrast, are seen to protect the interests of companies during periods of low profitability while giving the government an ability to capture a significant share of windfalls when profits are high. These progressive tools, however, are frequently more difficult to enforce effectively, because they require an ability to audit costs and calculate profits.

- **Who carries the risk?** Not all extraction projects are successful. Fiscal terms are usually agreed to very early in the project, before extraction is underway. A company's investment in the expensive infrastructure and supplies necessary to extract natural resources represents a risk, as the investment may not equal future profits. With some fiscal packages, a government shares more of the risk with the company than others and is subject to losses when a project is not profitable.

Governments can consider these broad issues and then choose a combination of fiscal tools that meet their objectives. The industry often uses a shorthand by referring to the *government take* and the *company take*. Though it is tempting to simply compare different countries' government take, it is very complicated to determine whether a government take is fair or good for a particular contract. The type of mineral being extracted, the quality of the crude or ore, and the costs of developing a project vary greatly and have a large influence on government take. Establishing a transparent fiscal system enables better oversight by government agencies, civil society organizations and parliament.

*“Progressive fiscal tools protect the interests of companies during periods of low profitability while giving the government an ability to capture a significant share of windfalls when profits are high.”*

## FISCAL TOOLS

As stated above, not all fiscal tools are equal. A 5 percent royalty is not equal in revenues or timing to a 5 percent corporate tax. The chart below explains some of the most common fiscal tools.

Fiscal tool	Explanation	Example
<p><b>Royalties</b></p>	<p>A payment made in reference to the amount and value of the mineral produced. The most common form of royalties, called <i>ad valorem</i>, collect revenues based on percentage of the value of the resource extracted. This percentage is usually applied to the gross value of production, without accounting for production costs. Most royalties are regressive, because they result in a greater burden for companies in a lower-profit context. Some countries use progressive <i>sliding scale royalties</i>, which adjust the percentage of government take based on measures of the profitability of the project.</p>	<p>“The Investor shall pay a royalty under Article 47.3.2 of the Minerals Law at the date of this Agreement equal to 5% of the sales value of all Products mined from the Contract Area that are sold, shipped for sale, or used by the Investor....”                      –Mongolia Oyu Tolgoi contract (2009), art. 3.13</p> <p><i>Royalty = (Percent) x (Assessed Sales)</i></p>
<p><b>Corporate income taxes</b></p>	<p>Taxes are assessed as a percentage of the net profits of a project after deducting allowable expenses. These vary most often based on what deductions are allowed and how they are calculated and monitored.</p>	<p><i>Corporate or Profit Tax = (Project Revenues - Allowable Deductions) x (Tax Rate)</i></p>
<p><b>Bonuses</b></p>	<p>A lump sum payment is required at a specified point in the project timeline. Some bonuses are paid at signature, while others are designed to bring revenues when certain production levels are met. They typically provide a front-loaded payment, which the company must pay whether or not the project proves profitable.</p>	<p>“(a) an amount of one million US Dollars (US \$1,000,000) to be paid in respect of each Commercial Discovery within thirty (30) days after Commercial Production Start Date of such Commercial Discovery; and (b) an amount of five million US Dollars (\$5,000,000) upon achieving cumulative production of one hundred million (100,000,000) Barrels of oil equivalent from each Commercial Discovery....” –Libya Exploration and Production Sharing Agreement</p> <p><i>Bonus = Bonus Amount</i></p>
<p><b>Withholding taxes</b></p>	<p>Withholding tax represents tax on payments that extraction companies make to their lenders, owners (in the form of dividends) and subcontractors. A common practice is for companies to be required to withhold a share of payments to these third parties and transfer it to the government. This makes it possible for the government to tax third parties who may not be based in the country but are profiting from the project.</p>	<p>“...[T]he Concessionaire shall withhold tax on payments made to non-residents and residents at the following rates for the first 12 Years: (i) Dividends, 0 percent; (ii) Interest, 5 percent; (iii) Payments for services, 5 percent.” – Liberia-China Union (2009), sect. 14.3(c)</p> <p><i>Withholding Tax = (Payment to Third Party) x (Withholding Tax Rate)</i></p>

<p><b>Production sharing</b></p>	<p>These arrangements, which are most common for oil projects, establish formulas for the sharing of physical production of oil and gas between the private investor and the state (often through a state-owned enterprise). A typical production sharing arrangement first allocates some portion of oil back to the contracting company to recoup its costs (<i>cost oil</i>). The remaining <i>profit oil</i> is then split between the contracting company and the state, usually according to a sliding scale based on the level of production or the profitability of the project.</p>	<p>See figure1 for an illustration of revenue flows in a production sharing contract.</p> $\text{Government Share of Profit Oil} = (\text{Production} - \text{CostOil} - \text{Royalty}) \times (\text{Government Share})$
<p><b>State equity participation</b></p>	<p>A state may purchase or negotiate shares in an oil or mineral project. Equity gives the state either a share in the distributed profits of a company or the right to distribute some portion of the petroleum or mineral output. It may also entail additional obligations by the state and could increase the government’s share of the risk.</p>	<p>“[The National Oil Company] shall have the right to demand from CONTRACTORS that a ten percent (10%) undivided interest in the total rights and obligations under this Contract be offered to either itself or a [company]... designated by Pertamina...” –Indonesia Yapen Contract (1999), section 16.1</p> <p><i>Dividend = (Percentage of declared dividends to which company is entitled on the basis of its equity stake, sometimes minus reimbursement of accrued costs that were paid by the contracting company on the state’s behalf)</i></p> <p>or</p> <p><i>Dividend = (Contracting Company Share of Profit Oil x Equity Participation Percentage, sometimes minus reimbursement of accrued costs that were paid by the contracting company on the state’s behalf)</i></p>
<p><b>Resource rent taxes</b></p>	<p>Designed to capture part of the excess profit that can arise when international prices of resources soar. These are also known as windfall profit taxes. They are designed to be progressive.</p>	<p>Brazil has a <i>special participation</i>, which allocates a larger share of <i>net income</i> to the government as the production rate increases. Similarly, Ghana’s <i>additional oil entitlement</i> gives a larger share of the oil production to the government as the company’s rate of return increases.</p>
<p><b>Surface rental payments</b></p>	<p>Payments to the central, or sometimes subnational, government based on a fixed or per acre fee.</p>	<p>“The Investor shall pay an annual mining license fee of USD15.00 per hectare of mining area granted under a Mining License, and Stabilized.”</p> <p>–Mongolia Mineral Law (2006), art. 13.14</p> $\text{Surface Rent} = (\text{Rate per Acre}) \times (\text{Number of Acres})$

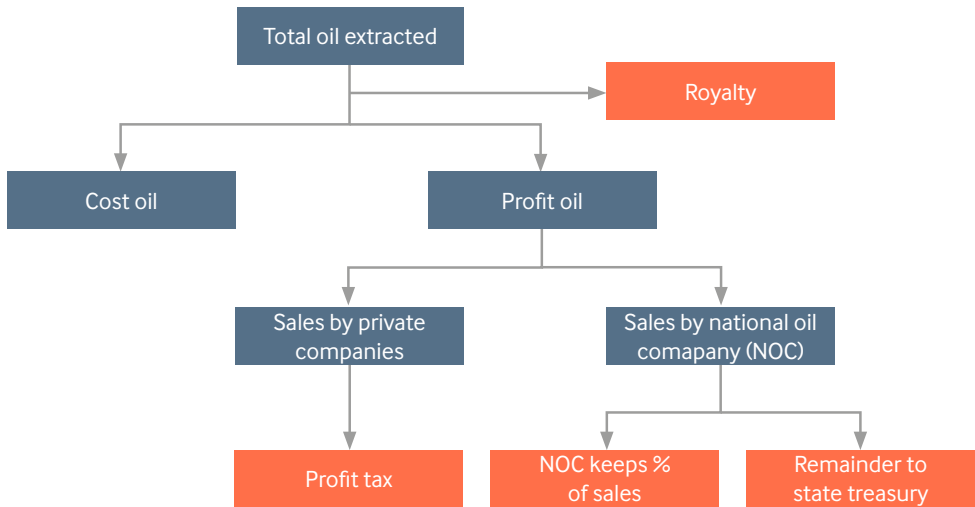


Figure 1. Typical revenue flows in a production sharing contract (PSC)

(Orange indicates revenue flows to the government)

Source: NRG

### HOW THEY FIT TOGETHER: DESIGNING THE FISCAL REGIME

The fiscal regime represents the choices a government makes about which fiscal tools to use to divide revenues from a particular extraction project. As discussed above, these tools may be enshrined in legislation or agreed to on a project by project basis in individual contracts. Laws that are specific to the industry, such as the mining law or petroleum act, often set out some of the fiscal tools, but general legislation, such as the tax law, may also set specific fiscal tools. The total government revenue is calculated by adding up the government revenue from each of these fiscal regimes. If a country publishes EITI reports with revenue information disaggregated by revenue stream per project, such as in Zambia, it is possible to see how each fiscal tool adds to the overall government take.

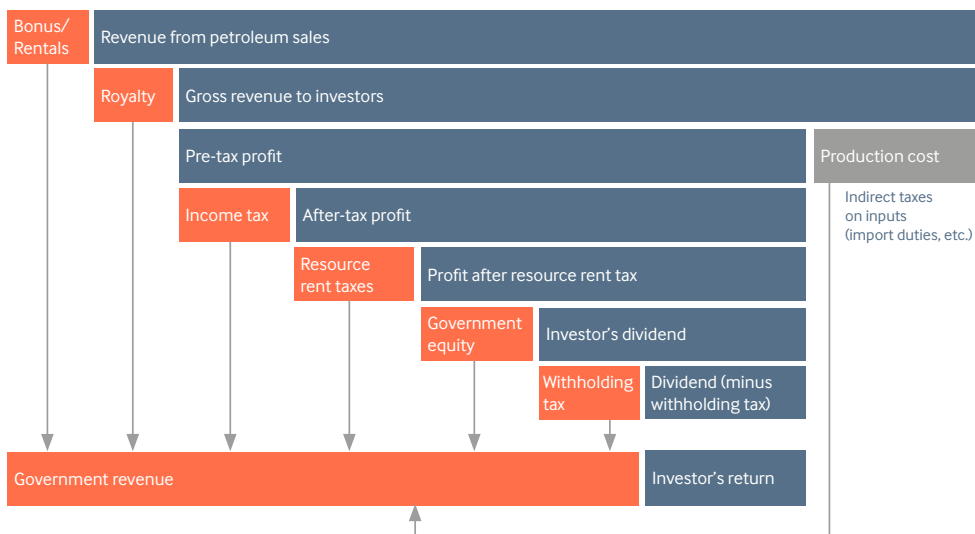


Figure 2. Revenue flows in a tax and royalty system

Source: NRG elaboration

## LOOPHOLES AND PITFALLS

The fiscal tools above represent the government’s vehicles for collecting revenues from the extraction project. Like many taxpayers, some companies will try to minimize the amount they must pay for the government using various loopholes. Below are a few common loopholes that companies try to exploit.

Common loophole	Explanation
<b>Transfer pricing</b>	<p>Transfer pricing occurs when taxable income is shifted from a relatively high to a relatively low tax jurisdiction. Transfer pricing in the extractive industries typically takes one of two forms. First, the subsidiary in a resource-rich country may sell its oil or minerals to a sister company at an artificially low sales price in order to reduce its declared revenues and thus the size of its royalty or income tax obligations within that country. Second, the subsidiary within the resource-rich country may purchase goods and services from a sister company at an inflated price, thereby increasing its declared costs and decreasing its declared profits within the resource-rich country. A multi-national enterprise may seek to shift taxable income to its home country (if tax rates are lower there or the government provides special tax incentives) or to a tax haven country. Governments can reduce the risk of transfer pricing on the revenue side by requiring commodity sales to be accounted for tax purposes using objective market prices rather than the sales value declared by companies.</p> <p>In the example in figure 3, the Angolan subsidiary buys inputs above market level from the British Virgin Islands based subsidiary. This could be anything from management fees to high-interest loans or equipment. The Angolan firm then sells its minerals to the U.K. subsidiary at below market value. At the end of the day, only a tiny amount of taxable profit remains in Angola; the rest has been transferred out through this pricing strategy.</p>
<b>Thin capitalization</b>	<p>Thin capitalization frequently occurs when the interest payments that a company makes on loans are tax deductible. This can encourage a company to finance a project with a large amount of debt (including debt from related companies), allowing the company to inflate its interest deductions and reduce taxable income. States can adopt rules to limit interest deductions to a reasonable level to prevent the loss of tax revenues.</p>
<b>Production costs</b>	<p>Companies can decrease revenue to the government by increasing production costs. This can be done through <i>gold plating</i>, spending more on production than is necessary, or inaccurate accounting. Countries can reduce this risk by developing rules that encourage efficient production and closely auditing the company’s production costs. Another way companies can decrease government revenues is by deducting costs incurred on a project from the taxable income of another project. A company may have legitimate reasons to do so, especially if it is engaged in several exploration or development efforts within the same country. But such tax-based incentives can distort company behavior and detract from the economic interests of the state. Some countries seek to prevent this practice by mandating <i>ring fencing</i>, which allows a company to apply the production costs only against the taxable income of the same project. Other countries choose not to ring fence so that they can encourage investment in new mines.</p>

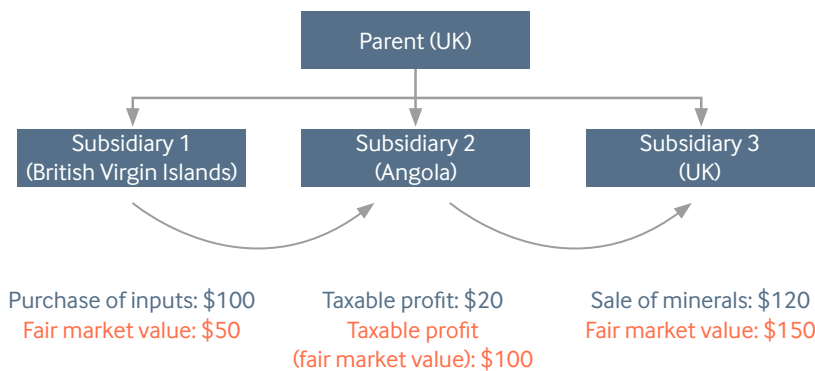


Figure 3. Illustration of transfer pricing

Source: NRGi

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## QUESTIONS TO ASK

- What fiscal tools are used in my country?
- What do the fiscal tools allow for in terms of timing, share of revenue as profits increase, share of risk and encouragement of other investments?
- Does the fiscal regime for the extractive industries benefit from a clearly defined set of legislation and policies, or is it negotiated on a case-by-case basis? If is it the latter, why is it not standardized?
- Are policymakers aware of the various fiscal options and legislative tools available to obtain revenues from natural resource development?
- Is the fiscal regime adapted to avoid common pitfalls and loopholes often exploited by companies?
- Are policymakers able to monitor the fiscal regime? Do they have the training and knowledge to estimate revenues the government should be receiving?

## ADDITIONAL RESOURCES

Natural Resource Charter, precept 4 [http://www.resourcegovernance.org/sites/default/files/NRCJ1193\\_natural\\_resource\\_charter\\_19.6.14.pdf](http://www.resourcegovernance.org/sites/default/files/NRCJ1193_natural_resource_charter_19.6.14.pdf).

Numerous contracts are available at <http://www.resourcecontracts.org> where you can compare the fiscal terms between different agreements.

*Oil Contracts: How to read and understand them* (OpenOil, 2012), available at: <http://openoil.net/contracts-booksprint/>.

*Mining Contracts: How to read and understand them* (2014), available at: <http://www.resourcecontracts.org/blog/guides-to-contract-terminology.html>.

Ernst & Young, *Global Oil and Gas Tax Guide* (2013), available at : [http://www.ey.com/Publication/vwLUAssets/2013\\_global\\_oil\\_and\\_gas\\_tax\\_guide/\\$FILE/EY\\_Oil\\_and\\_Gas\\_2013.pdf](http://www.ey.com/Publication/vwLUAssets/2013_global_oil_and_gas_tax_guide/$FILE/EY_Oil_and_Gas_2013.pdf) (provides country by country tax information).

PricewaterhouseCoopers, *Corporate Income Taxes Mining Royalties and Other Mining Taxes: A summary of rates and rules in selected countries* (2012), available at: [http://www.pwc.com/en\\_GX/gx/energy-utilities-mining/publications/pdf/pwc-gx-miining-taxes-and-royalties.pdf](http://www.pwc.com/en_GX/gx/energy-utilities-mining/publications/pdf/pwc-gx-miining-taxes-and-royalties.pdf).

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