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Petroleum Revenue Funds – Part 2

Creating and operating a petroleum revenue fund entails a large number of steps. If the fund is a separate legal entity, a legal framework for the fund needs to be established. Fund objectives, deposit and withdrawal rules, the structure of the agency or unit overseeing the fund, the investment strategy, performance benchmarks, appointment of fund managers, and mechanisms for independent audits, reporting, and dissemination of information will all need to be considered and established. This note, the second in a series of four, discusses various aspects of fund establishment and operation.

Concerns about high revenue volatility, sudden appreciation of the national currency which makes the manufacturing sector less competitive, and eventual depletion of petroleum resources have prompted a number of governments to set up special funds to manage petroleum revenue [1]. Part 2 of the series on petroleum revenue funds discusses options for managing a separately established petroleum revenue fund. This note draws materials heavily from [2] and [3].

Legal Framework

A fund can be virtual, a fund in name only with inflow and outflows shown as a line item in the budget. Virtual funds require no new institutions; their resources are commingled with the rest of the government's assets and managed in the same way by the treasury or the central bank. Or the fund's assets can be accumulated in a separately managed and audited account. If the latter, a legal framework needs to be established to govern the fund. That framework would ideally cover fund establishment, control, oversight, management, use, and dissolution. A fund that is a separate legal entity can be established by a constitutional amendment (Alaska), an act of parliament (Alberta, Kuwait, Norway, Oman, Russian Federation, São Tomé and Principe, Timor Leste) or an executive decree (Azerbaijan, Kazakhstan, Venezuela). There is a tradeoff between protecting the integrity of the fund and allowing for enough flexibility to respond to changing circumstances.

A constitutional amendment arguably provides the greatest legal backing to the fund because changing the principles governing the fund or dissolving it would require amending the constitution. If rules for paying into and withdrawing from the fund are also specified in the constitutional amendment, it would be difficult to stop paying into the fund or "raid" the fund. By the same token, it requires considerable political support and more time to amend a constitution than to pass a law, so that there is the potential to slow down the establishment of the fund. If circumstances change substantially and there is good reason to change fund rules, another constitutional amendment might be needed. To date, only Alaska has chosen this route. This approach might still be considered if there is a realistic possibility of the fund being dissolved or subverted by future governments.

An act of parliament is less binding but still carries considerable legal weight and provides an opportunity for public discussion of the fund's aims and operations. Substantive departure from the act will require an amendment to the law or a new law, requiring another act of parliament. In many countries, this approach may strike the right balance between safeguarding the fund and flexibility.

The quickest way to establish a fund is by decree, which typically does not require approval of any other government body. This provides the greatest flexibility and may be suitable in a rapidly evolving situation, but by the same token also provides the greatest scope for fund misuse and mismanagement.

Funds can take one of two forms. The first is to be a separate legal entity, an independent government agency (Aaska, Alberta, Azerbaijan, Kuwait, Oman). The agency controls and manages the fund's assets. The second is for the fund to reside in the finance ministry, sometimes managed on its behalf by the central bank (Norway, Timor-Leste). This approach is appropriate where the fund is to be used for expenditure smoothing, or where all revenues are first paid to the

fund and payments are made out of the fund to the treasury.

Deposits and Withdrawals

Transactions in and out of the fund can be rule-based or discretionary (that is, no rigid accumulation or withdrawal rules). Rule-based mechanisms generally involve quantitative formulae. For payment into the fund, for example, several funds require surplus revenue above some reference price (Nigeria, Russian Federation) or reference revenue (Algeria, Iran, Oman, Trinidad and Tobago) to be deposited into the fund. The reference price may be adjusted periodically to reflect world oil price trends. Venezuela's Investment Fund set the five-year average of the export prices as the reference price. Setting appropriate reference prices has proven difficult in the past because future oil prices are notoriously difficult to predict. Revenue is also affected by production. For saving for future generations, one approach is to transfer a fixed percentage of the petroleum revenue (Alaska, Alberta) or the total government revenue (Kuwait's Future Generation Fund).

For withdrawal, some funds have fully specified withdrawal mechanisms. In Alberta, only the earnings in real terms (after adjusting for inflation) are returned to the budget.

Rule-based mechanisms may appear to be less vulnerable to manipulation, but rules can always be changed or broken. An example is the failure of the government of Venezuela to make the obligatory deposits into the Investment Fund for Macroeconomic Stabilization (precursor to the current Fund for Macroeconomic Stabilization) in the third year of operation. Discretionary mechanisms may weaken transparency and accountability, but a prominent counterexample is Norway's Pension Fund–Global (formerly Petroleum Fund)—considered among the most successful petroleum revenue funds. The Norwegian fund is completely integrated into the state budget and the overall fiscal policy determines the net transfer to the fund. In theory, parliament can withdraw as much as it wishes from the fund to pay for the nonoil budget deficit. That it has not recklessly done so highlights parliament's fiscal discipline.

Either way, the underlying principles for deposits and withdrawals depend on the fund's objective(s), discussed in [1], and influence its size and growth.

- For expenditure smoothing, typically a portion of revenue is deposited and saved during booms and withdrawals are made during downturns. A fund with a very small balance might not be able to smooth spending in the face of large revenue fluctuations. A very large fund would act more like a savings fund. If viewed strictly as an expenditure smoothing fund, the fund's large balance might lead to political pressure to increase overall spending.

- For saving for future generations, one approach is to consider so-called permanent income and withdraw only the amount equivalent to it. Permanent income refers to long-term income expectations, and in this case is the value of all the oil and gas likely to be extracted in the life of the country. The idea is to consume income from the total value of oil and gas (and not current revenue) in such a way as to maintain the same level of spending into perpetuity. This requires forecasting all expected future revenues—a difficult task involving estimating future petroleum prices, production profile, production costs, and economically recoverable reserves—and real returns (which factor out inflation). The government spends only the real return on the investment using the overall petroleum revenues, leaving the capital untouched. An added consideration is future population growth. If per capita spending is to be equalized across time, then even greater savings will be needed.

Everything else being equal, revenue will be low in the early days of oil production because production volume is low and costs are still being recovered. (One exception is when large signature bonuses are paid.) In developing countries, these are also likely to be the days when demand for spending will be greatest because of many unmet essential needs. Further, the real return on permanent income may be higher than the actual revenue in the early years of oil production, necessitating borrowing—which might be undesirable—if the government were to adhere strictly to spending the real return on permanent income. These considerations may require modifications to the rules for payments and withdrawals.

Other Rules on Fund Asset Movements

Other considerations include whether

1. The fund can borrow (typically this is not the case)
2. The fund can lend money to the government
3. The government can use the fund's capital as collateral to borrow
4. The fund needs to maintain a minimum balance
5. The size of the fund has a ceiling.

Setting a ceiling may be considered if, for example, the fund is to be used for short-term expenditure smoothing.

The first three options should not be permitted, or else the fund could lower, rather than enhance, transparency. The government could claim to be saving petroleum revenues and cite the fund balance as evidence, while running a large deficit and borrowing against the fund.

Fund and the Budget

A well designed petroleum revenue fund can support fiscal management if it is fully integrated with the budget, has wide political and public support, and operates under clear rules. The goal remains developing a sustainable fiscal policy that integrates petroleum revenue and building institutions that are competent, transparent, and accountable. A well-formulated medium-term budget framework—that can help design stable expenditure policies to allow a better appreciation of the future implications of the government's expenditure decisions today—should be at the heart of fiscal policy. Expenditures should be prioritized as a whole in a unified budget. If the fund is permitted to have its own spending program and there is effectively a dual budget with fragmented spending prioritization, the net impact of establishing a fund could even be negative rather than positive.

Fund Management

Fund asset management aims to maximize long-term return subject to an acceptable level of risk, and requirements for liquidity (the degree to which fund assets can be cashed without affecting the asset price) and minimum income. There should be a clear allocation of responsibilities concerning who sets the fund's overall investment policy, formulates operational guidelines, manages the fund's assets, and evaluates performance. The fund's operational guidelines should be clear about the desired risk-return combination, the shares of different types of assets in the portfolio, the geographical spread of assets, and the desired currency composition. There should be no ambiguity about who is ultimately responsible for the performance of the fund. The division of responsibilities among the finance ministry, the central bank, and the fund should be clearly specified.

The government may consider the following.

- ***Investment strategy body.*** Governments of Alaska, Alberta, and Azerbaijan have created a special body to define the overall investment strategy. Norway and the Russian Federation use prescriptive rules. Whether or not there is a strategy body, the fund's investments in general should not be disruptive to financial markets and macroeconomic stability. The investment strategy should be consistent with the main objectives of the fund, and give due consideration to the appropriate time horizon (short-term expenditure smoothing, long-term savings, and so on).
- ***Geographical spread.*** One important decision is where to invest, domestically or abroad, and the geographical spread of the nondomestic investments. Alaska and Alberta initially invested entirely in the domestic market. Azerbaijan, Norway, and Timor-Leste have held all assets outside the country; this helps to sterilize petroleum revenue and slow down local currency appreciation. Once the decision to invest outside the country is made, geographical spread has to be selected. The predominant approach is to assign market shares on the basis of market capitalization. In this approach, the United States, Europe, and Japan are assigned most of the assets.
- ***Stock investment policy.*** Initially investments may be limited to high-grade fixed income securities (investments that yield fixed returns). Stocks may have higher returns but also carry higher risks. They are not liquid—selling them at the "wrong" time could result in large losses. It is important that the fund's liquidity match the expected withdrawal schedule. Stocks are more appropriate for long-term savings.
- ***Real estate.*** Real estate assets are likely to be difficult to manage in developing countries where markets may be thin and highly volatile. Alaska and Alberta permit the holding of real estate; Azerbaijan explicitly prohibits it.
- **Investment advisers.** Government may wish to engage investment advisers, who may report to the minister of finance or to the board of the fund (Alaska, Alberta).
- ***Internal versus external managers.*** A fund may be managed entirely internally, or external managers may be hired for all or part of the fund. If fund assets are in the form of high-grade fixed-income securities, adequate expertise may exist in the central bank which manages the rest of the government's assets. As more experience is gained and the fund grows, fund investments may diversify into higher-return/higher-risk assets, with which the central bank is likely to have limited experience, if any. It is common to engage external managers to undertake the management of these riskier assets.

- ***Use of benchmarks and publication of the overall target return.*** The funds in Alaska, Alberta, and Norway identify benchmark indexes for each class of assets, so that the actual return for each asset class can be compared with the benchmark for that class. Several funds set and publicize an overall target rate of return. Actual returns are compared against the target.

Ensuring Fund Integrity

Most funds have adopted multiple levels of oversight. At the top level is a supervisory body¾comprising representatives from the government or parliament or both¾examining the strategy, the general performance, and management of the fund. To avoid conflicts of interest, members of this board should be different from the investment advisory board members and fund managers.

Funds should have an internal mechanism for their audit through the government's auditor. To give more confidence to the auditing process, a separate external audit should be carried out and published. Norway has carried out, in addition, an entirely separate external *performance* audit, which checks the internal audit performance as well as the actual performance against the benchmark.

It is important that the fund publish an annual report, and that the report includes sufficient details of classes of assets held and their performance—for example, comparison of benchmarks and the actual performance of each class of assets. Alaska, Alberta, Azerbaijan, and Norway provide enough detail to give a full assessment of the fund's overall performance and the main categories of investment assets. The information contained includes the fund's holdings, fair value of the fund, returns in local and international currency, and in nominal and real terms and net of costs. Norway also gives the value of all individual stock holdings. Some countries do not publish a full annual report but publish occasional statements about the total value of the fund and additions to the fund. At the opposite end of the spectrum, Kuwait, Oman, and others do not publish annual reports, partly on the grounds that their publication would increase pressures for current spending. But not publishing annual reports makes fund operation opaque and makes it easier not to deposit amounts due or take money out of the fund without proper authorization.

Publication of annual and audit reports is an essential tool to ensure that good use is made of the fund's resources. These reports should be made available in several media, including the Internet, for ready accessibility.

Observations

Petroleum funds cannot compensate for poor fiscal policy, but can help build public awareness and support for prudent and long-term management of petroleum wealth. Undertaking wide public consultation and publicly debating whether to establish a fund and if so what type, as Timor-Leste has done [4], would be beneficial and can contribute to nation-wide commitment to prudent use of petroleum income. Those countries that have established successful funds have clear, transparent rules that are strictly enforced; public disclosure of fund activities and accounts; full integration of the fund's operations into the state budget that is based on multiyear expenditure planning; independent professional management of fund assets including appointment of fund managers based only on merit; clear investment strategy; and independent audits of transactions and activities that are regularly published. There are many reasons why a country might consider establishing a petroleum fund. A fund may help mitigate political pressures to increase spending in the face of large revenue inflows. That said, a large or rapidly growing fund could also give rise to spending pressures. What is universally agreed is that fiscal discipline is a pre-requisite for successful fund management.

References

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