8.3 Resource Funds and their Popularity

Interest in the use of natural resource funds based on setting aside a portion of resource revenues has grown significantly over the past few years. Since 2000 the number of such funds has grown from 24 to 54, and the assets they manage have been estimated at a value of US$3.5 trillion\(^1\). At least 14 more funds are at the planning stage at the national level, and at the sub-national level a number of countries, such as Canada and Indonesia, are considering them for revenue management among provinces, states or districts. This renewed interest among governments in a not-so-new instrument has been partly due to the discovery of new resource deposits, and partly a response to dramatic increases in resource prices yielding increased revenues during the long commodities super-cycle ending around 2014-15. For an emerging EL producer, such funds offer a highly appealing combination of potential benefits: the accumulation of funds for national development projects; a buffer against budget deficits if resource revenues decline; a way of mitigating spending volatility and improving the quality of public spending, reducing poverty and insulation of revenues from corruption. They could act as precautions against major negative resource shocks or to generate financial revenues for the future, replacing resource revenues when the resource itself is depleted. *Unlike fiscal rules, resource funds do not constrain fiscal policy*, although a fund may be a part of a fiscal framework as in Norway.

However, such funds have an uneven history in terms of performance. An example is the Kuwait Investment Authority’s loss of US$5 billion in less than ten years on poor investments in Spanish firms. Among the reasons for this loss were an absence of internal controls, lack of transparency and supervision. There are other examples of poor decision-making and waste. Some governments have drawn on the funds accumulated to address short-term problems or finance special projects. Nor should they be seen as repositories of windfalls of resource revenue so that a state can potentially live off the interest for many years afterwards\(^2\). There is no need for a fund mechanism to accumulate a windfall in, and the interest would be unlikely to last for many years. So why are they so popular?

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Research into these funds\(^3\) – which are a form of sovereign wealth fund – has identified at least five reasons for governments to create funds: (1) financial savings (to provide inter-generational equity); (2) macroeconomic stabilization (smoothing government expenditure in the face of volatile revenues); (3) earmarking resource funds for future development or specific purposes (poverty reduction or debt servicing, for example); (4) sterilization (to avoid overheating of the economy in the face of constrained absorptive capacity, although some countries have also established dedicated infrastructure funds); and (5) ring-fencing resource revenues. Their main aim is to act as an accountable financial instrument in the service of the national economy and not become a grey financial tool or a parallel budget.

The two main types of funds, savings and stabilization, are defined by their function. A savings fund seeks to create a store of wealth for future generations. A stabilization fund, by contrast, will have as its raison d’être the reduction in the impact of volatile revenue on the government and the economy. A savings fund may be combined with a stabilization fund into a hybrid with dual objectives. This may introduce an element of increased flexibility. The most successful resource fund in the world, the Norwegian Government Pension Fund, has mixed savings/stabilization objectives, with flexible rules. So does Timor Leste’s successful Petroleum Fund. For examples of stabilization and savings funds see Boxes 8.2 and 8.3 respectively. A list of 32 oil funds is set out in Table 7.3, distinguishing their role as savings or stabilisation funds.

A key element in stabilization funds is the setting of a reference price, and ensuring that if the resource price exceeds the reference price, then any revenue collected over and above the reference, is deposited in the fund and not channelled through the budget (see Section 7.4.2 below on Stabilization Funds). By contrast, it is not the only key for savings funds: they also have to take into account the expected profile of future revenues and that will in turn depend upon reserve estimates. As a result, they tend to have some non-contingent rule for accumulation (for example, x percent of resource revenue or total revenue has to be put away, as in Kuwait).

Country context will shape a government’s motive in setting a fund’s objectives (and indeed in deciding whether a fund is necessary at all): for example, the stabilization objective is likely to be stronger among large, established producers of oil, gas and hard minerals with mature provinces. They are likely to be concerned about the impacts of cyclical variations in revenues.

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caused by price volatility. Similarly, concerns about an ageing population and its effects may encourage a focus on the inter-generational benefits of a fund (as in Norway).

### 8.3.1 Common Features

Some features are common to both kinds of fund and are noted below:

**Legal Frameworks for Funds** In practice resource rich countries have used a wide variety of legal frameworks to establish an extractives (usually oil) fund. Where a distinct legal framework is required to set-up a *real* fund(s), a purpose-designed law or amendment to existing legislation (or even the constitution) is usually required. Decisions on the level of specificity in the law will involve trade-offs between ensuring the financial integrity of the scheme (for instance, prevention of its reversal or perversion, and providing adequate administrative or executive flexibility to address unforeseen circumstances).

Funds may be either ‘virtual’ or ‘real’. Funds are virtual where they are embedded in the normal budget process and require no special approval for their establishment or maintenance. Strictly speaking, a virtual fund is a sub-account under the Treasury Single Account. No new responsibilities need to be created. Funds are real where accumulated funds are held in a separate managed and audited account, requiring a legal framework. The preference for one or the other may depend on the overall transparency of fiscal reporting to both the legislature and the public. Where resource revenue dependency and public interest in its use are high, the creation of a real fund may be desirable, rendering more transparent the link between resource revenue generation and utilization. As Bacon and Tordo have observed, the “preference for one or the other may depend on the overall transparency of fiscal reporting to both the legislature and the public”\(^4\). On the other hand, virtual funds might be desirable if it is important that all national funds remain fully integrated with the regular budget (which would always be a basic objective of PFM)\(^6\). If it is decided to establish a real fund (which can also be reasonably well integrated with the budget), good practice would certainly argue for the closest possible coordination of their operations with the regular budget process.

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5 Ibid, p.9.
**Payments into and Withdrawals from Funds**

In general, there are two approaches to determining the rules for deposits into funds and withdrawals. The first is on the budget side, in terms of specifying fiscal deficits to be covered by the fund. The second is on the fund side. Experience shows that it is the budget side that determines the fund, rather than the reverse.

Procedures for payments into, and withdrawals from, funds will often be governed by two sets of operational rules known as deposit and withdrawal rules. The former define which oil, gas or mineral revenues are deposited and when. The latter define how much revenue may be withdrawn from the fund in any given quarter or year and also where that withdrawn amount may be sent.

These rules may differ depending on the objectives of the fund. For savings funds, the focus will tend to be on the long-term sustainability of resource revenue spending so that its size will be determined by reference to a policy of seeking to keep the wealth in the fund constant; expenditure will ideally be limited to the ‘permanent’ income of the resource wealth. For stabilization funds, the goal is different, so the size of the fund will depend on assumptions about volatility of revenues and the average expenditure required by the government. *Good practice would link these transfers to and from the fund to the annual budget process and near-term revenue forecasting since the principal intention is to allow for expenditure smoothing.* Parliamentary or presidential approval may be required to authorize transfers to and from the fund(s).

Transfers into a fund may be direct or indirect:

- where they are direct, certain defined categories of revenues will be paid into the fund account which is usually held by the finance ministry or central bank. If there is a lack of precision about the categories or the classification is incomplete, problems will arise. The expected size and use of the fund is then determined by means of the rules concerning withdrawals from the fund; and
- in the case of indirect transfers, all of the revenues have to be paid into the finance ministry and then a decision is made by the competent authorities to determine the expenditures from revenues that will be made through the budget and the balance is transferred into the fund for investment.

In many states, however, operational rules have been introduced to make amounts added to, or withdrawn from, the fund(s) automatic. Such rules have the perceived advantage of reducing discretion but may themselves create serious tensions when their operation proves inappropriate to actual state circumstances or developmental priorities. For example, it may be desirable in the near-term to spend in excess of long-term sustainable levels in order to take...
advantage of investment opportunities expected to yield high developmental returns, or to spend less than the long-term sustainable amount where near-term absorptive capacity constraints apply. In practice, fiscal rules do need to be flexible and appropriate to national circumstances. They must also have a broad-based buy-in from stakeholders and ideally adherence to the rules should be monitored by an independent oversight body (such as PIAC in Ghana). However, the need or otherwise for an independent oversight body will depend on the circumstances, since such a body is not without costs and trade-offs arise. For example, few would argue that there is a need for such a body in Norway. Where they have been adopted, an oversight body will not be able to function unless there is a strong degree of transparency of the flow of funds from collection to the time when the revenues are spent. Fund administrators should be obliged to publicize and defend any deviation from guidelines where these have been adopted.

In practice, a number of countries have found that rigid operational fund accumulation rules prove impossible to sustain and they change them, bypass them or even eliminate the fund in the face of spending pressures, changing policy priorities or exogenous events that render the fund’s operational accumulation and withdrawal rules inappropriate. Chad, Ecuador and Papua New Guinea found that their funds became operationally or politically unworkable and abolished them. Other countries have changed their rules including Oman, Kazakhstan, Russia, Mexico and Venezuela, as well as the US State of Alaska and the Canadian province of Alberta.

Financial Management  Financial management of resource funds requires asset management and decisions on asset classes in which funds will be invested. Decisions on asset classes will depend, to a large extent, on the purpose of the fund, attitudes towards risk and time horizon. Fund management is often assigned to the central bank which may engage third-party custodians and specialist asset managers for safekeeping and investment of the assets. A set of asset management mandates based on risk and return objectives should provide benchmarks for the assessment of performance by government selected fund trustees or their delegates.

Governance of Funds  Past experience with resource funds has underscored the critical importance of oversight and governance features. Funds often lie outside established budget systems and are frequently accountable to only a few persons, who are political appointments. Abuse of responsibility and susceptibility to political interference are a real risk. Constraint and accountability are ideally spelled out in legislation. Independent regular audits are also essential, but in practice have often been loose. Good governance practices include both

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8 Managing the Public Trust (2014) contains examples of this.
vertical and horizontal accountability. Vertical accountability comes with fund management reporting lines that leads, ultimately, to a minister. Horizontal accountability is provided by regular reporting on performance to elected officials independent of government and widely available and readily accessible public information on the fund. Transparency with respect to all aspects of fund operation and performance is generally regarded as indispensable to achieving good governance (see Chapter 4). This can be achieved through press releases, publications and audits which are available on the internet. Bacon and Tordo go further and recommend the “presence of watchdog non-governmental organizations (NGOs) (which) strengthens horizontal accountability”\(^9\).

As discussed in section 8.2.1, the management of a fund will often involve the use of both internal and external managers. The recruitment of any asset managers should be made as independent as possible. Regular, independent audits are also essential if confidence in the fund is to be established and maintained. In Norway’s case, an external performance audit is carried out and published in addition to the internal audit, which checks the latter’s audit of performance and also checks the actual performance against a benchmark.

### 8.3.2 Savings Funds as a Means of Addressing Fiscal Sustainability

Many funds will have been set up with savings as at least part of their overall raison d’être: save now to provide for future expenditure. Tordo finds at least three reasons for this\(^10\):

- To provide income for future generations so that they may benefit from natural resource endowment, when policies of rapid depletion to meet urgent current expenditure needs risk exhaustion of the resource;
- To optimize social return over time by limiting current expenditure by government to projects that yield an adequate return, when limited absorption capacity means that too rapid government expenditure could lead to Dutch Disease symptoms; and
- To provide precautionary saving against large and unexpected shocks to the domestic or world economy that would generate abnormal demands on expenditure or very large falls in revenue.

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\(^9\) Bacon and Tordo (2006), 15.

The design of the savings fund should focus on the accumulation of financial assets and the generation of financial returns adequate to replace resource revenues as they decline, thus maintaining a constant level of government expenditures attributable to the initial resource wealth. However, the generation of financial returns will depend on fiscal policy, not on the savings fund. If the government builds up assets in the fund by running up public debt because it is running fiscal deficits, the accumulation of assets in the fund will not generate financial returns adequate to replace resource revenues. It is not in practice the design of the fund but the design of fiscal policy that will generate the financial returns to replace resource revenues in the future. The savings fund is merely an instrument.

**Size** The desirable size of a savings fund will depend on, among other things, the scale and expected life of the resource deposit. Generally, the shorter the life of the deposit, the higher the percentage of resource revenues going into the fund ought to be. The asset mix in a savings fund is typically longer term and higher risk than might be found in a stabilization fund.\(^{11}\) Several examples of savings funds in resource-rich countries are briefly summarized in Box 7.2.

An important concern about savings funds turns on the assumptions they necessarily make. For example, when oil revenues are the principal source, the government will have to consider projected profiles of output, extraction costs, prices, discount rates and returns on alternative investments by keeping oil in the ground.

**Fungibility** Critically, savings funds suffer from a problem of fungibility. They receive a share of revenues that are automatically put away for future generations. However, for this to be effective, they need to lead to higher government savings in the aggregate. If, instead of this outcome, the government does not reduce its expenditure and borrows to finance the gap left by revenue which has been diverted into the fund, the aggregate savings are unaffected. What happens is that savings fund assets are merely offset by government debt.\(^{12}\) A way of solving this is to change the paradigm and, instead of having a rigid accumulation rule, require the fund to finance the budget: the fund receives budget surpluses and finances budget deficits. This model has been adopted by Norway, Timor Leste and Chile. While it may appear that these arrangements remove the ‘disciplining’ effect of a savings fund and lead to a loss of the automatic mechanism for saving, in fact, as discussed above, the disciplining effects of a savings fund can be illusory as long as the government can borrow.

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\(^{11}\) See Ossowski, supra note 77, at pp. 8-9.

An argument against a fiscal policy that aims at accumulating ‘excessively’ large savings funds is that investment in domestic social and physical infrastructure can yield potentially much higher returns; the resulting incremental growth (if achieved for a sustained period) may, for many states, come to dwarf the income from holding resource wealth in financial assets. This argument must be qualified, however, by taking into account the absorptive capacity of the domestic economy and institutions.

**Box 8.2 Savings Funds: Selected Examples**

<table>
<thead>
<tr>
<th>Country</th>
<th>Brief Description</th>
</tr>
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<tbody>
<tr>
<td>Norway</td>
<td>The Government Petroleum Fund was established in 1990. It has two main purposes: 1. To act as a buffer to smooth fluctuations in oil revenues and mitigate exchange rate pressures to avoid Dutch Disease and preserve a diversified industrial structure; 2. To save part of current oil rents to help address future needs related to the ageing population and eventual decline in oil revenues. Fund income consists of government net cash flow from petroleum activities and the returns on the Fund’s assets. Detailed guidelines for Fund operations are decided by Government in consultation with Parliament. Its only expenditures are transfers to the government’s budget: the Fund is an integrated part of the Government Budget. Transfers to and from the Fund require Parliamentary approval. Withdrawals from the fund reflect a fiscal rule, agreed in 2001, that limits the non-oil structural deficit to 4 percent. Norway’s balanced budget rule is a political commitment and is not set down in legislation. Information is available in quarterly and annual reports. Control and supervisory bodies exist at all levels of fund management. Fund assets have to be invested abroad, instead of becoming an additional source of financing public expenditure, to avoid strong impacts on the mainland economy and on the exchange rate.</td>
</tr>
</tbody>
</table>
Alaska (USA) | The Alaska Permanent Fund was set up by an amendment to the State Constitution in 1976, and receives 25 percent of all mineral lease rentals, royalties and bonuses taken by the State.

Only a portion of oil revenues are deposited into the Fund. For example, corporate income taxes from oil companies go straight into the budget.

It has two unusual features. The principal of the Fund is to be invested permanently and cannot be spent without a popular vote. This is a highly unusual feature of a fund. A further unusual feature is that income from the Fund is to be used for inflation proofing the capital and paying dividends annually to citizens; this has had the effect of limiting any attempts to broaden the scope of the Fund. The determination of individual dividends or direct cash payments is made according to a formula set out in legislation and does not reflect current oil prices but instead it is based on a five year average of earnings on a number of securities.

The legislation determines ways that payments flow in and out of the Fund, leaving little room for even legislative discretion. The primary requirement is that the real value of the capital is maintained.

The model is rigid as a result: it is unable to respond to changing state needs or a decline in oil production.

Internal and external managers are used. Investments are always made outside of the State.

Operation of the Fund exhibits a high degree of transparency; quarterly and annual reports are produced.
The Heritage Savings Trust Fund was set up in 1976 but evolved considerably from the 1990s. Initially it had goals of economic diversification and social improvement but these were abolished after perceptions of limited success; instead the Fund was restructured into a financial investment fund with the goal of maximizing return subject to acceptable risk.

It is required to invest much of its assets within the Province as part of developing the local economy but also invest savings outside the Province.

The Fund has been de facto decoupled from the oil economy and is now a portfolio of financial assets with returns being used to pay down provincial debt. Quarterly reports are made by the provincial finance minister summarizing investments to the legislature and the public; annual reviews of the Fund’s performance, ensuring compliance with the regulations governing the Fund are undertaken. Fund finances are subject to a regular external audit by the Auditor General.

External managers have been hired to cover specific investment mandates.

The Fiscal Management Act of 2013 created the Contingency Account as a stabilization fund to provide budget financing in those years where expenses exceed revenues. The 2013 budget adjusts the new deposit rule by depositing the first $5 billion in resource revenue into the Contingency Account. In subsequent years, all or some of any fiscal surpluses will be deposited into the Contingency Account. The Alberta Treasury determines the portion of fiscal surpluses to be deposited into the Account. The size of the Contingency Fund cannot fall below $5 billion.

Furthermore, the net income of the Fund will no longer be withdrawn after fiscal year 2017/2018, and will instead be retained in the Fund using a graduated process.

One of the objectives of the Alberta Heritage Savings Trust Fund in Canada is to save oil revenues for future generations. Yet despite sky-high production and historically high prices at times from 1987 to 2012, only two relatively small deposits were made into the Fund over this period. This is due to the lack of a deposit rule. In 2013, the Alberta government finally instituted a set of fiscal rules with long-term savings and fiscal stabilization objectives in mind.
Kazakhstan

The National Fund was established in 2000 as an account of the Government held at the national bank. Oil and mining revenues due to the Government are first paid to the finance ministry and then paid into the Fund according to a strict formula.

The Fund has a savings and a stabilization function and payments are made into two separate portfolios to reflect this. A reference price for oil is determined for a five-year period and this determines baseline budgeted oil revenues. Ten percent of these are paid into the savings account quarterly and 90 percent are retained for the budget. Excess revenues above the budgeted amount are paid into the stabilization account; deficits below the reference price are withdrawn from the stabilization account. Mining payments have a separate reference price. The finance ministry sets benchmarks for the Fund and the central bank reports to the ministry on Fund performance against the benchmarks.

All major decisions concerning management and altering of rules on payments in and out of the Fund have to be made by the President.

Accountability is lower than usual in such funds and there is little oversight or transparency of information.

(2010-present) Presidential Decree No. 962 introduced the most recent rule. Annual transfers are fixed at $8 billion per year, which can now be used to fund current budget expenditures in addition to development programs. This amount can be adjusted by 15 percent through legislation.

The balance of the Fund cannot fall below 20 percent of GDP in a given fiscal year. If it does, the shortfall is to be covered by cutting the fixed annual transfer by the amount needed to cover the difference.

A further change was made in November 2014, in response to a drop in oil prices: withdrawals of US$3bn a year will be made from 2015 to 2017 to develop transport, energy, industrial and social infrastructure.

Sources: NRGi and Colombia Center for Sustainable Investment; Davis et al (IMF); Bacon and Tordo.