

Natural Resource Fund Governance: The Essentials

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Executive summary

Natural resource funds—a subset of sovereign wealth funds—held approximately \$4 trillion in assets as of July 2014. This money, which belongs to the public and comes from extraction of non-renewable resources, should serve the public interest. Governments can use these funds to cover budget deficits when resource revenues decline; to save for future generations; to earmark for national development projects; or to help mitigate Dutch disease by investing abroad. They can also be used to reduce spending volatility, in turn improving the quality of public spending, promoting growth and reducing poverty, and protect oil, gas and mineral revenues from corruption. Citizens in Chile, Norway, some Persian Gulf countries and some U.S. states have experienced these benefits.

Unfortunately, poor natural resource fund governance has often undermined public financial management systems and funds have been used as sources of patronage and nepotism, with dramatic results. Ostensibly designed to steady macroeconomic management or set aside savings for the future, many funds have lacked clear goals or rules, and thus have complicated public finance without making it more effective. And in places like Angola and Russia, they have been used to avoid public scrutiny, facilitating billions of dollars in wasteful spending.

The Natural Resource Fund Project

The Natural Resource Governance Institute (NRGI) and the Columbia Center on Sustainable Investment (CCSI) surveyed 22 natural resource funds worldwide, covering 18 national and subnational jurisdictions. The research methodology for these fund profiles drew on a number of resources for its analytical framework, including Edwin Truman's Sovereign Wealth Fund Scoreboard, NRGI 2013 Resource Governance Index and the Santiago Principles. Each profile is the product of in-depth study of the laws, regulations and policies governing one or a set of funds in a given country or subnational jurisdiction. Primary sources were used when available and all profiles were peer-reviewed by sovereign wealth fund experts, based in-country where possible.

Lessons from these case studies crystalized into five policy briefs examining fund management, investments, transparency and accountability to the public, as well as the fiscal rules that govern them. **This policy overview is a summary of the project's findings and conclusions.** Detailed discussions of our conclusions can be found in the five policy briefs and in the 18 profiles at www.resourcegovernance.org/nrf.

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Why does natural resource fund governance matter?

Poor fund governance has resulted in the loss of billions of dollars in oil, gas and mineral sales. For instance, due to excessive risk-taking and lack of oversight, the Libyan Investment Authority lost much of a \$1.2 billion investment in equity and currency derivatives following the 2008 financial crisis. From the mid-1980s to 1992, the Kuwait Investment Authority lost \$5 billion on poor investments in Spanish firms. An absence of internal controls, supervision and transparency made possible not only mismanagement of assets but also high commissions and profits for insiders. The opacity of many natural resource funds provides a fertile environment in which these maladies can fester; of the 58 natural resource funds we have identified globally, half are too opaque to study comprehensively, raising questions about how they are being used or misused.

The indirect costs of poor natural resource fund governance may be even greater. Many natural resource funds either do not serve a well-defined purpose or do not meet their objectives. One self-declared savings fund, the Canadian province of Alberta's Heritage Savings Trust Fund, failed to save for much of a 25-year period, contributing to inflation and encouraging unsustainable consumption. And some self-declared stabilization funds have failed to mitigate expenditure volatility caused by swings in oil prices (e.g., Azerbaijan, Kazakhstan, Trinidad and Tobago, Venezuela). Expenditure volatility makes planning for the future, both by the government and the private sector, more difficult, leading to poor investment decisions. Additionally, when spending increases too quickly, money is often wasted on legacy projects such as concert halls and monuments, or can cause inflation. When spending is cut too quickly, roads are left half-built and economies can experience significant unemployment or bankruptcies.

Key findings

Natural resource funds are increasingly popular; 34 of the 58 funds currently active were established since 2000, with authorities in more than a dozen more countries considering or planning new funds.¹ Among both new and older funds, there is a clear trend toward codifying (in legislation or regulation) governance requirements, such as rules determining which types of revenues must be deposited, or rules detailing the management roles of different government agencies.

Transparency requirements and checks on corruption and patronage are often inadequate. We find that only about half of the funds in our sample of 18 release internal or external audits of their performance or publish the details of specific investments. Funds in Botswana, Equatorial Guinea, Iran, Kuwait, Mexico, Russia and Qatar remain relatively opaque despite their governments signing on to the Santiago Principles, a set of voluntary good governance standards. The Brunei Investment Agency, Equatorial Guinea's Fund for Future Generations and the Libyan Investment Authority still keep nearly all information about their activities secret. Amidst the overall weakness in fund transparency, there are a growing number of funds that have begun to publish audits and information about returns and investment managers.

Some governments also resist even the most basic operational rules, leaving them at greater risk of not fulfilling their macroeconomic objectives. The governments of Abu Dhabi (UAE), Azerbaijan, Botswana, Iran, Kuwait, and Russia, for example, have been unwilling to impose withdrawal rules on their respective funds, while the governments of Abu Dhabi and Botswana have not imposed deposit rules.

Additionally, most governments permit domestic spending directly through their funds' choices of asset holdings rather than through the budget process. This has undermined parliamentary accountability, democratic institutions and public financial management systems in some

¹ New funds are being planned or considered at the national level in Afghanistan, Israel, Kenya, Lebanon, Liberia, Mozambique, Myanmar, Niger, Peru, Uganda, Sierra Leone, South Sudan, Tanzania and Zambia and at the subnational level in many other countries.

countries. In Azerbaijan, for instance, government authorities have used the State Oil Fund (SOFAZ) to directly finance strategic government projects such as the railway between Azerbaijan, Georgia and Turkey. These expenditure items are not subject to the same reporting or public procurement requirements as those financed through the normal budget process, nor are they subject to as much parliamentary oversight. The Angola Sovereign Fund, the National Development Fund of Iran, and Russia's National Wealth Fund also bypass normal budgetary procedures and are used as vehicles for political patronage. In recognition of this danger—as well as the potential that domestic spending by the funds will undermine macroeconomic objectives like fiscal sterilization—some funds, including those in Abu Dhabi (UAE), Botswana, Chile, Ghana, Kazakhstan and Norway, have prohibited direct domestic investments.

Contrary to conventional wisdom, we argue that because of the risks associated with their existence outside the ordinary budget process, funds generally ought not to be used as vehicles for domestic investment through choices of domestic asset holdings. Instead, domestic spending of natural resource revenues should be made via withdrawals from the fund to the general or consolidated account, and can even be earmarked for specific health, education, infrastructure or sector-specific projects to encourage spending on development priorities.

The rhetorical appeal of natural resource funds as symbols of development and progress has sometimes outstripped their practical value as solutions to specific macroeconomic or budgetary problems. This lack of clarity represents a real danger, as poorly conceived funds can become channels for corruption.

Recommendations

We recommend that governments establishing or maintaining natural resource funds consider six steps that promote good natural resource fund governance, each of which is elaborated further in our other policy briefs:

1. Set clear fund objective(s) (e.g., saving for future generations; stabilizing the budget; earmarking natural resource revenue for development priorities).
2. Establish fiscal rules—for deposit and withdrawal—that align with the objective(s).
3. Establish investment rules (e.g., a maximum of 20 percent can be invested in equities) that align with the objective(s).
4. Clarify a division of responsibilities between the ultimate authority over the fund, the fund manager, the day-to-day operational manager, and the different offices within the operational manager, and set and enforce ethical and conflict of interest standards.
5. Require regular and extensive disclosures of key information (e.g., a list of specific investments; names of fund managers) and audits.
6. Establish strong independent oversight bodies to monitor fund behavior and enforce the rules.

Additionally, we stress that governments should establish these and other rules and institutions governing natural resource funds through a process that generates broad political consensus. Governments may not comply with even the best rules unless key stakeholders and the broader citizenry have bought into the need for government savings and constantly apply pressure to follow the rules. This has become apparent not just in natural resource-rich economies, but also in places like Europe where, from time to time, most member states breached the fiscal rules outlined in the EU's Stability and Growth Pact even prior to the 2007-08 global financial crisis.

Finally, we call on international institutions and advisers to carefully consider the implications of recommending the establishment of funds where public financial management systems are opaque

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and poorly functioning. International advisors should recognize that the establishment of a fund by itself will not improve resource governance. Rather, natural resource funds ought to be products of fiscal rules or macroeconomic frameworks that call for savings of oil, gas or mineral revenues. Minimum conditions (e.g., clear objectives, operational rules, investment risk limitations, effective oversight, transparency) must be present in order to improve natural resource governance.



The Natural Resource Fund Project

Given their collective size—approximately \$4 trillion in assets as of July 2014, and growing—and concerns about the motivations of their government owners, much has been written about natural resource funds (NRFs), their investments and their global influence.² However, funds' impacts on governance and public financial accountability at home has received far less attention.³

On the one hand, these funds can be used to serve the public interest—for example, by covering budget deficits when oil or mineral revenues decline, saving resource revenues for future generations, or helping to mitigate Dutch disease through fiscal sterilization.⁴ On the other hand, in many countries they have undermined public financial management and become sources of patronage and nepotism.

The Natural Resource Governance Institute (NRGI) and the Columbia Center on Sustainable Investment (CCSI) have conducted a worldwide survey of natural resource funds—a subset of sovereign wealth funds—examining their management, investments, transparency and accountability to the public, as well as the fiscal rules that govern them.⁵ The goal of the project is to better understand current fund governance practices in order to foster cross-country experience sharing and improve fund performance. The five policy briefs, 18 natural resource fund profiles, this policy overview, and associated website (www.resourcegovernance.org/nrf) that constitute the project have been designed to equip government officials, policymakers, researchers and citizens with much of the necessary background and information to establish funds or reform existing ones. Each profile—whether it covers a national fund like Kazakhstan's or a subnational fund like North Dakota's (USA)—is the product of in-depth study of the laws, regulations and policies governing one or a set of funds in a given country, province or state. Primary sources were used when available and all profiles were peer-reviewed by sovereign wealth fund experts, based in-country where possible.

This policy overview summarizes our results and conclusions. It defines a natural resource fund and provides a synopsis of the basic elements of good fund governance and recent trends in fund governance. It also recaps the five separate policy briefs which cover:

1. Institutional structure of natural resource funds
2. Rules-based investment for natural resource funds
3. Fiscal rules for natural resource funds—how to develop and operationalize an appropriate rule
4. Independent oversight of natural resource funds
5. Natural resource fund transparency

2 For example: Clark, Gordon L., Adam D. Dixon and Ashby H.B. Monk, *Sovereign Wealth Funds: Legitimacy, Governance, and Global Power*. Princeton University Press: Princeton (2013); Bolton, Patrick, Frederic Samama and Joseph E. Stiglitz (eds.), *Sovereign Wealth Funds and Long-Term Investing*. Columbia University Press: New York (2012); Truman, Edwin, *Sovereign Wealth Funds: Threat or Salvation?* Peterson Institute for International Economics: Washington, D.C. (2010); or the *Financial Times* and *Guardian* pages on sovereign wealth funds.

3 Key publications include: Bacon, Robert and Silvana Tordo, *Experiences with Oil Funds: Institutional and Financial Aspects*. World Bank: Washington (2006); Collier, Paul and Anthony J. Venables (eds.), *Plundered Nations? Successes and Failures in Natural Resource Extraction*. Palgrave MacMillan: New York (2011); and Johnson-Calari, Jennifer and Malan Rietveld, *Sovereign Wealth Management*. Central Banking Publications: London (2007).

4 Dutch disease is a decline in the manufacturing or agricultural sectors caused by a large inflow of foreign currency into the economy from, for example, oil sales to foreigners. The inflow causes exchange rate appreciation or inflation, making exports less competitive. Also, labor and capital move into the “boom sector,” often the oil or mining sector, from the other sectors, further harming manufacturing or agricultural competitiveness. Consumers may be harmed by a rise of prices of “non-tradeables” such as taxis, haircuts and restaurant meals. Fiscal sterilization—essentially placing foreign currency income back outside the economy—can help mitigate the Dutch disease.

5 The NRFs were chosen based on three criteria: interest from policymakers on their governance, availability of information and available resources. Over time we expect to expand the number of NRF profiles available on www.resourcegovernance.org/nrf.

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What are natural resource funds, why are they established, and are they successful?

In 2010, approximately \$1 trillion in oil and gas revenues alone were deposited into government accounts in resource-rich countries.⁶ Mineral production contributed tens of billions more to government coffers.⁷ These vast sums have the potential to transform economies for the better through public investments in health, education, infrastructure and social services, or through direct benefits to citizens.

In most countries, the vast majority of resource revenues are spent through the national budget. However, they are often collected or distributed by accounts or entities other than the budget as well. In Ghana, for instance, more than 40 percent of oil revenues in 2011 were transferred to the state-owned Ghana National Oil Company.⁸ In Mongolia, a portion of mining revenues has been transferred directly to citizens via a cash transfer program. And in Indonesia, Nigeria and Peru, sub-national governments receive a percentage of mineral or oil revenues according to a stated formula.

The largest non-budgetary allocations of oil, gas or mining revenues have been to special funds, sometimes called **sovereign wealth funds (SWFs)** or **natural resource funds (NRFs)**.⁹ A natural resource fund is a special-purpose investment fund owned by a government whose principal source of financing is revenue derived from oil, gas or mineral sales and that invests at least in part in foreign financial assets (see Box 1 for an explanation of the difference between natural resource funds and other extrabudgetary funds).¹⁰ This study has identified 58 such funds worldwide (see Table 1 and Figure 1 for a full list and Figures 2 and 3 for a breakdown of the funds by size and source of financing).

Natural resource funds have proliferated over the last decade. Since 2000, approximately 34 funds have been created (see Box 2 for a brief history of natural resource funds). Afghanistan, Israel, Kenya, Lebanon, Liberia, Mozambique, Myanmar, Niger, Peru, Uganda, Sierra Leone, South Sudan, Tanzania and Zambia are planning or considering new funds at the national level, while subnational jurisdictions in many other countries, including Canada and Indonesia, are considering them at the provincial, state or district levels.

6 Economist Intelligence Unit.

7 EITI reports.

8 National oil companies often sell oil on behalf of the state and retain a portion of oil revenues to cover their costs and for reinvestment purposes, following a formula (e.g., KOC in Kuwait) or on an ad hoc basis (e.g., Sonatrach in Algeria). Some other national oil companies function as commercial entities, paying the same tax rates as private companies (e.g., Statoil in Norway). In still others, oil revenues are pooled in a natural resource fund and transferred to the national oil company directly by the fund (e.g., Ghana).

9 Natural resource funds are a type of sovereign wealth fund. The difference between a sovereign wealth fund and a natural resource fund is that the latter is principally financed through oil, gas and mineral sales while the former may be financed through fiscal surpluses (e.g., from trade surpluses) or pension contributions.

10 This definition draws on a number of sources, namely the International Working Group on Sovereign Wealth Funds (IWG), consisting of 24 member governments which define sovereign wealth funds as “special purpose investment funds or arrangements, owned by the general government. Created by the general government for macroeconomic purposes, SWFs hold, manage, or administer assets to achieve financial objectives, and employ a set of investment strategies which include investing in foreign financial assets. The SWFs are commonly established out of balance of payments surpluses, official foreign currency operations, the proceeds of privatizations, fiscal surpluses, and/or receipts resulting from commodity exports” (IWG 2007). Edwin Truman (2010) defines sovereign wealth funds as “large pools of government-owned funds that are invested in whole or in part outside their home country.” Truman includes subnational funds. Similarly, Castelli and Scacciavillani (2012) define them as “publicly owned investment vehicles with a mandate to transfer wealth to future generations by investing in an international portfolio of securities and assets, including companies.” They specifically exclude investment vehicles primarily geared toward domestic development, such as state-owned enterprises or national development banks and entities financed primarily through transfers of central bank reserves. We have omitted funds created to shield national budgets from agriculture-based commodity cycles, such as the National Coffee Fund of Colombia, a stabilization fund that was created in 1940, because the macroeconomic impacts of agricultural revenues are usually small relative to oil, gas and mineral revenues, and they are renewable resource revenues, whose optimal saving-spending ratios are different from non-renewable resource revenues.

Table 1:
List of all identified
natural resource funds
(as of July 2014)

Government	Fund name	Year established	Value of assets (latest available or estimate) ¹¹	Financing resource
Abu Dhabi (UAE)	Abu Dhabi Investment Authority*	1976	> \$773 billion	Petroleum
	International Petroleum Investment Authority	1984	\$68.4 billion	Petroleum
	Mubadala Development Company	2002	\$60.9 billion	Petroleum
Alabama (USA)	Alabama Trust Fund*†	1985	\$2.84 billion	Petroleum
Alaska (USA)	Alaska Permanent Fund*†	1976	\$52.4 billion	Petroleum
Alberta (Canada)	Alberta Heritage Savings Trust Fund*†	1976	\$16.2 billion	Petroleum
Algeria	Revenue Regulation Fund	2000	\$70.9 billion	Petroleum
Angola	Angola Sovereign Fund	2012	\$5 billion	Petroleum
Azerbaijan	State Oil Fund*†	1999	\$36.6 billion	Petroleum
Bahrain	Future Generations Reserve Fund	2006	\$0.22 billion	Petroleum
Botswana	Pula Fund*†	1994	\$5.7 billion	Minerals
Brunei	Brunei Investment Agency	1983	\$39 billion	Petroleum
Chile	Pension Reserve Fund*†	2006	\$7.6 billion	Minerals
	Social and Economic Stabilization Fund*†	2007	\$15.9 billion	Minerals
Colombia	Savings and Stabilization Fund	2011	Not yet operational	Petroleum
Equatorial Guinea	Fund for Future Generations	2002	\$0.2 billion	Petroleum
Dubai (UAE)	Investment Corporation of Dubai	2006	\$160 billion	Petroleum
Gabon	Gabon Sovereign Wealth Fund	1998	\$0.4 billion	Petroleum
Ghana	Ghana Heritage Fund*†	2011	\$0.13 billion	Petroleum
	Ghana Stabilization Fund*†	2011	\$0.32 billion	Petroleum
Iran	National Development Fund of Iran*	2011	\$62 billion	Petroleum
	Oil Stabilization Fund*	2000	No information available	Petroleum
Kazakhstan	Kazakhstan National Fund*†	2000	\$76.6 billion	Petroleum
Kiribati	Revenue Equalization Reserve Fund	1956	\$0.65 billion	Minerals
Kuwait	Kuwait Investment Authority*	1953	> \$400 billion	Petroleum
Libya	Libyan Investment Authority	2006	\$66 billion	Petroleum
Louisiana (USA)	Louisiana Education Quality Trust Fund†	1986	\$1.2 billion	Petroleum
Malaysia	National Trust Fund	1988	\$1.7 billion	Petroleum
Mauritania	National Fund for Hydrocarbon Reserves†	2006	\$0.09 billion	Petroleum
Mexico	Oil Revenues Stabilization Fund	2000	\$3.47 billion	Petroleum
	Mexican Fund for Stabilization and Development	2014	Not yet operational	Petroleum
Mongolia	Fiscal Stability Fund†	2011	\$0.21 billion	Minerals
Montana (USA)	Montana Permanent Coal Trust Fund†	1978	\$0.56 billion	Minerals

¹¹ Estimates are from primary sources, such as fund annual reports, using the latest year, where available. Otherwise we used secondary sources such as newspaper reports or the latest estimates from the Institutional Investor's Sovereign Wealth Center.

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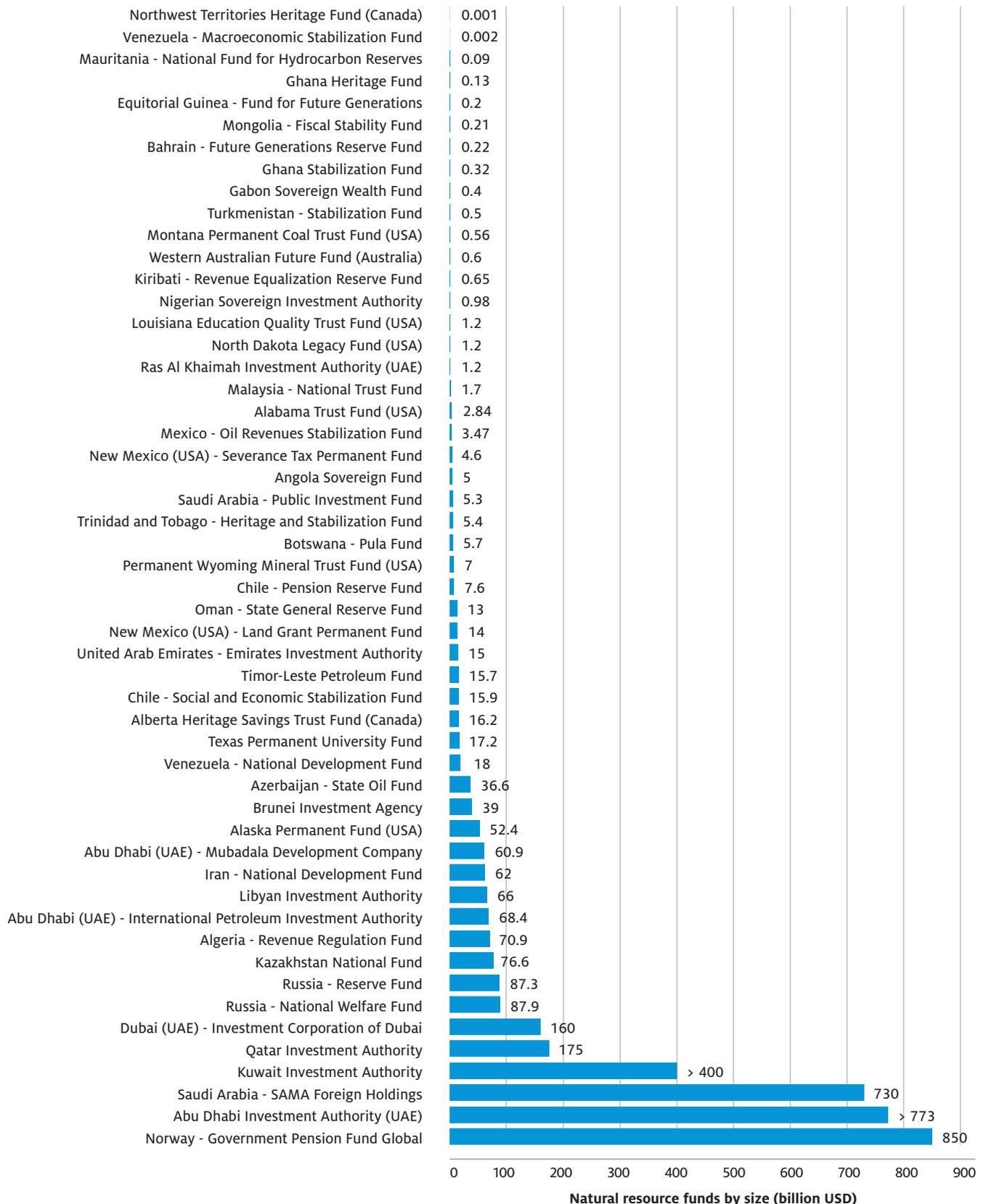
Government	Fund name	Year established	Value of assets (latest available or estimate) ¹¹	Financing resource
Nauru	Phosphate Royalties Stabilization Fund	1968	No information available	Minerals
New Mexico (USA)	Land Grant Permanent Fund†	1898	\$14 billion	Minerals and land
	Severance Tax Permanent Fund†	1973	\$4.6 billion	Petroleum and minerals
Nigeria	Nigerian Sovereign Investment Authority	2011	\$0.98 billion	Petroleum
North Dakota (USA)	North Dakota Legacy Fund*†	2011	\$1.2 billion	Petroleum
Norway	Government Pension Fund Global*†	1990	\$850 billion	Petroleum
Northwest Territories (Canada)	Northwest Territories Heritage Fund	2012	\$0.001 billion	Minerals
Oman	State General Reserve Fund	1980	\$13 billion	Petroleum
Papua New Guinea	Papua New Guinea Sovereign Wealth Fund	2011	Not yet operational	Gas
Qatar	Qatar Investment Authority	2005	\$175 billion	Petroleum
Ras Al Khaimah (UAE)	RAK Investment Authority	2005	\$1.2 billion	Petroleum
Russia	National Welfare Fund*†	2004	\$87.9 billion	Petroleum
	Reserve Fund*†	2004	\$87.3 billion	Petroleum
Sao Tome and Principe	National Oil Account	2004	No information available	Petroleum
Saudi Arabia	SAMA Foreign Holdings	1952	\$730 billion	Petroleum
	Public Investment Fund	1971	\$5.3 billion	Petroleum
Texas (USA)	Texas Permanent University Fund*†	1876	\$17.2 billion	Petroleum and land
Timor-Leste	Timor-Leste Petroleum Fund*†	2005	\$15.7 billion	Petroleum
Turkmenistan	Stabilization Fund	2008	\$0.5 billion	Petroleum
Trinidad and Tobago	Heritage and Stabilization Fund*†	2000	\$5.4 billion	Petroleum
United Arab Emirates	Emirates Investment Authority	2007	\$15 billion	Petroleum
Western Australia (Australia)	Western Australian Future Fund	2012	\$0.6 billion	Petroleum and minerals
Wyoming (USA)	Permanent Wyoming Mineral Trust Fund*†	1974	\$7 billion	Minerals
Venezuela	Macroeconomic Stabilization Fund	1998	\$0.002 billion	Petroleum
	National Development Fund†	2005	\$18 billion	Petroleum

* Funds profiled in the natural resource fund study

† Funds that publish quarterly reports (non-operational funds excluded) – an indicator of transparency

Figure 1:

**List of all identified natural resource funds
(as of July 2014)**



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Figure 2:
Breakdown of 52 operational natural resource funds by assets under management (number of funds), U.S. dollars

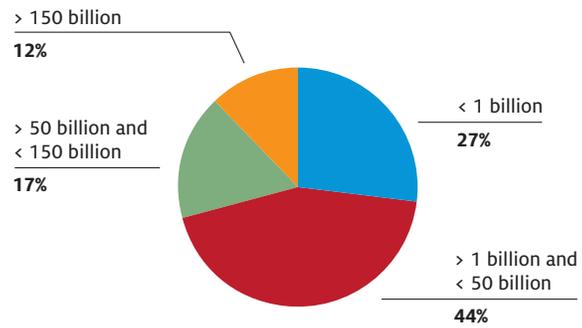
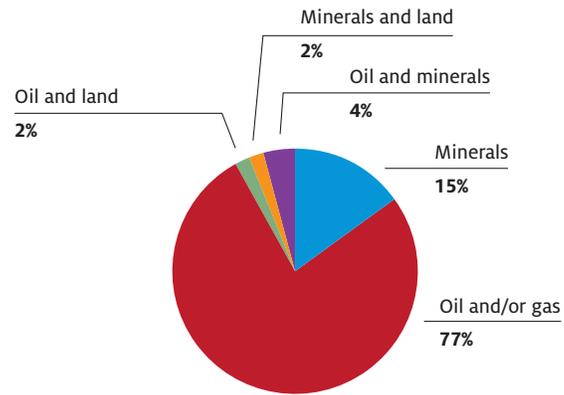


Figure 3:
Breakdown of the 52 operational natural resource funds by principal source of financing (number of funds)



Box 1: The difference between natural resource funds and other extrabudgetary funds

Governments often exclude some revenues, expenditures or financing from their annual budget laws, instead using separate banking or institutional arrangements called extrabudgetary funds to finance particular items. The most common extrabudgetary fund is a pension fund, such as the Canada Pension Plan. Other types include development funds that earmark spending for specific purposes like roads or environmental protection (e.g., Alabama (USA)'s Forever Wild Land Trust Fund); donor funds that manage donor aid under special conditions (e.g., Liberia Health Sector Pooled Fund); and multi-year budgets that do not expire at the end of the fiscal year (e.g., Timor-Leste's Infrastructure and Human Capacity Development Funds).

These funds are established for many different reasons. On the one hand, they can address a need for guaranteed multi-year financing, save government revenues for future generations, earmark spending for projects that promote development rather than recurrent expenditures, or protect politically sensitive programs from budget cuts. On the other hand, they can be used to circumvent parliamentary or citizen oversight, skirt established procurement procedures or keep certain activities of the government secret.

Natural resource funds are a type of extrabudgetary fund. What differentiates them from other types of government funds is that their principal source of financing is oil, gas or minerals, and they invest a portion of their funds in foreign assets with the goal of making a positive financial return. Also, their overall objective is generally to address macroeconomic challenges, such as Dutch disease or expenditure volatility.

While in most cases it is easy to distinguish between a natural resource fund and a multi-year financing, donor or development fund, at times the lines between them may be blurred. For example, the National Development Fund of Iran's main objective is to finance the domestic private sector, making it more of a development bank than a natural resource fund. However, because it has absorbed the Oil Stabilization Fund's foreign assets, along with its mandate to save oil revenues for future generations (in response to international sanctions), we have designated it a natural resource fund for the purposes of this project.

Sources: Allen, Richard and Dimitar Radev, Extrabudgetary Funds. IMF: Washington, D.C. (2010). <http://www.imf.org/external/pubs/ft/tnm/2010/tnm1009.pdf>.

Coppin, Erin, Marcus Manuel, and Alastair McKechnie, Fragile states: measuring what makes a good pooled fund. ODI Project Briefing No. 58 (2011). <http://www.odi.org.uk/sites/odi.org.uk/files/odi-assets/publications-opinion-files/7266.pdf>.

Why are natural resource funds established?

There are several strong rationales for establishing a natural resource fund. First, natural resource funds can help **smooth expenditures** in ways that improve public spending efficiency and the government's ability to spend thoughtfully. Since oil, gas and mineral revenues are volatile and unpredictable, governments may find themselves unable to set realistic budgets over the medium-to-long term. Worse, they may overspend when revenues are high, perhaps on extravagant legacy projects (e.g., hotels, concert halls, new airports) and have to either cut essential services or indebt themselves when revenues decline. This can lead to poor public investments and unfinished infrastructure. Governments can save a portion of revenues in stabilization funds when revenues are high and draw down on these funds when revenues decline in order to prevent these "boom-bust" spending cycles. For example, resource-rich U.S. states like Wyoming are able to grow through periods of temporary oil and mineral price declines due in part to the availability of a pool of funds to draw on during downturns.

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Second, funds can help governments **save resource revenues** when they either do not have the capacity to spend all the money efficiently when it comes in, or do not have significant immediate spending needs. Some governments, like in Timor-Leste, may find it difficult to spend all resource revenues as they are collected without generating significant waste because they do not possess the managerial systems, technology, labor or skills to spend vast sums effectively (also described as lack of “absorptive capacity”). In such cases, governments may elect to ‘park’ some revenues now in foreign assets until they develop enough capacity to spend the money well or the economy grows enough to absorb these revenues.¹²

However, even in advanced economies, saving revenues from a non-renewable resource may generate longer-lasting benefits than spending it all in the short-term. Oil, gas and minerals are finite assets. As such, some governments have recognized that saving a portion of extractive revenues, investing them in productive assets and living off the investment returns can extend the financial benefits of extraction beyond the life of the oil field or mine, perhaps even indefinitely. Additionally, there is an ethical case to be made about intergenerational equity; some believe that our children should receive the same share of financial benefits as the current generation. With small populations and vast oil wealth, many Persian Gulf countries like Kuwait, Oman, Qatar and the UAE have chosen to save for these reasons. In each, saving oil wealth has created an endowment for the benefit of future generations.

Third, funds can help **mitigate Dutch disease** by sterilizing large capital inflows, in this case foreign exchange inflows associated with oil, gas or mineral sales. Countries or regions with relatively small economies that scale up oil, gas or mineral production quickly may find that, if the economy cannot absorb it effectively, the large inflow of foreign currency associated with production can lead to the exchange rate appreciating or prices and wages increasing. This can cause local businesses to become less competitive internationally and harm the non-resource economy. Governments can help mitigate this so-called Dutch disease by saving a portion of resource revenues in foreign assets. This is called fiscal sterilization. Countries such as Norway and Saudi Arabia have kept their exchange rates under control or inflation lower than it would have been otherwise by saving resource revenues in foreign assets rather than spending them domestically.

Fourth, a natural resource fund can be a means of limiting the discretion of politicians in making spending decisions and **earmarking revenues for public investments** like roads, water systems, hospital equipment and education programs. Earmarking involves withdrawing money from a natural resource fund and requiring that it be spent on specific expenditure items through the budget process or as cash transfers to households. Importantly, it does not refer to making public spending decisions through the fund’s choices of asset holdings, bypassing the formal budget process. This could damage the integrity of the public financial management system, possibly circumventing accountability mechanisms like parliamentary oversight and audits, and lead to the use of resource revenues for patronage.

Examples of earmarking include Ghana’s rule that oil revenues must fund “development-related expenditures” and Alabama’s (USA) earmarking of some oil and gas revenues for land conservation, municipal capital expenditures and senior services. In Alaska (USA), a portion of oil revenues are distributed directly to residents. Since governments that already spend considerable amounts on public investment projects may simply shift money around to make it seem like they are using natural resource revenues to finance these projects, earmarking may be most useful where there exists strong political pressure to overspend on recurrent expenditures such as public wages and

¹² In low-income, capital-scarce economies such as that of Timor-Leste, spending needs are immediate, so fiscal space must be provided to allow the government to build the “absorptive capacity” to transform resource revenues into long-lasting assets such as infrastructure and human resources.

fuel subsidies. Earmarking has the added benefit of drawing public attention to the exhaustible nature of oil, gas and mineral resources by stressing that the revenues derived from their production must be invested rather than consumed; otherwise, they will have little lasting benefit.

Fifth, some funds have been created to “**ring-fence**” **resource revenues** to protect them from corruption or mismanagement. Given their size and the complex nature of revenue streams (e.g., royalties, profit taxes, bonuses, license fees) entering government coffers from extractive companies, natural resource revenues are often a target of misappropriation. Separating resource revenues can help reduce the risk of corruption and mismanagement only where there are strict and comprehensive disclosure requirements for fund operations and where there is a formal and effective oversight mechanism to monitor these operations. For example, the Sao Tome and Principe National Oil Account is subject to rigorous transparency provisions that ensure that oil revenues are well accounted for, and fund operations are open to public scrutiny. Governments may also want to ring-fence resource revenues because oil, gas and minerals are non-renewable. Pooling revenues under the management of a single authority can help governments distinguish and isolate these finite revenues from other government revenues so that they can be treated differently (i.e., saved).

Finally, natural resource funds can provide governments with **greater political leverage, power and autonomy**. Legislators in the Northwest Territories in Canada, for instance, have stated that their newly established Heritage Fund, financed by mineral revenues, will give the territorial government greater political autonomy from the Canadian federal government. And in low- and middle-income countries, governments can draw upon precautionary savings in cases of financial crisis instead of borrowing from private banks or international financial institutions, both of which can impose burdens on a government. In short, natural resource funds can be a powerful source of protection against foreign influence and market forces.

That said, natural resource funds are not always established with the public or national interest in mind. In some countries, particularly but not exclusively those ruled by authoritarian regimes, natural resource funds have been established to avoid public scrutiny of specific projects or bypass formal oversight. As such, many have been used as slush funds by the ruling family or party. The Libyan Investment Authority (LIA) under the Gadhafi regime is a case in point, where the late dictator’s son, Saif al-Islam Gadhafi, had nearly full discretion to manage much of the fund’s approximately \$65 billion. Billions of dollars were invested with Gadhafi’s close acquaintances.¹³

Finally, one of the most common reasons for establishing a natural resource fund has been to make a global statement about self-determination. Natural resource funds have become symbols of development and progress and are not always promoted as solutions to specific macroeconomic or budgetary problems. As such, they sometimes represent form over substance and are created without a well-defined objective in mind. This lack of clarity presents a real danger, as poorly conceived funds can undermine public financial management systems and can lead to squandering of revenues.

13 Lina Saigol and Cynthia O’Murchu, “After Gadhafi: A Spent Force,” *The Financial Times*, September 8, 2011. <http://www.ft.com/intl/cms/s/0/1b5e11b6-d4cb-11e0-a7ac-00144feab49a.html#axzz2PclPUcQK>.

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Box 2: A brief history of natural resource funds

Natural resource funds are not new. The oldest continually operating fund, the Texas Permanent University Fund (USA), dates back to 1876. The Kuwait Investment Board, the Kuwait Investment Authority's predecessor, was the first fund established at the national level in 1953, albeit while Kuwait was a British protectorate. However, it is only since the 2000s that natural resource fund growth has accelerated significantly. Their proliferation has been driven in part by historical context—a desire to learn from the mistakes of the 1970s-80s, when oil and gas windfalls were largely consumed without leaving many long-term benefits—but also by an emerging academic consensus on the optimal management of natural resource revenues windfalls, new large discoveries in several countries, and historically high oil and mineral prices in the 21st century, hence unexpectedly high government revenues.

In response to fears from recipient countries that sovereign wealth fund investments could be politically motivated, in 2007 the G7 called on the International Monetary Fund (IMF) to develop international standards for fund governance and transparency, which became known as the Santiago Principles. An International Working Group of Sovereign Wealth Funds (IWG) consisting of fund officials was established in 2009 to encourage compliance with these principles. Implementation to date has been slow.

When the term “sovereign wealth fund” was coined by Andrew Romanov in 2005 (the earliest known use of the term “natural resource fund” comes from a 2007 publication by Macartan Humphreys and Martin E. Sandbu, though several IMF staffers referred to “nonrenewable resource funds” in the early 2000s), natural resource funds held approximately \$1 trillion in assets. Just nine years later, they hold approximately \$4 trillion in assets.

Are natural resource funds meeting their policy objectives?

Natural resource funds have had varied success in achieving their policy objectives. In Chile, the Economic and Social Stabilization Fund has helped the government stabilize the budget despite large and unexpected rises and falls in government revenues, mainly caused by copper price volatility (see Figure 3). The Norwegian and Saudi Arabian funds have protected their economies from oil price shocks and sterilized capital inflows, helping to mitigate Dutch disease effects. In Timor-Leste, accumulation of oil revenues in the Petroleum Fund has helped the government smooth spending over the longer term. By keeping enormous capital inflows from overwhelming the economy, it has curbed wasteful public spending and has also helped to mitigate Dutch disease effects. Finally, funds in many countries and subnational jurisdictions, such as those in Ghana, Kazakhstan, Kuwait and North Dakota (USA), are saving revenues from non-renewable resources so that future generations may benefit from today's exploration, development and production.

However, many funds have served to undermine public financial management systems. In Azerbaijan, for example, billions of dollars' worth of strategic government projects are financed directly out of the State Oil Fund (SOFAZ), including a railway between Azerbaijan, Georgia and Turkey. These expenditure items are not subject to the same reporting or public procurement requirements as those financed out of the normal budget process.

Funds have also been used for patronage and nepotism. For example, the Libyan and Kuwaiti funds have incurred billions of dollars in avoidable losses due to financial transactions that benefited friends of the regime or investment managers. And in Nigeria, billions of dollars were withdrawn from the Excess Crude Account without plan or justification.¹⁴

¹⁴ See *Rules-based Investment for Natural Resource Funds* for references to the Libyan and Kuwaiti cases; M.U. Ndagi, “Nigeria: Devouring Excess Crude Account,” *Daily Trust*, September 7, 2013. <http://allafrica.com/stories/201309090256.html>.

Fund operations are often opaque and not subject to independent oversight. The Algerian, Bruneian, Omani and Turkmenistani funds are some of the most extreme examples of weak transparency; a visit to the Brunei Investment Agency website provides business hours, an email address and not much else. However, even some governments, such as Equatorial Guinea, Iran, Kuwait and Qatar, that are signatories to the Santiago Principles which commit them to a basic standard of disclosure vis-à-vis their funds, fail to publish detailed information on investments or activities. This opacity and a lack of independent oversight raise questions around how these funds are being used and whom they are benefiting.

In many cases, funds have simply been ineffective. As Figure 4 illustrates, while funds in Norway, Chile and Saudi Arabia have helped smooth government spending despite having to deal with volatile oil revenues, self-declared stabilization funds in Kazakhstan, Trinidad and Tobago and Venezuela have failed to stabilize the budget. And some savings funds have failed to save as their mandate requires. For example, 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.

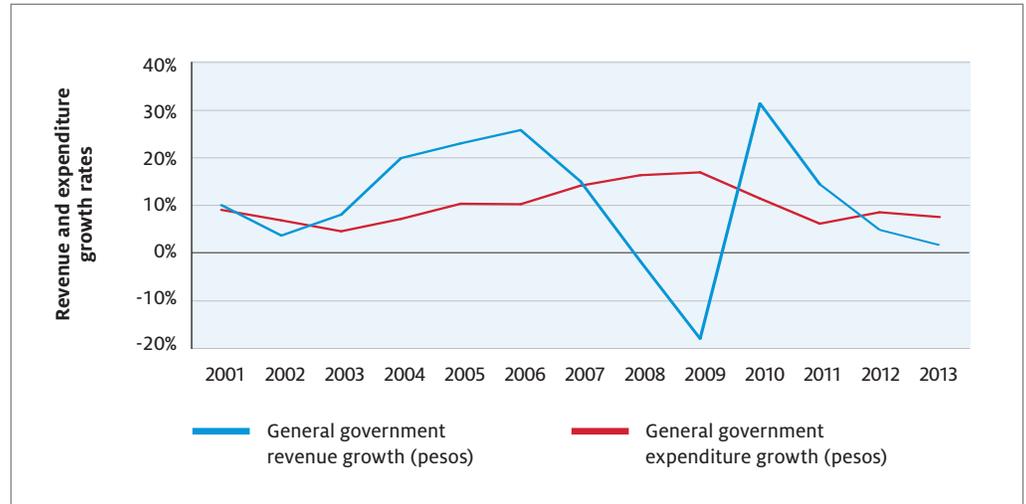


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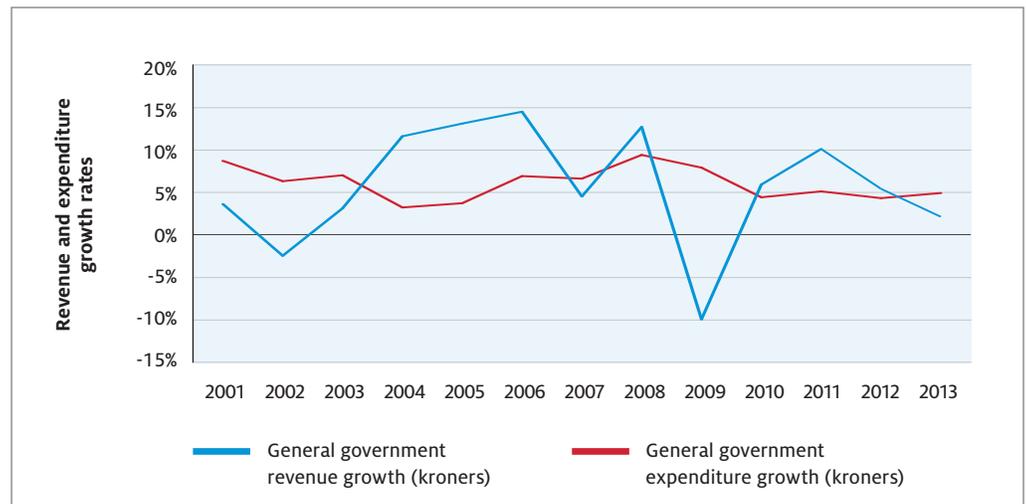
Figure 4:
Budget stabilization
in countries with
stabilization funds

Source: World Economic Outlook data (IMF)

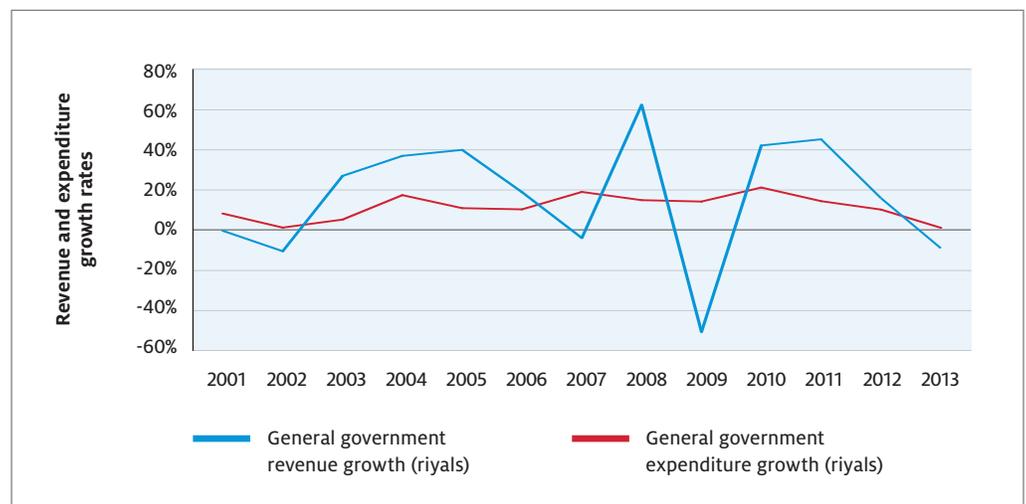
Chile



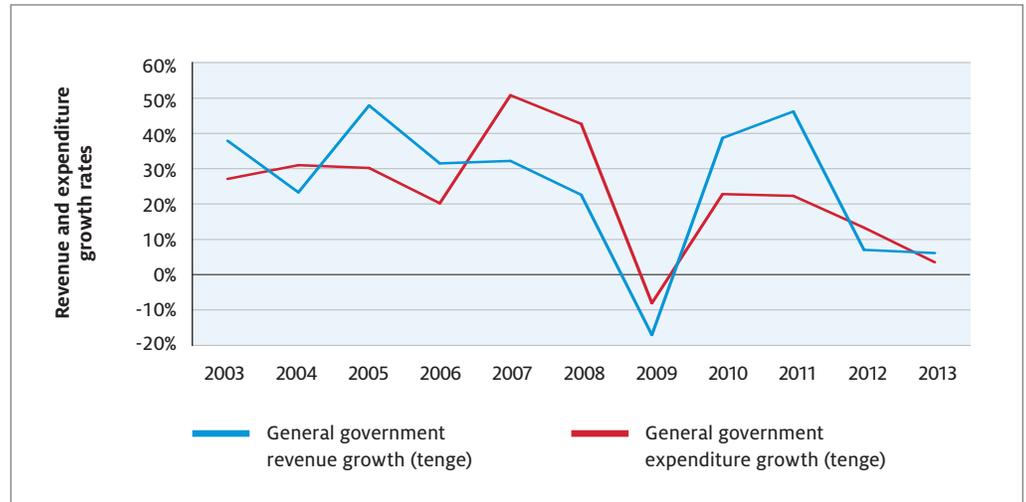
Norway



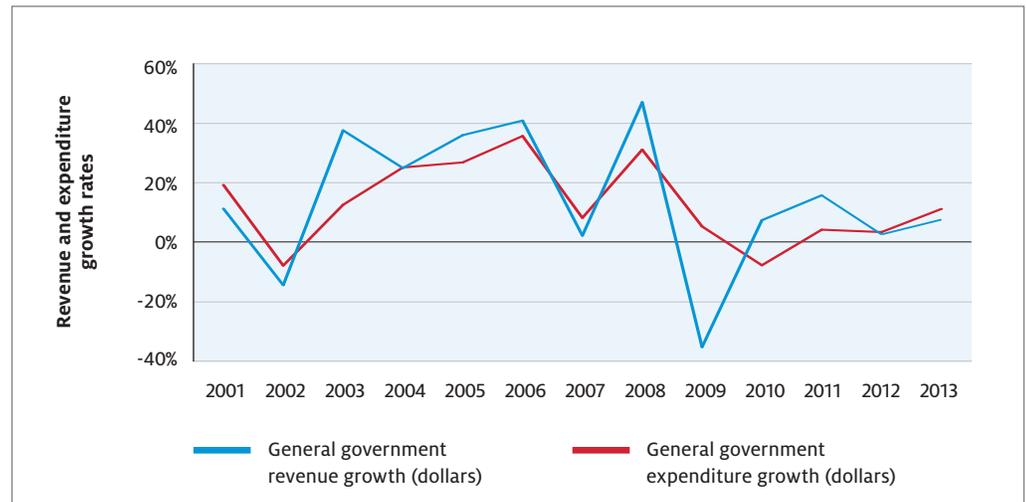
Saudi Arabia



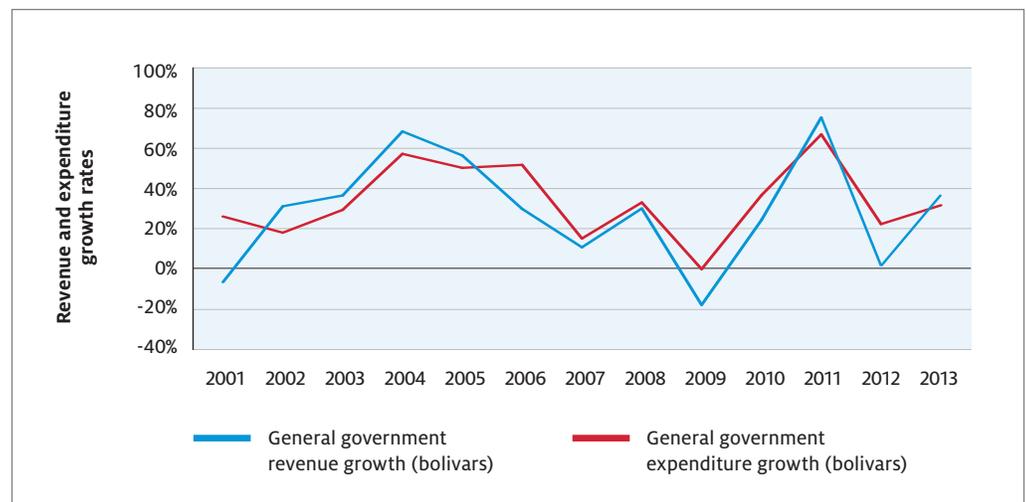
Kazakhstan



Trinidad and Tobago



Venezuela



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Key findings and recommendations

Given the size of revenues managed by these funds in the more than 40 countries that operate them—often in the many billions of dollars—and the dangers that weak governance can pose, good natural resource fund governance is essential for transforming natural resource wealth into citizen well-being. The proliferation of funds, especially in lower-income countries and low-capacity environments, will make good governance even more important in the coming years. But what constitutes good natural resource fund governance? And what can policymakers, oversight bodies and the international community do to improve natural resource fund governance?

The following are our findings from the study of 22 natural resource funds; secondary sources and in-country interviews; and discussions with policymakers and civil society in resource-rich countries (see Annex 2 for secondary sources and publications).

What is good natural resource fund governance?

Our survey of natural resource funds found several key elements of good fund governance: setting a single or multiple fund objectives; establishing appropriate fiscal rules; setting clear investment constraints; creating an effective institutional governance structure; making extensive information on fund operations public; and establishing strong independent oversight over these operations. These elements are reflected throughout the natural resource fund profiles and summarized in page 4 of each profile (see Annex 1 for an explanation of page 4 [“Good Governance Standards” page of the profile]). Below is a detailed summary of each of these elements.

Setting a single or multiple objectives

The objectives of natural resource funds should be clearly stated in government policy, regulation, legislation or even in the constitution. They could include:

- Saving for future generations
- Stabilizing expenditures as a response to oil, gas or mineral revenue volatility
- Sterilizing capital inflows
- Earmarking resource revenues for specific expenditures
- Protecting resource revenues from mismanagement, corruption or patronage
- Saving in case of environmental, financial or social crisis

Some funds serve a single objective, while others serve multiple objectives. For instance, in Ghana there are three funds. The Petroleum Holding Fund ring-fences all oil revenues and the law requires that the government use resource revenues withdrawn from the fund for development-related projects. The Ghana Heritage Fund saves revenues for the benefit of future generations. The Ghana Stabilization Fund helps to mitigate budget volatility. In contrast, the Timor-Leste Petroleum Fund serves as an all-in-one savings, stabilization, sterilization and ring-fencing fund.

At the same time, some resource funds are established without a well-defined objective, making it difficult for policymakers to decide on operational rules or manage the fund’s investments. For example, Azerbaijan’s State Oil Fund’s three objectives are to accumulate and preserve revenues for future generations, finance major government projects, and “preserve macroeconomic stability by decreasing dependence on oil revenues and stimulate the development of the non-oil sector.” Terms such as “preserve macroeconomic stability” are undefined. Furthermore, it is unclear what proportion of the fund is designated for each objective and what operational rules, if any, help the fund achieve them. Multiple objectives in and of themselves are not necessarily problematic, but the lack of operational rules to help funds meet those objectives and lack of clarity around objectives are.

Which objective or set of objectives a government chooses should be informed by the challenges the economy will face. For instance, if the government can absorb a large inflow of oil revenue and spend it efficiently but the inflow is so large that it will generate significant year-to-year budget volatility, a government may wish to establish a stabilization fund. However, if revenues will overwhelm the economy over the longer term, for example, by generating Dutch disease, it may be worthwhile to set up a fiscal sterilization fund. Where none of the problems associated with resource revenue inflows are expected to emerge—for instance, where resource revenues are small and where public financial management, transparency and oversight are effective enough that they will generate substantial benefits and economic growth—it may be preferable not to set up a fund at all.

Good practices: Funds in Chile, Ghana, Kazakhstan, Russia, and Trinidad and Tobago each have strong statements on objectives that make their purpose clear (though this does not mean that they achieve these objectives).

Establishing fiscal rules

(see “Fiscal Rules for Natural Resource Funds” policy brief)

Fiscal rules—multi-year numerical constraints on government finances—are perhaps the most important rules governing fund behavior. Whether a natural resource fund meets its objective(s) depends almost wholly on the suitability, clarity and enforcement of its fiscal rules. First, rules act as a commitment mechanism, binding successive governments to a long-term vision of public finances, so important in regions reliant on finite and unstable revenues. Second, they can facilitate the implementation of budgetary goals and hence improve the efficiency of the public financial management system. Third, they define the conditions under which deposits and withdrawals are made, which can stabilize government spending or generate savings.

Fiscal rules are operationalized through deposit and withdrawal rules. These rules should be clarified in legislation, regulation or a binding policy document. Exceptions to these rules—for example, in cases of environmental, financial or social crisis—should also be clarified.

The absence of clearly defined fiscal rules presents significant risks. In Azerbaijan, for instance, the lack of a withdrawal rule has led to discretionary withdrawals that have enabled the government to spend lavishly when oil prices are high and to cuts when oil prices have declined. The Alberta Heritage Savings Trust Fund (Canada) was established as a savings fund in 1976, though deposits were halted in 1987. As a result of this lack of a deposit rule, the fund saved less than \$4 billion in oil revenues over 25 years, despite hundreds of billions of dollars in oil revenues entering government coffers over the same period. In 2013, the Alberta government finally instituted a set of fiscal rules with long-term savings and fiscal stabilization objectives in mind.

No single rule is appropriate for every country; context should determine the design of fiscal rules and there must be political consensus on their suitability, or they may not be enforced. For example, in Timor-Leste, spending has exceeded what the fiscal rule calls for in nearly every year since 2010, partly a consequence of an overly constraining rule for a country desperately in need of domestic public investment. That said, strong internal controls and independent oversight can help enforce rules.¹⁵

Good practices: The parliaments of Chile, Ghana, and Trinidad and Tobago have established clear and appropriate fiscal rules for their countries (though both the governments of Ghana and Trinidad and Tobago tend to fiddle with their revenue projections in order to spend more and save less).

¹⁵ See policy briefs on Institutional Structure of Natural Resource Funds and Independent Oversight of Natural Resource Funds for how to enforce the rules.

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Establishing investment rules

(see “Rules-based Investment for Natural Resource Funds” policy brief)

Money deposited into a fund must be placed somewhere. One difference between natural resource funds and the government’s consolidated/general fund is that some or the entire natural resource fund is invested in financial or other assets abroad.¹⁶ Investments may include stocks, bonds, derivatives, real estate or even infrastructure.

Investments can be riskier, with an expected higher long-term financial return, or less risky. A fund’s investment risk profile should be a function of its policy objectives (e.g., stabilization fund assets should be more liquid than savings fund assets), the strength of the systems set up to prevent mismanagement, and the capacity to manage complex investments (or at least the capacity to manage the managers). No matter what risk profile is chosen, it should be well defined and enforced through explicit rules that limit exposure. For example, legislation, regulation or fund policy can detail the allocation between cash, fixed income investments, equities and alternative assets. Each can also prohibit investments in certain high-risk financial instruments or volatile currencies. Also, specific assets owned by the fund (e.g., real estate, Berkshire Fund stocks) should be listed in a publicly available document in order to generate a disincentive to invest in obscure or high-risk investments (the Alaska Permanent Fund [USA] is a model in this regard). Lack of rules around investment risk in an opaque setting can generate substantial losses for a fund. For example, the Kuwait Investment Authority lost approximately \$5 billion from poor investments in Spanish companies in the early 1990s due to a combination of lack of oversight and lack of investment rules.¹⁷

Investments can be made in either foreign or domestic assets. Although the governments of many resource-rich developing countries invest in domestic projects directly from natural resource funds, a better practice is to make these investments from the budget itself for at least two reasons. First, domestic spending through the fund can undermine rules designed for fiscal sterilization.¹⁸ But more importantly, such spending might undermine transparency and accountability systems. Bypassing the normal budget process could circumvent controls and safeguards such as project appraisal, public tendering and project monitoring, and enable patronage or financing for projects that support the political goals of government officials or fund managers. To avoid these outcomes, many funds—including those in Abu Dhabi (UAE), Botswana, Chile, Ghana, Kazakhstan and Norway—prohibit direct domestic investments.

Another common investment rule is to prohibit the use of some or all of fund assets as collateral. A multi-billion-dollar natural resource fund can be used to secure government loans. In brief, the government can promise creditors that if it defaults on its debt, the fund’s assets can be used to pay them back. This is particularly useful for credit-constrained governments, those that are charged high interest rates, or those that have been locked out of international financial markets because of weak government finances. However, this strategy also puts natural resource revenues at risk—especially if the government has a tendency to default—and encourages over-borrowing. For example, from 2000 to 2004 Angola borrowed more than \$9 billion, all backed by oil revenues, from banks like Société Générale, China Eximbank, Barclays Bank and Royal Bank of Scotland.¹⁹ At the same time, the Angolan government was negotiating with the IMF to restructure its debt due to heavy debt-servicing commitments. One solution to this problem has been to restrict either

16 The consolidated fund or general fund is the government’s main bank account, usually held at the central bank. Also, it is important to differentiate between funds and official reserves. While natural resource funds (along with the consolidated or general fund) belong to the government, official reserves belong to the central bank. Keeping these accounts separate helps prevent confusing fiscal and monetary policy operations.

17 Bazoobandi, Sara, *Political Economy of the Gulf Sovereign Wealth Funds: A Case Study of Iran, Kuwait, Saudi Arabia and the United Arab Emirates*. New York: Routledge (2012).

18 If one of the objectives of the fund is to mitigate Dutch disease, it may enact a fiscal rule that requires that a certain portion of resource revenues must be invested in foreign assets. However, reinvesting these revenues inside the country would undermine this objective.

19 Brautigam, Deborah, *The Dragon’s Gift: The Real Story of China in Africa*. Oxford: Oxford University Press (2009).

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part of all of a natural resource fund from being used as collateral. While this may not prevent over-borrowing—since international lenders might assume that in a crisis the fund would be used to bail out the government even though the fund assets are not formally pledged—it is important to make these rules explicit.

Good practices: Alberta (Canada), Chile, Norway and Timor-Leste have codified comprehensive investment rules that limit the risks fund managers can take and, in Norway’s case, impose ethical investment guidelines on fund investments.

Clarifying division of responsibilities and enforcing ethical and conflict of interest standards (see “*Institutional Structure of Natural Resource Funds*” policy brief)

Fiscal rules and investment rules must be implemented by government officials and fund managers. A clear division of responsibilities, strong internal controls and political independence, and strong internal capacity are essential for correct implementation.

Organizational structure is very context-specific. However, the roles and responsibilities of governing bodies—such as the legislature, executive, central bank, advisory bodies, fund governing board and fund executive—should be detailed in law, regulation or a government policy document. The same is true for the internal structure of the operational manager, whether it’s a unit within the central bank, a unit in the ministry of finance, or a separate entity. Chile, for example, has regulation that designates the Minister of Finance as both the manager and ultimate authority over the two funds and the Central Bank of Chile as the day-to-day operational manager of fund investments. In Norway, the manager and operational manager are also the Minister of Finance and central bank, respectively, but the fund is ultimately accountable to the Storting (parliament).

The fund’s governing structure must be made clear and governing bodies must enforce ethical and conflict of interest standards, preferably through concrete penalties such as dismissal, fines or even imprisonment. Staffing policies should encourage professionalism and compliance with operational rules. These measures should be complemented by transparency, independent oversight and political will to follow the rules.

Authoritarian regimes often lack these checks and balances that prevent mismanagement. In such settings, large pools of funds can become tempting targets. The Russian government, for instance, arbitrarily suspended its fiscal rules in 2010 and has since nearly emptied the Reserve Fund (valued at approximately \$150 billion in 2009) and raided the National Wealth Fund of tens of billions of dollars, which had been intended to finance future Russian pension liabilities.²⁰ In such an environment, political will is an essential element of good resource revenue management.

Good practices: Norway and Texas (USA) each have strong internal controls that include regular and publicly available internal audits, ethical guidelines for fund employees, effective monitoring of external managers, and independent oversight at every level, including over the board of directors, managers and staff.

Requiring regular and extensive disclosures and audits (see “*Natural Resource Fund Transparency*” policy brief)

Good fund governance requires a strong degree of transparency for several reasons. First, transparency can encourage compliance with fiscal rules and investment rules by aligning public expectations with government objectives. Second, transparency can improve government

²⁰ Kryukov, Valery et al., “The contest for control: oil and gas management in Russia,” *Plundered Nations?: Successes and Failures in Natural Resource Extraction* (eds. Paul Collier and Anthony J. Venables), New York: Palgrave Macmillan (2011).

efficiency, since ministries, parliaments and regulatory agencies benefit from improvements in data quality. Third, transparency is a prerequisite for accountability and compliance with governance rules, because oversight bodies cannot monitor fund operations and scrutinize fund performance without adequate information.

Transparency means not only publishing regular, accurate and data-disaggregated reports on fund activities in a format that is fully accessible to lay readers but also making the rules governing the fund clear and public. One way of institutionalizing transparency is by requiring the public release of all regulations, policy documents, quarterly financial statements and annual internal and independent external audits, and requiring that these meet international standards. Reports should not only be backward-looking; they should also clarify what will be achieved in the future to set benchmarks for performance and set public expectations.

Good practices: Funds in Alaska (USA), Chile, Norway, Texas (USA) and Timor-Leste can be considered models of transparency. Each discloses deposit and withdrawal amounts, specific investments (including type, location, currency composition and returns), significant fund activities and transactions, and fund managers.

Establishing strong independent oversight bodies to monitor fund behavior

(see “Independent Oversight of Natural Resource Funds” policy brief)

Effective internal control mechanisms are often not enough to ensure compliance with governance rules or management of natural resource funds in the public interest. Independent oversight bodies should also fund in order to exert external pressure on policymakers and fund managers. They should be politically accountable to the legislature; operationally accountable to the comptroller, auditor-general or other independent formal supervisory body; legally accountable to the judiciary; and scrutinized by civil society, the press and even international bodies like the IMF or policy institutes.

Governments sometimes circumvent their own rules due to weaknesses in independent oversight and lack of transparency. For instance, Abu Dhabi (UAE) has three natural resource funds, none of which require parliamentary approval for withdrawals. In addition, despite self-made claims of political independence, leading members of the ruling family sit on the Abu Dhabi Investment Authority’s board of directors. This conflict of interest and lack of oversight, combined with a lack of transparency, has resulted in questions raised around the potential for politically motivated investments and misuse of funds. In Ghana, the Public Interest and Accountability Committee (PIAC), a body charged with monitoring compliance with oil revenue management legislation, has not been given an operating budget by the government, nor does it have formal powers to enforce its recommendations. Taking advantage of these weaknesses in independent oversight, the government has overestimated oil revenue projections in order to artificially inflate its spending allowances as fixed by Ghana’s fiscal rule.²¹

Independent oversight bodies can encourage good financial management by praising compliance with the rules and good fund governance. In some cases, they can also discourage poor behavior by imposing punitive measures ranging from naming-and-shaming to fines, imprisonment or international sanctions. For example, Alberta (Canada) requires that its legislature conduct annual reviews of fund performance, ensuring compliance with regulations, and that it hold annual public meetings on fund activities. This is on top of periodic reviews of investment methodology

²¹ PIAC Report on Management of Petroleum Revenues for Year 2012.
<http://piacghana.org/>. See Ghana’s natural resource fund profile for further information.

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and regular external audits that are publicly available.²² And in 2008, the Timor-Leste appeals court found that a \$290.7 million withdrawal from the Petroleum Fund was illegal.²³

While there are numerous types of oversight mechanisms, independent oversight is most effective when the oversight body has expertise in the topic under investigation, possesses the power or capacity to investigate, has access to information, holds enforcement powers, and is integrated with the institutional environment. If authorities decide to establish new bodies to oversee the natural resource fund (e.g., Ghana's PIAC or Timor-Leste's Petroleum Fund Consultative Council), which is not always necessary, these bodies should support existing institutions such as the comptroller's office or parliament by providing targeted reports on compliance with legislation or regulation. Where existing institutions have the potential to become more effective, they should be strengthened legislatively or through capacity building activities.

Good practices: Alberta (Canada), Ghana and North Dakota (USA) have introduced strong independent oversight requirements on their respective funds.

What are recent trends in natural resource fund governance?

Codifying rules. There is a trend toward establishing strict deposit, withdrawal, investment and other governance rules in legislation or regulation. The new Mongolian Fiscal Stabilization Fund is a case in point, with deposits and withdrawals determined by a set of fiscal rules (an expenditure growth rule, a structural balance rule and a debt ceiling). Often, new funds draw on a small



22 World Bank Institute, *Parliamentary Oversight of the Extractive Industries Sector*, 2010. http://www.agora-parl.org/sites/default/files/parliamentary_oversight_and_the_extractive_industries.pdf.

23 La'o Hamutuk, *Timor-Leste Appeals Court Invalidates 2008 State Budget*, 2008. <http://www.laohamutuk.org/econ/MYBU08/BudgetRuledUnconstitutional08.htm>.

number of model pieces of legislation. For example, the recently established Northwest Territories Heritage Fund drew on Alberta’s legislation, the Mongolian Fiscal Stability Fund drew on the Chilean experience, and Norway was used as a model in Timor-Leste. This is partly due to the influence of the IMF, World Bank and international consultants, particularly from Norway and Chile, who act as principal advisors on the establishment of new funds. However, aspects of these models may be inappropriate in developing- or post-conflict contexts. Specifically, fiscal rules that generate significant savings and limit fiscal space for domestic investments in health, education and infrastructure may be too constraining for governments in capital-scarce countries (see “Fiscal Rules for Natural Resource Funds”). Also, foreign advisors often underemphasize enforcement mechanisms such as transparency and oversight requirements. While some of the advice around fiscal rules is changing, advisors should place added stress on rules around disclosure and compliance.

Greater transparency. Of the 23 natural resource funds scored by Allie Bagnall and Edwin Truman’s Sovereign Wealth Fund Scorecard in both 2007 and 2012, all but three became more transparent over time. Specifically, many more funds are publishing audits, information about returns and investment manager information. Two Abu Dhabi funds, Chile’s Economic and Social Stabilization Fund, and Trinidad and Tobago’s Heritage and Stabilization Fund improved the most since 2007.²⁴ On the other hand, some funds, like Equatorial Guinea’s Fund for Future Generations and the Libyan Investment Authority, still keep nearly all information about their activities secret. In Kuwait, it is against the law to disclose information about the Investment Authority to the public.²⁵ Transparency remains a serious challenge overall, with only about half of the funds studied releasing audits (internal or external) or publishing specific investments (see Figure 5).

Figure 5:
Percentage of funds publicly disclosing specific information (of 18 surveyed jurisdictions)



24 Bagnall, Allie and Edwin Truman, *Progress on Sovereign Wealth Fund Transparency and Accountability: An Updated SWF Scoreboard*. Peterson Institute for International Economics: Washington DC (2013). <http://www.piie.com/publications/pb/pb13-19.pdf>.

25 2013 *Resource Governance Index*. Revenue Watch Institute: New York. <http://www.resourcegovernance.org/rgi>.

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Continued resistance to some rules. While funds are becoming more rules-based, operational and fund management rules—for instance rules for which revenues must be deposited and when and the rules clarifying the roles of different government agencies in fund management—are much more common than transparency requirements or checks on corruption and patronage (see Figure 6). At the same time, some governments are resistant to even the most basic operational rules. The governments of Abu Dhabi (UAE), Azerbaijan, Botswana, Kuwait, and Russia, for example, have been unwilling to impose withdrawal rules on their respective funds, while the governments of Abu Dhabi (UAE) and Botswana have not imposed deposit rules.

Governments seem most resistant to prohibiting domestic investment through choices of asset allocation and publishing key information such as lists of specific investments or internal and external audits (see Figure 7 and Annex 1 for an explanation of different rules). Funds in Botswana, Equatorial Guinea, Iran, Kuwait, Mexico, Russia and Qatar, for instance, remain relatively opaque despite their governments signing on to the Santiago Principles.²⁶

Figure 6:
Percentage of funds that have clear and comprehensive legislation or regulation covering four different types of rules (of 18 surveyed jurisdictions)



Figure 7:
Percentage of funds that have clear legislation or regulation covering specific good governance requirements (of 18 surveyed jurisdictions)



26 Opacity here is measured using Allie Bagnall and Edwin Truman's 2013 *Progress on Sovereign Wealth Fund Transparency and Accountability: An Updated SWF Scoreboard* indicators 20-23. The Santiago Principles are a voluntary set of transparency principles and practices for sovereign wealth funds agreed upon by governments.

What steps should the international community, specifically the international financial institutions and other advisors who support governments in establishing and operating natural resource funds, take to improve fund governance?

First, international institutions and advisors should carefully consider the implications of suggesting the establishment of funds where public financial management systems are opaque and poorly functioning. In other words, international advisors should recognize that the establishment of a fund by itself will not improve resource governance. Rather, natural resource funds ought to be products of fiscal rules or macroeconomic frameworks that call for savings of oil, gas or mineral revenues, and minimum conditions (e.g., clear objectives, fiscal rules, investment rules, effective oversight and transparency) must be present if funds are to improve resource governance. Too often funds are established without a well-defined rationale, leading to poor outcomes.

Second, funds are often established by the executive branch of government, usually the finance ministry, on the advice of international experts from high-profile academic institutions or international financial institutions like the IMF and World Bank and through a technocratic process. This approach is doomed to fail in many countries. Unless there is political consensus on the use of resource revenues and informed civil society and oversight bodies to put pressure on governments to follow their own rules, even the best rules will usually not be followed. The international community can do a better job of encouraging multi-stakeholder consensus in order to agree on funds' operational rules and ensure compliance with those rules. In most cases, this will involve broad-based consultations around oil, gas or mineral revenue management legislation.

Third, the international community can better support oversight actors like legislators, auditors, the media and civil society in their work to promote compliance with fund governance rules. The IMF and World Bank, for example, often work exclusively with ministries and government officials, overlooking the important role that other actors play in promoting good governance. These other players must be as well informed as the government for funds to become better managed. Donors may therefore wish to consider added financial and technical assistance to these groups. They may also wish to remove the IMF and World Bank's constraints from working with oversight bodies or finance independent organizations to support the work of oversight institutions like parliaments, civil society and the media.

Fourth, the international community should promote enhanced global norms for good resource revenue management. Currently, there are a number of international standards for fund governance, notably the Santiago Principles and the IMF Guide on Resource Revenue Transparency. However, they do not go far enough. Both focus mainly on disclosure of information, clarification of roles and responsibilities, and political motivation of investments. None of the existing standards explicitly address funds' impacts on the citizens whose wealth they manage, or the issue of fiscal rules. Recently, several efforts have been made to codify fund behavior and create a global standard for fiscal rules. These include Edwin Truman for his Sovereign Wealth Fund Scoreboard; the IMF recent guidance note advocating a flexible approach on fiscal rules in its policy notes; the Extractive Industries Transparency Initiative (EITI) new standard, which includes information on fund management; and the Natural Resource Charter's inclusion of revenue volatility and management in precepts seven and eight.²⁷ However, there is still no international consensus on what good fund governance entails.

Finally, while national policy initiatives like the establishment of natural resource funds should be driven from within countries or regions, the international community can further encourage governments to better manage their resource revenues by placing natural resource

²⁷ Natural Resource Charter precept seven: "Resource revenues should be used primarily to promote *sustained, inclusive economic development* through enabling and maintaining *high levels of investment* in the country." Precept eight: "Effective utilization of resource revenues requires that *domestic expenditure and investment be built up gradually and be smoothed* to take account of revenue volatility."

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fund governance on the international agenda. Improved natural resource fund governance can prevent loss and mismanagement of billions of dollars that could go to health, education or infrastructure. It can also improve macroeconomic stability and mitigating Dutch disease, thereby improving the quality of investments, increasing growth rates and helping to diversify the economy. The indirect effects might even be much more significant than the direct ones. International institutions, academics and other influencers may be able to do more for poverty alleviation and growth by pushing for improved natural resource fund governance—such as encouraging codification of deposit and withdrawal rules and additional transparency—than through many other types of diplomatic interventions.

Annex 1: Explanation of the good governance standards in the natural resource fund profiles (page 4)

These good governance standards for natural resource funds draw on a number of sources including the 2013 Resource Governance Index questionnaire, Edwin Truman's Sovereign Wealth Fund Scoreboard and the Santiago Principles.

Operations

Are objectives clear: The objectives of natural resource funds should be clearly stated in government policy, regulation, legislation or even in the constitution.

Rule for how much can be withdrawn in any given year: Fiscal rules (withdrawal and deposit) are the most important rules governing fund behavior. Whether a natural resource fund meets its objective(s) depends almost wholly on the suitability, clarity and enforcement of its fiscal rules. These rules should be clarified in legislation, regulation or a binding policy document.

Rule for which revenues must be deposited and when: Same as above.

Are exceptions to rules clarified: Exceptions to fiscal rules—for example, in cases of environmental, financial or social crisis—should also be clarified.

Investment

Use of resource revenues as collateral: Using resource revenues to back government debt puts natural resource revenues at risk, especially if the government has a tendency to default, and encourages over-borrowing. One solution has been to restrict either part of all of a natural resource fund from being used as collateral. It is important to make these rules explicit.

Domestic investment is explicitly prohibited: Financing domestic investment directly by the fund is not recommended, because it can undermine transparency and accountability systems by bypassing the normal budget process, with its controls and safeguards, such as parliamentary approval, project appraisal, public tendering and project monitoring. All spending out of the fund should pass through the budget process and be subject to normal budgetary oversight processes.

Investment risk limitations: No matter what risk profile is chosen, it should be well defined and enforced through explicit rules that limit risk.

Publication of specific investments: In order to determine whether the risk limitations are being met, a public list of specific assets held by the fund should be published.

Management

Penalties for misconduct: Ethical and conflict-of-interest standards must be enforced by the fund's governing structure, preferably through concrete penalties such as dismissal, fines or even imprisonment.

Ethical and conflict of interest standards: Ethical and conflict-of-interest standards must be made clear in order for employees to understand the constraints they must abide by.

Detailed responsibilities of fund managers and staff: The roles and responsibilities of the operational manager, whether a unit within the central bank, a unit in the ministry of finance or a separate entity, should be detailed in law, regulation or a government policy document.

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Role of government agencies in fund management: The roles and responsibilities of the governing bodies—such as the legislature, executive, central bank, advisory bodies, fund governing board and fund executive—should be detailed in law, regulation or a government policy document.

Transparency and Oversight

Public disclosure of external audits: This is a prerequisite for accountability and compliance with governance rules, because oversight bodies cannot monitor fund operations and scrutinize fund performance without adequate information.

Public disclosure of internal audits: This is a prerequisite for accountability and compliance with governance rules, because internal managers cannot monitor fund operations and scrutinize fund performance without adequate information.

Formalized oversight mechanisms: Effective internal control mechanisms are often not enough to ensure compliance with governance rules or management of natural resource funds in the public interest. Funds should also be monitored by independent oversight bodies that exert external pressure on policymakers and fund managers.

Public disclosure of regularly compiled fund reports: This is a prerequisite for accountability and compliance with governance rules, because oversight bodies cannot monitor fund operations and scrutinize fund performance without adequate information.

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