Countries rich in oil and minerals commonly use sovereign wealth funds (SWFs) to store a share of their natural resource wealth. Governments in Chile, Kuwait, Norway, Texas (U.S.), Timor-Leste and more than 50 other countries have chosen to set aside a portion of resource revenues to decrease budget volatility, save for future generations or earmark financial earnings for education or infrastructure spending. But over the last decade we have seen a new trend: governments creating funds when resource revenues are small, distant or uncertain. This is just another manifestation of the “presource curse,” where the discovery of oil, gas or minerals leads to rosy expectations by politicians and citizens, and over-optimism from governments and international institutions.¹

International advisors—especially some economists at international institutions, investment bankers and lawyers—have promoted the creation of what we call “premature funds.” Yet there are considerable costs and risks associated with their establishment.

**RISK 1. SAVING WHILE BORROWING**

In many countries—especially those with fiscal revenues that are massive relative to their small populations or economies—it makes sense to set aside a portion of oil or mineral wealth. A government can earn interest on these savings and use that interest to finance crucial social services and public investments. For example, the Texas government uses the earnings from its sovereign wealth fund to finance public university education; Alaska uses its fund to pay cash dividends to each resident; and Norway and Timor-Leste use their funds’ interest to finance their national budgets. However, this approach makes less sense where public debt levels are so high that the interest rate paid on borrowed money is higher than the interest earned from SWF savings.

The well-established, larger and more professionally managed SWFs have yielded financial returns in the range of 2 to 6 percent annually (see Table 1 for examples), but it is important to contrast this with the borrowing costs these countries face. While many OECD countries are borrowing at near-zero interest rates, emerging market sovereign bond yields are around 4.7 percent and the average African

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Eurobond requires borrowing states to return 6.2 percent to lenders. These yields can go much higher in case of shocks, and management fees in issuing bonds also add to the cost.

<table>
<thead>
<tr>
<th>Sovereign wealth fund</th>
<th>Year established</th>
<th>Return since inception in USD</th>
<th>Asset value in USD millions (end 2016)</th>
<th>RGI score (out of 100)</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Norway: Government Pension Fund Global</td>
<td>1990</td>
<td>5.78%</td>
<td>926,940</td>
<td>90</td>
<td>NBIM 2016 Annual Report</td>
</tr>
<tr>
<td>Trinidad and Tobago: Heritage and Stabilization Fund</td>
<td>2000</td>
<td>5.34%</td>
<td>5,880</td>
<td>74</td>
<td>HSF 2016 Annual Report</td>
</tr>
<tr>
<td>Chile: Pension Reserve Fund</td>
<td>2006</td>
<td>3.29%</td>
<td>8,862</td>
<td>92</td>
<td>SWF 2016 Annual Report</td>
</tr>
<tr>
<td>Chile: Economic and Social Stabilization Fund</td>
<td>2007</td>
<td>2.24%</td>
<td>13,966</td>
<td>92</td>
<td>SWF 2016 Annual Report</td>
</tr>
<tr>
<td>Timor-Leste Petroleum Fund</td>
<td>2005</td>
<td>3.80%</td>
<td>16,238</td>
<td>88</td>
<td>PF 2016 Annual Report</td>
</tr>
<tr>
<td>Ghana Stabilization Fund</td>
<td>2011</td>
<td>0.46%</td>
<td>208</td>
<td>93</td>
<td>GPFs 2016 Annual Report</td>
</tr>
<tr>
<td>Ghana Heritage Fund</td>
<td>2011</td>
<td>1.80%</td>
<td>277</td>
<td>93</td>
<td>GPFs 2016 Annual Report</td>
</tr>
</tbody>
</table>

But countries with small savings, less experience investing in complex financial instruments and high debt levels should expect lower returns and higher interest rates on debt. For example, Ghana’s transparent and conservatively managed funds have yielded a net return of around 1 percent annually since they were established in 2011. However, over the same period, the country has borrowed over USD 3 billion in Eurobonds and is paying more than 9 percent interest on its latest Eurobond issuance.

Similarly, Mongolia has invested the money in its Fiscal Stability Fund in demand deposits in Mongolian commercial banks that generally pay 7 to 9 percent interest in domestic currency. In contrast, the government is paying nearly 6 percent on U.S. dollar-denominated debt and 14 percent on short-term domestic debt. Interest payments on Mongolian public debt alone were greater than USD 400 million in 2016, more than the government spent on health care for the whole country. Some funds do not publish the returns they earn, so we cannot assess their performance. However, both Ghana’s and Mongolia’s government has borrowed extensively at high interest rates at the same time as they have been saving in their SWF and earning low returns. (See Figure 1.)

3 SWF annual reports were sourced via the RGI databank, and can be accessed here: https://www.resourcedata.org/record?q=fund+annual&category=Precept+8%3A+Revenue+Volatility
In both Ghana and Mongolia, the overall impact of savings is a net loss running into the many millions of dollars (especially to foreign creditors). Had the governments of these countries allocated their resource revenues to debt reduction rather than savings, they would have paid less interest and less money would have left the countries. As 2017 Nobel Prize laureate Richard Thaler has pointed out, there is a human tendency to place savings and borrowing into separate mental “buckets,” which may partly explain why governments make such ultimately irrational choices.

Mongolia—currently facing a debt crisis—has recently passed legislation requiring the government to save an additional 25 to 50 percent of its mineral revenues in any given year. Guyana and Lebanon, both highly indebted countries, are also in advanced stages of establishing oil and gas funds.

**RISK 2. REVENUE STREAMS THAT ARE TOO SMALL**

Saving revenues in a fund can help countries mitigate serious macroeconomic challenges like Dutch disease or excessive expenditure volatility. For instance, the Chilean government uses its Economic and Social Stabilization Fund to smooth year-to-year spending, guaranteeing a steady and predictable flow of money to ministries so that each can plan its respective public services years in advance.

However, a common myth is that the existence of oil, gas or mineral revenues requires a SWF. If resource revenues are small relative to the size of the economy or government revenue, some of the macroeconomic challenges that funds aim to solve may not emerge at all. Besides, in most countries swings in commodity prices may not be the biggest source of economic volatility; a drop in oil prices may lower resource revenues, but could actually result in cheaper imported fuel (which can generate a net benefit for a net importer nation). Furthermore, some of the challenges that do emerge can be addressed with central bank intervention. SWFs may not only be unnecessary for these countries, but might in fact be harmful; a new fund may undermine public accountability mechanisms and divert scarce resources away from public services.⁶

Regardless, funds are often established where resource revenues are relatively small. The government of the Northwest Territories in Canada, for example, established a mineral royalty-financed Heritage Fund even though mineral royalties only account for approximately 3.5 percent of the territory’s fiscal revenues. Kenya

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also established a SWF for a share of its oil revenues, despite projections that oil revenues will never exceed more than eight percent of fiscal revenues. Uganda similarly established a Petroleum Revenue Investment Reserve despite modest oil prospects, while Zimbabwe established a SWF despite low mineral revenues.

As has been previously shown, future resource revenues are consistently overestimated. Thus even these revenue projections may be optimistic. Governments ought to therefore be wary before establishing funds designed to manage large revenues. The Tanzanian government has been innovative in tackling this problem: it has set a gas revenue threshold at which revenue accumulation in its SWF should start (it looks unlikely that the threshold will be reached in foreseeable future). Mexico’s new Fund for Stabilization and Development uses the same approach.

RISK 3. UNCERTAIN RESOURCE REVENUE FLOWS

Some governments do not even wait for oil or mineral revenue to start flowing before they establish a SWF. Cyprus, Mauritania and Sao Tome and Principe, for example, established funds in 2013, 2006 and 2004, respectively. None has produced much oil or gas.

The Lebanese authorities are currently considering setting up a fund for oil and gas revenues. Their expectations of future resource revenues are based on promising seismic surveys of Lebanese waters and large discoveries in neighboring countries. But officials should temper their optimism with caution. In 2013, the Lebanese Ministry of Energy and Water presented a timeline leading to oil and gas production by 2017/2018, assuming no technical and political delays. With exploration contracts yet to be signed, Lebanon is only marginally closer to production now than it was in 2013.

On the one hand, there may be sound logic in establishing a fund before resources come out of the ground. It can preempt special interests from capturing the revenues. It can also help safeguard resource revenues by increasing the likelihood that the government introduces strong transparency and accountability provisions early on. On the other hand, SWFs can become special interests in themselves, costing staff salaries and overhead.

RISK 4. UNDERMINING THE BUDGET

Economists generally prescribe that government revenues—including natural resource revenues—be used to pursue development goals. The question is whether a SWF is the right vehicle for such spending.

Most SWFs are designed to invest primarily in foreign assets. These funds may be inappropriate in countries where resource revenues are small and there are significant development benefits accruing from spending inside the country. It makes little sense to invest scarce resources in U.S. government bonds or corporate

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shares when domestic investments (e.g., education, electricity) can generate immediate economic returns, especially when the oil or mineral sector is too small to generate Dutch disease or other macroeconomic problems.

Some SWFs invest both in foreign and domestic assets. However, as has been argued elsewhere,\(^1\) these funds generally undermine governmental oversight and are often used as sources of corruption and patronage.\(^2\) More effective vehicles for domestic spending are the annual budget process and institutions designed for such purposes (such as national development banks or state-owned companies). Similarly, using a separate account within the budget (rather than through a new fund) can increase transparency and improve reporting requirements.

Still, officials in some countries are considering establishing funds in low-income settings with high economic growth potential. Afghanistan, Mozambique, Myanmar, Sierra Leone and Senegal are just some of the countries in the conceptual phase of SWF planning. Governments of countries that already have SWFs but also acute development needs and “shovel-ready” projects—such as Kenya, Mexico and Nigeria—may wish to channel the money not through their funds but through the normal budget process.

CONCLUSION

There have been calls and proposals by international advisers and domestic politicians to establish a SWF in nearly every country that has made even a modest discovery or has some natural resource potential. However authorities in countries with high debt payments, small resource revenues relative to their economies, uncertain revenue flows and acute development needs may wish to think twice before creating a “premature fund.” Establishing a new institution or opening a new account in a low-capacity or poor governance environment are not themselves steps that will improve the management of natural resource wealth. A more important priority might be to ensure that the budget is well managed and that government resources are spent to improve development outcomes. If a SWF is warranted or a political reality—since funds are useful in some circumstances and the establishment of a fund is often used by politicians a symbolic gesture of “responsible government”—good governance crucially depends on enacting the right fiscal rules, investment rules and appropriate transparency and oversight.\(^3\)

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3 CCSI-NRGI 2014.