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Avoiding the Resource Curse

Many resource-rich countries have fallen prey to the natural resource curse [1]. But a handful of developing countries have managed to escape it. This note examines four resource-rich countries and the policies they have followed since the beginning of the 1970s. One, Nigeria, is a well-publicized case of oil wealth impoverishing rather than enriching the economy. The other three—Indonesia, Malaysia, and Botswana—have achieved impressive economic gains despite their resource abundance.

How have some resource-rich countries managed to avoid the resource curse? Nigeria and Indonesia make an interesting comparison. They exported comparable amounts of oil in the first half of the 1980s. Both have large populations and regional and ethnic tensions. Yet Nigeria, despite being the world's sixth largest oil exporter in 2005, has one of the poorest populations in sub-Sahara Africa and come to epitomize what can go wrong with oil wealth, while economic growth in Indonesia until 1996 has won praise. And this enormous difference in outcome is not because Indonesia had inherent advantages over Nigeria before the first oil boom of 1973–74. In fact, the initial conditions in Indonesia were anything but favorable: a military regime that came into power in 1966, a low adult literacy rate, high levels of ethnic and linguistic diversity which can lead to conflicts (see [1] for the impact of oil wealth on civil strife), and pervasive corruption.

This note describes and contrasts some of the policies implemented by Nigeria, Indonesia, Malaysia, and Botswana in response to large inflows of resource revenues, and their consequences.

Nigeria

In 1970, Nigeria had an active private sector and a large labor force, holding great promise to become the region's economic power house. Successive governments have embraced three common objectives: economic growth, greater domestic participation in both the oil and non-oil sectors, and more equitable distribution of income across ethnic groups and regions.

As the first oil boom of 1973–74 began to generate substantially larger state revenues, the government initially tried to save excess income. But this attempt at saving was short-lived. As the size of the new oil wealth became widely known, political pressures to spend all of it at home mounted and the government soon accelerated spending as if the high oil prices were permanent. Budget deficits grew, and, encouraged by projections of continually rising oil prices, the government began to borrow abroad. These foreign debts soon became unsustainable.

During 1975–1980, the government gave priorities to infrastructure (transport and communications); mining and manufacturing; agriculture and water supply; and health, education, and housing, in that order. Spending on primary education was greatly increased, and one major achievement was the use of oil income to fund almost universal primary education. Although self-sufficiency in agriculture was the desired goal, investment in agriculture declined. In other areas, many projects were quickly started without due attention to their economic viability, coordination, or sequencing, and with few safeguards against waste and corruption.

The second oil boom of 1979–80 prompted another spending spree, giving rise to higher salaries and new investment projects, including construction of the new inland capital, Abuja. The lion's share of investment in agriculture and industry went to a few large, high-cost projects such as steel, irrigation, and fertilizer production. The policy of maintaining a relatively low interest rate, combined with rising wages and the appreciating exchange rate (see [1] for a discussion on Dutch disease), encouraged capital-intensive industries based on

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imported inputs. These distortions and inefficiencies in the economy slowed down competitive industrialization and the share of industry in gross domestic product (GDP) actually fell from 19 percent in 1974 to 10 percent in 1994.

After 1980, oil revenues collapsed and real income per person fell sharply. The income from oil exports in Nigeria was among the most volatile on account of fluctuating oil production—exports more than halved between 1979 and 1983—in addition to oil price volatility, plummeting from a high of US$25 billion in 1980 to a low of $6 billion in 1986. During the oil booms, the Nigerian currency appreciated and agricultural exports halved. Poor policy choices amplified the adverse effects of oil revenue volatility, making the investment climate extremely unattractive.

In the face of mounting economic difficulties, the new military government that came into power in 1983 imposed a program of fiscal austerity, including across-the-board budget cuts, reduced imports, and foreign exchange rationing. The wage bill could not be reduced for political reasons, and budget cuts resulted in many unfinished projects. Continuing deficits and emerging debt-servicing problems led the government to adopt a structural adjustment program in 1986. But downsizing the public sector and improving fiscal administration again proved politically difficult. The third oil boom of 1990 led to more public spending [2].

Like many large oil exporters, Nigeria has historically subsidized fuel prices. This has not only carried an enormous cost, but led to a widespread black market, smuggling of subsidized fuels to neighboring countries, inadequate financing to maintain and modernize domestic refineries, and frequent fuel shortages coupled with price spikes that hurt consumers and especially the rural poor. Cheap fuels have also encouraged non-essential and inefficient fuel consumption. Increasing fuel use, together with smuggling, raise "apparent" domestic demand—fuels smuggled out of the country are not actually consumed on the domestic market but appear in the statistics as domestic consumption—and cut oil exports, reducing revenue to the government.

Agricultural performance in the 1970s and 1980s fell far short of the goal of self-sufficiency. Despite efforts under the "Operation Feed the Nation" in the 1970s, Nigeria—once a modest exporter of farm products—became a large net importer of food by the early 1980s. A lack of clarity in land ownership rights; public spending targeting urban rather than rural infrastructure; cheap food imports thanks to the stronger exchange rate; loss of skilled workforce to migration to urban areas; and inefficiency in the distribution of domestic inputs and technical support contributed to this disappointing outcome.

The quality of economic policy in Nigeria progressively deteriorated after 1990. Business activity was affected by personal ties and endemic corruption. Some suspect General Abacha alone of having stolen an estimated US$2.2 billion of government revenue during his presidency between 1993 and 1998 [3]

Nigeria returned to civilian rule following the elections of 1999 and has been making concerted efforts to tackle corruption and accelerate development. In 2004 an Economic and Financial Crimes Commission was established, which began trying people for corruption in a civil court for the first time. The government has adopted an oil-price-based fiscal rule that mandates saving excess oil income when world oil prices rise above a reference price.

Allowing corruption to fester for decades, Nigeria has not found it easy to root it out. Oil still provides some 85 percent of the government's revenue and continues to be a source of strife and mismanagement. Nigeria has publicly demonstrated its commitment to revenue transparency by launching the Nigeria Extractive Industries Transparency Initiative, which will be discussed in future briefing notes.

Indonesia

In the mid-1960s, Indonesia was one of the poorest countries in the world, with large government deficits and hyper-inflation nearing 1,500 percent a year at one point. President Suharto came into power in 1966. Despite being a military one with high concentration of power in the president, the Suharto government gave priority to economic growth, emphasizing infrastructure, education, capital-intensive industry, and, above all, agriculture to which an unusually high proportion of government spending was allocated.

President Suharto appointed a team of five economic advisers, all academics drawn from the Faculty of Economics at the University of Indonesia. They were technocrats, well educated and competent, and exerted considerable influence. Focusing on macroeconomic

stability and tight control over inflation and budget deficits, the government brought down inflation drastically by 1969. President Suharto's 31-year grip on power, which could have led to economic failure, enabled a long-term view and continuity in policy-making.

Agriculture, which accounted for three-quarters of total employment in the early 1960s, played a key role in the country's growth and poverty reduction. During the first oil boom, the government allocated about 20 percent of its investment expenditure to agriculture, compared to only 2 percent in Nigeria. The government gave large subsidies to inputs (fertilizers, pesticides); invested in irrigation, roads, and schools in rural areas; and helped stabilize rice prices. Fortunately for Indonesia, the timing of these policies coincided with the Green Revolution, which introduced high-yielding crop varieties. Oil revenues funded fertilizer subsidies and spread of high-yielding varieties. These helped raise rice yields in the late 1970s and early 1980s and Indonesia turned from having to import almost a third of the world's traded rice in some years to self-sufficiency by 1985, a goal earlier considered unattainable by many.

The country was also "helped" by Pertamina's financial scandal of 1975. Pertamina, Indonesia's national oil company, failed to repay its loans in 1975 after making extensive and diverse business investments and accumulating some US$10.5 billion in debt, equivalent to almost 30 percent of Indonesia's GDP. This scandal greatly diminished Pertamina's reputation and political influence, delayed overly ambitious and risky investments in the oil sector (and when oil prices fell in the 1980s, there was still time to cancel the planned projects), and strengthened the hand of reformers.

When oil prices fell in the early 1980s, the government reacted swiftly with a series of measures that combined expenditure reduction, exchange rate devaluation in 1983 and 1986, and economic reform. The response was dramatic. Between 1983 and 1992, the share of manufactures in total merchandise exports rose from 7 percent to nearly 50 percent. Some officials have even come to regard the collapse of world oil prices as a blessing in disguise.

This is not to say that all economic policies were sound. The government has maintained large fuel price subsidies (prices were more than doubled in 2005, but the total subsidy bill in 2006 is still an estimated US$7 billion) and this has had similar negative effects to those in Nigeria. The financial crisis of 1997–98 affected Indonesia more than other Asian economies, and some analysts argue that the way the country's rapid growth interacted with weak institutions contributed to the severity of the crisis [4]. Nevertheless, Indonesia illustrates how a major oil producer has overcome unfavorable initial conditions and temptations to squander oil windfalls to achieve impressive economic gains.

Malaysia

Malaysia is endowed with diversified natural resources that include oil, rubber, tin, and palm. Like Indonesia and Nigeria, Malaysia faced ethnic tensions, but the government deliberately pursued a policy of improving the welfare of the majority group, Buminputeras, who were rural and poorer than other groups.

A critical element of success was the high savings rate that made capital available for investment. Households were frugal by nature, and in addition workers were required to contribute to a compulsory savings scheme. Government expenditures favored education, housing, and health, and achieved a geographically balanced distribution.

Malaysia promoted export-oriented manufacturing from the early 1970s. One unsuccessful policy was use of oil income in the early 1980s to launch heavy and chemical industries (vehicles, steel, and cement) by public-sector companies enjoying government protection. This policy led to economic difficulties. The size of the public sector doubled between 1966 and 1981. The recession of the mid-1980s returned the country to private-sector-led economic development.

Instead of import substitution, Malaysia pursued economic diversification and export-oriented industrialization. Sensible economic policies were formulated and implemented by professional civil servants, academics, and technocrats. In the early stage of development, the government focused on labor-intensive industrialization utilizing workers from rural areas. Fortunately, around that time, multinational companies were relocating manufacturing to developing countries where wages were lower. To supply skilled workers to the rapidly expanding manufacturing sector, the government allocated a substantial portion of the budget to education. As a first step, the government provided free primary education. Secondary education was expanded in line with progress made in primary education, and the en-

rollment tripled from 1960 to 1990 [5].

Botswana

At the time of independence in 1966, Botswana was extremely poor. Botswana is not an oil producer but is the world's largest producer of gem-quality diamonds. A small country, Botswana ranks among the most successful resource-rich countries, thanks to prudent fiscal policies toward managing revenue generated from diamond mining. Much of the diamond income has been spent on infrastructural development, education, health, and agriculture, and little on "prestige" projects.

To assess its fiscal performance, the government has constructed an index called the budget sustainability ratio. It is the ratio of non-investment spending (that is, consumption) to non-mineral revenue. A ratio greater than unity indicates that the government is using mineral revenues to finance consumption, which is unsustainable in the long run.

In 1972, in the same year the commercial production of diamonds began, the government established a fund to save excess revenues abroad to finance budget deficits in times of need, and introduced an incomes policy specifically designed to prevent mining wages from pulling up general wages. Consensus politics has evolved and taken hold in Botswana, leading to a high level of transparency in public revenue collection and expenditure. The ruling elite has left technocrats and professional civil servants (who were among the best educated) alone to implement sensible policies.

The government has historically had a reputation for being relatively clean, but a number of scandals broke out in the early 1990s. In response, the government established a Directorate of Corruption and Economic Crime in 1994 to good effect. Corruption has remained well below levels seen in most other developing countries. Table 1 ranks countries in order of increasing corruption according to a perception index compiled by Transparency International. In addition to the countries surveyed in this note, Saudi Arabia—the world's largest oil exporter—and Iceland—perceived to be the least corrupt—are included for comparison.

Table 1: 2005 Transparency International Corruption Perception Index

Rank	Country	Score
1	Iceland	9.7
32	Botswana	5.9
39	Malaysia	5.1
70	Saudi Arabia	3.5
137	Indonesia	2.2
152	Nigeria	1.9

Source: http://ww1.transparency.org/cpi/2005/cpi2005infocus.html.

Conclusions

Until recently, the economic trajectory of Nigeria reflected many policy errors and deteriorating governance generally considered responsible for the natural resource curse: large expenditures on dubious prestige projects, a growing public sector that is not able to contract in times of low oil prices, and outright thefts of oil revenue, to mention a few. In contrast, Indonesia has managed to achieve a four-fold increase in GDP per person through political stability, good economic policy, rapid productivity improvement in agriculture, poverty-focused policies, and an effective response to large oil revenue volatility. Indonesia, Malaysia, and Botswana have all relied on highly trained technocrats and given them relative autonomy to run the economy. These examples illustrate that the resource curse is not inevitable, but also that a strong political will and commitment to sound economic policies, sustained over many years, are needed to avoid it.

References

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