CHAPTER 3

Delivering Human Development Services in Resource-Rich Countries

Abstract

More money is sometimes necessary to improve services, but it is never sufficient. The weakness of governance and transparency in resource-rich countries affects how well they deliver services. Systems (institutions, incentives, and information) are important for channeling the increased revenues (or parking them until capacity is available) and for transforming them into better services, especially those that help to increase human capital.

Governance Challenges and Service Delivery

While the case for investing in human capital is compelling, how to deliver the related services—health, education, and social protection—is not obvious. When resource revenues give countries more fiscal space, countries can invest more in human capital, but allocating the resources effectively and efficiently is not a given. For example, although oil-rich municipalities in Brazil have increased their spending, households have benefited less than expected (Caselli and Michaels 2013). While corruption and rent-seeking behavior by those with access to the resources are issues when making the decision on how to allocate the revenues, the lack of capacity to absorb and spend higher revenues effectively also comes into play.

This chapter argues that in many resource-rich countries in Sub-Saharan Africa (SSA), three dimensions of governance—institutions, incentives, and information—are vital for mitigating the unique challenges of rents, volume, and volatility that come with resource riches. However, these very same dimensions are among those least developed in resource-rich SSA countries. Building up institutions, incentives, and information is necessary to ensure robust governance frameworks that shape effective and efficient delivery of health, education, and social protection services.
This book considers three groups that have a stake in social service delivery: politicians and policy makers, clients and citizens, and service providers. World Development Report 2004: Making Services Work for Poor People articulated a framework to capture the accountability relationships between them (World Bank 2004). This chapter builds on that framework by highlighting how institutions, incentives, and information can help to strengthen both the long and short routes of accountability.\(^1\)

The next section explains how the rest of this chapter is structured, and it is followed by sections that detail three characteristics—rents, volatility, and volume—of resource wealth and that describe possible levers associated with the governance dimensions of institutions, incentives, and information that can be used to strengthen the quality of public service delivery, especially for human development.

**Accountability for Service Delivery in Resource-Rich Countries**

This chapter introduces the need to build up three components of governance in resource-rich countries: institutions, incentives, and information (figure 3.1). Concentrating on these three components will enhance both the long and short routes of accountability.

Institutions are the rules that shape human interaction. Institutions can be formal rules and regulations, such as a country’s constitution and laws. They can also be informal but conventional, often unwritten, codes of behavior. With respect to natural resources, formal institutions are the laws that govern natural

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**Figure 3.1 Accountability Framework for Service Delivery in Resource-Rich Countries**

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<th>The state: national or subnational</th>
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<td>Long route of accountability</td>
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<td>Short route</td>
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<td>Citizens or clients</td>
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<td>Information</td>
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<td>Incentives</td>
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From Mines and Wells to Well-Built Minds • http://dx.doi.org/10.1596/978-1-4648-1005-3
resource sectors and revenue allocation or the rules that shape the allocation of resource revenues to areas of government. They organize arrangements to deliver services at the central and local levels and through different types of providers—public, private, or not-for-profit. Informal rules, for example, may govern the relationships between competing political elites or favor relationships and kinship in the allocation of revenues.

Incentives affect the way provider organizations, their managers, and staffs are held accountable for their behavior and ability to deliver services with quality and efficiency. From this vantage point, what is of interest is how providers are selected, paid, monitored, and held accountable for their performance, notably in delivering human development services (Fiszbein, Ringold, and Rogers 2011). These relationships can be structured in a variety of ways, around the domains of human resources management, financing, procurement and management of critical inputs, information, and provider entry.

In this section, we focus on how to use revenues from natural resources to design financial incentives to strengthen either (a) performance, through results-based financing (RBF) or performance-based financing (PBF), whereby cash or nonmonetary benefits are provided in response to measurable actions or achievement; or (b) demand, through cash transfers (conditional or unconditional) to potential beneficiaries of services.

Information on inputs, outputs, and outcomes is used along the service delivery chain to shape decisions and behaviors. The rules regarding which information is collected and made available—as well as the availability, reliability, and timeliness of that information—can influence both the demand for services and their performance. The presence and pervasiveness of imperfect or minimal information in resource-rich countries have serious implications for service delivery. Citizens are often unaware of the services available to them, their rights, and the types and standards of services they should expect. This starts with scant or missing information on resource revenues and their allocation. While information is not sufficient to improve governance and accountability in service delivery, it is a necessary component. Access and rights to information are central to social accountability interventions, such as grievance redress, monitoring, and other opportunities for citizen action. Information and communication technologies (ICTs) have created opportunities for innovative approaches to accessing information, particularly in developing countries.

Diagnostics
Governance is weak in resource-rich countries, and this weakness affects service delivery. Governance is an important element of service delivery in all countries. Where governance is inadequate, public spending is not allocated effectively or efficiently to sectors where social returns are high. Instead, it is directed toward projects and sectors where rent-seeking behavior is high (Mauro 1998). Resource-rich countries are notably poor performers across governance indicators (figure 3.2).

Whereas, in a standard economic framework, natural resource deposits would always be wealth-enhancing, the large body of evidence assessing the resource
curse suggests that the reality is not that straightforward (Ross 2012; Sachs and Warner 1999, 2001). One strand of the literature focuses on the “Dutch disease” phenomenon, in which the price increases after resource booms are so extreme that they severely harm the export industry and cause other sectors to collapse, leaving the country poorer than it was before the boom. Another strand emphasizes disincentives to invest in either human or physical capital—or both. A large and growing strand of this literature has emphasized that one main reason for the potentially destructive power of natural resources lies not in the terms of trade and relative prices but in politics and poor institutions. As described in chapter 2, bad governance, a lack of democracy (authoritarianism), and especially civil wars can make a resource windfall destroy regular economic activity (Baland and Francois 2000; Collier 2007; Dunning 2005; Ross 2001, 2012; van der Ploeg 2011). The quality of existing institutions is a key factor that mediates resource-rich countries’ economic outcomes, and the political economy context shapes the management of natural resources in both the generation and distribution of revenues (Barma and others 2012). Resource-rich countries tend to be endowed with poorer institutional quality than their income levels would warrant.

Accountability relationships are especially fraught in resource-rich countries. One reason is that resource windfalls can insulate policy makers from citizens, because policy makers do not have to rely on taxes or revenues from non-extractive sectors to fund programs and projects (box 3.1; Karl 1997; Moore 2004; Ross 2001). Understanding and strengthening the link between governance

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Figure 3.2 Resource-Rich Countries Are Poor Performers across Governance Indicators


a. Measures perceived levels of public sector corruption on a scale from 0 (highly corrupt) to 100 (very clean).

b. Assesses governance progress on a scale from 0 (weak) to 100 (strong) using data from more than 30 sources.
Box 3.1 Does Taxation Increase Transparency?

Taxation has a useful role to play in the proper functioning of a state (Brautigam, Fjeldstad, and Moore 2008; Devarajan and others 2011). Disliked as it is, taxation is fundamental to the social contract between citizens who pay taxes and state institutions that provide public goods (Brautigam, Fjeldstad, and Moore 2008). The lack—or very limited share—of tax revenue in the gross domestic product (GDP) of resource-rich countries helps to explain their poor performance (Devarajan and others 2011; Palley 2003; Sandbu 2006).

Taxation has a direct positive effect on institution building because the state has to expand and improve its revenue-generating bureaucracy (Gillies 2010). Timmons (2005) showed that a government is most likely to be sensitive to the needs of the population that carries the largest tax burden. Broad-based taxation is thus important to limit the possibility of rent seeking. While broad-based taxation and a transparent way of ensuring taxpayer rights characterize a tax system that leads to state building (Fjeldstad and Moore 2008), trust in institutions and civic engagement are prerequisites for tax compliance (Brautigam, Fjeldstad, and Moore 2008). Taxation and state building are thus mutually reinforcing: a tax system provides a mechanism through which citizens invest in the state and become interested in its development, holding it accountable for delivering results. At the same time, the state’s ability to deliver to its shareholders—citizens—conditions their willingness to continue investing in the state by paying taxes. Higher tax revenues seem to be linked to more scrutiny over public spending as well as better governance and more efficient public spending (Gadenne 2011).

The link seems to be particularly strong for direct forms of taxation (Devarajan and others 2011; Martin 2013). The reason is simply that individuals take much more interest in money that has passed through their pockets and tend to require higher standards when the money is spent (Sandbu 2006).

Ardanaz and Maldonado (2014) show that an increase in oil windfalls is linked to a decrease not only in fiscal transparency but also in public scrutiny of government spending. Since oil revenues are transferred directly to government coffers, citizens lack precise information on the amounts and tend to grossly underestimate them. Transfers are less visible than general taxes. Citizens tend to monitor how funds from transfers are used less closely than funds from general taxes.

Moss and Majerowicz (2013) point to subnational studies in Argentina, Nigeria, Tanzania, and Zambia, which showed that districts dependent on tax revenue tend to allocate more funds to deliver better services and are more democratic and less corrupt than districts dependent on central transfers or oil revenues. The higher a government’s dependence on tax revenue, the higher its incentive to respond positively to citizens’ requests because citizens control the funds. When the majority of funds come from oil transfers, the balance shifts and the allegiance of the government moves away from citizens and toward the new money provider, in this case, the oil industry. Taxation constitutes the link of accountability between the client—the tax-paying citizen—and the service provider, the government. The higher the price of the services provided—the tax—the higher the expectations of those paying, and the higher the standards to which the service provider is held. Without this link, neither party has much of a vested interest in interacting with the other one.
and the management of natural resource revenues are important for improving service delivery in sectors such as health, education, and social protection.

Public trust in institutions is lower in resource-rich countries than in other African countries. People also report that less budget information is available, and that there are fewer channels for public participation (figure 3.3).

**Figure 3.3 Public Trust in Institutions Is Lower and Less Budget Information Is Available in Resource-Rich SSA Countries**

*a. Trust in institutions*

<table>
<thead>
<tr>
<th>Institution</th>
<th>Resource-rich</th>
<th>Non-resource-rich</th>
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<tbody>
<tr>
<td>President</td>
<td>70</td>
<td>60</td>
</tr>
<tr>
<td>Parliament</td>
<td>60</td>
<td>50</td>
</tr>
<tr>
<td>Local government council</td>
<td>50</td>
<td>40</td>
</tr>
<tr>
<td>Courts of law</td>
<td>40</td>
<td>30</td>
</tr>
<tr>
<td>Traditional leaders</td>
<td>30</td>
<td>20</td>
</tr>
</tbody>
</table>

*b. Information provision*

<table>
<thead>
<tr>
<th>Question</th>
<th>Resource-rich</th>
<th>Non-resource-rich</th>
</tr>
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<tbody>
<tr>
<td>Does the local government use public funds well?</td>
<td>24</td>
<td>25</td>
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<tr>
<td>Does local government allow citizen participation?</td>
<td>25</td>
<td>26</td>
</tr>
<tr>
<td>Does the local government provide budget information?</td>
<td>26</td>
<td>27</td>
</tr>
</tbody>
</table>

*Source:* AfroBarometer, round 4.
Social services, including health and education, pose particular accountability challenges. Delivery of health and education services is complex because (1) these services are transaction-intensive and discretionary, and monitoring and accountability mechanisms can lead to micromonitoring and overwhelm the daily interactions of teachers and health workers with students and patients; (2) there are multiple actors and tasks, which can “blunt the precision of incentives” (World Bank 2004a); and (3) attribution is not clear because outcomes result from a complex interaction between service provision and client behaviors and characteristics.

Accountability for service delivery is particularly poor in resource-rich countries. The accountability of providers is critical for the quality of services. Indicators of how providers behave, such as the absenteeism of health and education staff, provide a measure of how well service delivery is governed (Fiszbein, Ringold, and Rogers 2011). In some SSA countries, close to 40 percent of people surveyed said they occasionally or frequently encountered physician absenteeism (figure 3.4, panel a). Among the countries where absenteeism is highest are resource-rich or emerging resource-rich nations such as Zambia (40 percent), Guinea (38 percent), Mozambique (38 percent), and Sierra Leone (38 percent). A similar picture emerges in education, with more than one-third of respondents reporting that teachers are occasionally or frequently absent in Guinea, Liberia, Mozambique, and Sierra Leone (figure 3.4, panel b).

Other measures, such as the service delivery indicators (SDIs), also point to weak accountability for the delivery of public services (box 3.2).
Box 3.2 Service Delivery Indicators: Health and Education Services Need Improvement

Service delivery indicators track the performance and quality of service delivery in health and education through standardized facility surveys of a nationally representative sample of primary schools and frontline health facilities across African countries and over time; they cover several resource-rich countries.

SDIs for Sub-Saharan Africa suggest poor service delivery, with staff in schools and health centers frequently absent, very limited time spent delivering services, and limited knowledge of the subject (among teachers) or appropriate clinical practice (among health workers).

Physician absence rates range from a low of about 30 percent in Kenya and Nigeria to almost 50 percent in Uganda. Inputs for health service delivery are not always available: only 18 percent of public facilities surveyed in Nigeria and 19 percent in Tanzania had basic equipment (weighing scale, thermometer, and stethoscope).

Teacher absenteeism ranges from 27 percent in Uganda and 23 percent in Tanzania to 15 percent in Kenya and 14 percent in Nigeria. Time spent teaching per day is well below

Figure 3.4 In SSA, Accountability for Service Delivery Is Poor in Resource-Rich Countries (continued)

b. Share of respondents encountering teacher absenteeism in public schools

Note: Respondents were asked to state how often they experienced doctors being absent from public clinics in the past 12 months or teachers being absent from the local public schools during the past 12 months: “never,” “once or twice,” “a few times,” or “often.” The figure combines the “never” and “once or twice” responses as “never or infrequent” and the “a few times” and “often” responses as “occasional or frequent.” Asterisks represent resource-rich countries.
Delivering Human Development Services in Resource-Rich Countries

Box 3.2  Service Delivery Indicators: Health and Education Services Need Improvement (continued)

official teaching hours in all countries, by as much as five hours (Uganda). The SDI education data make it clear that inputs needed for service delivery are not always the barrier. While only 19 percent of the Nigerian schools surveyed possessed the minimum infrastructure (for example, sufficient light for reading) and equipment, more than 50 percent of the Kenyan and Ugandan schools surveyed did.

SDI can help to identify different drivers of poor service delivery and allow for smarter and more targeted use of resource rents, especially in countries like Tanzania and Uganda where recent natural resource discoveries may create opportunities to address service delivery challenges.

a. So far, the SDI has been implemented in Kenya, Mozambique, Niger, Nigeria (in selected states: Anambra, Bauchi, and Ekiti), Senegal, Togo, Tanzania, and Uganda.

Dissatisfaction with Education and Health Services

Public dissatisfaction with services is another indicator of quality. In 16 of the 29 countries in the Afrobarometer survey (of which 7 are resource-rich countries), more than one-third of respondents expressed dissatisfaction with the way their government was handling education. If newly resource-rich countries were included, the number of resource-rich countries would increase to 10 (figure 3.5, panel a). Dissatisfaction with health services is more pronounced; in 21 of the 29 countries surveyed (of which 7 are resource-rich countries), more than one-third of respondents felt that the government was providing health services fairly badly or very badly (figure 3.5, panel b).

Resource-rich countries do not necessarily spend more on human development. As discussed in chapter 1, resource-rich SSA countries spend more per capita on education and health than other countries in the region, but spend less as a percentage of GDP (table 3.1). These averages hide great variation; for example, Botswana spends almost 10 percent of its GDP on education, while Chad spends 2 percent. Private spending also varies from country to country.

Gaudin and Yazbeck (2012) analyzed public expenditure reviews (PERs) of health in 70 countries, 24 of them in Africa. On average, in 2008 public spending on health reached 2.4 percent of GDP and private spending was an additional 2.6 percent, but again this hides huge variations: in 2004 Guinea had total health expenditures of 13 percent of GDP, but 11.8 percent was private, leaving just 1.2 percent public; in the Democratic Republic of Congo, public spending was 0.6 percent. Corruption and bad governance, inadequate data collection and reporting, and issues of spending and equity in targeting arise in more than 90 percent of African PERs, pointing to generalized government failures, lack of funding, and lack of organization.

a. So far, the SDI has been implemented in Kenya, Mozambique, Niger, Nigeria (in selected states: Anambra, Bauchi, and Ekiti), Senegal, Togo, Tanzania, and Uganda.
Figure 3.5 Citizens’ Dissatisfaction with the Provision of Public Health and Education Is High in SSA

(a) Education services

(b) Health services

Note: Respondents were asked to state how well or badly the current government is improving basic health and education services: “very badly,” “fairly badly,” “fairly well,” “very well,” “don’t know” or “haven’t heard enough.” The figure aggregates the responses in two categories. Asterisks represent resource-rich countries.
Moreover, few recent PERs are available for resource-rich countries—they are available only for Equatorial Guinea (World Bank 2010a); Gabon (World Bank 2012a), Liberia (World Bank 2012b), Niger (World Bank 2013a), Uganda (World Bank 2013b), Republic of Congo (World Bank 2014b), Mozambique (World Bank 2014c) and Madagascar (World Bank 2015c).

Money is not enough; the quality of public spending on education also matters. As described in chapter 1, the quality and allocation of spending matter, in particular for equity and efficiency. For example, disproportionate public spending at the tertiary level can be regressive, if the poor are not likely to go beyond secondary school. Both resource-rich and non–resource-rich countries are spending, on average, about 45 percent of their total education budget on primary schools and about 18 percent on tertiary education. Resource-rich countries spend about 35 percent on secondary schooling, and non–resource-rich countries spend about 28 percent. However, in resource-rich Niger, about 60 percent goes to primary education, while in resource-rich Cameroon and the Republic of Congo, 53 percent goes to secondary schooling (figure 3.6). As described in figure 1.15 in chapter 1, public spending is only weakly correlated with the probability that school-age children (ages 6–14 years) attend school and with the proportion of young persons ages 15–19 years who have completed grade 6.

In health, while spending levels are still an issue for some countries, issues regarding the quality of spending, allocation of resources, procurement of essential drugs, and management of human resources are pervasive (box 3.3).
Figure 3.6 Public Spending on Education Is Only Weakly Correlated with Outcomes, 2010

<table>
<thead>
<tr>
<th>Country</th>
<th>Primary</th>
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<th>Tertiary</th>
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<td>Mauritius</td>
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<td>Congo, Rep.</td>
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<td>Malawi</td>
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<td>Namibia</td>
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<td>Angola</td>
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Note: Asterisks represent resource-rich countries.

Box 3.3 Public Expenditures on Health Services in Ethiopia, Guinea, Malawi, Madagascar, Senegal, and Sierra Leone

The 2006 and 2013 Malawi PERs (World Bank 2007, 2013b) highlighted serious quality problems, arising mainly from the lack of skilled health workers and frequent “downloading” of clinical tasks to staff with poor or no supervision. This lack of quality is evident in a high—and rising—maternal mortality rate (from an estimated 613 deaths per 100,000 live births in 2007 to 638 in 2014). Malawi had the lowest density of physicians (0.05) and nurses (0.26) per capita, lower on both counts than Angola, Sudan, and the Democratic Republic of Congo. Because satisfaction was low, few used the services.

The 2010 Sierra Leone PER (World Bank 2010b) emphasized the declining share of spending on health relative to other sectors, large differences between actual and planned spending, and low spending by international standards. Additional donor disbursements substituted for national funding rather than increasing total resources for the health sector and for primary care in particular, especially preventive programs. Yet in six of the eight years between 2001 and 2008, the Ministry of Health and Sanitation substantially underspent its allocations. Major deviations from the budget were found in spending on drugs and medical supplies. Poor governance was blamed for significant waste. Official cost recovery through the sale of publicly supplied drugs and other medical supplies broke down, mostly because of drug shortages; health facilities bought drugs from private vendors and operated informal versions of cost recovery systems. Informal fees were levied because of low or unpaid salaries.

The PER stressed the lack of transparency and accountability—even of basic accounting in facilities. Misclassified expenditures and coding mistakes were common, and data on
revenues and expenditures were absent. The PER found that the Anticorruption Commission had achieved some progress in curbing corruption; notably, in 2009 the minister of health and sanitation was indicted for alleged corrupt practices.

The 2007 and 2015 Madagascar PERs (World Bank 2007a, 2015c) raised the problem of unpredictable external financing. The country remains heavily dependent on external funds, which are volatile, making it difficult for the government to program health activities. In particular, external donors and the government have different budget cycles. Dispersion is also pervasive; rules, actors, and calendars for budget preparation and execution are different for wages and salaries, other operational expenditures, and investment. Delays in procurement are blamed on the lack of procedures for external projects. The low percentage of the state budget that goes to the sector supports mostly salaries. Public spending is not distributed equitably—in particular, between the capital and rural areas.

In Ethiopia, Guinea, and Senegal (World Bank 2004b, 2004c, 2004d), obstacles to better health service delivery included underdeveloped human resources, inadequate management, and the lack of monitoring of staff training and performance. Funds and personnel were inadequately distributed between the center and the regions. The PERs emphasized the need to extend the network of qualified physicians, midwives, and nurses into rural and very poor regions. To sustain staff morale and improve retention, “soft” investments (such as assigned housing, technical support, and recognition or performance rewards) would be key to maintaining good working conditions.

**Sources:** Gaudin and Yazbeck 2012; World Bank 2015b.

### Public Expenditures and Safety Nets

Safety nets can help to reduce chronic poverty and vulnerability and act as springboards to promote productive inclusion. Safety nets are noncontributory transfer programs targeted to the poor or vulnerable (Grosh and others 2008). They include instruments such as general subsidies, fee waivers to access basic social services, and in-kind and cash transfers, and they can be universal or targeted. Revenues from resources could be channeled to finance such safety net investments—in particular, those with direct effects on access to and the use of human development services and on poverty alleviation.

However, resource-rich countries tend not to use the most effective interventions. Resource-rich countries rely heavily on expensive general subsidy programs to redistribute income. Most developing countries spend about 1–2 percent of GDP on safety nets; in most African countries, spending averages about 1.7 percent of GDP and 4.4 percent of total government spending (Grosh and others 2008; Monchuk 2013):

- In Zambia, total spending on transfers of all kinds amounted to about US$540 million in 2010. However, the amount spent on programs that explicitly provide transfers to the poor was only about US$50 million, and much of this was

**Box 3.3 Public Expenditures on Health Services in Ethiopia, Guinea, Malawi, Madagascar, Senegal, and Sierra Leone (continued)**
donor spending on discrete programs. Spending on genuine safety nets represented only about 0.2 percent of GDP in 2010—even lower than in other low-income countries, where the range was from about 0.5 to 3.5 percent. If the total US$540 million were targeted to the poorest 39 percent of the population, it would be enough to transfer about K 36,000 per capita per month, which would almost entirely eradicate the food gap (Tesliuc, James, and Rosemary 2013).

- In Mali, few resources are allocated to social safety nets—about 0.5 percent of GDP in 2008, excluding general food subsidies—and most of those are from external sources (Cherrier, del Ninno, and Razmara 2011).

Many countries use expensive and regressive general subsidies—mostly untargeted—to redistribute income. Of the 17 countries in a 22-country analysis of SSA countries with some form of general subsidies, 10 are resource-rich or newly so. In 2011, fuel subsidies in the region accounted for 1.5 percent of GDP, and 5.5 percent of total government revenues (IMF 2013). The economic rationale for energy subsidies lies in reducing energy costs for firms and potentially increasing their profits and stimulating productive investments, which would create jobs. However, energy subsidies tend to be foremost political economy instruments that create economic distortions, catering to specific constituencies and crowding out social investments. General food subsidies also distort consumption patterns, and most are regressive. They also create distortions in food production and value chains, often to the detriment of the poorest farmers.

In Cameroon, between 2008 and 2010, all subsidy programs averaged 6.28 percent of the government budget and 1.39 percent of GDP. But this spending was mostly regressive; most of the subsidized items were not in the consumption basket of the bottom quintile of the income distribution. Only subsidies on kerosene were pro-poor (del Ninno and Tamiru 2012).

**Contributors to Weak Governance in Resource-Rich Countries**

Three characteristics of resource-rich environments—rents, volume, and volatility—exacerbate the governance problems of service delivery.

**Rents**

Resource rents create a sense of “free money” that can distort spending decisions. Rents are the difference between the revenues from and the extraction costs of natural resources and are different from other forms of revenue. Resource rents can induce rent-seeking behavior with perverse effects: unequal fiscal distribution, inefficient and unproductive ventures, poor governance, and corruption (Arezki and Gylfason 2013; Barma and others 2012; Karl 2004; Robinson and Torvik 2005). Resource rents, estimated at about US$4 trillion annually, provide a larger margin of fiscal space for resource-rich than for non-resource-rich countries to invest in sustainable development and better outcomes for their populations. However, the creation of assets, whether infrastructure or human capital,
requires deferring benefits, because the return will likely be realized several years in the future rather than in the present budget or electoral cycle (Barma and others 2012). The benefits are broad and nonrival, so politicians cannot take credit for them. Instead, they tend to use the rents as political currency and channel them to certain constituencies, creating and sustaining vested interest groups. The rentier state lives off unearned income, and the rents induce patronage behaviors. In particular, a class of “rent-seeking pseudo-entrepreneurs” enjoys an umbilical relationship with the state (Pritchett and Werker 2012). These business elites are intertwined in the state’s capturing of resource rents and become entrenched obstacles to transformative measures. The disproportionate influence of quasi-autonomous, state-owned oil or mining companies affects public investment (Kaiser 2012; Rajaram and others 2014). In addition, the exact amount of the rents can easily be concealed from public scrutiny, fostering a culture of secrecy.

The government’s dependence on resource rents tends to weaken its bargaining power with developers. Because the extraction and collection of natural resource revenues is often extremely centralized, the state is itself an enormous prize: in thinly institutionalized environments, the victor can claim all the spoils (see the discussion on conflict in chapter 2; Barma and others 2012). Building in mechanisms to ensure that rents are shared broadly—for example, distributing rents through public goods rather than hoarding them as private goods—is crucial to breaking this dynamic.

By limiting the need to generate other forms of government revenue, such as tax collection, natural resources can lead to an attenuation of state administrative and institutional capacity building. Indeed, the quality of public institutions in resource-rich countries is often lower than it should be for their level of GDP.

**Volume**

Large inflows of capital can overwhelm public sector capacity and temporarily inflate the prices of inputs. In many developing countries, poor management of public investment undermines the ability to allocate resources effectively and efficiently for human development. In resource-rich developing countries, the sheer volume of resources available for public investment strains absorption capacity when project management capabilities are minimal. Resource-rich countries face the risk that resource windfalls will crowd out factors of production in nonresource sectors, overwhelming the capacity of the target sector or temporarily inflating prices—the phenomenon known as Dutch disease (Dobronogov and Keutiben 2014).

**Volatility**

Resource-rich countries are vulnerable to revenue volatility because of fluctuations in commodity prices. Resource price volatility can impede economic growth by creating uncertainty (Ross 2012). Volatility puts pressure on public investment decisions; because public investment is discretionary, capital spending, which is typically used for investment projects, is more vulnerable to cuts
than recurrent expenditures like public sector wages and transfer programs (Bacon and Kojima 2008; Barma and others 2012).

Natural resource price volatility has a highly negative effect on growth (van der Ploeg and Poelhekke 2009). Resource-rich countries face two distinct political economy trajectories. One is during the boom years, when priority is given to rent seeking; the political economy challenges then are to create and apply medium-term planning strategies and adhere to fiscal rules. The second trajectory is during the bust years, when commodity prices fall and the political economy challenges shift to sustaining spending on various public programs and preserving human capital gains (Barma and others 2012). The macro effects of volatility, such as a fall in the real wages of service providers in education and health, compounds the political economy challenge. This is happening now in many countries with the plunge in the prices of oil, iron ore, and other minerals since June 2014.

The volume of capital inflows is also related to the volatility of booms and busts. Volatility has a negative impact on the financing of the public investment portfolio. The boom-and-bust cycles typical of resource prices are mirrored in the rapid scaling up and down of capital spending in resource-rich countries. Arezki and Ismail (2013) noted that the response of current and capital expenditures to changes in oil prices is asymmetric; current spending shoots up rapidly during booms, and capital spending drops even faster during busts. When inflation shoots up, construction of facilities may halt and never resume or the supply of crucial imported inputs may dry up, with increased stockouts.

The volatility of natural resource prices affects public investment decision making. Price volatility is a problem because (1) it can jeopardize economic growth due to the uncertainty it creates about the future, which discourages investment, particularly by the private sector; and (2) it interferes with the government’s ability to “productively invest [its] resource revenues by shortening the government’s planning horizon” (Ross 2012). Although the current soft oil prices are contributing to the reduced fiscal space of resource-rich countries, particularly oil exporters, they also present an opportunity for those countries to tackle subsidy reforms that would ultimately enlarge the fiscal resources for pro-poor spending and investment (Fabrizio and others 2014; World Bank 2015b).

Devarajan and others (2014) have analyzed the economic implications of various budget rules for managing natural resource revenues. They employed a dynamic stochastic general equilibrium analysis to identify spending rules of thumb for managing and allocating resource revenues over time in low-income countries like Niger. They concluded that what is preferable is a fiscal regime that takes a balanced approach to addressing price volatility, investing a predetermined share of the windfall in a sovereign wealth fund (SWF) and the rest in public infrastructure.

Price volatility entails risk and transaction costs. For example, shifts in the factors of production (labor, capital, and land) across sectors (agriculture, minerals,
and others) face transaction costs (Frankel 2012). Resource-rich countries should consider policy options to mitigate price volatility and other potentially negative aspects of resource dependence: (1) setting and adhering to fiscal rules that are immune to political manipulation—Chile’s fiscal institutions are a well-known model; (2) creating commodity funds with rules about the payout rate; and (3) distributing resource wealth equally per capita (Gelb and Majerowicz 2011; Ross 2007; Sala-i-Martin and Subramanian 2003).

Public investment management (PIM) in resource-rich countries is thus subject to two challenges: technical or capacity, and political economy (Arezki, Dupay, and Gelb 2012). Robust PIM requires technical expertise. Sound PIM requires experts to undertake project appraisals, supervise construction, and manage all aspects of the investment; design and maintain the necessary accountability checks and balances; and, particularly in resource-rich countries, integrate resource rents into the budgeting cycle for public investments. Arezki, Dupay, and Gelb (2012) showed that, on average, the quality of public investment is lower in resource-rich, low-income countries than in non-resource-rich ones. Investing in the technical capabilities needed for sound management of public investment is central to the “investing in investing” approach recommended for developing countries, especially those that are resource-rich (Collier 2010, Kyobe et al. 2011). Box 3.4 describes eight features for achieving PIM efficiency identified by Rajaram and others (2014), based on a review of country experiences.

To strengthen the management of its public investments, Chile spent an extended period building project appraisal capacity across various levels and agencies of government and made the public investment program available to the public online. Other countries have set up a project monitoring function that reports directly to government leaders, such as the Strategic Policy Unit in the Office of the President in Sierra Leone (Rajaram and others 2014).

The political economy of public investment in resource-rich countries, particularly during resource booms, is often distorted by highly visible rents and pressures on public officials to allocate them to groups that are of strategic interest. One outcome can be to concentrate decision making about resource rent allocation at the highest levels of government, “to bypass the regular budget cycle and procedural rules” (Kaiser 2012, 167; Rajaram and others 2014). This cycle undermines the very institutions needed to maximize resource wealth investments. Timor-Leste, a resource-rich developing country, has invested heavily in reforming its PIM to take better advantage of its resource windfall. For instance, it has reinforced the transparency mechanisms for the annual budget and the Petroleum Fund, and no public investments are made off-budget, even those of the national oil company (Rajaram and others 2014). Another challenging outcome is the short-term horizon of public officials, who tend to be biased toward present consumption needs at the expense of future returns on investments in health, education, and investment systems such as PIM.
Box 3.4 Eight “Must-Have” Features for an Efficient Public Investment Management System

An investment choice is justified as a welfare-improving public policy when:

- The actual investment project management is effective and leads to the completion of the project on schedule.
- There is efficient and sustainable operation of the asset created by public investment.
- There is a process of learning to improve future project selection, implementation, and operation.
- Investment is undertaken through an allocation of risk that is more likely to ensure efficient and effective implementation of the project. Risk management is one of the key challenges when it comes to coordinating public and private investment modalities.

As illustrated in figure B3.4.1, effective PIM systems require not only the alignment of capacities and incentives to improve project design and selection (the first four features) but also credible commitments and long-term investments in technical and administrative capacity to improve project implementation (the last four features). Building such systems is not trivial, since it tries to address problems of transparency and accountability, which are especially acute in resource-rich countries.

![Figure B3.4.1 Features of an Efficient Public Investment Management System](image)

Source: Rajaram and others 2014.
Levers for Improving the Governance of Service Delivery

The first main section of chapter spelled out the governance challenges confronting resource-rich countries—rents, volume, and volatility—and their effects on public investment choices and systems. This section sets out three entry points for mitigating these challenges: institutions, incentives, and information.

Institutions

Institutions shape human interaction. They can be formal, through rules such as a country’s constitution and laws, or informal, with conventional, but often unwritten, codes of behavior. In resource-rich countries, a robust institutional environment is needed for the effective management of natural resource wealth. Formal institutions might include legislation on natural resource sectors and revenue allocation, rules that shape the allocation of resource rents to various levels of government, or the responsibility of legislative bodies to create rules that strengthen accountability and transparency (box 3.5).

Box 3.5 The Role of Parliaments in Managing Resource Wealth

Parliaments can do a great deal to foster domestic accountability. Their mandate is to manage the policy making and implementation processes through legislation and regulation, to scrutinize public spending, and to represent citizen needs and demands in decision making. Four of their functions can strengthen governance in resource-rich countries:

1. Legislative. The legislative function covers drafting, reviewing, and passing bills. This function enables parliament to create a legal framework for effective and efficient management of resource wealth. For example, parliament can introduce laws to establish decentralized systems of service delivery and provide earmarks for social sector spending (table 3.1).

2. Regulatory. Parliament can use its oversight responsibility to hold the executive accountable for the execution of laws and policies. Parliamentary committees can use hearings and investigations to press government officials on resource wealth allocation and service delivery.

3. Representative. As a representative of the public, parliament ensures that the voices and preferences of the public are heard; one method is to pass access-to-information laws.

4. Budgetary. Parliament’s “power of the purse” gives it the opportunity to ensure that the annual budget process is used to promote an efficient and effective allocation of resource revenues.

Parliaments are not monoliths: they comprise various committees, different political parties, various coalitions, and so forth. Typically, specialized committees such as budget, oil or mining, and public accounts are prominent players in resource wealth management. Committees on social sectors—such as health, education, and social protection—and other
Institutions constitute the framework for the long route of accountability (leading from citizens to the state and from the state to providers). However, reinforcing institutions often means tackling rules and norms that challenge entrenched interests or have long existed. A relatively sound institutional environment can help to mitigate the risks associated with the particular characteristics of resource-rich countries. Institutional structures (1) set the rules for allocation and spending of rents; (2) allow for systems to deal with the inherent volatility of prices and volumes associated with resource rents; and (3) enable citizens to hold policy makers accountable for allocating resources and regulating public service delivery.

This section focuses on decentralization and private sector provision of services as two possible ways (1) to build up the institutional environment at various levels of government (for example, central and subnational) and for various types of providers (private, both for-profit and not-for-profit; and public) and (2) to shape the allocation of rents to provide services related to human development. In resource-rich countries, there is a risk that mineral rents will be captured partly by civil servants through higher wages, as is the case in Ghana and Tanzania. This is a challenge not only for the efficiency of service delivery but also for the strengthening of PIM, and it creates liabilities in downtimes. In that perspective, unions of teachers and health providers are key actors to engage early on, as they can influence both the legislative and the executive branches.

**Decentralization and Intergovernmental Relations**

**Issue**

Decentralizing service delivery to the local level could improve services through better information about local needs, greater accountability and responsiveness.
of local agents, and more citizen participation. One way to promote the efficient delivery of human development services is to examine the relationship between central and subnational government agencies and shift responsibilities and resources, if feasible. The rationale for decentralization is that localizing service delivery can make the state more responsive and accountable, increase the voice and participation of citizens, encourage cost-effectiveness, and reduce bureaucracy (Bardhan 2002; Faguet 2004). However, minimizing spatial inequities in human development outcomes and reducing disparities in per capita spending on social services is an especially important policy goal in resource-rich countries. Two opposing factors play a role in the financing equation. On the one hand, the resources tend to be located in poorer and more remote areas, which tend to bear most of the direct social and environmental costs of extractions and where service provision is more challenging. On the other hand, the royalties from the resources may potentially create large differentials in own-source revenues between the local jurisdictions where the natural resources are located and most others. Decentralized provision may best be combined with centralized financing. The distribution rules need to be negotiated clearly and transparently between the center and local governments to avoid creating political tensions and conflict.

Pros and Cons

Although decentralizing service delivery can alleviate information asymmetries, other trade-offs may arise. Local governments are said to have certain advantages over central governments, such as (1) better information about local needs and conditions; (2) responsibility for smaller, more homogeneous jurisdictions; and (3) public officials who are more accountable to voters (Galiani, Gertler, and Schargrodsky 2008). In other words, decentralization can alleviate information asymmetries, agency costs, and collective action problems in service delivery. However, decentralization can also be less efficient in delivering services if central agencies are better able to achieve economies of scale and better equipped to deliver the services technically and organizationally—or if local elites have captured subnational institutions. The theoretical literature highlights these trade-offs, which require context- and service-specific resolution (for an extensive review of decentralization and governance, see Bardhan 2002; and Faguet 2014).

Empirical Evidence

Empirical studies provide a mixed view of how decentralization affects the delivery of health and education services. A review of studies from the last 20 years that have tried to assess the causal impact of decentralization on health and education found a variety of effects (Channa and Faguet 2012). In general, decentralization pushes up spending, but more for education than for health. However, its relationship with health or education outcomes is less clear.

Evidence from Bolivia and Indonesia showed increased local investment in education. After Bolivia underwent devolution reform in 1994, studies found a statistically significant increase in investment in education (Channa and Faguet 2012;
Fuguet 2004). Similarly, political decentralization to Indonesian districts was associated with more public spending overall; when aggregated, overall spending on education increased, but not spending on health (Skoufias and others 2011). In China, a significant relationship was found between county-level fiscal decentralization and infant mortality rates (Uchimura and Jütting 2009).

In education, cross-country analyses of international student assessments—such as the Programme for International Student Assessment and the Trends in International Mathematics and Science Study—found that countries with more local decision-making authority and greater accountability have better learning outcomes (Fuchs and Woessmann 2007). In Kenya, test scores were significantly higher for pupils taught by contract teachers hired by the parent-teacher association than for pupils taught by government teachers (Duflo, Dupas, and Kremer 2012). This was attributed to the fact that the association had the power to hire and fire contract teachers, but no control over government teachers.

A review of Uganda’s public spending on education paints a pessimistic picture of resource allocation between the central and local authorities. Uganda’s local governments rely on transfers from the central government for more than 90 percent of their revenue, yet transfers have fallen from about 5 to about 3.5 percent of GDP, which has led to a steep decline in local government spending on social services. Education budgets have been especially hard hit; between 2001/02 and 2011/12 real per capita transfers were reduced nearly 20 percent (World Bank 2013d). Public spending per capita also varies greatly across districts, by a factor of 6.3 in 2010. The number of students per primary school teacher varies from 32 to 100. Heightening value-for-money in education in the districts that are lagging behind could help the country to achieve better outcomes without raising costs.

Summary on Decentralization

The evidence for decentralization as a potential mechanism for improving governance of service delivery is mixed. On the one hand, it seems to be associated with an increase in public spending on health and education. This association is promising for resource-rich countries because it provides a means of transferring rents to subnational levels. On the other hand, the evidence on actual human development outcomes is sparse and mixed:

1. Decentralization efforts are most effective when the responsibilities of different levels of government are clearly defined. The Ugandan case highlights how a shift in central government priorities can affect local government budgets and priorities. There needs to be a clear understanding of what roles are most suitable for the central and local levels and what capacity is available at both.
2. Local actors are likely to be more effective if they have the appropriate authority and capacity to undertake their responsibilities.
3. Closely related to clearly defining the responsibilities of central and local governments is the need to put in place complementary fiscal rules that (1) take into account the size of the rents from natural resources and the associated
price volatility and that (2) ensure equitable and efficient local distribution based both on needs and own-resource capacities (some of which are associated with the geographic location of the rents). For example, in Brazil, the fiscal decentralization of health care allocated the majority of funding to hospitals, which are mainly in richer localities (World Bank 2003), and discussion about changing the allocation rules for revenues from the new oil fields have generated many discussions.

**Private Provision of Services**

*Issue*

Private providers already play a significant role in the delivery of services related to human development, across the income distribution. Private providers are responsible for delivering at least half the health services in SSA (IFC 2011). For example, in Chad, Niger, and Uganda, more than 40 percent of people in the lowest economic quintile who seek health care for children with symptoms of acute respiratory infection go to private, self-financing providers. In Côte d’Ivoire, the government addressed the lack of spaces in government-run secondary schools by sponsoring students to attend private (religious and secular) secondary schools and training institutions (LaRocque 2008). Resource-rich countries can use their resource rents and formulate institutional rules and mechanisms to enhance partnerships with the private sector for service delivery, particularly in education and health.

*Pros and Cons*

Private providers, it is argued, can have a positive impact on human development outcomes. They can (1) create competition in a particular market; (2) offer more flexible service delivery arrangements (for example, contract teachers and health care workers); (3) improve efficiency and service delivery outcomes by increasing risk sharing between government and private partners; and (4) increase choices for users of services. However, such partnerships may also exacerbate unequal access to high-performing schools or hospitals and reduce the government’s control over public services (for a review of public-private partnerships in education, see Brugha and Zwi 1998; IFC 2011; and Patrinos, Barrera-Osorio, and Guáqueta 2009).

Public-private partnerships (PPPs) use a variety of arrangements, ranging from government funding of existing private schools and hospitals to expanding access to contracts to deliver a range of inputs and introduce management efficiencies that the public sector lacks (Patrinos, Barrera-Osorio, and Guáqueta 2009). For example, The Gambia and Mauritius subsidize private schools, mostly faith-based nonprofits, either with school inputs, such as teacher salaries and textbooks, or through grants to students.

At the other end of the spectrum, in some countries, the framework for the relationships between public and private sectors is still incipient. In the Republic of Congo, official relationships between the public and private sectors are limited, apart from tax and regulation issues, so a dialogue mechanism has been
proposed to increase their interaction in the health sector (Makinen, Deville, and Folsom 2012). In Mali, there is no formal dialogue between the public and private health sectors, but private community health facilities are more closely integrated into the policy environment than the traditional for-profit private operators (Lamiaux, Rouzaud, and Woods 2011).5

**Empirical Literature**

The evidence suggests that in those education systems that have PPPs, students perform better on a variety of indicators (Angrist, Bettinger, and Kremer 2006; Barrera-Osorio and others 2011; Bettinger, Kremer, and Saavedra 2010). Other studies, such as that by Uribe and others (2005), have not found any difference in student performance between public and private schools.

In the health sector, there is a continuing, robust debate about the relationship of private providers to health systems and health outcomes (see Basu and others 2012; Brugha and Zwi 1998). In their review of related research studies, Basu and others (2012) concluded that the private sector is not necessarily more efficient, accountable, or medically effective than the public sector; however, the public sector appears to lack timeliness and hospitality toward patients and has a more limited availability of equipment, medications, and trained medical health providers.

It is important to acknowledge the heterogeneity of the private actors that deliver services. For example, agencies providing health and education services may be nonprofit or for-profit, faith-based or secular, or affiliated with a variety of other groups. Their motivations vary; some are driven by a profit motive, others by religious views, and others by another moral or social imperative. Do these varying motivations affect service delivery? Reinikka and Svensson (2010) found religious nonprofit health care providers to be intrinsically more motivated to serve poor people in Uganda. There is some evidence that faith-based private schools do not reach the poor more than public schools, but they do reach the poor substantially more than private secular schools (Wodon 2013).

**Summary on the Private Provision of Human Development Services**

Building the governance environment is important for strengthening the private provision of services. The emerging, and mixed, evidence of the impact of PPPs highlights the need for government policies to create a policy and regulatory environment that is relevant to all actors in a sector. Of the 45 African countries covered in a study by the International Finance Corporation (IFC 2011), 38 have an official policy of working with the private sector, although limited capacity is a major impediment to doing so.

Better regulation is one way of building up private provision and thus improving service delivery outcomes. In many countries, significant amounts of public resources have been used to regulate the private sector and improve service delivery, with limited success (Basu and others 2012). Private actors in Ghana’s health sector identified as problems inadequate information on regulations, complex and
nontransparent regulations, and the limited capacity of the responsible public agencies to monitor and evaluate private providers. The public agency responsible for regulation could not identify a significant number of private providers to assess accreditation and quality (Ojo 2013).

The Côte d’Ivoire government pays private secondary schools a contractual fixed amount to educate a student. The private schools must be certified and meet several criteria to receive subsidies, including meeting input specifications and quality indicators and having prior education experience (Sakellariou and Patrinos 2009). In Uganda, as part of the Universal Secondary Education Policy of 2007, the government contracts out the education of students not served by public and government-aided schools. A memorandum of understanding with the Ministry of Education sets requirements for private schools to submit performance data on a range of indicators, make periodic progress reports, and be subject to periodic reviews and assessments of academic performance. The ministry pays a fixed fee per student (LaRocque 2008).

Patrinos, Barrera-Osorio, and Guáqueta (2009) outlined recommendations for strengthening PPPs, particularly in education, among them (1) clearly defining operating requirements and performance standards for private schools; (2) setting output measures, including quality indicators, in contracts for education services; and (3) establishing special agencies to manage private school operations and the flow of funds from government to private schools in order to consolidate expertise on education PPPs.

**Incentives**

Incentives affect the way provider organizations, their managers, and their staff are held accountable for their behavior and ability to deliver services with quality and efficiency. From this vantage point, what is of interest is how providers are selected, paid, monitored, and held accountable for their performance, notably in delivering human development services (Fiszbein, Ringold, and Rogers 2011). These complex relationships are often characterized by both information asymmetries and varying motivations and objectives. A principal-agent problem arises, in that a principal who desires certain results needs to ensure that the agent responsible for doing the requisite tasks actually does so. If agents shirk their responsibilities (due to information asymmetries and different motivations), the principal must then put in place a mechanism—a contract or compact—to align the incentives.

There are different ways to structure these relationships, among them performance incentives—result- or performance-based financing (RBF or PBF)—which may be cash or nonmonetary benefits provided against measurable actions or achievement and cash transfers (conditional or unconditional) that seek to heighten demand. During booms, resource-rich countries have the fiscal space to employ incentive structures that can affect service delivery. During busts, well-targeted transfer programs can prove to be a more efficient means of spending public resources than general subsidies (for example, fuel subsidies).
Supply Side: Results-Based Financing

**Issue**

RBF refers to the “transfer of money or material goods conditional on taking a measurable action or achieving a predetermined performance target” (Musgrove 2011; Oxman and Fretheim 2009). In health care, for example, financing mechanisms traditionally focused on inputs—such as infrastructure, medical supplies, and equipment—on the implicit assumption that quality would follow (Morgan and Eichler 2011; HRITF and World Bank 2014). RBF interventions can target various stakeholders; for example, consumers, when they undertake health-related behaviors, such as having a child immunized, or providers, when they achieve performance targets, such as a percentage of children immunized.

**Pros and Cons**

RBF has the potential to address problems such as the underuse of services, low quality of care, and inefficient delivery of services. RBF shifts some of the risk borne by the principal under traditional financing arrangements where payment does not depend on results (Pearson, Johnson, and Ellison 2010). That is, RBF is expected to improve the quality and availability of services due to increased motivation derived from incentives—financial or otherwise. Different aspects of quality can be assessed in an RBF scheme—(1) inputs: linking performance incentives to inputs needed for care, such as the availability of essential drugs or accreditation; (2) process: linking performance incentives to compliance with evidence-based guided care (following treatment protocols) or patient satisfaction; and (3) outcomes: linking performance incentives to mortality and morbidity indicators (Ergo and others 2012).

Critiques of RBF schemes for health and education question whether material rewards replace or conflict with intrinsic motivation. If educators or health care providers are already strongly motivated, skeptics argue, incentives that provide rewards convey a lack of trust in the providers, which has a negative impact on quality (see, for example, Benabou and Tirole 2006; Eichler, Levine, and Performance-Based Incentives Working Group 2009; Ellingsen and Johansson 2008). Participants in the incentives intervention may also learn to game the system; for example, teachers may only work the exact times needed to meet target income (Fehr and Goette 2007), or health care providers may only offer services to the group targeted by the incentive, reducing overall provision (Eichler, Levine, and Performance-Based Incentives Working Group 2009).

**Empirical Evidence**

Impact evaluations paint a mixed picture of how RBF affects human development outcomes. Careful attention to program design and implementation is critical to RBF success. In health, RBF is said to increase autonomy, strengthen autonomy, and empower frontline workers and facility managers. New evidence
In education, a combination of financial incentives and monitoring can make a difference. In India, teacher pay incentives and monitoring to discourage teacher absenteeism yielded a decrease in teacher absenteeism of 21 percentage points and an increase in student test scores of 0.17 standard deviation compared with the control group (Duflo, Hanna, and Ryan 2012). In Chile, incentives had a positive short-term impact on student performance, but did not improve learning in the long term (Contreras and Rau 2009).

**Summary on RBF**

Supply-side RBF interventions highlight the role of incentives in improving governance for the delivery of human development services. For resource-rich countries, where service delivery challenges like worker absenteeism are especially high, RBF offers a promising approach. RBF interventions also provide a credible alternative to the common practice of simply increasing supply-side resources in order to improve outcomes.

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**Box 3.6 Results-Based Financing: A Tale of Two Sub-Saharan African Countries**

*Rwanda*. Rwanda was the first African country to implement RBF (*l’approche contractuelle*) in its health sector. The program was adopted as national policy in the 2005–09 Health Strategic Plan and was later incorporated into the National Finance Law (Morgan and Eichler 2011). The quality of service being delivered in hospitals was assessed in two ways: a team of central-level evaluations made random visits, and a team of medical professionals from peer hospitals performed reviews. The quality of primary care services was assessed through frequent monitoring and supervision by district hospitals. Impact evaluations conducted in 2009 found significant improvements. There was a 21 percent increase from the baseline in the probability of deliveries in a health care facility. There was little impact on child vaccinations, although immunization rates in Rwanda were already high when the program began (Basinga and others 2011).

*The Democratic Republic of Congo*. Between 2009 and 2013, the effect of various health financing mechanisms, including RBF, was evaluated in the Haut-Katanga District as part of the World Bank–supported Projet d’Appui à la Réhabilitation du Secteur de la Santé. The evaluation analyzed the effect of the financing mechanism on service provision in terms of (1) availability of services; (2) price of health services and the cost to patients; (3) health worker satisfaction, work-related stress, and motivation; (4) service use; (5) patient satisfaction; and (6) health status of the population. The results found no significant increases in service use and coverage. However, the incentives did lead to a reduction in absenteeism in facilities receiving results-based incentives compared with facilities in the control group (Health Results Innovation Trust Fund and World Bank 2014).
Demand Side: Conditional and Unconditional Cash Transfers and Direct Dividend Payments

Issue
Distributing resource wealth through cash transfers is one mechanism for facilitating redistribution and poverty reduction, increasing the transparency of resource use, and supporting citizen engagement. Cash transfer programs provide noncontributory cash grants to beneficiaries to satisfy minimum consumption needs (Garcia and Moore 2012). Such programs can be conditional or unconditional, with the former providing benefits only to program participants who have adhered to prescribed conditions (for example, children must regularly attend school; or a household adult must attend seminars covering such topics as health and nutrition). Unconditional cash transfer programs provide cash grants to all eligible and registered participants. Cash transfers, which can distribute resource rents directly to citizens (box 3.7), have been demonstrated to be effective in tackling poverty and vulnerability.

Box 3.7 Direct Dividend Payments
Direct dividend payments (DDPs) consist of the direct distribution to citizens of all or part of the resource revenues. While the idea of DDPs is not new, it has recently gained international recognition (Devarajan and Giugale 2013; Devarajan, Minh Le, and Raballand 2010; Gillies 2010; McGuirk, Rajaram, and Giugale 2016; Moss and Majerowicz 2013; Moss and Young 2009).

In 1976, the State of Alaska established one of the earliest DDP systems, the Alaska Permanent Fund, which receives at least 25 percent of oil revenues. The fund invests the revenues, and every Alaska resident gets a share of the dividends. In countries like Bolivia and Mongolia, resource payments are more targeted: in Mongolia, the Child Money Fund uses mining revenues to pay poor families with children; in Bolivia, Renta Dignidad spends oil and natural gas proceeds on pensions for everyone older than 65 years of age, differentially by income.

DDP proponents focus on the potential and theoretical governance gains that the approach delivers. By giving citizens a direct payment out of resource revenues, the program would create a nationwide constituency a more responsible management of these resources (Devarajan, Minh Le, and Raballand 2010; Palley 2003; Sandbu 2006). The DDP literature also points to the empowering effects the program could have by eliminating the state’s monopoly on resource revenue and transferring the cash to citizens. By diminishing the total funds available to the state, the policy forces the government to be more cautious about spending and increases the opportunity cost of misspending (Shaxson 2008). DDPs could also mitigate the principal-agent problems that affect the allocation of public funds where institutions are weak—that is, they circumvent the problem by eliminating the intermediary maker of decisions about spending public resources (the state) and give decision-making power to the individuals (Devarajan, Minh Le, and Raballand 2010; Moss and Young 2009; Sandbu 2006).

Direct payments could create an environment conducive to good governance. But they could just as easily create an environment of entitlements, where the citizens’ lobby focuses only on the size of the cash transfers (Collier 2013; Sandbu 2006). Another risk of circumventing...
Box 3.7 Direct Dividend Payments (continued)

the state system is of undermining the public sector’s institutional capacity or absolving it of any responsibility toward its citizens (Gillies 2010). If state institutions are completely bypassed, the likely result is that the government will never become more efficient and the system will never have to reform, as there will be no pressure to do so. The literature showcases the example of Alaska, where studies have found citizens disengaged from public life, growing disinterest in scrutinizing public spending, a perception of the government as a distributor of funds, and a powerful lobby against redirecting cash transfers to public investment (Cowper 2007; Devarajan, Minh Le, and Raballand 2010; Goldsmith 2002).

McGuirk, Rajaram, and Giugale (2016) analyzed the theoretical conditions under which DDPs are rational for political candidates. They found, first, that propitious political conditions—including competitive elections, undeveloped patronage networks, and a high degree of budgetary accountability—increase the share of resource revenues to be spent on citizens’ welfare. They then showed that a high poverty headcount and inefficient public institutions will each strengthen the political incentive to provide direct dividend transfers relative to public goods. This combination of conditions is rare, which may explain why relatively few countries have implemented or plan to implement direct dividend transfers. Leaders who are not constrained by electoral incentives—for example, those facing term limits and no internal party discipline—are more likely to renege on policy proposals and extract more rents for personal benefit.

DDP proponents point to one essential adjustment that could help to mitigate some of the potential downfalls: taxing the payments (Devarajan, Minh Le, and Raballand 2010). Taxes would create incentives for optimized behavior. On the one hand, political as well practical costs to the state are associated with taxation, so there is an incentive to spend more carefully. On the other hand, in giving tax money back to the state, citizens have an incentive to scrutinize the use of these funds and to keep institutions accountable for the delivery of public services. However, taxation would work only if a substantial enough percentage of revenues is distributed via DDPs; otherwise, there is little incentive to tax (Gillies 2010).

Some mainstream critiques of DDPs point out that because resource-rich countries in Africa have a severe infrastructure gap and poor levels of human development, investment in such public goods should have priority. Proponents, however, point to the high levels of leakage and very low levels of service delivery in these countries to justify allocating public funds to DDPs (Moss and Majerowicz 2013). Arezki, Dupay, and Gelb (2012) showed that the higher the resource revenue, the higher the “adjustment costs” governments incur and concluded that the optimal public spending policy should focus on direct payments rather than public investment. Devarajan and others (2011) and Devarajan and Giugale (2013) have pointed out that DDPs could even increase spending on public goods due to the additional scrutiny of public spending.

Pros and Cons

Demand-side programs like cash transfers are thought to be more efficient in using resources and more effective at improving outcomes than supply-side-only interventions (Patrinos 2007). Also, cash transfers may potentially transform the social and economic relationships within households and communities by “providing opportunities for social groups who are often denied access to decision-making structures to build ‘bridges’ and social connections both
horizontally, with other community members, and vertically, with state actors” (Samuels, Jones, and Malachowska 2013). Cash transfers, particularly those with conditions, are expected to increase citizens’ demand for services and thus strengthen their stake in how services are delivered.

Among the challenges facing cash transfer programs are (1) the large number of beneficiaries; (2) the sharing of program responsibilities across many government agencies (social welfare, education, and health) and levels (central, municipal, and local); (3) high visibility; and (4) the need for well-functioning payment and accounting systems.

**Empirical Evidence**

Cash transfer programs improve outcomes such as consumption, nutrition, education, and health (a more detailed discussion is available in chapter 4). In analyzing the pilot conditional cash transfer program in three districts in Tanzania, Evans and others (2014) noted positive effects on the health and education outcomes for households that received the transfers. For example, those households were 5 percentage points less likely to be sick (average across all ages). Soares and Teixeira (2010) found that Mozambique’s Food Subsidy Program raised the proportion of household expenditures on food by 22 percent, with even larger increases for female-headed households. Household adults were more likely to be working (increased probability of 17 percent for male adults and the elderly and 24 percent for female adults, although the increase was only marginally significant), and boys ages 5–9 years were less likely to work (decreased probability of 29 percent). An evaluation of Zambia’s program in three districts found positive effects on consumption, particularly nonfood consumption (RHVP 2009). Levine, van der Berg, and Yu (2009), who analyzed Namibia’s grant system, concluded that the transfers significantly decreased the number of poor people, with an even more notable decrease in the number of those who were extremely poor.

Better accountability mechanisms matter for improving the governance of both cash transfers and service delivery. Social protection programs like cash transfers can affect social relationships by allowing social groups, particularly the vulnerable, to participate in decision-making processes and interact with other stakeholders. In their qualitative and participatory assessment of cash transfer programs in Kenya, Mozambique, Uganda, the West Bank and Gaza, and the Republic of Yemen, Samuels, Jones, and Malachowska (2013) identified three ways to enhance accountability in cash transfer programs:

1. **Grievance mechanisms to provide formal channels for citizens to express dissatisfaction and demand redress.** The three categories of grievance redress mechanisms are (a) mechanisms within government agencies—such as hotlines, complaints offices, and websites—that field complaints about government programs and services; (b) independent institutions—such as ombudsmen, tribunals, and civil society organizations—that operate outside the formal government bureaucracy and may have little to no public authority to enforce their findings; and (c) the courts. Most cash transfer programs have a grievance and complaints procedure, but their record is mixed.
2. Program feedback loops to provide continuing information about program experiences through suggestion boxes or meetings with direct beneficiaries. Limited interactions between program officials and beneficiaries undermined the effectiveness of feedback loops in Mozambique and the Republic of Yemen (Samuels, Jones, and Malachowska 2013).

3. Monitoring and evaluation to assess whether program objectives are being met and how the program is being implemented and delivered and to identify lessons learned.

Access to information and audits should also be considered a key mechanism for improving the accountability and governance of cash transfer programs. The rationale is that having access to budget information, operations manuals, and rigorous independent evaluations will give citizens incentives to use the information to address program strengths and weaknesses (for example, to perform social audits on program and provider performance). However, the assumption obscures the reality that access to information and audits without active campaigns to inform citizens of their rights and the standards and program performance they should expect are unlikely to make service delivery more accountable (Ringold and others 2012). In resource-rich developing countries, where access to information on resource wealth is severely limited, promoting the accountability of cash transfer programs for service delivery through access to information and audits will have to confront this challenge.

Summary on Cash Transfers
Cash transfers as a demand-side program to encourage citizens’ participation in service delivery have proved promising for promoting human capital accumulation. In SSA, cash transfers are becoming increasingly common, and as they spread, it is important to identify accountability mechanisms that not only enhance human capital but also change the social relations that inhibit the formation of human capital. For resource-rich countries, cash transfers are one way to distribute resource wealth and stimulate citizens’ demand for better services.

Information
Citizens want information about natural resources and how they are used. Access to information can enable social accountability, through redress, monitoring, and other opportunities for citizen action. In resource-rich countries, where public institutions and civil society may be weak and information scarce or opaque, giving citizens access to information may be particularly powerful. Box 3.8 summarizes the policy recommendations of a recent research report on transparency and political engagement (Khemani 2016).

Citizens are often unaware both of the amount of resource revenues and their use. They generally lack information about the services available to them, their rights, and the quality and standard of services they should expect. In Tanzania, two-thirds of the population reported that they would like more information about natural gas discoveries (Gaddis and others 2014). They expect the
Delivering Human Development Services in Resource-Rich Countries

Box 3.8  Transparency to Improve the Quality of Political Engagement

Sustainable improvements in governance can happen when two forces—transparency and political engagement—interact and work together to strengthen institutions (Khemani 2016). Targeted information that interacts with political engagement, enabling citizens to select and sanction leaders on the basis of performance in delivering public goods, can strengthen institutions by shaping how leaders behave in office, disciplined by the threat of challengers. The study concludes with four key policy recommendations:

1. Policies should support the generation of reliable and impartial evidence on the performance of leaders tasked with the delivery of public policies. This should include information on the consequences of policy actions for public good outcomes.

2. Policies should promote healthy competition in media markets, complemented by regulations to support public interest programming. Sponsorship of appealing programs, or so-called “infotainment,” to communicate the findings of technical evidence, holds potential to change norms and persuade citizens to shift political beliefs in ways that strengthen the demand for good policies.

3. Information on the provision of public goods at the local level is more relevant to voters’ decisions in local elections than is information at the national level. Performance assessments of both current incumbents and challengers, delivered regularly during a term in office but also at the time of elections, can make it easier for citizens to use information to hold leaders accountable.

4. Governments should experiment with the design of public sector institutions to take advantage of the interaction between growing political engagement and transparency, and they should do so in crosscutting ways. Models of individual citizen engagement should not rest on organized groups within each school or health clinic—rather, it should target individual domains of citizen action, such as a local administrative level with a range of service delivery responsibilities.

Source: Adapted from Khemani 2016.

government to provide information and think that education and health should be priority sectors for investment.

The gap between laws mandating transparency and accountability and their actual influence on service delivery is large. Few countries, including those that are resource-rich, have access-to-information laws or mandate that information be provided about the human development sectors. Yet in resource-rich countries where information asymmetries are particularly skewed, the lack of legal requirements for access to information undermines opportunities for governance and efforts at accountability for the allocation of resource rents. Even in countries that do have access-to-information laws, their application may be minimal and channels for grievance redress may be absent or difficult to access. Generally, resource-rich countries fail to provide basic information about the extractive sector; where they do, those transparency initiatives tend to be
externally driven, such as the Extractive Industries Transparency Initiative, with little local ownership (Revenue Watch Institute 2010). According to the 2013 resource governance index, which analyzes the governance environment of resource-rich countries and assigns a composite score of 0–100, 11 of the 15 Sub-Saharan resource-rich countries analyzed had weak or failing scores.9

**Social Accountability**

**Issue**

Social accountability, also known as “bottom-up” accountability, refers to tools citizens can use to influence the quality of service delivery by holding providers accountable. It covers interventions to provide citizens with information and channels to use it, such as citizen monitoring, oversight, and feedback on public sector performance; user-centered access to and dissemination of public information; public complaints and grievance redress mechanisms; and citizens’ participation in resource allocation decisions, such as participatory budgeting. Social accountability interventions aim “to improve institutional performance by bolstering both citizen engagement and the public responsiveness of states and corporations” (Fox 2014).

While the emphasis is on citizen action, policy makers and service providers are central to making these types of interventions more effective. Social accountability initiatives give resource-rich countries another possible means of enhancing the governance environment regarding resource wealth management and service delivery.

**Pros and Cons**

From a theoretical perspective, there is no clear prediction of the impact of social accountability interventions. On the one hand, citizens’ participation in and monitoring of policy making and program planning can help to ensure that service and program objectives reflect citizens’ needs and priorities. Citizens’ monitoring and evaluation can also help to ensure the proper use of resources and provide feedback on problems and successes in service delivery. Participatory budgeting in Porto Alegre, Brazil, is a well-known citizen participation program that has increased school enrollment and improved water and sanitation services (Shah 2007). Factors that contributed to the success of this initiative include access to information, inclusion and participation, and local organizational capacity.

As noted, citizens often lack trust in government institutions and their ability to deliver services. Social accountability can help to enhance government legitimacy by allowing citizens to have a say in government services. Social accountability can also increase revenues. In Porto Alegre, municipal revenues increased almost 50 percent in four years (De Sousa Santos 1998; Schneider and Baquero 2006). More transparency in the use of funds and inclusion of citizens in making decisions about resource allocation have motivated citizens to pay taxes.

While giving citizens information about service delivery and channels to use it has potential, there are major caveats and bottlenecks to making social
accountability work on the side of citizens and policy makers (Molina 2014; Ringold and others 2012):

1. Citizens may not have access to information, be able to absorb or use information, or feel empowered to engage with service providers. They also face other constraints, such as limited time and attention spans, poor literacy, and collective action problems. Efforts that task citizens with tracking budget allocations for local services (schools or health centers) or engaging in community targeting for cash transfer programs may not be effective if time commitments are prohibitive; they may not include the poor or vulnerable because other priorities are more pressing (Alatas and others 2010; Banerjee and Mullainathan 2008).

2. Even if citizens use social accountability interventions to highlight service delivery challenges, providers may not respond. Some experimental evidence suggests that increasing citizens’ information can be effective in making providers accountable to their clients (see Andrabi, Das, and Khwaja 2009; Currie, Lin, and Zhang 2011). Other studies found no change in the relationship between providers and clients (Keefer and Khemani 2011). This raises the issue of other factors—such as the political, historical, and cultural dynamics and the role of incentives for service providers—that shape the interactions between citizens and providers.

**Empirical Evidence**

The literature does not provide a clear picture of how social accountability interventions affect service delivery and is particularly sparse for resource-rich countries. Reinikka and Svensson (2004, 2005, 2011) analyzed the impact of user-centered public information access and dissemination on improving education outcomes in Uganda. They found a significant reduction in the capturing of funds, especially in areas with higher newspaper penetration. They also found that, in such areas, both enrollment rates and test scores experienced a significant jump. Lieberman, Posner, and Tsai (2014) analyzed the impact of an information campaign on educational outcomes in rural Kenya. They found that the intervention, which was designed to reduce the information gap of parents about their children’s outcomes and ways to improve them, had no discernible impact on education outcomes. They concluded that providing information about the quality of services in developing countries is in itself not enough to generate a change in behavior.

Tanzania’s health sector was decentralized in the mid-1990s to ensure better service and greater community participation by creating council health service boards to design service delivery improvement plans and participatory health care budgeting. However, although the formal structures were generally set up properly, the actual influence of citizens on the process was limited, and participatory planning at the community level was not reflected in the priorities set (Friis-Hansen and Cold-Ravnkilde 2013; Maluka and others 2010 and 2011;
Tidemand, Olsen, and Sola 2008). These results are in sharp contrast to the findings from Porto Alegre’s participatory budgeting and underscore the limitations of such interventions in environments with feeble formal processes of decision making and accountability. Bjorkman and Svensson (2009) estimated the impact of a Citizen Report Card intervention—a pilot community involvement and monitoring of primary health service delivery—on health clinic performance in Uganda. A year after the intervention, treatment communities saw increased use and improved health outcomes. The most significant results were reduced child mortality and higher child weight in communities that were more involved in monitoring and where the provider exerted more effort in delivering health services.

**Summary on Social Accountability**

While social accountability interventions are increasingly used to bring citizens into the policy-making and program implementation processes of public service delivery and seem promising avenues for citizens’ participation and monitoring of service delivery, it is crucial to understand the context in which they take place. This bottom-up or demand-side approach is said to improve service delivery outcomes, enhance government legitimacy, and assert citizens’ voices. However, both theoretical and empirical research studies have found mixed expected and actual outcomes from such interventions:

1. Accountability interactions take place in unique social, political, historical, and cultural contexts, which may not change easily and quickly. Relationships between citizens and providers or policy makers may be such that citizens are reluctant to challenge their authority (Ringold and others 2012).

2. Social accountability may not improve the quality of service delivery on its own, unless supported by fairly well-functioning formal institutions (for example, access-to-information laws, transparent budget-making processes, and audit and other formal monitoring institutions). Fox (2014) distinguished between “tactical” and “strategic” accountability programs. Tactical programs focus too heavily on applying specific tools such as citizen scorecards, are too short term in planning and objectives, and are often implemented as isolated projects. Strategic programs are more long term, are integrated with other transparency and accountability initiatives, and have several entry points. This strategic approach to social accountability is promising.

Accountability relationships in resource-rich countries may be especially high-stakes, given the rents, volume, and volatility of natural resource wealth and the inadequacy of their institutions. However, there are encouraging examples of citizens’ groups organizing themselves to demand better services through monitoring and participation (box 3.9).
The rapid rate of change has created opportunities for innovative approaches to access to information, particularly in developing countries. The emergence of new ICTs has created numerous ways to make data transparent and information accessible and to conduct monitoring and reporting activities. Among these technologies are community radio, mobile phone apps, short message service (SMS), social media, wikis, interactive mapping, and websites (Avila and others 2010; Bertot, Jaeger, and Grimes 2010; Wittemyer and others 2014; for a more encompassing treatment of digital dividends, see World Bank 2016).

Developing countries have seen an unprecedented diffusion of ICTs. The number of smartphone owners in developing countries now exceeds that in the developed world (World Bank 2016). Since 2005 mobile phone subscription rates in both resource-rich and non–resource-rich SSA countries have been rising, increasing at a higher rate in the former than in the latter (figure 3.7). ICTs can help citizens to expand their resources and knowledge, demand public services, and have a voice in the governance processes shaping service delivery.

**Box 3.9 Social Accountability in Resource-Rich Countries**

The Democratic Republic of Congo. In the Katanga Province of the Democratic Republic of Congo, the civil society organization Commission Diocésaine de Justice et Paix (CDJP) led an initiative to engage with a local mining company and others (government officials, other civil society organizations) to promote transparency and accountability in the extractives sector. The mining company and government officials were initially reluctant to disclose information, but, through a series of workshops that reinforced relationships among the actors, “champions” within the government, and an extended civil society network, the CDJP was able to audit the allocation of resource rents to local communities (Integrity Action 2014a).

Côte d’Ivoire. In the rural community of Jacqueville, residents and a mining company disagreed about the company’s allocation of resources to rehabilitate teachers’ quarters and construct an additional building for its own purposes. The community contended that the rehabilitation was not done properly. The civil society organization, Initiative pour la Justice Sociale, la Bonne Gouvernance, et la Transparence en Côte d’Ivoire (Social Justice), sought constructive engagement between the community and the mining company. Social Justice organized a series of trainings to sensitize the community on its rights, facilitated a meeting between the mining company and the community, and engaged the media to shed light on the project and its problems. These strategies were effective components of a social accountability campaign (Integrity Action 2014b).
Pros and Cons

ICTs can be used to relieve information asymmetries, reduce some time constraints for participation, and expand platforms and means of communication. They can enhance both the demand for and supply of governance. New technologies give citizens the means to demand better service by broadening the distribution of information and facilitating networking among geographically dispersed people. ICTs can allow policy makers and service providers to engage citizens in policy- and decision-making processes, expand stakeholder participation, offer greater access to public information, and deliver services to targeted groups (UNDP 2014). They allow information to both flow downward (government-to-citizens) and upward (citizens-to-government) (Wittemyer and others 2014).

ICTs cannot operate in a vacuum, as mentioned in World Bank (2016). The benefits of using ICTs to expand access to information, broaden participation, and improve service delivery are realized when the state fosters an environment that allows citizens to access public information easily. Citizens also need to be informed that the information is available and how to access and use it. Without access-to-information laws and other regulations that deal with the use of ICTs, their benefits will be minimal. Analyses of open government initiatives and right-to-information laws and policies highlight the importance of having a capable civil service and bureaucracy and buy-in by users, civil servants, policy makers, politicians, and other stakeholders (McGee and Gaventa 2010).

Note: SSA = Sub-Saharan Africa.
Citizens who cannot afford access to certain ICT-driven platforms are also excluded. This undermines one of the advantages of ICTs as an inclusive means for participation.

**Empirical Evidence**

There are numerous examples of ICT-enabled programs that stimulate access to information and service delivery, and the empirical evidence on impact is emerging.

In 2009, the ICT4GOV Program was introduced in South Kivu in the Democratic Republic of Congo to facilitate decentralization of governance and service delivery. ICT4GOV uses mobile technology to enhance the participatory budgeting approach to service delivery in a variety of ways: (1) SMS texts are used to alert households about participatory budgeting assembly meetings; (2) citizens use their mobile phones (via SMS texting) to vote on issues to include in the agenda; (3) voting outcomes are shared via SMS texting; and (4) mobile phones are used to monitor and evaluate programs as citizens provide feedback via SMS. Preliminary findings from an external evaluation found a positive impact on tax revenues; citizens are more likely to pay their taxes because they are now more likely to associate tax payment with improvements in services. In some jurisdictions, tax collection has risen 20-fold since the project began. Communities now have investment budgets and are devoting up to 40 percent to investments. In Luhinja, 54 classrooms were constructed; in Bagira, a new health center was built and the sewage system is being repaired; and in Ibanda, water fountains and public toilets were installed at local markets (Gigler and Bailur 2014).

As part of a school grant program in Indonesia, SMS text messages to parents proved to be an effective way to convey program details as well as to trigger parental participation in school activities (Cerdan-Infantes and Filmer 2015).

The Check My School Program in the Philippines uses open data to promote citizens’ monitoring of public school performance. The program combines on-the-ground community monitoring with ICT-enabled mechanisms, such as an online platform to access information on the provision of education services. Data from the Department of Education are presented in a user-friendly format on a website, and the data are validated (or not) from visits to schools by “infomediaries” (community leaders and other socially active individuals). An analysis of the pilot phase noted that motivated, well-organized civil society groups; “champions” within government agencies; endorsement by the Department of Education; and access to information proved to be the conditions that enabled the launch of the program (Shkabatur 2014).

Stop Stockouts is a regional campaign in some African countries (Kenya, Madagascar, Malawi, South Africa, Uganda, Zambia, and Zimbabwe) to ensure that all public health facilities are stocked with essential medicines. Stop Stockouts uses SMS from visiting researchers to monitor medicines’ availability in public health facilities—“pill checks.” Impact evaluation is under way for this campaign.
**Summary on ICTs**

ICTs are potential governance game changers, but context and offline institutional settings matter. ICTs allow policy makers and service providers to offer services on a variety of platforms and citizens to be active in making decisions and monitoring service delivery. ICTs offer both top-down and bottom-up approaches, but efforts to use ICTs as governance mechanisms in service delivery will have to contend with issues such as the general policy environment for ICT-enabled approaches, the selection of participants, and how broad-based participation is.

**Improving the Governance of Human Development Services in Resource-Rich Countries**

Recent windfall natural resource rents have created a significant window of opportunity for many SSA countries to put in place policies and programs that transform the rents into sustained growth. Investing in human capital is vital. However, just as the availability of resource rents presents opportunities, it also presents challenges for delivering services that contribute to developing human capital. Table 3.2 summarizes the discussion of the role of institutions, incentives, and information in overcoming challenges particular to resource-rich countries.

### Table 3.2 Guiding Principles for Improving the Governance of Service Delivery in Resource-Rich Countries

<table>
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<th>Indicator</th>
<th>Institutions</th>
<th>Incentives</th>
<th>Information</th>
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| **Rents** | Draft and reinforce the formal rules and structures that shape allocation of rents. For example,  
- A fiscal regime that maximizes broad-based allocation of rents  
- Decentralized arrangements to allow for subnational transfer of rents  
- Rules to guide private provision of services | Consider incentive-based interventions that link allocation of rents to service delivery outcomes and use | Reduce information asymmetries to stimulate citizens’ monitoring of government spending and service provision:  
- Disclose contract terms and support third-party monitoring of bundled contracts  
- Improve the flow of information about resource rents  
- Use analytical and diagnostic tools such as public expenditure tracking to determine allocation of resources |
| **Volume** | Strengthen public investment management to make PIM more efficient | Establish clear PIM rules to guide capital versus recurrent spending | Provide quality-of-service information to assess the efficiency and effectiveness of sectors that maximize social welfare |
| **Volatility** | Establish and adhere to fiscal rules that help to smooth spending-related decisions during booms and busts; promote countercyclical spending; separate regulatory from service provision agencies | Consider earmarks to protect social spending; provide matching grants and performance-based transfers | Disseminate information on countercyclical mechanisms to protect social spending; provide clarity on budget assumptions related to resource rents and allocation |

*Note: PIM = public investment management.*

From Mines and Wells to Well-Built Minds • http://dx.doi.org/10.1596/978-1-4648-1005-3
Institutional design that shapes rent allocation, incentives that address asymmetries, and information interventions that stimulate transparency can maximize spending of resource rents on human capital. The fiscal regime and decentralized arrangements between central and local authorities can help governments to spend resource wealth and allocate rents to sectors that contribute to human capital. It is important for resource-rich countries to have the capacity to collect resource revenues, prioritize their allocation and spending, and minimize capturing. Decentralized service delivery with a centralized funding formula allows for the subnational distribution of rents to health, education, and social protection. It has the potential to encourage responsiveness and participation by local authorities, local service providers, and citizens. However, decentralized services are likely to be most effective when the rules and responsibilities of all stakeholders are clear.

Both supply and demand incentives for service delivery can mitigate information and motivation asymmetries for all concerned. RBF as a supply-side-incentive intervention makes financing contingent on results. Where service delivery is low or quality is poor, RBF has promise for tackling these challenges. Cash transfers are demand-side incentive programs to stimulate citizens’ use of services that help to form human capital, but also to create spaces where participation and accountability are possible for a wide cross section of social groups. Well-designed cash transfers also provide an effective and efficient means of public spending.

The lack or inadequate availability of information on mining contracts, resource revenues, and public spending of resource revenues make it harder to establish a governance environment that enables service delivery. Access-to-information laws can help to relieve information asymmetries and stimulate citizens’ and third-party monitoring of government spending and service provision. Better tracking of public expenditures through diagnostic tools also has potential for improving the flow of information about the allocation and spending of resource rents.

Building the capacity of PIM systems is vital for managing resource rents that are subject to price and volume volatility. Public investment strategies in resource-rich countries have to contend with boom-and-bust cycles that are peculiar to natural resources. During boom periods, high public investment in certain sectors can strain their absorptive capacity, particularly where project management capabilities are weak. Price volatility also affects the financing of the public investment portfolio. During bust cycles, capital spending is among the first to be cut or eliminated. Building up PIM requires strong and sustained political commitment and significant “investment in investing”; it potentially allows for clear rules to smooth expenditure-related decisions.

Boxes 3.10 and 3.11 summarize the experience of Botswana and Chile in investing natural resource wealth and harnessing investment returns to foster broad-based development, highlighting the key features of their governance environment.
Box 3.10 Botswana: A Diversified Portfolio of Investing Natural Resource Wealth

Botswana is the world’s top producer of diamonds by volume and widely considered as a success story in administering its diamond wealth. The first large diamond mine was discovered in 1967, a year after independence from Britain. Since then, diamonds have been a major source of government revenue and have driven GDP growth. The Mines and Minerals Act of 1967 vested all mining revenues in the national government, thus reducing the potential for regional conflicts over ownership rights. Botswana is also rich in other minerals, such as copper, nickel, gold, and coal; total mining exports accounted for 79 percent of export earnings in 2011. Diamond exports drove impressive growth from the early 1970s through the late 1990s—GDP per capita, which was less than US$1,000 at independence (in 2011 purchasing power parity dollars), currently exceeds US$15,000. Diamond deposits are due to peak around 2016, and their value is expected to drop sharply after 2020—with depletion expected around 2030.

Government has invested the vast majority of mineral revenues in human and physical capital development—one estimate puts the value at close to 90 percent over the 1983–2014 period, with roughly half of that going to infrastructure and half to human capital investments (African Development Bank 2016). In the 2014 budget, education was allotted 28 percent of government finances, which amounts to about 8 percent of GDP. More than 90 percent of children age 7–13 were in school in 2011, and the country boasted a primary completion rate of 95 percent. Access to secondary school is nearly universal. The Ministry of Health was the second-biggest recipient of allocations from the 2014 budget, with 15.7 percent of funding, and the government consistently spends more than 5 percent of GDP on health care. Botswana spent about 4.4 percent of GDP in 2013 on social protection programs (including safety nets, pensions, and active labor market programs). However, social protection programs are not as efficient as they could be because many of them suffer from limited coverage, fragmentation, poor targeting, and suboptimal monitoring: only 20 percent of poor households are covered by social safety nets (or one-third of eligible individuals, according to International Monetary Fund assessments).

In addition to investing, Botswana has saved a sizable—albeit smaller—share of its natural resource revenues in a sovereign wealth fund. The Pula Fund, a long-term investment portfolio established in 1994, receives some of the income from diamond exports and is managed by the Bank of Botswana. Government deposits are included in the bank’s financial statements. The fund was worth about US$6.9 billion in 2013 and has as a dual purpose: to preserve some of the wealth for future generations and to be used as a stabilization measure—for example, to ensure liquidity in the post-2008 global financial crisis. Some media reports have pointed to unexplained drawdowns (Konopo and others 2016).

Botswana has held democratic elections, deemed free by international observers, since independence, although the Botswana Democratic Party has been continuously elected and in power since 1966. Despite criticism of its domination of the political scene, the one-party rule may have contributed to the continuity of successful national-level policies. It has pushed a legal framework promoting strong governance.
Box 3.10  Botswana: A Diversified Portfolio of Investing Natural Resource Wealth (continued)

Botswana does not have a freedom-of-information law (efforts to introduce a bill to that effect in 2012 were unsuccessful), but the government publishes almost all budget documents recommended by the Open Budget Initiative, including a citizens’ budget. The country has a budget process that includes a participatory dimension—the “budget pitso,” or consultation forum, which allows the community to be involved. This practice has its roots in the traditional tribal system of consultation in Botswana, the kgotla, distinguished by the fact that anyone can express opinions, and decisions are made by consensus. Also significant is that the annual budget process is coordinated with the six-year national development plans that are developed in consultation with civil society members and senior political offices. Botswana has consistently had a low prevalence of corruption, and in 2016 it ranked 35 out of 176 countries in Transparency International’s corruption perceptions index.

Box 3.11  Chile: Managing Natural Resource Wealth for Stability

Chile has been resource dependent for more than a century. In the late nineteenth and early twentieth centuries, the country relied heavily on exports of nitrate (of which it was the world’s largest producer), but with the discovery of synthetic nitrate, copper became its main export. By the mid-1970s copper represented around 80 percent of Chilean exports—although this fell to close to 40–50 percent in 2000–10, in part due to a major drive for diversification. The national copper corporation—Corporación Nacional del Cobre de Chile—was founded in 1976 after copper mines and fields were nationalized in 1971 and today produces more copper than any other company in the world. Between 1980 and 2014, GDP per capita almost tripled—from under US$7,500 (in 2011 purchasing price parity dollars) to close to US$22,000. GDP per capita grew 2.8 percent per year, on average, in the 1980s, 4.8 percent in the 1990s, 2.5 percent in the 2000s, and 3.5 percent between 2010 and 2014; growth rates closely tracked copper prices year-to-year.

A key part of Chile’s approach to managing resource revenue has been its use of savings funds to channel budget surpluses. In 1985 the government created the Copper Stabilization Fund, which was split into two sovereign wealth funds in 2007 (under the Fiscal Responsibility Law):

- The Pension Reserves Fund, which aims to mitigate expected future pension liability shortfalls.
- The Economic and Social Stabilization Fund, which serves macroeconomic stabilization purposes.

The Pension Reserves Fund is a savings fund with no withdrawals allowed for 10 years that receives around 0.2–0.5 percent of GDP, depending on the overall budget surplus (the initial installment was US$600 million). The Economic and Social Stabilization Fund is a stabilization fund (similar to the original fund) that receives fiscal surpluses, which are above 1 percent of
Box 3.11 Chile: Managing Natural Resource Wealth for Stability (continued)

GDP (the initial installment was US$5 billion). Since the 1990s, government expenditures have been largely independent of copper price fluctuations—budget surpluses were saved instead of being used to offset taxes, and the savings could be used subsequently in times of budget deficits. The funds have served as a major instrument for fiscal discipline. According to Arellano (2011): “Fiscal discipline contributed to good macroeconomic performance, which created favorable conditions for economic growth. This then translated into the main source of resources to fund social policy. This is the social dividend of fiscal discipline.”

Indeed, having a stable program of government expenditures has enabled Chile to maintain a robust, consistent, and balanced investment program for human development. Overall social spending (which includes education, health, and social protection) increased by a factor of 2.5 between 1990 and 2006, with a particularly strong increase in the areas of education and health, which increased by a factor close to 4. Education spending has emphasized preprimary education and service delivery in primary education (primary education was universalized in the 1980s). Public spending on health has emphasized infrastructure, although salaries for health personnel have grown significantly as well. Most of the population receives health insurance through public health insurance or via the private health insurance system with compulsory contributions. A large part of social spending has gone to old-age pensions. A substantial effort also went into implementing targeted programs for the poor. In particular, the program Chile Solidario has taken a comprehensive approach to tackling extreme poverty by assisting families through a range of social services, including access to education, health, training, and employment in addition to cash transfers.

Chile’s emergence from military rule in the early 1990s was marked by a desire for consensus in order to sustain a successful transition to democracy. This consensus resulted in the introduction of relatively stable policies and reforms during this period. Describing the process, Arellano (2011) identifies constitutional and fiscal institutions as key. Also important was “managing people’s expectations.” Resource revenue windfalls associated with price increases put pressure on politicians to increase public spending rapidly in unsustainable ways. Arellano concludes, “The rejection of populism and the promotion of gradualism in satisfying social needs and fulfilling goals has been a crucial, constant factor.”

Notes

1. The “short” route of accountability is the ability of citizens as clients to hold service providers directly accountable. When this direct path is not available, citizens can use voice and politics to influence policy makers and politicians and to hold them accountable; policy makers, in turn, can use the compact with providers to hold them accountable. This is the “long” route of accountability (World Bank 2004).
2. They use a 1-2-3-4 model: for one country, two types of capital (private and public), three sectors (tradable, nontradable, and resources), and four goods (domestic goods, traditional exports, natural resource exports, and import goods).
3. For an analysis of fiscal and administrative decentralization, see World Bank 2015a.
5. Mali’s community health centers are run by community health associations that are constituted under private law as distinct from public health entities (Lamiaux, Rouzaud, and Woods 2011).

6. This includes a gamut of schemes such as pay-for-performance, performance-based incentives, or output-based aid.

7. For more information on RBF in health, see https://www.rbfhealth.org/mission; in particular, see the webinar series at https://www.rbfhealth.org/resource/webinar-results-based-financing-health.

8. The term *cash transfers* generally covers both unconditional and conditional transfers. Any separate discussion of one type of program is identified as such.

9. The composite score comprises (1) institutional and legal setting, (2) reporting practices, (3) safeguards and quality control, and (4) enabling environment (Natural Resource Governance Institute 2013).

References


Arellano, José Pablo. 2011. “El cobre comopalanca del desarrollo para Chile.” Mimeo, CIEPLAN.


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From Mines and Wells to Well-Built Minds • http://dx.doi.org/10.1596/978-1-4648-1005-3


Pearson, Mark, Martin Johnson, and Robin Ellison. 2010. Review of Major Results-Based Aid (RBA) and Results-Based Financing (RBF) Schemes. London: DFID, Human Development Resource Center.


deliver-more-districts-uganda-fiscal-challenges-opportunities-reforms-public-
expenditure-review.


education-health-public-spending-improved-quality-service-delivery-all-public-
expenditure-review-education-health-sectors.


governance/brief/decentralization-and-intergovernmental-relations-global-solutions-
groups.


public-expenditure-review-education-health.