



Workshop Working Paper

# Policy Frameworks for Resource Rich Countries<sup>1</sup>

---

<sup>1</sup> Adapted from the forthcoming World Bank report *The Extractive Industries Sector: Essentials for Economists and Public Finance Professionals*. Vol. 2. Fiscal Management in Resource-Rich Countries

*Since nonrenewable resources are exhaustible and run the risk of obsolescence, Resource Rich Countries (RRCs) have to consider how to allocate finite resource wealth to the current generation and to future generations. This has important implications for the decision of how much to consume and to save during the period of resource production, and how to allocate savings into different forms of assets. Furthermore, in some countries the need for fiscal saving also arises from long-term pressures on the public finances, such as aging populations and growing healthcare costs.*

### **1. Fiscal sustainability analysis in RRCs**

**Analyses of fiscal sustainability in developed and emerging countries are usually based on medium-term projections of the public debt to GDP ratio given certain macroeconomic projections and fiscal policy assumptions.** A typical World Bank-IMF debt sustainability analysis (DSA) involves examining the expected trajectory of the debt ratio in the medium-term to assess whether the underlying fiscal policies can be sustained under plausible macroeconomic conditions without jeopardizing public sector solvency and external balance.

**The IMF and the World Bank have recommended a specific debt sustainability framework for low-income countries.** The standardized framework for analyzing debt-related vulnerabilities introduced in 2005 consists of a set of indicative policy-dependent thresholds against which projections of external public debt are compared to assess the risk of debt distress. Vulnerability to external and policy shocks is explored in alternative scenarios.

**In RRCs, particularly in countries with limited resource production horizons, the sustainability analysis should include the exhaustibility of nonrenewable resources.** This special treatment is necessary given the importance of the associated fiscal revenues for the public finances. The projection period should be extended into the long-term, beyond the medium-term horizon used in many DSAs in other countries, because nonrenewable resources give rise to important intergenerational allocation issues that require the use of long-term intertemporal models. These exercises force the choice of explicit intertemporal welfare criteria regarding how much resource revenue to consume now versus how much to save for future generations.<sup>2</sup>

**A number of fiscal sustainability exercises for RRCs have been based on the permanent income hypothesis (PIH).** These models provide a benchmark for the non-resource primary balance (NRPB) that can be financed indefinitely. The NRPB is defined as non-resource revenue minus non-resource spending other than interest payments; for oil producers this is usually labeled the non-oil deficit. The benchmark is defined as the permanent annual NRPB derived from estimated government net wealth—the expected present value of projected future fiscal oil revenues plus the value of net government financial assets.

**Long-term PIH fiscal sustainability models where no distinction is made between the consumption and investment components of the NRPB have been challenged.** It has been noted that the fiscal benchmarks these models prescribe are too tight for low-income RRCs because they ignore the longer-term developmental needs in capital-scarce, credit constrained countries and the potential role of productive public investment in that context.<sup>3</sup> In particular, if the economy is capital scarce, the rate of return to domestic capital is likely to be high and may well be above world interest rates. Thus, it is important how policy makers allocate public savings during the production period into net accumulation of foreign financial assets and investment in domestic physical and human capital to promote growth.

**In low-income RRCs, investing resource revenues domestically could relieve existing large deficits in infrastructure and human capital.** Investment could relieve capital scarcity, raise potential nonresource growth, and increase fiscal revenues. In these circumstances, the optimal NRPB will be lower than the benchmark NRPB suggested by PIH models as productive public investment is scaled up, provided that the government can realize the fiscal dividends of the additional growth.

---

<sup>2</sup> Traditional DSAs in other countries incorporate intertemporal welfare choices implicitly, for example by recommending the stabilization of the debt to GDP ratio at a “prudent” level. This recommendation has fundamental implications for the assignment of debt repayment responsibilities between current and future generations that are usually not made explicit.

<sup>3</sup> This argument is most closely associated with experts at the Oxford Centre for African Resource Rich Economies (OXCARRE).

**Modified versions of the PIH model can be designed to incorporate the scaling up of public investment and allow a more front-loaded spending path financed by RR.** Models may assume, as a "worst case scenario," that the scaling up of public investment does not have an impact on growth. Or it may be assumed that higher public investment has a favorable effect on growth, which would generate higher nonresource revenues, but also higher operations and maintenance costs for the additional public capital.

**Finally, uncertainty rises the longer the projection period, and the uncertainties surrounding long-term sustainability exercises are enormous.** The estimation of wealth from future resource revenue is subject to uncertainty about many of the parameters in the estimates, including future resource prices and production costs, the size of resource reserves in the ground, the fiscal regime applied to the resource sector, and interest rates. Given these uncertainties and the asymmetric penalty function discussed above, the use of long-term sustainability exercises to help determine fiscal policy strategies should include an element of caution and prudence.

## **2. Public investment and sustainability**

**The quality of public investment is important for growth.** Econometric evidence suggests that the quality of public investment, as measured by variables capturing the adequacy of project selection and implementation, is statistically significant in explaining variations in economic growth, a result driven mainly by low-income countries.

**Will public investment generate fiscal revenues and preserve fiscal sustainability?** If the net fiscal return on the scaled up investment is larger than the foregone return on net financial assets, net government wealth after the scaling up of investment could be higher than in the absence of such investment. But this will depend on whether the expenditures have a positive impact on growth and on whether the government can reap fiscal dividends from that growth. Fiscal dividends include tax revenue from the higher economic activity and user fees, if applicable.

**Sustained growth benefits will come about if public investment is productive.** Poor governance, defective public investment systems and supply bottlenecks may impair the productivity of investment. Ramping up public investment in these circumstances could run into inefficiencies, hamper the transformation of natural resources into productive public capital, and, rather than contributing to sustained growth, it could result in waste of resources. Fast increases in investment could also increase macroeconomic instability and vulnerability to shocks, and generate Dutch disease effects – all of which can affect long-term growth.

**Growth, in turn, will lead to higher fiscal revenues if the higher potential revenue base is taxed and the revenues collected,** and if the financial returns cover the future running costs of the projects.

- If the higher revenue base is given away through tax holidays, tax incentives, exemptions, tax-free zones and the like, or otherwise not taxed or collected appropriately (particularly in a context where many low-income RRCs have weak nonresource tax systems), growth will not generate fiscal dividends and the higher public investment expenditure may actually affect fiscal sustainability.
- The government must be able to capture enough of the returns to finance the future operation, maintenance and depreciation costs associated with the completed projects. The financial returns on the investments have to cover these additional recurrent costs to have a positive impact on the government's cash flow and therefore on sustainability.

### **Box 1. The Sustainable Investment Approach**

The SIA takes into account important features common in developing countries, including public investment inefficiencies, institutional and absorptive capacity constraints, weak tax systems, and Dutch disease (Berg and others 2012). It proposes raising public investment gradually in line with institutional and absorptive capacity constraints, and saving some of the resources.

The SIA incorporates quantitative measures of investment efficiency explicitly in the framework. This includes the feature observed in developing countries that if public

investment is scaled up quickly (as often observed in resource windfalls), capacity constraints due to factors such as supply bottlenecks or poor planning can drive up investment costs, as discussed earlier. Indeed, indirect evidence suggests a declining return to investment as the latter accelerates. The SIA also accounts for the fiscal costs of operating and preserving public capital.

The gradual scaling up of public investment gives government time to improve public investment efficiency. It also allows for building buffers to prevent damaging disruptions to public investment in the event of negative resource shocks.

The authors stress the importance of assessments in public investment projects of both the rate of return and the absorptive capacity constraint. They also emphasize that the financing of future recurrent costs of the projects should be accounted for, so that the growth benefits of the public investment can be sustained.

**Frameworks to calibrate the speed of scaling up investment to take macroeconomic and capacity constraints into account have been developed.** One example is the "sustainable investing approach" (SIA). This framework can help determine how much and how fast public investment can be scaled up to transform part of the resource wealth into public capital that can increase the productivity of private activities while maintaining economic stability. It takes explicitly into account investment inefficiency and absorptive capacity constraints often found in developing RRCs (Box 1).

**Attention to the processes that govern public investment is critical.** Weaknesses in public investment can negate the main argument that higher investment can enhance future economic prospects. Rajaram and others (2010) provide a pragmatic and objective diagnostic approach to the assessment of public investment management systems for governments (Box 2).

#### **Box 2. Diagnostic Framework for Assessing Public Investment Management**

Rajaram and others (2010)\* single out eight key "must have" stages of a well-functioning public investment system. The public investment management (PIM) cycle is broken down into its main stages, and the authors provide a practical diagnostic framework (not reported here) to assess them. The investment stages are:

- Investment guidance, project development and preliminary screening
- Formal project appraisal
- Independent review of appraisal
- Project selection and budgeting
- Project implementation
- Project adjustment
- Facility operation
- Basic completion review and evaluation

\*<http://documents.worldbank.org/curated/en/2014/09/20268592/power-public-investment->

**As discussed earlier, high uncertainty surrounds resource prices and it is difficult to forecast prospects for international resource markets.** Therefore, investment scaling up in low-income RRCs should be pursued with caution, and stabilization buffers should be built to address volatility and to be in a strong position to withstand exogenous shocks. The gradual scaling up of investment and a smooth investment path that reduces the volatility of public investment as recommended in the SIA would also reduce the volatility of nonresource output, thereby improving economic stability.

### **3. Adjusted net saving models**

**Under the "wealth of nations" approach, a country's total wealth—including produced, natural and intangible (human and institutional) capital—is estimated.** Changes in wealth are tracked as a key indicator of sustainability. Empirical wealth estimates produced by the World Bank suggest that the preponderant form of wealth worldwide is intangible capital, i.e., human capital and the quality of formal and informal institutions. The share of natural capital in total wealth tends to fall with income, while the share of intangible capital rises. In low-income countries, natural capital (including nonrenewable resources) is an important part of total wealth, and is on average greater than the share of produced capital.

**Natural capital can be transformed into other forms of capital, provided resource rents are effectively and efficiently invested.** Natural rents can be an important source of development, and some countries have successfully used natural resources in this way, including diversifying their economies away from heavy dependence on resources, or preparing for their eventual depletion.

**A key concept for the preservation of wealth is adjusted net savings (ANS).** In RRCs, resource dependence complicates the measurement of saving and consumption because the depletion of natural resources is not visible in the standard national or fiscal accounts. Adjusted net or genuine saving is an attempt to measure the true level of saving in a country after depletion of minerals, energy and forests, depreciation of produced capital, investment in human capital (as measured by education expenditure), and environmental damage. Sustained negative adjusted savings would lead to lower national wealth and diminished social welfare.

**World Bank research suggests that many RRCs, and most RRCs in Sub-Saharan Africa, display very low or negative adjusted net savings, even in recent boom times.** The evidence suggests wealth dissipation through much of the recent resource boom. On average, in 2008 a group of 21 oil- and gas-exporting countries were estimated to have had negative adjusted net savings.

- After adjusting net national income for the depletion of natural resources, Ley (2010) finds that Zambia had very low, and often negative rates of adjusted savings, implying declining national wealth. An earlier study by Lange (2004) found similar results for Namibia.
- In contrast, Botswana has managed to use its natural capital to build national wealth (Lange 2004)

**Appropriate policies are needed to revert negative net adjusted savings trends.** In particular, RRCs should put in place macroeconomic policies that encourage saving; resource policies that lead to dynamically efficient rates of extraction; fiscal regimes that capture resource rents; and public investment programs that put resource revenues to their best use, including investment in human capital.

#### **4. Medium-Term Expenditure Frameworks**

**A medium-term perspective for annual budgeting is essential.** It is vitally important to introduce an awareness of the future beyond the budget year into the budgeting system, and provide for a more informed and systematic discussion of fiscal and public spending strategies.

**The specific characteristics of RRCs underscore the importance of developing comprehensive fiscal policy frameworks adapted to the challenges these countries face.** The enhancement of the links between annual budgets and medium- and long-term fiscal objectives and the introduction of assessments of fiscal risks can help address short-term policy bias and tendencies towards procyclicality that increase fiscal vulnerabilities, and make a contribution to improving fiscal management and the allocation of public resources in many RRCs.

**A MTEF is a key component of a comprehensive fiscal framework.** Crucially, a well-developed MTEF addresses what the World Bank long ago identified as the single most important cause of poor budgeting outcomes in developing countries: the failure to link policy, planning, and budgeting.

**In RRCs in particular, a MTEF can help link annual budgets to longer-term policies and fiscal sustainability objectives.** It can enhance fiscal risk analysis in the face of revenue volatility. And it can provide an institutional framework for addressing medium- and long-term resource allocation issues in the presence of RR.

**MTEFs in RRCs help meet objectives that traditional one-year incremental budgeting does not reliably meet.** In particular:

- promoting fiscal discipline so that spending is sustainable, limited by resource availability, and does not generate excessive fiscal vulnerabilities going forward.
- ensuring that budget allocations reflect expenditure priorities as set out in medium-term policies.
- providing an institutional framework to assess fiscal sustainability issues under uncertainty, and take them into account in the framing of fiscal strategies.
- promoting transparency, a more informed public discussion, governance and accountability.

**There are three main forms of MTEF which involve gradually greater complexity and demands on capacity.** The World Bank identifies the following frameworks:

- The simplest MTEF is a Medium-Term Fiscal Framework (MTFF). It entails a statement of fiscal policy objectives; a macro-fiscal strategy; integrated medium-term macroeconomic projections within which the annual budget and multi-year budget estimates can be presented and discussed; fiscal targets, rolling aggregate revenue, expenditure, and other fiscal forecasts, and fiscal risk and sustainability analysis.
- A Medium-Term Budget Framework (MTBF) includes, in addition, the bottom-up determination of spending agency resource needs and reconciliation of these with the resource envelope.
- A Medium-Term Performance Framework includes sector objectives and strategies, including specific agency and/or program output or outcome targets, with an emphasis on the measurement and evaluation of performance.

**A recent comprehensive study by the World Bank finds evidence of positive impact of MTEFs.<sup>4</sup>** The study used various methodological approaches that included event studies, econometric analysis and country

---

<sup>4</sup> Beyond the Annual Budget: Global Experience with Medium-Term Expenditure Frameworks.  
<https://openknowledge.worldbank.org/handle/10986/11971>

case studies to assess the effect of MTEFs on achieving three objectives: fiscal discipline, allocative efficiency, and technical efficiency. The event study and econometric evidence suggest that MTEFs improve fiscal discipline and allocative efficiency, while the results on technical efficiency are more mixed. The case study analyses indicate that MTEFs have improved fiscal discipline, have made budgeting more strategic, have improved recognition of resource constraints, and have fostered cooperation among government agencies. Improvements in spending efficiency and less clear, although spending in targeted sectors increased.

**MTEFs are not multi-year budgets and do not introduce rigidity.** At first sight, it might seem that MTEFs would be at odds with the budget flexibility that RRCs need in the face of substantial revenue volatility. There could be a notion that MTEFs would set in stone rigid fiscal and spending plans, when budgets in RRCs need room for manoeuvre to react to unforeseen developments in resource prices and other shocks. However, a MTEF is not a multi-year budget. Expenditure ceilings for the years beyond the first-year annual budget tend to be no more than indicative. Unanticipated developments and large deviations from MTEF projections in the outer years can be assessed and addressed through adjustments to the MTEF when circumstances warrant it. Far from introducing rigidity, by extending the planning horizon, MTEFs adapted to the circumstances faced by RRCs are a useful tool for fiscal management in these countries.

**The rest of this section focuses on the role MTEFs can play in helping quantify and address fiscal risks and long-term sustainability issues in RRCs.**

### ***5. MTEFs and fiscal risks***

**Fiscal risks may be broadly defined as short- to medium-term variations in fiscal outcomes not anticipated in the budget or medium-term estimates.** They are the government's exposure to circumstances or events that could cause variability to fiscal variables such as revenue, expenditure, fiscal balances, assets and liabilities, and off-balance sheet items such as guarantees. Fiscal risks are broader than those associated with RR volatility. Sources of risk can be macroeconomic (such as those arising from unexpected fluctuations in interest rates and exchange rates) and those associated with contingent government expenditures, public enterprises, subnational governments, private-public partnerships, the financial system, and natural disasters.

- RRCs that have passed legislation on the disclosure of fiscal risks or contingent liabilities include Australia, Canada, Chile, Colombia, Nigeria and Peru. As of 2009, seven countries (including some nonrenewable resource exporters) consolidated information on fiscal risks in a single published document (Australia, Brazil, Chile, Colombia, Indonesia, New Zealand and Pakistan).

**MTEFs can be specifically designed to help quantify and address fiscal risks.** In RRCs where fiscal policies continue to focus on one-year budgets with little reference to fiscal risks and vulnerabilities, there is a need to give greater focus to RR volatility and uncertainty in the medium-term. A MTEF is particularly important when revenues fluctuate significantly and unpredictably. The approaches to dealing with fiscal risks and vulnerabilities and formulating mitigating fiscal strategies set out in the previous section should be implemented within the MTEF, which, capacity permitting, should have a broad fiscal risk statement.

**The provision of information and discussion of RR-related risks and the enhancement of transparency promote informed analysis and scrutiny of fiscal strategies and their implications for risk.** From a political economy point of view, this can help build support for prudent and less procyclical fiscal policies in the face of RR volatility. The public scrutiny that comes with quantification and disclosure can create pressure to ensure that risks are contained and appropriately managed. Politicians and legislatures may be less enthusiastic about supporting reckless spending increases during booms if they and the public are provided with a clear statement of what this would imply in terms of fiscal vulnerability to resource price downturns, and the kind of fiscal adjustments that would be required if such a situation arose.

### ***6. MTEFs and long-term perspectives for fiscal policy***

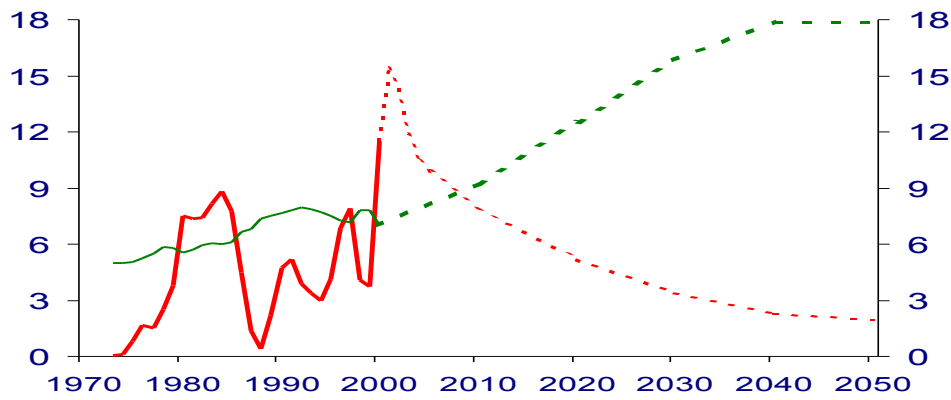
**In many RRCs there is a need to get the technical analysis and the wider political debate to span longer horizons.** In countries where fiscal discussion is excessively or exclusively focused on the short term, the development of institutions that promote a long-term perspective can help moderate pro-cyclicality and focus public attention on strategic issues regarding the use of the resources. This is also warranted given the inability of future generations to voice preferences on the issues.

**Acknowledgment of the finite nature of natural resources can help focus more pointedly on looming fiscal pressures.** In some RRCs with large non-resource deficits and public debt, the expected resource

production horizon at current output rates is not long (10-20 years), but policies continue to be carried out as if those resources were of infinite duration. Comparing temporary resource rents to long-run pressures on the public finances such as future higher age and health-related spending, social spending needs, environmental costs, contingent liabilities, and debt service would contribute to an informed political discussion of the budget in a longer term perspective, dampen resource euphorias, and promote fiscal prudence.

- In Norway, a simple graph showing declining net cash flow from the oil sector and mounting pension pressures in the long-term was widely used (Figure 7). It helped build broad political and social support for a prudent and sustainable fiscal policy and the institutional frameworks supporting it. In the years after it was developed, it became a standard feature of fiscal policy documents in Norway and was widely understood by the population (Skancke 2003).

**Figure 1. Norway: Net Cash Flow from the Petroleum Sector and Pension Expenditures (2001 Projections)**  
(In percent of GDP)



Source: Skancke (2003).

**A well-designed MTEF with long-run sustainability assessments including resources in the ground and long-run risk analyses forces an intertemporal assessment of fiscal policies.** It can help foresee and quantify long-term challenges and help the political economy of starting to prepare for them. It can foster the creation of constituencies for prudent use of the resources. More broadly, it can provide a framework to set fiscal policy objectives in the face of significant uncertainties, and the policies to achieve them.

**MTEFs with extensive risk and long-term analyses also bring out clearly acute policy tradeoffs that are seldom considered explicitly.** For example:

- In the short-term and in the face of an increase in resource prices, what is the tradeoff between increasing expenditure and raising fiscal risks?
- From a long-run perspective, what are the tradeoffs between accumulating physical capital as opposed to net financial assets?
- What are the tradeoffs between increasing public consumption and the non-resource deficit against the expected size of future net assets when the resource runs out?

**MTEFs should be adapted to planning uncertainty.** Long-term planning is subject to considerable uncertainty: measures of sustainable public spending may vary over time, and estimates of long-term spending pressures may change as circumstances change. A rolling MTEF that is updated as circumstances change and new information comes in would help clarify policy choices against immediate and longer-term objectives, and their likely consequences.

**Several RRCs have implemented or are moving towards adopting at least basic forms of MTEF that**



include fiscal risk and long-term analyses. Box 3 provides some examples.

### **Box 3. MTEFs in RRCs: Fiscal Risk and Long-Term Analyses**

Colombia's 2013 Medium-Term Framework (MTF) included risk analysis of the public debt, a statement of quasi fiscal activities, costing of the long-term implications of laws enacted in the previous year, and extensive costing of implicit and contingent liabilities (Colombia 2013).

Nigeria's 2014-16 Medium-Term Expenditure Framework and Fiscal Strategy Paper included a brief discussion of the impact of fiscal shock scenarios such as a global economic downturn, falling oil prices, and risks to oil production and nonoil revenue (Nigeria 2014).

Budget documents in Norway contain a statement on medium-term fiscal policy objectives and comprehensive discussions of long-term fiscal sustainability and fiscal risks. A paper on the long-term perspectives for the Norwegian economy is produced every four years.

The 2015-17 MTF in Peru includes a comprehensive DSA with a 10-year horizon (including a stochastic DSA) and sensitivity analysis and stress testing of the fiscal position in the medium term.

- The sensitivity analysis considers two potential external shocks – a deterioration in the terms of trade associated with a strong deceleration of the growth rate in China, a rapid tapering of monetary impulse in the U.S. and higher perception of risk in emerging market economies – and an internal shock (a strong "El Niño"). It quantifies the impact of those risks, if they were to materialize, on the balance of payments, the domestic economy and the fiscal accounts. The analysis also assesses the capacity to undertake a countercyclical fiscal policy as mitigation strategy in case of a significant economic downturn, which might involve invoking the exceptional escape clause in the structural fiscal rule.

Timor Leste, despite severe administrative capacity limitations, adopted a fiscal framework based on the ESI (estimated sustainable income) from oil wealth in the long term. The budget documents include detailed sensitivity analyses of the impact on the ESI of changes in key long-term assumptions. The ESI is stress-tested for lower oil prices, lower oil and gas production, and higher production costs.

## **7. Factors for the success of MTEFs**

**While experience with MTEFs around the world is varied and general lessons are hard to draw, a few key factors that would contribute to the success of MTEFs in RRCs would seem to be:**

**Political commitment** at high levels and buy in from the ministry of finance to a comprehensive and realistic budget process. In some RRCs, the political economy of spending resource rents will be against the introduction or strengthening of a MTEF because of the vested interests and powerful constituencies that might be affected by greater transparency in policy choices and budget processes. In such cases, support from the top is key.

**Ability to realistically forecast key fiscal aggregates** to be in a position to clearly articulate fiscal policy objectives and targets. RR poses a particularly difficult challenge, which can be addressed with strategies that are discussed later in this volume, and the risk analysis mechanisms noted above.

**Integration of the MTEF with the budget process and national/sectoral strategies** – particularly important in RRCs that retain separate fiscal institutions that plan and execute investment, often not fully coordinated with the budget, as well as extrabudgetary funds and resource funds with authority to spend.

**A strong coordinating agency**, typically the ministry of finance, with inclusive participation of other agencies.

**Accountability for budget discipline**, with robust systems of budget execution and reporting.

**A commitment to publicity and dissemination**, to strengthen political and public support for the MTEF.

**Getting the sequencing right:** avoiding moving too fast, starting with the basics, such as a simple aggregate MTEF, and only gradually moving on to more demanding medium-term budget and performance frameworks – but incorporating the specificity of RR into the analysis from the very beginning.

Copyright © 2015  
The International Bank for Reconstruction and Development/The World Bank  
1818 H Street, NW  
Washington, DC 20433  
Telephone: 202-473-1000  
Internet: [www.worldbank.org](http://www.worldbank.org)

World Bank papers are published to communicate the results of the Bank's work to the development community with the least possible delay. The manuscript of this paper therefore has not been prepared in accordance with the procedures appropriate to formally edited texts. Some sources cited in this paper may be informal documents that are not readily available. This paper is a product of the staff or consultants of the International Bank for Reconstruction and Development/The World Bank. The findings, interpretations, and conclusions expressed in this paper do not necessarily reflect the views of the Executive Directors of The World Bank or the governments they represent. They are entirely those of the author(s) and should not be attributed in any manner to the World Bank, or its affiliated organizations, or to members of its board of executive directors for the countries they represent.

The World Bank does not guarantee the accuracy of the data included in this publication and accepts no responsibility whatsoever for any consequence of their use. The boundaries, colors, denominations, other information shown on any map in this paper do not imply on the part of the World Bank Group any judgment on the legal status or any territory or the endorsement of acceptance of such boundaries.

### **Rights and Permissions**

The material in this publication is copyrighted. Copying and/or transmitting portions or all of this work without permission may be a violation of applicable law. The International Bank for Reconstruction and Development / The World Bank encourages dissemination of its work and will normally grant permission to reproduce portions of the work promptly.

Queries on rights and licenses, including subsidiary rights, should be addressed to the Office of the Publisher, The World Bank, 1818 H Street NW, Washington, DC 20433, USA; fax: 202-522-2422; e-mail: [pubrights@worldbank.org](mailto:pubrights@worldbank.org).