
Pankaj Gupta, Ranjit Lamech, Farida Mazhar, Joseph Wright
AUTHORS ACKNOWLEDGMENTS

We would like to thank John Besant-Jones for his guidance in developing the paper. We would also like to thank Ananda Cavindassamy, Mansoor Dailami, Thomas Duvall, Mohinder Gulati, Bernard Tenenbaum and Michel Wormser for their helpful comments.

DISCLAIMER

The findings, interpretations, and conclusions expressed in this study are entirely those of the authors and should not be attributed in any manner to the World Bank, to its affiliated organizations, or to members of its Board of Executive Directors or the countries they represent.

CONTACT INFORMATION

To order additional copies please call the Energy Help Desk. 202-473-0652
energyhelpdesk@worldbank.org

This paper is available online
www.worldbank.org/energy/

For more information on World Bank guarantee instruments contact Farida Mazhar fmazhar@worldbank.org or Pankaj Gupta pgupta2@worldbank.org or visit www.worldbank.org/guarantees

The material in this work is copyrighted. No part of this work may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying, recording, or inclusion in any information storage and retrieval system, without the prior written permission of the World Bank. The World Bank encourages dissemination of its work and will normally grant permission promptly. For permission to photocopy or reprint, please send a request with complete information to the Copyright Clearance Center, Inc., 222 Rosewood Drive, Danvers, MA 01923, USA, fax 978-750-4470. All other queries on rights and licenses, including subsidiary rights, should be addressed to the Office of the Publisher, World Bank, 1818 H Street N.W., Washington DC, 20433, fax 202-522-2422, e-mail: pubrights@worldbank.org.

Pankaj Gupta, Ranjit Lamech, Farida Mazhar, Joseph Wright

The World Bank, Washington, DC
Privatization of electricity distribution utilities, a key component of reforming energy markets, is a priority for the governments of many developing countries as they seek to improve efficiency and reliability and attract private investment in network expansion. Not only is access to reliable electricity a key driver of economic growth, but it is also a direct means of reducing poverty by improving the productivity of households and enhancing the delivery of social services.

The mixed post-privatization experience of investors in utility distribution entities in developing countries, however, has heightened investors’ sensitivity to regulatory risk. Moreover, events of 2001/2, including the poor financial performance of several international power companies and the Argentinian financial crises, have increased investors’ risk aversion toward developing countries in general. Many investors have consequently withdrawn from these markets, leading to a substantial reduction in private capital support for privatizations. For developing country governments to realize the desired private investment in distribution utilities, it is essential that they take appropriate action to address investor concerns regarding regulatory and other associated political risks.

Recognizing the failure of the public sector to deliver sustainable energy and other services, the World Bank Group has oriented its activities toward liberalizing and privatizing infrastructure markets under a sound regulatory framework, shifting support away from the traditional integrated state-owned monopolies and toward greater use of private investment in the energy markets of developing and transition economies in the context of sector reform.

World Bank privatization guarantees have been specifically designed to help governments attract back investors by addressing their concerns through mitigation of perceived government performance risks associated with privatizations. The guarantees can also help catalyze private capital flows for much needed investments in the sector, thereby reducing the fiscal burden on governments.

Because privatizations are such an important part of the Bank’s development effort in emerging market countries, the Partial Risk Guarantee (PRG) can be made available to clients to back regulatory and other political risks in support of distribution privatizations. This discussion paper provides general guidance on how emerging market governments could use the Bank’s PRG for this purpose, thereby enhancing private investor interest in power distribution in these countries.

Jamal Saghir
Director, Energy & Water Department
Chair, Energy and Mining Sector Board
Private Sector Development and Infrastructure Vice-Presidency

Michel Wormser
Director, Project Finance and Guarantees Department
Private Sector Development and Infrastructure Vice-Presidency
INTRODUCTION & OBJECTIVE

This paper outlines how a World Bank Partial Risk Guarantee (PRG) may be used to promote private sector investment in electricity distribution utilities. The paper explains how a PRG could backstop a government commitment to a pre-defined regulatory framework and a process of dispute resolution, thereby helping to mitigate regulatory risk. As a risk mitigation instrument, the World Bank PRG can also be applied to the privatization of generation, transmission, or integrated power sector businesses, as well as to other infrastructure privatizations. However, this paper focuses on identifying issues and proposing strategies to cover regulatory risk in distribution privatizations, because recent experience in power sector reform in developing countries has shown that distribution privatization can present new risk allocation and risk mitigation challenges for both investors and governments.

Although between 1990 and 1998 more than 70 distribution businesses were privatized in developing and transition countries,1 the post-privatization experience of investors in these businesses has been mixed. Furthermore, in recent years private investors have shown reduced, and in many cases no, interest in power distribution utilities in developing countries. In some instances of distribution privatizations, not a single bid was received.

In a recent World Bank survey of private power investors2, 45 percent of respondents considered “fair adjudication of tariff adjustments and disputes” to be a critical factor in determining the success or failure of an investment, making it the second most important factor after “cash-flow sustainability” (which is also affected by tariffs). In the same survey, when asked to describe their worst power sector investment experience, 50 percent of respondents cited a failure to respect contractual regulatory commitments as a contributing factor. Clearly, regulatory risk in developing countries is considered by investors to be a political risk that must be adequately mitigated if they are to invest in the privatization of distribution businesses.

As proposed in this paper, the World Bank PRG can help to reinforce confidence in new regulatory frameworks, thereby enabling investors to be more responsive to privatization opportunities. This is particularly important in the context of recent attempts by several countries to privatize their distribution business in a deteriorating investment climate. Although PRGs are being actively considered in support of distribution privatizations in several countries, no transactions have been concluded to date.

Elements of political risks other than regulatory risk may also need to be mitigated to ensure a successful privatization. Investors will typically seek coverage for other political risks, such as expropriation, change of law, restrictions on currency convertibility and transfer, and frustration of arbitration. These risks can also be covered under the PRG — and there are many successful examples of how this has been done.3

The paper presents a two step approach to mitigating regulatory risk. Firstly, it reviews the nature of regulatory risk facing investors in electricity distribution businesses and explains how such a risk may be mitigated through pre-privatization design of the regulatory framework and dispute resolution process. Secondly, the paper discusses the need for risk mitigation instruments such as a PRG to backstop a government’s commitment to the regulatory framework and the outcome of dispute resolution. Two possible structures for applying a PRG to this end — a Limited Recourse Structure and a Letter of Credit Structure — are described. Last, the paper outlines a process for implementing a privatization using a PRG.

---

1 Most of these privatizations took place in Latin American countries, notably Argentina (18), Brazil (17), Peru (9), El Salvador (3), Colombia (3), Bolivia (2), Dominican Republic (2), Guatemala (2), and Panama (2).
2 The results of which are to appear in a forthcoming Energy and Mining Sector Board Discussion Paper by R. Lamech and K. Saeed, “Survey of Power Sector Investors in Developing Countries.”
The Need to Mitigate Regulatory Risk

Distribution privatization is considered a priority because of low levels of access to electricity in developing countries, the deterioration in supply quality in many power systems during the 1990s, and the limited availability of public capital to fund rapid network expansion. Privatization is also expected to address high distribution system losses, which undermine the benefits of efficiency improvements in upstream sectors of the industry. In addition, improved cash collection at the distribution level supports the privatization of upstream generation businesses by reducing the credit risk of power purchasers. Therefore, the privatization of distribution companies, through long-term concessions or asset sales, is a key element of power sector reforms in most developing countries.

An important element of power sector reforms is the establishment of new economic regulatory regimes and institutions to make impartial decisions on tariffs, set performance standards, and monitor efficiency improvements. Power distribution networks have several special features that necessitate regulation:

• They are capital intensive, and most network assets may not be redeployed once they have been installed. Therefore, if distribution tariffs are not maintained at a level that permits the recovery of reasonable costs (including a fair rate of return), the owners may find themselves trapped in a loss making business, unable to liquidate their assets.

• They are characterized by economies of scale to the extent that the market is most economically served by one distribution network in a given geographical area. In the absence of regulation, consumers may therefore be exposed to the abuse of monopoly power by the network provider.

• They supply a service considered valuable to the welfare of households, and therefore access to electricity, its price and quality can be a political issue.

These characteristics both make economic regulation a necessity for utilities and make it difficult.[4]

It is also important to note that, from the perspective of private investors, these features of distribution businesses constitute risks. Firstly, the fact that it is difficult to liquidate or re-deploy distribution assets exposes the investor to the risk of strategic behavior by the government, for example, effective expropriation of the assets by setting tariffs below costs. Secondly, concern about abuse of monopoly power means public scrutiny of profitability (even if these profits are legitimate according to regulated prices). Thirdly, there is the risk that the government will seek to impose below cost tariffs or unviable investments on the utility in order to seek political advantage.

The challenge for governments is therefore to design regulatory frameworks that are impartial (that is independent from capture by the various producer, consumer and political interests) and at the same time accountable for providing fair and effective regulation. A government that seeks to implement an effective new regulatory framework must also be able to make a credible commitment that it will maintain the regulatory framework in this way. However, because privatizations often follow the creation of a regulatory framework, sometimes even occurring commensurately, governments often lack the record of good performance. Without adequate assurances of an effective regulatory framework, private investors will be reluctant to commit their capital (even though they may be willing to assume the operational and investment risks of a distribution business).

In addition to an effective regulatory framework, the content of regulation, that is the rules about pricing, quality and technical standards under which a utility operates, are also of concern to investors. Specifically, an investor’s perception of regulatory risk will be mitigated to the extent that the content of regulation adheres to the following principles:

• A tariff regime that provides a predictable and stable trajectory of revenues, and allows for the reasonable recovery of costs.

• An impartial and timely process for re-setting retail tariff parameters, for example, performance targets (allowable losses, expansion requirements); reasonably incurred energy purchase costs; foreign exchange; and inflation rates.

• An automatic pass-through of distribution costs beyond the control of the operator.

---

[4] This section draws on the following two papers: Stern & Holder, 1999, and Levy & Spiller 1994 (full details of these references are given at the back of the paper).

• Regulatory commitment to provide timely approvals, for example, approval of the investment programs required by the operator to achieve performance and expansion targets.

• Predictable quality of service and technical standards.

The principal regulatory risk that a distribution utility faces is that it will not be permitted to earn sufficient revenues to cover its legitimate costs, including a reasonable rate of return. Therefore, if the regulatory rules do not enable the investor to project cash flow with reasonable certainty, or if they grant the regulator broad discretionary powers, then they are likely to be perceived as unacceptably risky.

From the perspective of the government and consumers, minimizing regulatory risk — both ensuring an effective regulatory framework and good regulatory content — is important for several reasons. First, regulatory risk mitigation will enhance the value of offers, and commitment to invest in the business, that bidders are willing to make. Secondly, it may increase the number of firms willing to bid for a privatization opportunity, thereby increasing the competitiveness of the sale tender. Thirdly, mitigation of regulatory risk offers the prospect of lower tariffs than would otherwise be the case, as the investor may expect a lower risk-adjusted rate of return from its investment.

In later sections this paper discusses how a PRG could be utilized to reinforce the credibility of a government’s commitment to a regulatory framework while it establishes a record of good performance. It may be questioned whether a government back-stop supported by a PRG is necessary if a government has already signaled its commitment by establishing an independent regulator with what may be considered a good regulatory framework.

Experience has shown that in the difficult transition to credible regulatory and government conduct: (a) governments have been known to undermine a good regulatory framework by causing regulatory rules to be broken through indirect pressure on a regulator, denying the regulator adequate resources to do a effective job, and frustrating the dispute resolution process; and (b) regulators have been known to take decisions that may be technically correct but practically unsound — for example, denying a revision of agreed baseline loss levels when facts prove those initial baselines to have been wrong. In this context, a PRG can help to facilitate a smooth transition to a credible regulatory framework.

**MITIGATING REGULATORY RISK THROUGH PRE-PRIVATIZATION DESIGN**

Private investors will not invest in a business opportunity if they perceive regulatory risk to threaten the long-term viability of their investments. To attract investors with the financial and technical ability to improve and expand distribution businesses, governments need to mitigate regulatory risk effectively in advance of the distribution privatization. The best way is through sound project structuring and regulatory design, supported by political risk mitigation mechanisms.

Two key elements of pre-privatization design are central to moderating the perception of regulatory risk. The first involves carefully defining the regulatory framework in a manner that provides both the regulator and the investor with an acceptable level of predictability about tariff setting, coupled with the flexibility required to deal with changing business conditions. The second concerns the design of a dispute resolution mechanism that provides assurance that regulatory decisions can be legitimately questioned and fairly resolved.

**Defining the Regulatory Framework**

A carefully constructed regulatory framework built on sound fundamentals should address each of the conditions discussed previously. While accommodating the need to be flexible, the regulatory regime should not allow crucial adjustments that affect the investor’s revenues to be delayed by a regulator’s inaction. Hence, it is important to define a period within which the regulator is required to respond to a tariff request from the investor.

The general principles of this type of regulatory framework are best established in primary legislation such as an electricity reform law, while the detailed implementation of these principles may be defined in secondary legislation, licenses, concession agreements, or regulatory orders. The benefit for all parties is that the tariff methodology and parameters, and the procedure to effect changes, to the extent possible, are defined in advance. For example, this methodology could encompass a multiyear tariff path (typically lasting five years or longer) calculated according to

---

6 This point should not be overstated: it may be that investors are unable to effectively price regulatory risk in emerging markets into their expected rate of return and that they would rather not invest at all if regulatory risk is a serious concern.

7 A forthcoming paper by Bakovic, Tenenbaum, and Woolf provides a detailed analysis of this type of arrangement – “regulation by contract” – along with examples of its application.
to well-defined tariff formulae and base assumptions. The investor is better able to assess the prospective profitability of the company and associated business risks, while the government and consumers benefit from a predictable tariff path and assurance that the investor will meet its performance obligations, thereby reducing the risk of disputes for both parties.

This type of regulatory predictability does not undermine regulatory authority; rather it requires laying the basis for making major regulatory decisions in advance of the entry of the private investor, and specifying them in the license, regulatory/concession contract, or other binding legal instrument. The regulator is then responsible for administering the rules fairly. Necessary regulatory flexibility is not forgone but it is circumscribed for both the investor and regulator.

In practice, a regulatory framework will not be prepared under circumstances of perfect foresight. Pre-privatization design of the regulatory framework will never eliminate the need for a credible and competent regulatory authority, as it will be necessary to periodically re-set the tariff formula or other elements of the regulatory framework. For example, it is common for both the regulator’s and the investor’s understanding of system losses to evolve as better information becomes available after privatization. In addition, some of a distribution company’s costs (for example, taxes, compliance with environmental standards, and sometimes power purchase costs) are beyond its control, and changes in such costs should be appropriately reflected in a retail tariff adjustment. Such adjustments may be unavoidable within the multiperiod tariff period, but as far as possible tariff adjustments should be scheduled from the outset.

Where cost changes are beyond the control of the operator and are objectively verifiable, ideally tariffs would be automatically adjusted. Tariff adjustments that involve a greater element of judgment (for example, to allow for new information on system losses) require both parties to commit to an objective process for reaching a determination. Such a process, for example, might involve the use of independent expert third parties, or a commitment to mediated negotiation.

**Dispute Resolution Mechanism**

The existence of clear regulatory rules does not remove the possibility of a dispute arising as a consequence of an unforeseen event or an alleged failure by one party to abide by the regulatory contract or license. Therefore, a key component of regulatory risk mitigation is a regulatory framework that commits both parties to adhere to established dispute resolution mechanisms.

The specific mechanism for achieving this will vary according to country circumstances and the outlook of the investor and the government. For example, some jurisdictions permit international arbitration, while others do not. In some instances, a regulatory dispute must be heard by a specialized appellate tribunal, whereas in others it requires a court hearing.

Generally, however, the dispute resolution mechanism should include the following features:

- The form of dispute resolution should be appropriate to the magnitude of the dispute, in terms of both time and cost. For example, a dispute with a regulator over enforcement of easement rights for a distribution line would be more appropriately handled by a local court than by international arbitration.

- The adjudicator of a dispute should have the requisite technical expertise to make an informed determination. For example, a dispute over the correct value of the asset rate base may be better referred to an independent engineer rather than a local court.

- The dispute resolution process should have a well-defined timeframe. For example, specific time limits within which each party must present evidence to an appellate tribunal, and within which the tribunal should issue a ruling.

- The outcome of dispute resolution should be binding, and the opportunity for appealing a decision should be limited. For example, if it is possible to appeal the rulings of a specialist appellate tribunal to the local judicial system (and this is done commonly), then the tribunal may effectively serve to delay dispute resolution.

- The parties to dispute resolution should have access to formal international arbitration (International Center for the Settlement of Investment Disputes - ICSID, United Nations).

---

*Stern & Holder (1999: p39) observe that “Given the enormous difficulties of writing (let alone rewriting) time-consistent, enforceable long run contracts for a long period ahead that can cover all the necessary contingencies, eliminating any mediating regulatory agency is likely to place too much strain on the concession agreement.” The recommended strategy is therefore to have a capable and independent regulator to complement the concession agreement, and for the concession agreement to clearly define the roles of the regulator and the investor, and the process for re-opening the agreement should be necessary.*
Nations Commission on International Trade Law - UNCITRAL, and so forth) in the event of a serious dispute.

- There should be incentives for parties to settle disputes before commencing the formal dispute resolution process. One example is the use of procedures for notification of each party when regulatory rules are thought to have been violated, and ‘cure’ periods whereby disputes may be settled amicably before formal dispute resolution commences.

**USE OF A PRG TO BACKSTOP REGULATORY RISK**

World Bank privatization guarantees can help to catalyze private capital flows to emerging market countries by mitigating government performance risks associated with privatizations. The Bank’s guarantee is generally available in any country eligible for borrowing from the International Bank for Reconstruction and Development (IBRD) or International Development Association (IDA). As with loans, the Bank would require a counter guarantee from the host government in the form of an Indemnity Agreement. In addition, compliance with the Bank’s policies and due diligence requirements relating to the project and the sector, including environmental and social safeguards, is required. PRGs can support both foreign and domestic currency financing.

Given the Bank’s unique relationship with its member countries and their governments, it is better equipped than the private sector to backstop certain political risks, thereby reinforcing the incentives for governments to comply with their performance undertakings. A PRG would be particularly relevant in countries where the sector is in the early stages of reform and the perceived risk of policy reversals and changes to the regulatory framework is high. The Bank’s objective when structuring a PRG is always to provide its support only to the extent needed to make a privatization transaction financeable in the commercial markets (see the section entitled “PRG Structures for Mitigating Regulatory Risk” for details of alternative PRG structures).

Political risk guarantees are necessary to support private power investment in circumstances where investors lack sufficient assurances that a government will not change the policy framework unilaterally, and will maintain the commitments relating to the regulatory framework that it has put in place. A government can best mitigate investors’ perceptions of political risk by developing a good track record of implementing sound policies. However, political risk guarantees may be needed during the transitional period to allow a government the time to build a credible policy and regulatory track record. The problem for governments is that their contractual commitments may not be sufficient to assuage investors’ concerns, particularly if they have a poor track record to date in honoring contractual undertakings or supporting private investment in the country. In such instances, a third-party political risk guarantee, such as a World Bank PRG, may be required to backstop government policy and regulatory undertakings.

In the context of regulatory risk, a PRG could backstop a government commitment that the regulatory framework defined in the pre-privatization phase would be adhered to and not changed unilaterally after privatization. This can be critical for investors because there is a high perceived risk of: (i) unilateral changes in the regulatory framework itself and (ii) decisions being made in contravention of the defined regulatory framework. Although investors are well equipped to, and should, assume the commercial risks such as demand, collection, and operational risks, they consider regulatory risks to be within the government’s purview and beyond their control. This is especially true in emerging market countries, where at best the limited track record of regulatory bodies does not enable investors to assess the extent of their independence from government influence.

Because governments are responsible for setting up the policy and regulatory framework, and in particular as they often have a say in the appointment of the regulator, investors believe that governments should be in a position to commit themselves to not interfere with the regulatory mechanism. In addition, they would expect the government to take the steps necessary to compensate them in the event that a regulator refuses to abide by the regulatory framework (once confirmed by the outcome of the dispute resolution process) because they have no other recourse except to the government. In such instances, the government would be expected to take remedial steps, including compensation, because the government at its discretion has alternative means of recovering compensation payments made to the investor (for example, through levying additional taxes or lowering subsidies to the sector).

A PRG for regulatory risk mitigation would therefore address a specific gap in risk coverage that investors seek in countries where the sector is in the early stages of reform (see also the box entitled “Coordination of the PRG
with Other Bank Group Instruments”). By backing the regulatory principles agreed to up front by all parties, the PRG would reinforce the incentives for compliance by each party. The PRG would weaken the incentives for existing and future governments to exert pressure on the regulator to deviate unilaterally from the framework because it would bind governments and make them contractually accountable for their undertakings. At the same time, by backing the regulatory or licensing agreement, and the dispute resolution process contained therein, the PRG would strengthen the incentives for the regulator to abide by the agreements, thereby reducing the likelihood of the regulator behaving capriciously and exposing the government to claims for damages that could undermine the sustainability of the privatizations. The investor on its part should be held accountable by the regulator for the investment and operational efficiency commitments that are under its control, which would not be guaranteed by the PRG.

PRG’s do not provide cover for lenders against debt service shortfalls that result from operational inefficiency and other commercial risks.

A PRG to support distribution privatization would generally require a direct contractual agreement between the government and the investor in the form of a Government Support Agreement (GSA) confirming the obligations of the government with respect to the agreed-upon regulatory framework and mechanism to resolve disputes. In whichever manner the regulatory framework is defined — be it in primary or secondary legislation, a license or concession/regulatory agreement — the GSA commits the government to backstopping this framework, and the PRG would guarantee this government commitment. A PRG therefore would not interfere with the definition or administration of the regulatory framework. In addition to the regulatory risk, other associated risks, which would include frustration of the dispute resolution process, may need to be addressed in the licensing agreement or the regulatory contract as well as in the GSA. Other such risks might be: competition policy, the ability for the operator to enforce disconnections in accordance with prevailing laws, the ability to collect payment from government consumers, and performance of the electricity generation and transmission companies. These risks would be considered as a subset of the regulatory risks and could be backed by the PRG (see “Risk Coverage” on page 11).

A PRG is essentially a transitional instrument to be used until a country has developed a regulatory track record and has built up sufficient confidence in its sector policy and political environment. To this end, a PRG may be structured to include financial incentives for the private lenders or the investor to allow the PRG to “fall away” once certain pre-agreed conditions have been met. These conditions could be contingent upon the achievement of appropriate credit ratings for the privatized entity or certain debt service or other financial ratios which would indirectly reflect compliance with regulatory rules for setting tariffs.

Coordination of the PRG with Other Bank Group Instruments

World Bank guarantees generally complement other Bank Group instruments, which are deployed following a hierarchy that starts with financial market-based instruments, followed by Multilateral Investment Guarantee Agency and International Finance Corporation instruments, then Bank guarantees (with the sovereign counter-guarantee), and finally sovereign-guaranteed loans and credits to state-owned energy suppliers when private investment cannot be catalyzed or for investments that the private sector should not undertake.

However, the Bank’s Board has agreed that the PRG can be considered for deployment on a “stand-alone” basis when one or several of its features (explicit counterguarantee, booking on Bank’s balance sheet and specific remedies attached, influence of the Bank, linkage to the Bank’s sector dialogue, sector conditionality, and so forth) are critical from a risk management or market point of view to achieve private financing objectives. Thus, deployment of PRGs can be considered for transactions where one or several of the following conditions are met:

- The sector is in the early stages of reform, where the risk of reversal is seen as significant;
- The operation is risky and large and booking of the risk on the Bank’s balance sheet, with remedies attached to Bank operations, is seen as preferable from a risk management perspective.
- The operation is highly dependent on government support or undertakings, and the explicit counterguarantee and the clout of the Bank are seen as critical to mobilizing private financing.
cases where the appropriate credit ratings or financial ratios are not achieved because of inefficient management, the PRG would not fall away, but it could not be called in so far as there are no instances of government non-compliance.

**ADVANTAGES OF THE PRG**

The PRG supports two key objectives for providing risk mitigation for distribution privatizations, as follows:

- **Enhancing Investor Interest**: Risk mitigation through a PRG strengthens investor confidence in a government’s commitment to the regulatory framework. As a consequence, more firms may be expected to bid for a privatization, thereby increasing the competitiveness of the tender, resulting in higher bid prices or stronger upfront commitments to invest in network rehabilitation and expansion.

- **Leveraging Additional Investment**: A PRG improves the risk profile of the privatization, enabling investors to raise funds in commercial debt markets that may not be available without some form of political risk mitigation. As such, a PRG helps make the privatizations financeable by catalyzing acquisition finance as well as by leveraging large amounts of capital typically needed for network rehabilitation and expansion. In this way, the pace of new investments for expansion of relevant services can be accelerated by overcoming the general reluctance of investors to commit large amounts of capital upfront. Catalyzing such investments through the private sector can relieve a government’s fiscal resources for other expenditures.

A PRG offers the following additional benefits through its political risk mitigation:

- **Better Risk Sharing**: The risks covered by the PRG would be limited to government-related performance undertakings. In this way, the PRG provides a transparent mechanism for allocating risks between the government and investors. The government is accountable only for its own actions and for the proper implementation of the regulatory framework, while the investors are accountable for all the commercial risks, including demand and collection risks as well as investment and performance risks.

- **More Competitive Tariff Structures**: Using the PRG to catalyze commercial debt not only helps to achieve much longer tenors for the debt, but also reduces the cost of financing because of the AAA credit-rating of the Bank. This helps achieve more sustainable retail tariff regimes for consumers by lowering the capital costs that investors need to recover through tariffs.

- **No Incremental Government Liability or Costs**: The PRG generally does not give rise to any additional contingent liability for the government, as it backstops only the contractual arrangements that the government already makes with the investor. However, mitigation of the critical risk of the regulatory performance could enhance the willingness of investors to assume additional risks in other areas. In addition, the government does not incur any cost associated with the PRG, as all guarantee-related charges are payable by the investor (see “Guarantee Related Charges” on page 10).

- **Reinforcing Regulatory Independence and Credibility**: The Bank’s involvement through a PRG signals government’s commitment to achieving a credible regulatory regime as a basis for sustained investment and financial viability in the sector, thereby boosting investors’ confidence in the sector. Thus, a successful privatization supported by a PRG has a positive demonstration effect by making future privatizations feasible without the need for political risk guarantees.

**PRG STRUCTURES FOR MITIGATING REGULATORY RISK**

The Bank has developed two guarantee structures to mitigate regulatory risk in distribution privatizations: (i) a Limited Recourse structure, and (ii) a Letter of Credit (L/C) structure. Both these structures can be used to support privatizations undertaken by means of a Concession or Transfer of Ownership.

**Limited Recourse Structure:**

Under the limited recourse structure, the Bank can provide guarantees of commercial debt or shareholder loans to the privatized company, thereby providing political risk mitigation as well as catalyzing commercial debt in support of distribution privatizations. Under this guarantee structure, the Borrower would be the privatized company and the Bank would cover scheduled debt service payments. The Bank guarantee could only be triggered in the event of a debt service default on the covered loans caused by governmental non-compliance to its contractual undertakings to the privatized company, typically as set out in the GSA (and other associated agreements) and as guaranteed by
the PRG. This structure would be suited to privatizations of large distribution companies where there is a need for substantial amounts of debt capital for system investments as well as for acquisition finance.

**Letter of Credit Structure**

The L/C structure is designed to provide political risk mitigation to the private investor(s) through an L/C Facility opened in favor of the privatized company by the government. Under this structure, the guarantee could only be triggered if cash flow shortfall resulted from a governmental non-compliance to its contractual undertakings to the privatized company, typically as set out in the GSA (and other associated agreements) and as guaranteed by the PRG. This structure would be more suited to support the privatization of small- and medium-sized distribution companies where the investor would be financing the purchase largely through equity or when the investor’s financing plan for system investments is not known ex-ante. This structure could also be utilized to support direct government payment obligations (for example, subsidy payments or government payment arrears to a privatized company). The two structures are described in detail below.

### Partial Risk Guarantees for Regulatory Risk Coverage

<table>
<thead>
<tr>
<th>The Limited Recourse Structure</th>
<th>The L/C Structure</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Application</strong></td>
<td>Privatizations of small distribution companies where the investor would be financing the purchase largely through equity or when the investor’s financing plan for system investments is not known ex-ante. Also, to support direct government payment obligations (for example, subsidy payments or government payment arrears to a privatized company).</td>
</tr>
<tr>
<td><strong>Objective</strong></td>
<td>• Political risk mitigation</td>
</tr>
<tr>
<td></td>
<td>• Political risk mitigation</td>
</tr>
<tr>
<td><strong>PRG Coverage</strong></td>
<td>Unpaid debt service payments on a commercial or shareholder loan made to the privatized distribution company.</td>
</tr>
<tr>
<td><strong>Illustrative Structure</strong></td>
<td>Government payments under an L/C to the privatized distribution company for cash flow shortfalls of up to pre-agreed amounts.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>The Limited Recourse Structure</strong></th>
<th><strong>The L/C Structure</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Government</strong></td>
<td>Government</td>
</tr>
<tr>
<td><strong>Regulator</strong></td>
<td>Regulator</td>
</tr>
<tr>
<td><strong>Equity</strong> (US$50m)</td>
<td>License Agreement/Regulatory Contract</td>
</tr>
<tr>
<td><strong>Privatized Distribution Company</strong> (US$50m)</td>
<td>Sale Proceeds</td>
</tr>
<tr>
<td><strong>Shareholder</strong> (US$25m)</td>
<td>Partly covered by WB-PRG</td>
</tr>
<tr>
<td><strong>Commercial Lenders</strong></td>
<td>Commercial (US$25m) Partly covered by WB-PRG</td>
</tr>
<tr>
<td><strong>Letter of Credit</strong></td>
<td>Letter of Credit</td>
</tr>
<tr>
<td><strong>Commercial Bank</strong></td>
<td>Letter of Credit</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>The L/C Structure</strong></th>
<th><strong>The Limited Recourse Structure</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Government</strong></td>
<td>Government</td>
</tr>
<tr>
<td><strong>Regulator</strong></td>
<td>Regulator</td>
</tr>
<tr>
<td><strong>License Agreement/Regulatory Contract</strong></td>
<td>License Agreement/Regulatory Contract</td>
</tr>
<tr>
<td><strong>Sale Proceeds</strong></td>
<td>Sale Proceeds</td>
</tr>
<tr>
<td><strong>Privatized Distribution Company</strong> (US$50m)</td>
<td>Total Financing (US$50m)</td>
</tr>
<tr>
<td><strong>Private Investor</strong></td>
<td>Private Investor</td>
</tr>
<tr>
<td><strong>Commercial Bank</strong></td>
<td>Commercial Bank</td>
</tr>
<tr>
<td><strong>Letter of Credit</strong></td>
<td>Letter of Credit</td>
</tr>
<tr>
<td><strong>Commercial Lenders</strong></td>
<td>Commercial Lenders</td>
</tr>
</tbody>
</table>

**Application**

Privatizations of large distribution companies where there is need for the investor to raise a substantial amount of debt for system investment, and to finance the acquisition cost.

**Objective**

- Political risk mitigation
- Catalyzing commercial debt

**PRG Coverage**

Unpaid debt service payments on a commercial or shareholder loan made to the privatized distribution company.

**Illustrative Structure**

An investor commits to a total financial outlay of US$100 million for the distribution company, a portion of which may be transferred to the government as sale price. The balance is used to fund investments. There is an equity contribution of US$50 million together with a shareholder loan of US$25 million and a commercial loan of US$25 million to the privatized state owned enterprise. The PRG covers a portion of the commercial loan and/or the shareholder loan.

**Application**

Privatizations of small distribution companies where the investor would be financing the purchase largely through equity or when the investor’s financing plan for system investments is not known ex-ante. Also, to support direct government payment obligations (for example, subsidy payments or government payment arrears to a privatized company).

**Objective**

- Political risk mitigation

**PRG Coverage**

Government payments under an L/C to the privatized distribution company for cash flow shortfalls of up to pre-agreed amounts.

**Illustrative Structure**

An investor commits a total financial outlay of US$50 million for the distribution company. The government opens an L/C through a domestic or international bank in favor of the privatized company for a specified amount. (For example, the L/C could be equivalent to an appropriate percentage of projected annual revenues.) Repayment of the L/C by the government is guaranteed by the PRG.
<table>
<thead>
<tr>
<th><strong>Partial Risk Guarantees for Regulatory Risk Coverage</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>The Limited Recourse Structure</strong></td>
</tr>
<tr>
<td><strong>Mechanism</strong></td>
</tr>
<tr>
<td>- The PRG can be triggered if a debt service shortfall</td>
</tr>
<tr>
<td>occurs as a result of a default of a government</td>
</tr>
<tr>
<td>contractual obligation only if the claim is not</td>
</tr>
<tr>
<td>disputed (if the default does not result in a debt</td>
</tr>
<tr>
<td>service shortfall, then the PRG can not be triggered,</td>
</tr>
<tr>
<td>and only dividends on the investor’s equity would be</td>
</tr>
<tr>
<td>impacted).</td>
</tr>
<tr>
<td>- If the claim is disputed, the Bank will pay only if</td>
</tr>
<tr>
<td>the dispute is resolved in favor of the investor in</td>
</tr>
<tr>
<td>accordance with the predefined dispute resolution</td>
</tr>
<tr>
<td>mechanism.</td>
</tr>
<tr>
<td>- Payments under the PRG will be limited to the</td>
</tr>
<tr>
<td>principal and interest payments on the covered</td>
</tr>
<tr>
<td>debt tranche.</td>
</tr>
<tr>
<td>- Any payments the Bank makes to the guaranteed</td>
</tr>
<tr>
<td>commercial lenders under the Guarantee Agreement give</td>
</tr>
<tr>
<td>the Bank the right to seek immediate repayment from the</td>
</tr>
<tr>
<td>host government under the Indemnity Agreement.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Risk Coverage</strong></th>
<th><strong>Risk Coverage</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>- Regulatory Risk — tariff principles</td>
<td>- Regulatory Risk — tariff principles</td>
</tr>
<tr>
<td>- Associated risks — the ability of the operator to</td>
<td>- Associated risks — the ability of the operator to</td>
</tr>
<tr>
<td>enforce disconnections in accordance with prevailing</td>
<td>enforce disconnections in accordance with</td>
</tr>
<tr>
<td>laws, the ability to collect payment from government</td>
<td>prevailing laws, the ability to collect payment</td>
</tr>
<tr>
<td>consumers, performance of state-owned electricity</td>
<td>from government consumers, performance of</td>
</tr>
<tr>
<td>generation and transmission companies, competitive</td>
<td>state-owned electricity generation and</td>
</tr>
<tr>
<td>policy/market structure and frustration of the dispute</td>
<td>transmission companies, competitive policy/market</td>
</tr>
<tr>
<td>resolution process</td>
<td>structure and frustration of the dispute</td>
</tr>
<tr>
<td></td>
<td>resolution process</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Guarantee-Related Charges</strong></th>
<th><strong>Guarantee-Related Charges</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>- Guarantee fee of 1% per annum (IBRD countries) and</td>
<td>- Guarantee fee of 1% per annum (IBRD countries) and</td>
</tr>
<tr>
<td>0.75% per annum (IDA countries) of guaranteed loan</td>
<td>0.75% per annum (IDA countries) of</td>
</tr>
<tr>
<td>amounts.</td>
<td>guaranteed loan amounts.</td>
</tr>
<tr>
<td>- Upfront fee of 1% of guaranteed amount (IBRD countries only).</td>
<td>- Upfront fee of 1% of guaranteed amount (IBRD countries only).</td>
</tr>
<tr>
<td>- Initiation and processing fees of up to 0.65% of</td>
<td>- Initiation and processing fees of up to 0.65% of</td>
</tr>
<tr>
<td>guaranteed amount.</td>
<td>guaranteed amount.</td>
</tr>
</tbody>
</table>
The Limited Recourse Structure

1. Tariff request to the Regulator
2. Regulator takes appropriate action
   - Yes: Matter resolved
   - No: Investor submits default notice to regulator/government
3. Dispute resolution process
   - Decision against regulator
   - Decision in favor of regulator
4. Regulator issues amended tariff order
   - Yes: Regulator takes appropriate action
   - No: No
   - Government/regulator disputes the claim
5. Government pays compensation to investor
   - Yes: Matter resolved
   - No: WB guarantee is triggered
6. WB pays private lender guaranteed amounts as due
   - WB claims repayment from host government
   - No

The L/C Structure

1. Tariff request to the Regulator
2. Regulator takes appropriate action
   - Yes: Matter resolved
   - No: Investor submits default notice to regulator/government
3. Dispute resolution process
   - Decision against regulator
   - Decision in favor of regulator
4. Regulator issues amended tariff order
   - Yes: Regulator takes appropriate action
   - No: No
   - Government/regulator disputes the claim
5. L/C bank pays claim/arbitral award
   - Yes: Matter resolved
   - No: Govt. repays L/C bank as due
6. Govt. repays L/C bank as due
   - No: WB guarantee is triggered
7. L/C reinstates by repayment amount
   - WB pays L/C due amounts
   - WB claims repayment from host
   - Yes
USING A PRG TO SUPPORT PRIVATIZATIONS

The Bank can consider providing a PRG once a client government has embarked on a sound and sustainable reform program. Ideally, the Bank’s involvement should be requested early in the pre-privatization design phase, to ensure that the Bank is in a position to issue an indicative term sheet for a PRG for incorporation in the Invitation to Bid for the privatization. In this way, the government is able to extract maximum value of the PRG in the form of enhanced investor interest, higher price offers, and greater upfront investment commitments. The Bank’s provision of the PRG would in all cases be subject to due diligence satisfactory to the Bank, including a review of the sector, industry, and project structures; compliance with all applicable Bank policies; Board approval; and satisfactory conclusion of an Indemnity Agreement with the host government.

The schematic below outlines a process for implementation of a distribution privatization using a PRG. Given that a successful distribution privatization is generally predicated on sound pre-privatization design, it is recommended that the integrity of this step not be compromised.

This paper has outlined the need for regulatory risk mitigation to promote private investment in the distribution sector and has proposed that this is best achieved through the pre-privatization design of a regulatory framework and dispute resolution mechanism. At issue has been the need for governments to enhance confidence in the level of their commitments to such a policy and regulatory framework. In this context, a PRG can be used to backstop a government’s commitment to the regulatory framework, thereby enabling a strategic investor to mobilize private capital for investment in electricity distribution in developing countries.
REFERENCES


