Recent trends in risk mitigation instruments for infrastructure finance
Innovations by providers opening new possibilities

Tomoko Matsukawa and Odo Habeck

Using risk mitigation instruments to support infrastructure finance has attracted growing interest among developing country governments, the donor community and the private sector. Official development agencies and private insurers are exploring new applications, opening new possibilities in raising finance for infrastructure projects.

The importance of infrastructure for economic growth and poverty reduction is well established. However, raising debt and equity capital for infrastructure development and service provision remains a challenge for developing countries.

Risk mitigation instruments can help mobilize commercial debt and private equity when governments or local infrastructure entities lack the creditworthiness or track record to attract finance on their own. They do so by transferring to third parties—official agencies (multilateral or bilateral) or private institutions—risks that private lenders or investors are unable or unwilling to take.

Risk mitigation instruments are no panacea. However, they will help “bridge the gap” while a country establishes a sound legal and policy framework that will reduce risk—and even afterward can support efficient risk sharing. Specifically, the advantages of risk mitigation instruments for the developing countries include that they: (a) mobilize private capital to supplement limited public resources; (b) enable private lenders and investors to participate when risks beyond their control or perceived excessive are transferred; (c) enable governments to share the risks of public projects with private sector financiers; (d) upgrade governments’ credit and in turn lower financing costs; (e) allow official agencies to leverage their financial resources; and (f) facilitate the development of commercial and sustainable financing mechanisms for infrastructure development.

Main types of instruments

Risk mitigation instruments for infrastructure finance can be defined as guarantees or insurance products. A guarantee contract guarantees the holder of a debt obligation the timely payment of principal and interest when due. If there is a default on debt service, the guarantor pays the amount due under the guarantee based on simple guarantee call procedures. An insurance contract insures payment to the holder of a debt obligation or the equity investor once the insurer evaluates the claim and determines that it is liable.

Risk mitigation instruments may benefit debt providers (lenders, bond investors) concerned about a borrower’s credit risk, covering default on debt service—or equity investors seeking protection against investment risk, covering losses on their investment. Some instruments differentiate between the “cause” of the loss as political or commercial risk. Payouts then depend on whether the loss was due to the risk specified. Many instruments cover only part of the debt or equity investment so that risk is shared between the guarantor or insurer and the lender or equity investor (figure 1). The instruments can be divided according to the type of risk mitigated.

Tomoko Matsukawa is senior financial officer, finance and guarantees, of the World Bank, and Odo Habeck is the managing partner of OGH Advisors. Dianne S. Rudo, a consultant in project finance, contributed to the editing of this note.
Credit guarantees
Credit guarantees cover losses in the event of a default on debt service regardless of the cause of the default.

Partial credit guarantees (PCGs) cover part of the debt service payment. Provided by a creditworthy guarantor, they improve the credit rating of a borrower’s debt issue and thus its market access and the terms of the commercial debt. Debt transactions using such guarantees reflect the hybrid credit risk of the guarantor (for the guaranteed part) and of the borrower (for the rest). The guarantee coverage can be structured flexibly, effectively sharing the credit risk between the lender (or bond investor) and the guarantor.

Full credit guarantees, or wrap guarantees, cover the entire debt service in the event of a default, normally obtaining debt terms similar to those of the guarantor. These guarantees are often used by bond issuers to achieve the higher credit rating demanded by capital market investors. Wrap guarantees have been widely used for asset- or mortgage-backed securities in the United States. Companies that provide wrap guarantees are usually known as monoline insurers. Some official agencies also provide such guarantees.

Export credit guarantees or insurance
Export credit guarantees or insurance cover losses for exporters or lenders financing projects. They are normally “tied” to the nationality of the suppliers, project developers, or lenders. These instruments cover both political and commercial risk (together, comprehensive risk). Coverage is generally limited to a specified percentage for each risk, but can be nearly complete. Comprehensive export credit guarantees provide the same protection as credit guarantees, guaranteeing debt service in the event of a default for any reason.

Political risk insurance or guarantees
Political risk insurance and partial risk guarantees (or political risk guarantees) cover losses caused by specified political risk events.

Political risk insurance (PRI) covers traditional political risks for equity investors and debt providers:

- Currency inconvertibility and transfer restriction—losses arising from an inability to convert local currency into foreign exchange or to transfer funds outside the host country.

- Expropriation—losses from acts by the host government that may reduce or eliminate ownership of, control over, or rights to the insured investment.

- War and civil disturbance—losses from damage to, or the destruction or disappearance of, tangible assets caused by politically motivated acts of war or civil disturbance in the host country.

Some political risk insurance policies may cover in addition other, less traditional political risks:

- Breach of contract—losses from the host government’s breach or repudiation of a contract.

- Arbitration award default—losses arising from a government’s nonpayment when a binding decision or award by an arbitral or judicial forum cannot be enforced.

Partial risk guarantees (PRGs). PRG is also used as an abbreviation for similar instruments called “political risk guarantees” which benefit debt providers, and cover a wider range of political and regulatory risks than PRI. They typically cover government contractual obligations, i.e., losses due to a government’s non-payment of its obligations under a contractual undertaking, where the coverage depends on the specific obligations contractually agreed to for a project by the host government. Besides the traditional political risks, they may cover:

- Government contractual payment obligations (such as termination payments).
- Government action or inaction with a material adverse impact on the project (i.e., a change in laws, regulations, taxes, or incentives).
- Contractual performance of public counterparties.
- Frustration of arbitration.
Recent trends in risk mitigation

Demand for political risk mitigation has been shifting from coverage for traditional political risks to coverage for risks arising from government actions or inactions that adversely affect the operations of a private infrastructure business—especially regulatory, devaluation, and sub-sovereign risk. Although these risks do not readily fall into an established category of political risk, some risk mitigation instruments have covered them, at least in part and indirectly.

Regulatory risk refers to the risk of losses resulting from adverse regulatory actions by the host government and its regulatory agencies, and from defaulting on contractual clauses when regulated by contract. Indeed, regulations for infrastructure projects are often included in concession or other key project contracts between the government (or a public body) and the private company. A PRG or breach of contract coverage of PRI can be used to cover related contractual obligations of the government.

Devaluation risk refers to the risk of losses due to unfavorable movements of the exchange rate (such as the impact of a local currency devaluation on projects earning revenues in local currency but paying expenses and debt service in foreign currency). In countries with sufficiently developed financial and capital markets, devaluation risk can be best mitigated through the use of local currency loans, public and private debt issues, or cross-currency swaps.

In the other countries, devaluation risk has been mitigated contractually by allowing for tariff indexation of foreign currency cost components to foreign exchange rates, although in practice, this indexation has not always been upheld during times of high volatility. A PRG or breach of contract coverage under a PRI can then be used to cover the risk of the government’s negating the enforcement of such a contract, thus indirectly covering the devaluation risk.

Subsovereign risk relates to breach or repudiation of contracts, non-performance or other actions or inactions by a subnational host government and/or contractual counterparties. Subsovereign governments are increasingly responsible for providing infrastructure, acting as borrower, concession granter, contractual counterparty, guarantor of municipal utilities, or local regulator. Multilateral banks have traditionally provided loans to subsovereign governments through or with the guarantee of the sovereign government. In investment-grade developing countries, and for some subsovereign governments and entities, private monoline insurers and recently established subsovereign units of multilateral banks provide loans and guarantee support based on the borrower’s own credit.

Who provides what?

Multilateral development banks offer PCG and PRG guarantees for debt providers, while multilateral insurance agencies offer PRI for debt and equity. These institutions offer partial coverage so as to share risk with private financiers, and use of their instruments is conditional on meeting their development objectives.

Bilateral development agencies have similar development objectives to those of multilateral agencies and offer similar guarantees (PCG and PRG for debt, for example). National export credit agencies (ECAs) include investment insurance agencies, and offer fairly similar insurance and guarantee programs covering trade transactions as well as equity investment or project finance debt. Because these agencies are supposed to serve their country’s national interest, their products are typically tied to the nationality of suppliers, project developers, or lenders.

Private monoline insurers guarantee structured debt transactions such as mortgage- and other asset-backed securities and offered wrap guarantees for project finance debt. To maintain a triple-A rating, they normally offer guarantees only to investment-grade countries. Private political risk insurers (and reinsurers) provide insurance similar to that offered by multi- and bilateral insurers.

While private insurers have sophisticated risk assessment capabilities, multilateral and bilateral agencies have greater leverage with host governments. Also, multilateral institutions enjoy preferred creditor status. Risk mitigation instruments offered by all these institutions are complementary and have been used together in many project financings. Some multilateral agencies have “guarantor of record” programs to share risk with private insurers, which then benefit from the multilaterals’ umbrella. Reinsurance arrangements to share and manage risks are common among all PRI providers.
Innovative applications

Providers have tried to expand the use of their instruments through innovative new applications.

PCGs and guarantor of record

To meet the demand for high-quality securities in local bond markets, the Inter-American Development Bank (IDB) has attracted the participation of private monoline insurers by establishing a new template that combines a financial guaranty and an A/B financing in bond transactions. The resulting guarantor-of-record structure extends the IDB's preferred creditor status to the co-guarantor monoline insurer, providing risk protection that allows private insurers to enter new markets. The IDB has used this approach for wrapping local currency bond issues by Chilean toll road companies, enticing private monoline insurers to cover a large share of the credit risk.

PCG for pooled finance

In the Indian state of Tamil Nadu the Development Credit Authority (DCA), part of the U.S. Agency for International Development (USAID), supported a pooled municipal bond issue to finance water and sanitation projects of urban local bodies (ULB) by providing a PCG covering 50 percent of principal repayment. The bond issue was also supported by a credit enhancement of the state and the ULBs (escrow accounts funded by the ULB and a debt service reserve fund funded by the state government and replenishable by diverting the ULB’s transfer payments).

Privatization guarantees and brown field project support

Multilateral and bilateral agencies have traditionally limited their support to projects making new investments. Some multilaterals now offer PRG/PRI for privatization transactions, which may not involve new investment and so cannot draw export credit support. To allow the privatization of power distribution companies in Romania, the World Bank provided a PRG backstopping the government’s obligations to compensate the privatized companies for revenue losses resulting from defined regulatory risks during the initial years of the new regulatory regime. The Japan Bank for International Coop-

eration provides investment guarantee support for equity acquisitions by Japanese private investors from the original private investor.

Complementary guarantees combining PRG/PRI

To support a pipeline project company in West Africa, the World Bank offered a partial risk guarantee while the Multilateral Investment Guarantee Agency (MIGA) and a private political risk insurer offered their respective PRGs and PRI, with claims to be allocated on a pro rata basis. A termination payment due but not paid by the government would be deemed to be a project company loan to the government under the project contract. That allowed the World Bank to offer its PRG for a project entirely equity funded.

Corporate finance with PRG/PRI

For the Southern Africa Regional Gas Project, in Mozambique, a South African sponsor provided a corporate guarantee to lenders for all project-related commercial risks, except for Mozambique political risk. To cover that political risk, over which the sponsor has no control, the World Bank provided a PRG and MIGA and the Export Credit Insurance Corporation of South Africa both provided PRIs.

PRI to facilitate securitization

MIGA provided PRI coverage (for the risk of currency inconvertibility, transfer restriction, and expropriation) for part of the interest payments on a mortgage portfolio to support the securitization of residential mortgage loans in Kazakhstan. This was instrumental in achieving a higher rating for the debt issue (A- by Fitch) than the country ceiling for Kazakhstan (BBB+ by Fitch).

 Guarantee facilities

Multilateral and bilateral agencies have helped countries set up guarantee facilities by providing contingent credit or seed capital to the government. Both official agencies and private institutions also set up—or are considering setting up—global or regional guarantee facilities to support infrastructure projects in developing countries.

Note: This note is drawn from Tomoko Matsukawa and Olof Habeck "Review of Risk Mitigation Instruments for Infrastructure Financing and Recent Trends and Developments (World Bank and PPIAF); Washington, D.C., 2007), which provides a concise guide and reference information for practitioners.
<table>
<thead>
<tr>
<th>Jurisdiction and unit</th>
<th>How much success did PPP program achieve?</th>
<th>What were PPP unit's objectives?</th>
<th>Did PPP unit meet its objectives?</th>
<th>How many functions necessary for solving government failure? Did PPP unit perform effectively?</th>
</tr>
</thead>
</table>
| Bangladesh IIFC (1999) | Little success                           | • Advise line ministries and government agencies in identifying, evaluating, awarding, negotiating, and implementing projects  
• Promote private participation in infrastructure and serve as clearinghouse of expertise on PPPs | No apparent effect on private participation in infrastructure | None to few  
• Technical assistance  
• Policy formulation, but no implementation authority |
| Jamaica NIBJ (1988)   | Little success                           | • Secure greater efficiency  
• Reduce fiscal drain  
• Optimize government's management resources  
• Secure enhanced access to foreign markets, technology, and capital  
• Broaden ownership | No, especially not the reduction in fiscal drain | None to few  
Managed some transactions, but real power never effectively delegated |
| Portugal Parpública (mid-1990s) | Much success                           | • Help structure higher-quality PPPs | Yes | Some  
• Policy formulation  
• Technical assistance  
• Quality control |
| South Africa Treasury PPP unit (2000) | Much success, despite low deal flow | • Filter out fiscally irresponsible PPPs while creating a structure for PPPs that would reassure private investors despite its being a fine filter | Yes, but scant impact on infrastructure deals | Some  
• Technical assistance  
• Quality control  
• Policy formulation |
| Republic of Korea PIMAC (2005) | Much success                           | • Provide technical assistance to government agencies and private sector  
• Promote infrastructure projects and educate private sector about PPPs  
• Review unsolicited proposals, feasibility studies, and bidding documents  
• Conduct value-for-money tests, evaluations, and negotiations; formulate PPP policy | Yes | Most to all  
• Technical assistance  
• Quality control  
• Policy formulation  
• Promotion and marketing |
| Philippines BOT Center (1993) | Some success, though PPPs of the 1990s left significant contingent liabilities | • Provide technical assistance  
• Promote and market PPPs  
• Monitor PPPs | Yes, but not for all PPPs | None to few  
Assigned many functions but effective only in technical assistance |
| United Kingdom Partnerships UK (1996) and Treasury task force | Much success                           | • Improve quality of PPPs  
• Shift focus away from financing infrastructure to value for money and risk allocation | Yes | Most to all  
• Technical assistance  
• Quality control  
• Policy formulation  
• Promotion and marketing |
| Victoria, Australia Partnerships Victoria (1999) | Much success                           | • Improve quality of PPPs in infrastructure  
• Ensure that PPPs provide for optimal risk transfer, maximize efficiency, and minimize lifetime costs | Yes | Most to all  
• Technical assistance  
• Quality control  
• Policy formulation  
• Promotion and marketing |


a. The year in parentheses is the year the unit was established.