

Government Guarantees for Mobilizing Private Investment in Infrastructure

By Jason Zhengrong Lu, Jenny Jing Chao,
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Acknowledgements

This guidance book was written by Jason Zhengrong Lu (Head, Global Infrastructure Facility) and Jenny Jing Chao (Public-Private Partnerships Specialist, World Bank), with James Robert Sheppard, Jr. (Consultant). The work was financed by a grant from the Public-Private Infrastructure Advisory Facility (PPIAF).

The team acknowledges contributions from: Rachel Elizabeth Aland (Consultant), who assisted with research and the writing of specific case studies, and Seong Ho (Consultant), who updated the data from the PPI Database.

The team is grateful to Sebnem Erol Madan (Manager, Financial Structuring and PPPs, World Bank) for overall guidance, as well as peer reviewers Sudarshan Gooptu (Global Lead, Fiscal Policy, World Bank), Edgar Saravia (Principal Investment Officer, IFC), Hoda Atia Moustafa (Head, Africa, MIGA), Daniel Pulido (Senior Infrastructure Specialist, World Bank), David Duarte (Senior PPP Specialist, World Bank), Suman Babbar (former Senior Advisor, World Bank), and Teuta Kacaniku (Senior Infrastructure Finance Specialist, World Bank) for their valuable comments. The team would like to thank Jemima T. Sy (Program Manager; PPIAF); Anthony Molle (Lead Infrastructure Finance Specialist, World Bank); Isabel Marques de Sa (Chief Investment Officer, IFC); Helen Mary Martin and Jeffrey D. Delmon (both Senior PPP Specialists, World Bank); Kenneth Hansen (Partner, Norton Rose Fulbright); and Bruce Schulberg for their additional helpful insights.

The guidance book was edited by Luba Vangelova and Sunny N. Kaplan, and designed by Victoria Adams-Kotsch.

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Acronyms & Abbreviations

BOO	build-own-operate	LGTT	Loan Guarantee Instrument for Trans-European Transport Network Projects
BOT	build-operate-transfer	LOC	letter of comfort
BOOT	build-own-operate-transfer	LOS	letter of support
BVGL	business viability guarantee letter	MDB	multilateral development bank
CIRR	commercial interest reference rate	MEF	Ministry of Economy and Finance
CRPAO	Certificados de Reconocimiento de Derechos de Pago Anual por Obras	MIGA	Multilateral Investment Guarantee Agency
DSA	debt sustainability analysis	MoF	Ministry of Finance
EAD	exposure at default	MRG	minimum revenue guarantee
EIB	European Investment Bank	MW	megawatts
EMDE	emerging market and developing economy	NBET	Nigeria Bulk Electricity Trading PLC
EPC	engineering, procurement, and construction	O&M	operations and maintenance
ESC	electricity sales contract	OECD	Organisation for Economic Co-operation and Development
EVN	Electricité du Vietnam	OPIC	Overseas Private Investment Corporation
FMO	Nederlandse Financierings-Maatschappij voor Ontwikkelingslanden N.V.	PAO	Pago Annual de Obras
GCA	government contracting agency	PAMO	Pagos Anuales por Mantenimiento y Operacion
GDP	gross domestic product	PCOA	put and call option agreement
GGU	government guarantee and undertaking	PD	probability of default
GoK	Government of Kenya	PFRAM	Public-Private Partnerships Fiscal Risks Assessment Model
ICT	information and communications technology	PII	Penjamin Infrastruktur Indonesia
IDA	International Development Association	PLN	Perusahaan Listrik Negara
IDR	issuer default rating	PPA	power purchase agreement
IFAC	International Federation of Accountants	PPI	private participation in infrastructure
IFC	International Finance Corporation	PPP	public-private partnership
IIGF	Indonesia Infrastructure Guarantee Fund	PRG	political risk guarantee
IIRSA	Integration of Regional Infrastructure in South America	PSO	public service obligation
IMF	International Monetary Fund	RPA	Responsabilidad Patrimonial de la Administración
IPP	independent power project	RPICAO	Retribuciones por Inversiones según Certificado de Avance de Obras
IPSASB	International Public Sector Accounting Standards Board	SOE	state-owned enterprise
JBIC	Japanese Bank for International Cooperation	SPV	special purpose vehicle
KenGen	Kenya Electricity Generating Company	USAID	United States Agency for International Development
KPLC	Kenya Power and Lighting Company		
L/C	letter of credit		
LGD	loss given default		

EXECUTIVE SUMMARY

This publication provides guidance to government officials in emerging markets and developing economies (EMDEs) on when government guarantees for public-private-partnership (PPP) projects might be desired; how they could be best utilized; the structure and scope of guarantees and guarantee programs; the costs and risks entailed; and how to manage these risks. This guidance book is not intended to promote PPPs or guarantees, but rather aims to provide a balanced view on how EMDEs can strategically deploy guarantees in limited circumstances to mobilize private financing for their infrastructure needs more effectively.

Traditionally, infrastructure is funded by governments through public budgets. However, many governments of EMDEs do not have sufficient public budgets to fund all of their infrastructure needs. Experience has shown that the private sector can bring in needed financing, technology, expertise, and efficiencies for the construction and operation of infrastructure projects, which can create value for money and improve service delivery.¹ PPP models of developing infrastructure through a long-term, performance-based contract can be an effective method of bringing private sector capital and expertise to the development of certain infrastructure projects.

Governments may be able to help encourage private participation in PPPs by reducing risks through government support instruments such as guarantees. Government guarantees are a sovereign obligation under a binding or potentially binding² written document (such as a contract or comfort letter) to satisfy certain obligations of an underlying contract, or to protect the beneficiary from defined losses if specified conditions occur.

Government guarantees are commonly used to make the project more acceptable and financeable to private investors by protecting investors from risks that they have little control over or may not be willing to bear. In this way, a government guarantee can be one of the most critical elements to move a project forward. Even in developed countries, government guarantees have been used to help governments enhance the credit of the underlying project, thus mobilizing private capital or reducing financing costs and passing through a lower cost of services to consumers.

However, government guarantees for PPPs will create contingent liabilities³ to different degrees and are thus subject to similar risks. Concerns and confusion about contingent liabilities have made many governments hesitant to issue government guarantees even in cases when using government guarantees are necessary and reasonable. To properly address such concerns, it is important to note the distinction between the two fundamental forms of guarantees: financial or credit (debt) guarantees and performance guarantees. Financial or credit guarantees are usually unconditional agreements to service debt obligations of the borrower in case of default. The government guarantees used in PPP projects, on the other hand, are typically performance-based and cover targeted risks. The implications of a financial or performance guarantee for governments' contingent liabilities can be very different, but this distinction is rarely considered when discussing government guarantees for PPPs.

Confusion around the implications of government guarantees has led to delays in infrastructure project development in many EMDE countries. These delays may have enabled governments to avoid any contingent liabilities, but the resulting costs due to infrastructure gaps and subpar service deliveries have severe consequences.

1 Value for money means achieving the optimal combination of benefits and costs in delivering services users want. Further information can be found at: <https://pppknowledge.org/guide/sections/54-assessing-value-for-money-of-the-ppp>

2 Some forms of government guarantees, such as comfort letters, may or may not be binding, depending on the drafting, jurisdictions and/or outcome of a dispute resolution process. See Section 3.1 for further discussion on this topic.

3 Contingent liabilities are obligations whose timing and magnitude depend on the occurrence of some uncertain future event.

This is especially true in countries with high infrastructure deficits, where underinvestment in infrastructure has led to slower economic growth and poor quality of life for the communities. In Sub-Saharan Africa, for example, it was estimated that if the infrastructure gap were closed relative to the median of the rest of the developing world, gross domestic product (GDP) per capita for the region would increase by an estimated 1.7 percent per year.⁴ Such economic progress resulting from improved infrastructure has tangible benefits for human capital development and poverty alleviation.

Government guarantees, when used in a strategic and prudent manner, can be a powerful tool to help close infrastructure gaps. It is important to note, however, that a guarantee will not turn a “bad” project into a good one. Not all projects are suitable for PPPs, and not all projects that are suitable for PPPs would require or should be considered for government guarantees. Furthermore, government guarantees may be structured in many ways, with different legal and financial implications. Therefore, careful consideration should be given to the benefits and costs of government guarantees before they are deployed. The best way to mitigate the risk from issuing a guarantee is to ensure that the project meets best practices in how it is selected, prepared, and structured. Projects shown to be economically viable are much less likely to fail. The challenge for governments is to determine where and what kind of guarantees are necessary or cost effective. The rest of this guidance book seeks to answer these questions. The book is organized into five chapters, as summarized below:

Chapter 1: Overview of Government Guarantees introduces the different types of guarantees and reviews the benefits and risks of guarantees and other forms of government support. This chapter notes that the decision to issue a government guarantee for a PPP should begin early in the project preparation and development cycle. Once a project has been identified as providing value for money—that is, it is found to be in line with the government’s development priorities and is economically and financially viable and affordable—the next decision is whether there is a role for the private sector, and whether the project should be procured as a PPP. Guarantees should be considered during this initial development phase, when the PPP structure and the project’s fiscal-support requirements are being determined. It is important for the Ministry of Finance (MoF) to be actively involved in the decision making, including as a “gatekeeper” or ultimate approver, given the fiscal implication of the PPPs. The benefits of a government guarantee can include increasing investor confidence in a PPP project; demonstrating government support; increasing the amount of financing and sources of financing available to a project; reducing the cost of debt service; and reducing the returns investors require by enabling a lower risk profile. However, overly broad guarantees that transfer risks to the government that should have gone to the private investor can create moral hazard and potentially lead to larger government payouts than necessary.

Chapter 2: Scope of Government Guarantees examines the risks involved in a PPP project, appropriate risk allocation among different parties and the common types of guarantees used to address these risks. This chapter notes that government guarantees are often requested when the risks are either within the government’s control or not acceptable by the market. Risks commonly associated with government guarantees include political and regulatory risk; revenue and demand risk; foreign exchange risk; uninsurable force majeure events; and payment and early-termination risks associated with the underlying contract with non-creditworthy counterparties. In certain cases, there is an important role for international financial institutions, such as multilateral development banks, to further enhance the credit strength of a sovereign guarantee.

⁴ World Bank 2017b.

Chapter 3: Structuring and Negotiating Government Guarantees first discusses the different forms of government support, from comfort letters to guarantee agreements, and their legal enforceability, before describing the common issues encountered when negotiating a government guarantee, including its scope, term, cure periods, dispute resolution mechanism, waiver of sovereign immunity, and the role of government advisors. More so than what a document is called, it is the language of the document that will determine whether a comfort letter or letter of support (LOS) is treated as a guarantee in a dispute resolution. The benefit of a guarantee is that it is a precise document that makes explicit the obligations of the guarantor. Like any contract, the specific provisions are important to ensure that the guarantee provides the coverage needed, while still giving the guarantor time to remedy the issue.

Chapter 4: Managing Fiscal Risks from Government Guarantees discusses how governments can manage the contingent liabilities that arise when government guarantees are called. This requires adequate assessment, approvals, accounting, disclosure, and monitoring throughout the life cycle of a project. This chapter also discusses how to budget for and fund guarantees, as well as costing and pricing estimation for guarantees. Estimating government's exposure under the issued guarantees is required in order to manage appropriately the risks associated with these guarantees. Budgeting and accounting standards are evolving to allow for more transparency in government guarantees, although measuring contingent liabilities still requires complex estimations of the probability of default and the size of the payout. Another path to managing the fiscal risks of government guarantees for PPPs is through transparency and disclosure of the key elements of PPP contracts, including guarantees.

Finally, **Chapter 5: Guidelines for Governments** summarizes the key takeaways from this guidance book—from project preparation to managing contingent liabilities—to ensure that governments use guarantees effectively and prudently to attract private investment in infrastructure while managing their own exposures and risks.

Additionally, case studies are referenced throughout the document to highlight specific points and provide real-world examples.

CHAPTER 1

OVERVIEW OF GOVERNMENT GUARANTEES

1.1 PPPs AND PROJECT FINANCE

This guidance book discusses how government guarantees (otherwise known as sovereign guarantees) should be assessed, structured, and managed in the context of PPP transactions. The World Bank defines a PPP as “a long-term contract between a private party and a government entity for providing a public asset or service, in which the private party bears significant risk and management responsibility, and remuneration is linked to performance.”⁵ The key potential benefits of PPPs are: 1) bundling of project phases (such as construction and operations) to create efficiencies in service delivery; 2) transfer of risks to the party best able to manage them; and 3) long-term performance-based contracts that create incentives for the private sector to deliver a quality “whole-of-life” solution for a public service.⁶

Infrastructure PPP projects⁷ are often financed through project-finance schemes whereby lenders provide long-term financing based on the assets to be built and expected future cash flows. In the typical project finance structure, the project is financed off the sponsors’ or equity investors’ balance sheets. Loans are made to a special-purpose vehicle (SPV) or project company created for the project, and the liabilities of the investor are “ring-fenced” to the cash flows of that SPV. In other words, lenders must rely on the cash flows of the project, with limited or no recourse to project owners. Furthermore, the tenors of such loans are often relatively long, because most infrastructure projects are capital intensive and take a long time to generate sufficient cash flows to repay the loans.

The equity investors or project sponsors/developers are responsible for raising the financing for the upfront capital investment, to be repaid through the project’s cash flows once it is operational. Project revenues could comprise of user fees; payment based on an output purchase agreement; a regular government contribution such as an availability payment; or a combination of the above. Equity sponsors often look at leveraging themselves as much as possible to maximize equity return and lower the project cost of capital by obtaining long-term debt financing, usually from commercial banks, and, to a much lesser extent in EMDEs, capital markets.⁸

5 World Bank 2017a.

6 More information can be found on the World Bank PPP Legal Resource Center at <https://ppp.worldbank.org/public-private-partnership/>

7 Except operations and management contracts that do not entail capital outlays.

8 The interest rate on project debt will be substantially lower than the project sponsor’s required equity return. Therefore, substituting debt for the sponsor’s equity raises the return on the remaining equity investment.

1.2 UNDERSTANDING THE NEEDS OF THE PRIVATE SECTOR

Successful PPPs require finding a balance among the needs of all parties through appropriate risk allocation. The governments' needs are to ensure that the projects are built on time to the required specifications, maintenance works are carried out, and the services are delivered throughout the operating periods, according to the contractual provisions, both in terms of quality and price. Governments also have a responsibility to their citizens to protect their limited budgets by minimizing their fiscal and contingent liabilities, as discussed elsewhere in this guidance book. Private investors in PPPs can be divided into two broad categories—equity investors and lenders. Understanding their different needs will assist in understanding the rationale behind government guarantees for PPP projects.

a. Equity Investors' Needs

Equity investors in a PPP can include sponsors/developers, infrastructure equity funds, and institutional investors such as pension funds and insurance companies. Generally speaking, compared to equity investors in other industries such as technology, equity investors in infrastructure are more similar to lenders, in that they prefer to operate on the lower end of the risk spectrum, because returns are limited due to infrastructure regulations.

Project developers or sponsors (often described as active or strategic investors) take on the major responsibilities of project development and operations. Equity funds are mostly passive investors (or financial investors). They are less involved in the strategic and operational decisions of the projects (unlike key developers and sponsors). Institutional equity investors, who are the stewards of pension funds and insurance companies, are the least risk-seeking equity investors and are subject to strict financial regulations. They entered the infrastructure finance market only recently, because of the need for diversification and the relatively higher yield in infrastructure investment than traditional fixed-income instruments such as bonds with record-low yields in recent years. Because institutional investors are relatively new to the infrastructure sector, they rarely invest in EMDEs.

Overall, equity investors need to find projects that have attractive returns but, at the same time, have an acceptable risk profile in line with their own risk appetites.

b. Lenders' Needs

As noted above, most sponsors and project developers seek to raise debt financing to meet the needs of a capital-intensive infrastructure project and to lower the average cost of capital and improve equity returns. Unlike project sponsors, who keep profits after loan payments are made and, therefore, have an incentive to take certain risks to maximize their profits, project lenders generally make a fixed return—the interest on the loan. Given lower expected returns with no upside, lenders tend to be very conservative and have limited risk appetite. Lenders' most important consideration is the certainty of debt repayment, either directly through the project's cash flow (the primary source of repayment), or indirectly through a third-party credit enhancement such as a guarantee.

Lenders need to undertake substantial due diligence on a project that include demand studies; legal and regulatory assessments; technical, environmental and social impact; integrity; governance assessments; and financial due diligence, engaging their own technical personnel or specialized consultants. The lenders' credit analysis will primarily focus on the operating cash flow of the project company, and the potential risks affecting the stability of this cash flow. In other words, lenders do not view a creditworthy guarantee as equivalent to strong underlying project cash flows. Rather, the guarantee is seen as a fallback measure, not as a first source of debt repayment. If there appears to be a high likelihood that the guarantee will be called, lenders are likely to avoid involvement with the project.

It is important to note that there is a distinction between local and international lenders. Local lenders often have relationships with the sponsors and may lend to a project on the strength of such relationships (often on a corporate finance basis), whereas international lenders providing loans on a non-recourse or limited-recourse basis will rely primarily on their due diligence, project documentation, and the underlying project merits and structure. Furthermore, local lenders often do not have the same aversion to country risk that foreign lenders may have. Thus, governments should try to maximize their domestic sources of financing, because it reduces the need to cover foreign exchange risk and minimizes the need for guarantees. However, given the lack of adequate volume and liquidity of local banking and capital markets in many EMDEs, combined with the inability to make long-term loans, foreign capital is often still needed.

1.3 OVERVIEW OF GOVERNMENT GUARANTEES FOR PPPs

In a project finance structure in EMDEs, government guarantees are often requested by private sector investors—especially lenders—to protect them from various risks that may affect the project’s cash flows, especially those risks that are beyond the control of the private partner. For the purposes of this guidance book, government guarantees for PPPs refer to any form of sovereign obligation, described in a binding or potentially binding⁹ written document, to protect the beneficiary from defined losses if specified conditions occur, or to satisfy certain obligations of an underlying PPP contract (such as a concession agreement). In other words, it is an explicit additional layer of protection promising that certain obligations in the underlying PPP contract will be honored by the government or damages will be paid.

It is worth noting that, for government guarantees for PPPs, there is a direct contractual obligation from the guarantor—usually a central government entity such as the MoF or sector/line ministry—to the beneficiary (i.e., the private investor) based on pre-determined triggers related to the non-performance of the obligation in the underlying PPP contract. The government will also have existing contractual obligations (either implicit or explicit), when the government or a state-owned enterprise (SOE) that is majority-owned or controlled by the government is acting as the contracting agency. Some of these existing obligations might also be contingent in nature, such as termination payments, minimum revenue guarantees, or foreign exchange guarantees. While these contingent obligations will also be referred to for completeness, the main focus of this guidance book is on obligations that have been reinforced by a third party in an additional and explicit guarantee document.¹⁰ A government guarantee is also referred to as a “sovereign guarantee” or “wrap”—a protective layer around the original agreement.

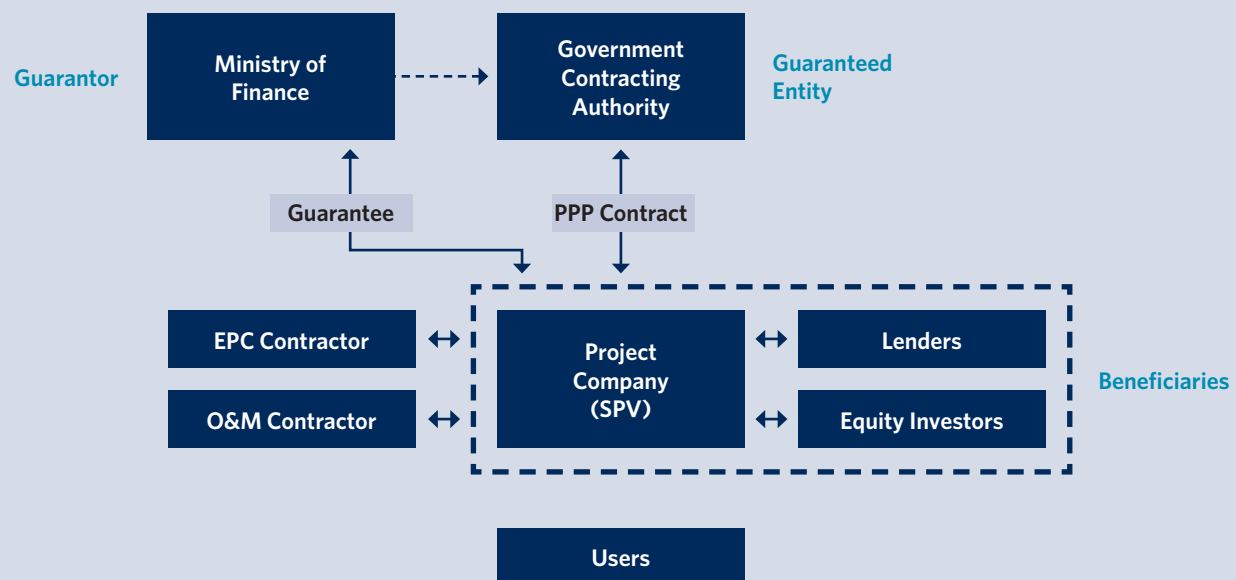
Parties in a government guarantee:

- **The guaranteed entity** is the government contracting authority—such as a line ministry, subnational government or SOE—that is the counterparty of the PPP contract;
- **The guarantor** is the guarantee provider, usually a central government entity such as the MoF; and
- **The beneficiaries** are typically the project company (SPV) and private sector investors or lenders.

9 Some forms of government guarantees, such as comfort letters, may or may not be binding, depending on the outcome of a dispute resolution process. See Section 3.1 for further discussion on this topic.

10 In this case, “third party” is referring to a party that is not a party to the underlying contract, though it could be another branch of government such as the MoF. For more information on structuring the underlying PPP contract, see, e.g., World Bank 2017a.

FIGURE 1.1
Typical PPP Structure with Government Guarantee



The PPP contracting authority or guaranteed entity can be a government agency, such as a subnational entity or a line ministry, or it can be an SOE such as a utility. From a private sector perspective, the benefit of a sovereign guarantee is to elevate the creditworthiness of the contracting agency. However, from a government’s perspective, there are different implications to the fiscal risks of the two types of entities. When the guaranteed entity is a government agency, the obligation being guaranteed is already an explicit government obligation, so the guarantee does not necessary add to the overall fiscal risks. In the case of an SOE, the obligation is on the SOE’s balance sheet, which the government is then backstopping as an explicit obligation as controlling shareholder. Moreover, there are two types of government guarantees—financial guarantees and performance guarantees, which can be used to cover a wide variety of risks, but with different implications for the issuing governments.

Financial or credit guarantees effectively cause the government to take on the debt-service obligations of the borrower in the event of default, thereby greatly impacting the government’s budget and the country’s borrowing limits. Under a financial guarantee, the government is “stepping into” the underlying loan agreements to make debt-service payments on behalf of the borrower, such as the subnational government or SOE, often regardless of the cause of default. Such guarantees are rarely offered by governments for PPP projects; instead, they are most often seen in cases where the MoF provides a guarantee to lenders for borrowing undertaken by subnational governmental units or SOEs for particular infrastructure projects. Financial guarantees are often structured and construed as unconditional, irrevocable, and liquid (requiring timely payment), thus the claim process is simple and straightforward.

Financial guarantees are rarely used in infrastructure PPPs because they may facilitate unbalanced risk allocations that place all risk with the government, and they are not linked to any performance indicators for the private sector. As a result, the government can be liable for a whole host of risks ranging from natural disasters and other force majeure events, to defaults by the private sector such as construction contractors. This type of guarantee

may provide the wrong incentives for the private sector because it relieves the debt-repayment pressure from the sponsors or contractors, especially if the project is not carefully planned and designed. Moreover, governments are often left with no time to remediate the situation through internal coordination or renegotiations, and are instead obligated to make immediate payment.

BOX 1

Financial Guarantees or Credit Guarantees

Financial guarantees can be very powerful tools to build investor confidence, open new markets, or improve financing terms of the guaranteed counterparties such as subnationals or SOEs, under certain market conditions or for specific policy considerations. One example is the Loan Guarantee Instrument for Trans-European Transport Network Projects (LGTT), jointly established by the European Investment Bank (EIB) and the European Commission. This initiative was intended to open new markets and mobilize institutional investors that have trillions of assets under management but have invested little in infrastructure, mainly due to risk concerns about infrastructure projects. Another example is the refinancing guarantee provided by the Flemish government in 2009, which can also be categorized as a financial guarantee to help address liquidity issues after the global financial crisis. Once called, the Flemish government would repay the senior lenders and would substitute the original loan facility with a new one until a commercial refinancing can occur.

Source: European PPP Expertise Center (EPEC) 2011.

Government guarantees for PPP projects are nearly always structured as performance guarantees, to reinforce certain government undertakings or cover the risk of a guaranteed government counterparty's failure to perform targeted or specific risks or obligations linked to underlying PPP contracts or concessions. With this type of guarantee, the government commits to making the contractual obligor (for example, the PPP contracting agency, subnational government or SOE) fulfill its obligations under specific project agreements, such as concession agreements, supply agreements, or output purchase agreements. The primary focus is on performance, although it may include financial implications to eventually make the beneficiary whole. The government's obligations as the third-party performance guarantee provider will be discharged if it is able to remedy the situation or find ways to deliver or fulfill the performance or service obligations according to the standards or indicators as stipulated in the underlying concession or PPP contracts. Thus, unlike financial guarantees, performance guarantees are conditional and, depending on what is being guaranteed, can be broad or relatively narrow.

To call on the government's guarantee for a PPP project, the beneficiaries typically need first to go after the primary obligor or guaranteed counterparty—usually the PPP contracting agency or counterparty of the PPP contracts—following the dispute resolution mechanism of the project agreements. Furthermore, although performance guarantees do provide ultimate recourse for the beneficiaries, they give the government more leeway and time to correct the problems (through cure periods) and to come up with a solution before it needs to make full payment. For example, if the offtaker misses a payment under an output purchase contract, the government or the MoF may be able to apply pressure on the offtaker or find another arrangement to make the payment, before having to make the payment from its own budget directly.

Understanding the differences between financial guarantees and performance guarantees will allow government officials to make more nuanced decisions about when to issue guarantees, what types of guarantees to offer

and how to structure and negotiate them, rather than avoiding them altogether. From the government's risk and financial management perspectives, a performance guarantee is more favorable than a financial guarantee, because the risk exposure tends to be more manageable. When assessing government guarantees, governments should carefully analyze the specific risks that are being guaranteed in order to calculate with greater accuracy the probability of a triggering event occurring, and the ultimate liability to the government. The government guarantees discussed in this guidance book, which is focused on the usage of government guarantees to support PPPs, primarily refer to performance guarantees (see Case 1.1: Performance Guarantees Through Implementation Agreements in Pakistan).

Note on Payment Guarantees

A payment guarantee, which can be either finance or performance related depending on how it is structured, is a form of government guarantee that can be particularly confusing. Generally, payment guarantees are financial commitments that require the guarantor to make a payment on behalf of the guaranteed entity, based on the terms outlined in the original concession agreement, in the event of payment default by the primary obligor (either the PPP contracting agency in PPPs, or the subnational or SOE borrower). Payment guarantees can be either unconditional or conditional. Unconditional payment guarantees are often seen in public procurements. An unconditional payment guarantee is essentially a financial guarantee used by sovereign entities in order to allow subnational governments or SOEs to gain access to, or get better terms for, commercial financing to fund their public infrastructure investment programs.

Payment guarantees in PPPs, however, are typically structured as performance guarantees, because performance expectations may eventually be met indirectly via payment by the guarantee provider, if it fails to cure the performance issues or payment default created by the primary obligor. Payment guarantees in PPP transactions are often conditional and linked to underlying concessions or PPP contracts, with performance requirements for both parties. For example, the central government may agree to provide a payment guarantee for subnational governments or SOEs to backstop their payment obligations, either for ongoing payments (such as availability payments for roads, and capacity and energy payments for power projects), or termination payments. However, such payment guarantees are often contingent on a number of conditions. In the case of power projects, when the government provides payment guarantees on the payment obligations of the state-owned utility under the power purchase agreement (PPA), the private sector has to deliver electricity according to the pre-agreed volume and quality standards in the PPA. If there is a dispute, the payment obligation is determined by the dispute resolution mechanism that had been agreed to by both parties.

1.4 BENEFITS AND RISKS OF GOVERNMENT GUARANTEES

Government guarantees have both benefits and risks specific to the type of guarantee issued and the conditions under which the guarantee can be called. To minimize risk and maximize benefit, government guarantees, as well as all other types of government support, should be considered part of the project structuring and assessed for risk allocation, government exposure, affordability and sustainability.

Benefits of Government Guarantees

There are many reasons for an EMDE government to issue a guarantee. The first is to enable financing of a project that would not be able to receive financing in the absence of the guarantee. Sometimes projects that have many positive economic and social benefits nonetheless have perceived risks that the private sector will not accept without a guarantee (for example, supply of electricity in rural areas). A guarantee is one way to allow the government to capture the benefits of such projects, which may not otherwise be implemented. A recent report by Marsh & McLennan Companies' Asia Pacific Risk Center analyzed a database of 10 years of projects in Asia and noted that an estimated 55 to 65 percent of them are not bankable without government or multilateral

development bank (MDB) support, because lenders would not be willing to finance the project on a non- or limited-recourse basis.¹¹ A publication by the Overseas Private Investment Corporation (OPIC), the U.S. Department of Commerce, the United States Agency for International Development (USAID), and the U.S. Trade and Development Agency cites offtaker payment support, including a potential government guarantee, as one of the 10 important features to include or consider for a bankable PPA in Africa.¹²

Guarantees can help build confidence in a PPP market and demonstrate government commitment to a PPP program, particularly in countries where PPPs are relatively new and the market or sector is untested for private participation. Where certain political or regulatory factors may have held up negotiations, a guarantee can be a useful workaround if the policies are difficult to change for political reasons (such as raising tariffs in the short run), allowing projects to go ahead when the regulatory environment is still uncertain or unfavorable, or sectoral reforms are still underway, and speeding up the overall project preparation time by covering risks that are likely to delay project implementation. In these cases, government guarantees can be used as interim or transitional measures to mobilize the private sector for infrastructure financing and delivery in the short run.

Another benefit of guarantees is to improve the terms of the financing, by either reducing the cost of financing, increasing the amount of financing available to the project, or lengthening the tenor of the project's financing, thereby reducing the annual cost of debt service passed through to the users of the project's services. For example, by providing a project company with a guarantee with respect to the payment obligations of a state-owned electric-power distribution company, the payment risks are transferred from the utility to the government guarantor, which often has a better credit profile. This reduction in risk enables private sector investors to be satisfied with lower returns, in line with the risks, and hence lower the cost of funding. For similar reasons, government guarantees, when added to a well-structured project, can increase the number of firms that bid to implement the project. This added competition can also help lower the cost of the project.

In short, government guarantees can:

- Enable a PPP project to receive commercial financing when it would not have done so without the guarantee;
- Increase competition in bidding for the opportunity to execute a project by lowering the project's risk profile, thereby expanding the investors' base;
- Increase the amount of financing available to the project;
- Lengthen the tenor of financing; and
- Reduce the cost of the project's financing.

Risks of Government Guarantees

Although guarantees can bring many benefits, they also come with a number of risks for the government issuing the guarantee. Such risks and how to mitigate them are discussed throughout this guidance book, but they are also briefly summarized below:

a. Moral Hazards

Certain guarantees that are extremely broad, such as financial guarantees described above, could reduce the overall benefit to the government by requiring payouts when the risks covered by the guarantee should be private sector risks. Broad or excessive guarantees may also create a moral hazard scenario, whereby the incentive for private investors to be efficient in performing their obligations is reduced because they no longer have as much at stake. Similarly, it is argued that guarantees may reduce the investors' and

¹¹ Marsh & McLennan Companies' Asia Pacific Risk Center 2017.

¹² OPIC et al.

lenders' incentives to screen projects carefully and perform adequate due diligence, because lenders may not scrutinize the project as they would have in a classic non-recourse project financing. In practice, this is rarely the case, because reputable lenders that finance infrastructure projects usually perform thorough due diligence rather than rely exclusively on a guarantee, but the moral-hazard risk remains.

b. Fiscal Risks

As noted by the International Monetary Fund (IMF), guarantees are a form of government intervention and thus are likely to alter the incentives faced by the private sector and other public sector entities due to market failures.¹³ Fiscal risks refer to potential adverse impacts on the financial position of a public body as a result of factors that affect the performance of a PPP project.¹⁴ Due to the difficulty of predicting when guarantees are called and the size of the payout, guarantees are not usually subject to the same degree of scrutiny through the budget process as regular spending. This makes it difficult to verify that a guarantee is the best fiscal policy instrument to meet a particular objective. When guarantees are called, often there is not ready funding for them in the current budget. These problems are magnified when a government gives guarantees to multiple projects and an economic crisis triggers the payment provision for all of the guarantees simultaneously, when the government's budget is already strained. As noted by the IMF, history has shown that different types of crises—currency, banking, and fiscal—tend to be triggered by one another, and the government must honor not only explicit contingent liabilities, but also implicit ones, such as backstopping SOEs or supporting the country's banking system.¹⁵

BOX 2

Risks of Broad or Excessive Guarantees

To support the development of the San Jose Lagoon Toll Bridge project, built to relieve congestion in San Juan, Puerto Rico, the government assumed most of the commercial risk of the project. In addition to agreeing to buy back the project at the concessionaire's request if traffic levels were less than 80 percent of the projected demand, the government would pay a 13-percent return on its investment as well as reimburse the concessionaire for project costs. This gave little incentive to the concessionaire to conduct due diligence on the quality of the project.

Source: World Bank 1997.

BOX 3

Fiscal Risk Associated with Guarantees

Sha Jiao B power plant in China is an example of excessive guarantees provided by the government to Hehe Power Ltd. of Hong Kong to attract private capital. Guarantees covering raw-materials supply, operating revenue, and foreign exchange rates caused the government to assume the majority of the project risk, which ended up costing HK\$16.8 billion for exchange-rate losses and YCNY 4.7 billion for fuel-cost escalation losses, while the private investor's internal rate of return during the concession period reached 38.8 percent.

Source: Xu et al. 2014.

¹³ Cangiano et al. 2006.

¹⁴ Monteiro 2007.

¹⁵ Hemming 2006.

Mitigating some of these risks starts with thorough sector planning, project prioritization, assessment, and preparation, so that only the most viable projects with adequate risk allocation go to market. Alongside a PPP program, there should be a sector-strengthening program, to ensure sector sustainability across the value chain, so that the sector can withstand the payment obligations under the PPPs. At the same time, government guarantees should be carefully structured to provide only the minimum to make projects bankable, ideally through the coverage of a limited number of specific risks that depend on the types of projects, sources of financing, and the political, economic, and financial market conditions of the host countries.

Furthermore, governments should consistently reevaluate the need for a guarantee in the case of each new project, with the aim of gradually reducing guarantees as the country's macro conditions improve, markets mature, and investors get more comfortable with the country's risk profile (see Case 1.2: Evolution of Government Guarantees in Peru). Finally, transparency is the key to managing contingent liabilities well, and countries should set up systematic reporting, accounting, disclosure, and valuation procedures on guarantees and all contingent liabilities, in order to manage the risks appropriately from fiscal perspectives. For more on the management of fiscal risks associated with government guarantees, please see Chapter 4.

1.5 GUARANTEES VERSUS OTHER FORMS OF GOVERNMENT SUPPORT

Guarantees are only one form of government support. There are others, including subsidies such as capital grants or financial viability support (either upfront capital subsidies to help cover a portion of the construction costs, or ongoing payment to reduce operations and maintenance [O&M] costs), in-kind grants, capital injections, and government equity investments into joint-venture structures to lower the project costs. Which type of support to select depends on the objectives the government is trying to meet, or the market failure the government is trying to correct. For instance, if the objective is to promote a project with positive socioeconomic benefits (for example, education or health care), or to assist poor consumers of a particular service (for example, rural electrification or local transportation), in most cases, a targeted or output-based subsidy will achieve that objective better than a guarantee, because it is more directly related to the objective.¹⁶ Similarly, if the objective is to circumvent a difficult policy or regulation, governments should consider changing the regulation or policy instead, which would be the fundamental solution to mitigate the risk.

Governments should carefully assess the pros and cons of each type of subsidy (including by modeling the associated costs, benefits and risks,¹⁷ and doing market soundings as needed) and deploy the most strategic government support that will allow them to achieve their goals. For example, a government grant, such as viability gap funding or government-funded capital expenditures, may attract private sector financing by increasing the internal rate of return for the investor. Having a government grant in the project may also have the added benefit of providing lenders with a show of the government's commitment to the project. Therefore, if the objective is to attract potential investors by increasing investor returns, a grant or other upfront capital injection (such as equity participation) may be the most straightforward method of doing so, but it requires the government to have the resources upfront. It also could be a larger overall government outlay, versus a guarantee that may never be called.

¹⁶ Hemming 2006.

¹⁷ For more details on how to assess various support instruments, see Irwin 2003.

Guarantees are best used to attract private financing in projects where there are certain risks that are under the government's control, such as political and regulatory risks that cannot be absorbed by the market through pricing or insurance. Governments must be mindful of the pitfalls of government guarantees that are discussed in this book, and only use a guarantee when it is the best option to achieve their overall objective.

1.6 GOVERNMENT GUARANTEES IN THE PPP PROJECT CYCLE

Considerations about government guarantees should begin at the project identification, assessment, preparation, and structuring phases, based on risk assessment, risk allocation, and market sounding. It is important that a clear process for prioritizing needed projects and assessing their suitability for private financing is in place, with appropriate approvals, checks, and balances.¹⁸ Before a government guarantee is contemplated for a given project, it should have demonstrated a strong strategic or economic case in the context of long-term sector planning and development goals, value for money, financial viability, and affordability, all of which will ensure that the project is likely to succeed, and is, therefore, less likely to require a guarantee or to result in a guarantee's being called. Having an adequate sector framework, with planned sector reforms, if necessary, will ensure the program's long-term sustainability.

Once a decision is made to procure a project as a PPP, the project must be carefully prepared and structured. Structuring a PPP project means allocating responsibilities, rights, and risks to each party in the contract.¹⁹ Technical, financial, and legal due diligence is required at this stage to identify the risks and to model the optimal financial structure to achieve the returns required, while minimizing costs. The precise risk allocation will be set forth in the PPP contract.

As part of this structuring, the nature and scope of government support, including government guarantees, if any, should be determined. It is important for such government support to be considered at this initial stage, along with the overall project, and for the rationale for such support to be clear. If the government decides to provide a guarantee for a given project, it should be made available to all the potential bidders upfront. Including a government guarantee can help increase interest from the private sector and increase the number of bidders, helping the government get a more competitive result. Good practice also calls for the MoF to play a central role in the review and approval of the structure that may require fiscal support, including the decision about whether a guarantee should be issued. Coordination among the various responsible agencies and departments is key, as is the MoF's ultimate role as the "gatekeeper" for any fiscal costs—contingent or otherwise—arising from the project. For examples of effective management of PPPs and the liabilities they create, see Chapter 4.

The structure, including any government support, must be communicated to bidders when the bid documents are issued, so that any value from such support can be priced into the bids. The government should conduct market soundings before the tender process to ensure that the project as structured will attract sufficient investor attention, and to understand if any additional requirements are needed. Failing to do this exposes the government to the risk that, after putting a project out to bid or otherwise seeking private participation, the project sponsor or its lenders will come to the government near the end of the development process and demand an unreasonable government guarantee or other form of support in order to continue. At this point the government may have made substantial expenditures itself and may have a significant reputational risk if the project fails, but providing such support at such a late stage runs the risk that it will be considered a fundamental change to the risk allocations of the bidding parameters with wrong price and trigger a mis-procurement. Therefore, upfront work on structuring is crucial to ensure that investors' concerns are addressed and that the risk allocation is appropriate.

¹⁸ Additional resources on the enabling environment for PPPs, planning, prioritization, and project selection can be found in World Bank 2017a.

¹⁹ World Bank 2017a.

CASE 1.1

PERFORMANCE GUARANTEES THROUGH IMPLEMENTATION AGREEMENTS IN PAKISTAN

When the electricity market was liberalized in Pakistan in the 1990s, several early independent power projects (IPPs) used a broad performance guarantee from the government to obtain financing. Such guarantees were issued by the president and covered the payment obligations of the electricity utility under the PPA, and of the state oil company under the fuel supply agreement. Specifically, the guarantee stated:

“Guarantor [in this case, the President] hereby irrevocably, unconditionally and absolutely guarantees the Project Company due and punctual performance of all the terms, conditions and covenants on the part of Government Authorities or Contract Parties contained in the various Project Agreements and undertakes to procure performance of the respective obligations thereunder, including the payment obligations of the Contract Parties as and when such payment obligations are due in accordance with the terms of each of the Contracts.”

It is important to note several elements of this guarantee language. The first is that the guarantee is irrevocable and unconditional. The government cannot change the guarantee once it has been signed. The second is that the guarantor must procure performance of the obligations, including payment obligations (which may include compensation resulting from lack of performance on the part of the government). For example, if it is the government’s obligation to supply fuel to a certain place at a certain time, and it fails to do so, the government must pay the compensation if the contracting agency does not pay. Finally, the third item to note is that the government is undertaking to “procure” performance, including payment obligations, when they are due (though the definition of when a payment is “due” may be subject to dispute resolution).

The specific performance obligations guaranteed included fuel supply obligations of the state-owned companies; a reference levelized bulk tariff of 5.6 cents per kilowatt hour (based on 60 percent capacity); indexations of variable cost elements (fuel price, foreign exchange rates, and inflation); exemption from corporate income tax and other duties; and free repatriation of profit. In exchange, the private developer had to design, finance and construct the plant on time and on budget, and keep it operating, maintained, and supplying a specified amount of electricity. This package was successful in attracting foreign investors to the IPP program, and 16 IPPs were commissioned from 1997 to 2001, totaling almost 6,000 megawatt (MW) of installed capacity. A total of \$5.3 billion was invested, with the World Bank Group having partially financed 11 of the IPPs.

Thus, the government guarantee was instrumental in launching the IPP program in Pakistan (where tenors for financing at the time of the IPP program were only 18–36 months, due to the level of perceived risk in the country). However, the number of IPPs issued with guarantees in such a short time warranted more scrutiny of the contingent liabilities that could arise from the guarantees. For example, as previously mentioned, the guarantee included an indexation of foreign exchange rates and a guarantee of repatriation of foreign currency. Given the number of projects, this meant that incremental foreign exchange outflow was about \$800 million per annum, equivalent to 8 percent of Pakistan’s exports. Upon reviewing the lessons learned, the World Bank noted that the government of Pakistan should have reserved the guarantee only for the highest-priority projects and ensured that such projects were affordable, both individually and collectively.²⁰

²⁰ Fraser 2005.

CASE 1.2

EVOLUTION OF GOVERNMENT GUARANTEES IN PERU

Experience with successful PPPs within a country can, over time, lead to reduced need for broad government guarantees. The government of Peru's proven track record led to a reduction in the level of direct government support for the Lima Metro Line 2 (2015), compared to the financing of the Amazon North Highway (2005).

The Amazon North Highway involved the building and maintenance of a 964-kilometer national highway and was a priority project from the Integration of Regional Infrastructure in South America (IIRSA) initiative. Due to the low projected daily traffic counts, the project was structured with the government making annual payments to the concessionaire to cover part of the investment, operation, and maintenance costs.²¹

For this project, the scope of the guarantees provided was quite comprehensive. Roads were divided into segments and, as construction milestones were achieved, the government issued "payment obligation certificates" (Certificados de Reconocimiento de Derechos de Pago Anual por Obras [CRPAOs]), which are unconditional annual payment obligations of the government of Peru that could be assigned to third parties (allowing for their use as security in the issuance of bonds).

The winning bid for the Amazon North Highway project was selected based on the lowest government subsidy requested. This subsidy involved two elements: the present value of the sum of the required PAO (annual payment for works) and PAMO (annual payment for O&M). The difference between the collected tolls from the eight collection toll road plazas distributed along the highway and the annual requested PAMO payments of the winning bidder were paid by the government throughout the lifetime of the concession. Over time, the program has been criticized for placing more risk than necessary on the government, and suggestions have been made for scaling back the scope of the guarantees.

The \$5.8 billion Lima Metro Line 2 project, awarded in 2015, shows a progression towards a more balanced risk allocation. The complex greenfield underground urban rail project bundled the design, construction, operation, maintenance and supply of equipment, systems and trains for 35 kilometers of a metro line.²² For this project, the concessionaire assumed the risks of design, construction, and operational performance, while the government of Peru assumed the risks related to land acquisition and resettlement, unknown geological conditions, demand, and force majeure.

The project also utilized a form of contractual payment obligations of the granting authority, Retribuciones por Inversiones según Certificado de Avance de Obras (RPICAOs), milestone-linked payment certificates that represent the payment obligations of the Ministry of Transport and Communications used to mitigate construction risk.²³ RPICAOs, unlike CRPAOs, involve the government of Peru acting as a guarantor of the payment obligations of the entity commissioning the project, rather than as a direct obligor. The payment obligations are funneled through a master trust funded with taxes, and the government of Peru is only obliged to pay any shortfalls, thus limiting the government's risk exposure. For more on Peru's current approach to limiting contingent liabilities in PPP projects, see Case 4.1.

²¹ World Bank 2012.

²² Inter-American Development Bank and World Bank 2016.

²³ Pulido et al. 2018.

CHAPTER 2

SCOPE OF GOVERNMENT GUARANTEES

As noted in Chapter 1, structuring a sustainable PPP project requires appropriate risk allocation between the private and public sectors.²⁴

The role of the government and the possible need for government guarantees vary across sectors and types of concessions. For example, in airport and seaport projects where there are often strong project economics with foreign currency revenues, the private sector's need for government guarantees may be limited to political and regulatory assurance on issues such as changes to laws, taxation, regulations, nationalization, and early termination of the concession. In the power sector, when the government provides a payment guarantee to cover a utility offtaker's payment obligations under a PPA, the government guarantee may be seen as analogous to a sponsor guarantee, because the government is the ultimate owner/shareholder and controller of the utility SOE. As a result, the guarantee in this instance can be viewed as in a commercial capacity, although the distinction is rarely that clear, because the government still has regulatory power over the sector, the utility offtaker, the private sector investors, and other key players.

It should be noted that some middle-income countries may feel that the issuance of guarantees reflects a weak credit standing or perceived inability to pay and therefore may resist them. Using guarantees is merely a form of credit enhancement to make projects financially viable and does not necessarily imply that the government or the contracting agencies/counterparties are not credible or that political risk is high. It is also worth noting that there are instances where even developed countries use guarantees strategically to lower the cost of financing of certain infrastructure projects. Developed countries such as the United States or the United Kingdom have used guarantees to, for example, improve the terms of financing, (i.e., longer tenor and better pricing), encourage private financing for innovative technologies such as renewable energies, or provide market stability, liquidity, and continuity after a financial crisis.

The rest of this chapter will examine the typical risks involved in a PPP project as well as possible government guarantees covering such risks.

²⁴ For more on standard risk allocation in PPPs, see Global Infrastructure Hub 2016.

2.1 RISKS THAT SELDOM REQUIRE GOVERNMENT GUARANTEES

Before examining the risks that might require a government guarantee, it is useful to discuss the risks that should not require such a guarantee, because these should remain private sector risks.

a. Construction Risk

One of the most serious risks for any project is construction risk—the risk that the project cannot be built on time, at its expected cost, or that it will not operate as expected, or have unforeseen environmental impacts.

When it comes to construction risk, governments may affect the cost, quality, or time of completion through certain policies and regulations, such as those relating to labor, local content, and licenses and permits. In most jurisdictions, governments are also viewed as responsible for land acquisition or completion of associated infrastructure (such as power connection points or access roads), which are frequently a major bottleneck affecting the construction cost, scheduling and completion deadline for PPP projects in EMDEs. To mitigate land-acquisition risk, investors will often require the land to be acquired by the government before construction starts.

Following the principle that “risk should rest with the entity best placed to manage it,” other construction risks are ideally passed through to the contractor, through the engineering, procurement and construction (EPC) contract, pursuant to which the contractor will design the project; procure the necessary machinery, equipment, and materials; and carry out the construction for a fixed price, with a guaranteed in-service date. The EPC contract also contains guarantees by the EPC contractor with respect to the output, availability,²⁵ efficiency, and environmental compliance of the project. It is important to note, however, that not all risks are passed through, otherwise the EPC contract cost would be too high.

A project site’s unknown geological or historical features, which may cause unpredictable increases in the project cost, will in certain circumstances remain the responsibility of the government. For example, Colombia’s 4G Toll Road Concession Program requires the construction of a significant number of tunnels. The construction cost of many of these tunnels is difficult to estimate with sufficient precision to enable the construction contractor to assume 100 percent of the risk for a price that appears reasonable to the government. Accordingly, the government of Colombia provided a guarantee that covers a portion of the additional costs incurred as a result of geotechnical risk. Another instance where this type of government guarantee might be appropriate is construction of a dam to generate hydroelectric power. As in the case of tunnels for a toll road, the geological features of the site might be sufficiently uncertain, making it difficult for the construction contractor to incorporate all of this risk in its EPC contract. Additionally, when the government provides part of the assets or contributes existing assets, it has to warrant the condition of those assets, which is similar to taking construction risk on that portion of the assets. However, the fact that there are private sector solutions for many of the construction risks means that government guarantees are normally not needed to cover them, except in the cases described above.

b. Sources of Inputs

For many infrastructure projects, there is a need to ensure a steady supply of the inputs required for the project to operate. This is critical to a reliable revenue stream as well as reliable services. Examples include fuel for electricity generation projects, raw water for water treatment plants, and gas for district heating or gas pipelines.

²⁵ “Availability” is the percentage of time the project is available to operate, whether or not it is actually called on to operate. For example, after taking into account the time required annually for maintenance, a gas-fired electric-power generating plant might have an availability of 92 percent—that is, it can run, if called upon to do so, 8,059 hours out of the 8,760 hours in a year of 365 days.

For many sources of inputs, the availability of the inputs can be determined through expert modeling and is considered a commercial risk. For example, the required inputs for renewable-energy projects—water, sunlight, wind, or geothermal resources—are provided by nature, so assurance for their availability typically does not call for a government guarantee.²⁶

However, where the supply of inputs is managed by an SOE, the government may guarantee the availability of the supply to cover the risk of delays in delivery or the risk of the inputs not meeting certain quality standards or specifications (such as gas pressure). This is normally covered under a supply agreement, whereby if the input is not delivered on time and to specifications, it will be deemed a compensation event. As noted below, in such instances, guarantees become linked to the payment obligations of the SOEs and are important if the SOEs lack track records or are not credit worthy.

c. Operational Risk

For projects in which operations remain with the private sector (e.g., BOO [build-own-operate] and BOT [build-operate-transfer] models), operational risk is one of the key risks transferred to the private sector in a PPP. Performance standards are usually set out in the contract, and the private operator will agree to these standards ahead of time, be responsible for delivering or performing according to these standards, and find efficient means of meeting those standards (and resolving any issues that arise). In some cases, a private party may also sub-contract operations to another service provider, particularly in cases where another provider is better able to manage the risk (such as subcontracting equipment operation to an equipment manufacturer). Because there are usually private sector solutions for operating risks, government guarantees are usually not needed for such risks (except when it comes to demand risks, as discussed in Section 2.2 below).

2.2 RISKS OFTEN MITIGATED BY GOVERNMENT GUARANTEES

As discussed in Chapter 1, government guarantees for PPPs are typically performance guarantees, which are conditional upon certain triggers and link to underlying concessions or PPP contracts. The following risks are often mitigated with the guarantees noted below; each risk and guarantee is discussed in more detail further down in this section:²⁷

Political and regulatory risk is often mitigated with the following guarantees:

- Protection from political violence, war, or civil disturbance;
- No introduction of new laws or changes to existing laws that will have a material adverse effect on the project;
- No expropriation/nationalization of the project without full compensation (at a minimum, the repayment of the project loans and related costs);
- Non-discriminatory application of the government's taxation or legislative powers, guaranteeing the authority will not discriminate against the project and/or the project company on an individual basis; and
- Permits and consents granted to the project company if it complies with the concession agreement.

²⁶ It is possible that a project might need a commitment from the host government that it will not divert water flow in a way that would negatively affect a hydroelectric generating project.

²⁷ Dentons 2013.

Revenue and demand risks are often mitigated with the following guarantees:

- Minimum-revenue guarantees, and
- Guarantees on availability or capacity payments.

Foreign-exchange risk is often mitigated with the following guarantees:

- Availability of foreign exchange to the project company to fulfill debt-service obligations;
- Foreign currency exchange rates; and
- Exemption from exchange controls.

Payment risk of a subnational, SOE, or government ministry is often mitigated with the following guarantee:

- Guarantee of payment obligations under the primary contract.

Early-termination payment risk is often mitigated with the following guarantee:

- Guarantee of termination payments under the primary contract.

It should be noted that, if a government chooses to develop the project through public funding or through an SOE, many of these risks would still exist and would likely be covered through an implicit guarantee to the SOE or ministry developing the project. The difference in the case of a PPP is that there is a private sector third party, and therefore the risk allocation must be clearly set out up front. The following sections explain details of the risks that may require a government guarantee to satisfy the concerns of project sponsors or, more likely, project lenders.

2.2.1 POLITICAL AND REGULATORY RISK

Political and regulatory risks include losses resulting from war and civil unrest; political violence; terrorism; political and economic instability due to elections or changes in government policy and laws; expropriation; and regulatory changes.

Political and economic stability is a concern in many EMDEs, where there may be dramatic shifts in the control of governments, brought about by electoral changes, violence, or military coups. Such changes in control of the government are naturally followed by changes in government policies, including those that affect infrastructure sectors. In other cases, major policy changes may be implemented by an existing government in response to advice from MDBs or development partners and advisers, or simply because top officials have decided that a change is needed. Common types of regulatory changes that may severely affect a project's rate of return include changes to taxation, currency, trade policies, foreign investment, tariffs, tolls, or other consumer charges, and environmental regulation, as well as the granting, extension or renewal of licenses, approvals or consents. Although expropriation without appropriate compensation—the physical taking of a project from the private sector for the public interest—has become rarer in recent years, changes in policies and laws may amount to indirect expropriation, which has a similar effect without the government's taking actual possession of the assets.

Pricing regulation is a particularly sensitive topic, because certain infrastructure services (particularly electric power and water) are often set below cost-recovery for political reasons, with tariffs being determined by a government or regulatory body. Regulatory bodies may not be independent of the political ministries, or, if nominally independent, may still be subject to political influence. In situations where the government is able to implement reforms by establishing regulations that permit infrastructure service providers to operate on a full cost-recovery basis, lenders and investors may fear that these policies will be reversed by a change in government. A track record of several years of maintaining appropriate policies is typically necessary to give lenders and investors confidence that these policies will remain in place.

Another sensitive area is taxation—most governments will object strenuously to losing the ability to impose future taxation policies. Similarly, governments do not, as a rule, like to agree to stipulations that they cannot change laws. Where a government refuses to agree not to change its laws, it may agree to compensate a project for the adverse consequences of a change in law. Another compromise is that the host government may agree to such constraints on its powers on a non-discriminatory basis, i.e., it will not, in exercising its taxation or other legislative powers, discriminate against the project and/or the project company on an individual basis.²⁸

The risk of these types of policy changes motivates project sponsors and their lenders to pursue assurances from the government in the form of guarantees or other support.

Guarantee of Political and Regulatory Risks

In response to many investors' concerns about political and regulatory risks, the host government may undertake to offer guarantees targeted only to risks such as political violence, war, or civil disturbance; currency inconvertibility and transfer restriction; expropriation; and changes of laws or regulations. Whereas most standard PPP contracts have mechanisms for compensation for these risks, an explicit risk guarantee may be seen as providing additional protection. Regulatory risks are seen as within the government's control, although of course governments must balance a multitude of agency, policy, and political considerations when making their decisions and thus may not always be able to prevent the circumstances that would trigger a call of the guarantee.

A political risk guarantee can cover several aspects of a regulatory regime. For example, it can promise that the infrastructure service provider may adjust prices at certain intervals based on a specified formula (so that it may charge different amounts for different classes of customers), or that its required service standards may not be changed by the government or the government's regulatory bodies. Unlike some types of guarantees where the terms are relatively standard, political risk guarantees are individually negotiated, with the factors covered by the guarantee being determined by the concerns of project lenders and investors.

In the case of IPPs in Kenya, the government was able to structure and negotiate a letter of support limiting the government undertakings to political force majeure events (see Case 2.1: Kenya IPPs: Limiting Government Undertakings to Political Force Majeure).

2.2.2 REVENUE AND DEMAND RISK

Risks of market, demand, or revenues relate to the usage of an infrastructure facility and whether there is high enough demand and sufficient usage charges (e.g., tariffs or tolls) to generate adequate revenues to support services contracted to the private sector. Whether demand risk is taken by the government or the private sector often depends on the project and sector-specific factors.

In well-developed private markets, such as wireless information and communications technology (ICT) networks, it is entirely appropriate for the private sector to take all demand risk. In electricity generation, the private sector would take the demand risk in a liberalized market but may expect a take-or-pay contract (in which a set amount of power produced must be purchased by the offtaker, regardless whether or not the offtaker can sell the power to consumers) in the case of a monopoly state-owned offtaker, because the power producer cannot sell the power to another buyer. Investors tend to feel more comfortable assuming demand risks for airports and seaports, which usually already have a few anchor customers in mind before being built, or brownfield road projects where there are established traffic patterns and data. By comparison, greenfield-road, passenger-rail, urban-transit, and water-and-sanitation projects have significant demand risks, because their demand forecasts tend to be less reliable.

²⁸ Dentons 2013.

TABLE 2.1
Global Transport Projects, 1990–2018

	TOTAL PROJECTS	CAPITAL SUBSIDY	AVAILABILITY PAYMENT AND/OR REVENUE SUBSIDY	REVENUE GUARANTEE
Roads	1,165	341	38	35*
Percentage		29.27%	3.26%	3.00%
Airports	210	4	1	1
Percentage		1.90%	0.48%	0.48%
Ports	616	6	0	4**
Percentage		0.97%	0%	0.65%
Railways	276	17	3	5***
Percentage		6.16%	1.09%	1.81%

Source: PPI Database, World Bank.

Notes: * Other guarantees include one debt guarantee, one interest rate guarantee, and one payment guarantee.

** Other guarantees include one debt guarantee.

*** Other guarantees include one construction cost guarantee and one tax credit.

Therefore, investors in certain projects may be hesitant to assume demand risks and often require government support (see Table 2.1). This support may come in the form of a guarantee of the take-or-pay clause, a minimum revenue guarantee (MRG), an availability payment, or another subsidy, such as a capital and revenue subsidy (for an example of a minimum revenue guarantee, see Case 2.2: Minimum Revenue Bands to Mitigate Demand Risk in Brazil). It should be noted that MRGs can also be structured where the upside is shared between the government and the private investor, if the demand is higher than expected. Usually, this is determined by specifying a certain threshold—such as a certain return on equity—in the contract. This would allow the government to counter some of the risk in MRGs, particularly across a portfolio of projects, by allowing the more successful projects to subsidize the less successful ones.

Another option available to the host government to mitigate demand risk is its ability to extend the concession period if demand is less than expected. While this method may eventually allow an equity sponsor to meet a certain return on its equity, for lenders, whose loans must be repaid within a specified period of time, it may be a less attractive option. However, in countries with well-developed financial and capital markets that make the refinancing risk lower, it becomes a viable solution.

A risk closely related to demand risk is the impacts of technological change, which are posing new challenges for long-term PPPs. For example, landline telephone networks used to be considered a sector with steady and constant demand but have now been largely replaced by wireless communications. Similarly, although electricity supply is still largely grid-based, the rapidly decreasing cost of alternative energy sources is threatening traditional generators' economic competitiveness and creating certain renegotiation pressures. In some cases, power plants may become “stranded assets” before completion of their expected lifecycle, due to the ascent of alternative energy. Technological changes have posed new challenges for both governments and investors when negotiating project agreements for new energy projects.

Guarantee of Revenue and Demand Risks

Although not all toll roads, urban transit or rail systems will need revenue or demand guarantees, such guarantees are most commonly seen in these sectors. A government guarantee of a certain minimum level of usage, or of a minimum level of revenues, may be necessary for the project to obtain financing, because lenders tend to shy away from greenfield demand risk. With road projects, the government may provide an MRG or simple availability payment to reduce the risk of insufficient revenue as a result of traffic falling short of the forecast level. While an availability payment is not technically a guarantee, it often functions in a similar manner to reduce a specific risk—in this case, demand risk. However, because the risks that are addressed by the guarantee are largely beyond the government’s control, governments should provide such guarantees with extra caution. For example, if demand projections are not sufficient to attract investment without a guarantee, governments should first determine whether there is a strong enough economic case to move forward with the project before resorting to providing a revenue guarantee (see Case 2.3: Minimum Revenue Guarantees in Seoul’s Metro Line 9, and Case 2.4: Risks of an Overly Optimistic Demand Forecast in Spain).

In the energy sector, as noted above, where there is a single monopoly utility or offtaker, there may be a PPA with a “take-or-pay” arrangement in which the offtaker essentially promises to purchase a minimum capacity generated by the project. If the utility is not seen as credit-worthy, lenders will often request a government guarantee to cover such payment obligations of the utility. Electricity use is also dependent on certain infrastructure beyond the project’s control, such as a transmission and distribution network capable of handling the increased capacity, while the price or tariff is often highly regulated. Governmental assurance that such infrastructure will be available when needed may be necessary for a bankable project. A government must carefully model the demand in energy consumption when signing PPAs, to ensure that they will be able to use the electricity generated across the portfolio of PPAs to avoid a situation where they are paying for more electricity than they need. In fully liberalized electricity markets where there are no long-term take-or-pay PPAs, demand risk becomes the project developer’s risk.

2.2.3 FOREIGN EXCHANGE RISK

Ideally, infrastructure projects should be financed by local financial markets in local currencies; this avoids the risk of a currency mismatch between local currency revenues and foreign currency debt-service requirements, arising when a project is financed with hard currency loans. Domestic investors or developers typically also have a relatively higher risk tolerance than foreign investors, given their knowledge and familiarity with local political, economic, and market conditions and institutions. However, EMDEs typically have domestic financial markets that cannot provide all of the financing required by infrastructure investment needs. This failure stems in part from a lack of capacity because of a low level of domestic savings and difficulty in attracting deposits and investments from foreign sources. As a result, domestic financial institutions often cannot provide sufficient long-term, fixed-rate financing in local currency that is needed for infrastructure projects.

Thus, it remains the case that much infrastructure is financed with foreign currency debt. In some projects, mainly relating to international commerce or cross-border transactions, revenues may be denominated in hard currency, which is compatible with the financing. This is often true for airports and ports, for example, as well as freight rail, gas pipelines, and cross-border hydroelectric plants. However, most infrastructure projects provide domestic services, where revenues are likely to be in local currency.

In such cases, there is a risk that the local currency will lose value over time against the foreign currency in which debt service is denominated, such as U.S. dollars or euros, which means the revenues generated by the project may be insufficient (when converted to foreign currency) to pay its debt service.

The probability of depreciation can be relatively high, depending on a number of factors. Most EMDEs have inflation rates that are higher than the rates in Organisation for Economic Co-operation and Development

(OECD) countries. As a result, EMDE exchange rates depreciate in nominal terms on a relatively consistent basis. Fluctuations in a country's foreign exchange rate may reflect changes in the government's macroeconomic policies—for better or worse—but they may also stem from economic factors beyond the government's control, such as changes in the market prices of export commodities.

In addition to depreciation of local currency, two other key risks are associated with foreign currency financing—the risk of inconvertibility (local revenues cannot be converted into foreign currency) and the risk of repatriation or transfer (e.g., foreign currency is not permitted to be transferred outside the host country). As currencies depreciate, central banks may try to control the ability to convert or repatriate the currency in order to stabilize exchange-rate fluctuations and prevent a full-on crisis. Foreign investors will want to seek protection from such events, such as through a government guarantee, hedges or political risk insurance if available.

Facing depreciation or devaluation of the local currency, a government has the option either to pass the increased costs of hard currency-denominated items such as debt service or imports through to the public or to have them be absorbed by the distribution entity. Passing these costs through to the public may be economically difficult and will certainly be politically unpopular. If the distribution entity is a private sector firm, it will be unlikely to take this risk. If the distribution entity is a government agency or SOE, its ability to absorb these costs will be determined by the financial resources of the government and the willingness of the government to subsidize the distribution entity. Thus, managing foreign currency fluctuations for inputs, outputs, and debt servicing is a major concern when attracting investment. (For an example of this, see Case 2.5: Evolution of Foreign Exchange Guarantees in Vietnam.)

In some cases, hedging instruments are available to mitigate foreign exchange risk through market mechanisms, but these hedging instruments are available primarily in developed economies. In most developing countries, such hedging instruments do not exist because market makers cannot hedge their risk by finding the “opposite side of the transaction,” which is a party with access to foreign currency that is willing to make a long-term commitment to exchange it for fixed amounts of local currency. In such instances, the government may be requested to provide a foreign exchange guarantee.

Guarantee of Access to and Remittance of Foreign Exchange

Although political risk insurance for the transfer and convertibility of local currency into foreign currency is broadly available, an alternative is a guarantee by the host government of access to and remittance (or transfer) of foreign exchange. “Access” refers to the unlimited exchange of local currency into foreign currency, and “remittance” (or transfer) means the ability to take such foreign currency out of the country. The larger the government's foreign exchange reserves and the more consistent the country's foreign exchange earnings, the less need there is for such a guarantee. On the other hand, if the host government appears to have a low level of foreign exchange reserves in relation to potential demands, and low or inconsistent foreign exchange earnings, the demand for a guarantee will increase, but so will the risk to the government if it provides such a guarantee. The guarantee will represent a prioritization of foreign exchange reserves in favor of the guarantee holder. For the guarantee to be credible, the amount of foreign exchange that might need to be provided pursuant to the guarantee must be evaluated against the government's foreign exchange reserves. Another way in which governments can provide assurances of access to foreign exchange when a government ministry is the project's counterparty is to agree to make payments due to the project in foreign exchange to an offshore account.

Guarantees of Foreign Exchange Rates

Guaranteeing foreign exchange rates can be very risky for the government because the government is essentially underwriting the currency-devaluation risk, which, as noted above, can be well beyond the government's control. For this reason, guarantees of foreign exchange rates by a government are rare on a stand-alone basis but may be implicitly imbedded in the concession or PPP contract (where the governments' payment obligation is specified in hard currency), or included as a component of a broader guarantee. A foreign exchange rate

adjustment may be inherent in the agreement whenever the infrastructure project must purchase inputs such as fuel in the international market and these costs are passed through to an SOE or other agency. Similarly, there may be contractual terms that directly adjust a significant portion of the price paid by the contracting agency for project outputs to reflect changes in the foreign exchange rate (or index the payments to the foreign exchange rate upfront, as had been the case with many PPAs). These provisions are typically designed to ensure that the amounts paid by the contracting agency in local currency will, when converted into foreign currency, be sufficient to enable the project to cover debt service denominated in foreign currency and to meet the project sponsor's expected return on equity. Another example is an MRG in foreign currency, which is essentially a foreign exchange guarantee. Governments typically do not consider it as such, because it is not called a foreign exchange guarantee.

Guarantees of foreign exchange rate adjustments provided by a MoF have an excellent record of being honored, but many of the governments that provided them have later said that they would not do so again²⁹ (see Case 2.6: Risks of Foreign Exchange Rates Guarantees Embedded in PPAs).

Guarantees that local currency revenues can be converted at specific foreign exchange rates and guarantees of payment in foreign currency are one of the riskiest guarantees that a government can provide and should be carefully balanced with the need to attract foreign currency financing where local currency markets are limited and the local currency is weak. Over time, governments should also focus on improving their domestic financial markets, to reduce the reliance on foreign currency financing.

2.2.4 PAYMENT RISK OF GOVERNMENT MINISTRIES, SUBNATIONAL GOVERNMENTS, OR SOEs

When infrastructure services are concessioned to the private sector by a government ministry or agency, subnational government, or SOE as contracting agency, the PPP or concession agreement will include certain payment obligations of the contracting agency. In some instances, private investors will prefer to have the MoF guarantee the contracting agency's payment obligations under the contract. Although an implicit guarantee may already exist, given the relationship between the agency or SOE and the sovereign, investors will often prefer such a guarantee to be in writing, allowing direct recourse to the MoF.

A common form of payment obligation is that of an output purchaser. If a project, such as an electric-power generating plant or a water treatment plant, is to receive revenues from sales to an entity that owns the distribution network, the credit quality of the entity or counterparty that purchases the project's output is a critical factor in determining whether the project will attract equity investors and debt financing. Often, this entity is a subnational government or state-owned utility, though it can also be a government agency. Thus, one of the risks is the payment risk of that utility under the output purchase contract. This is one of the more common risks covered by government guarantees.

In this discussion, payment risk can encompass two different risks: (a) the risk that payments will be delayed because the utility has insufficient cash or a devaluation or depreciation of the host country's currency has resulted in increased costs that cannot be passed through to the users, and (b) the risk that the utility has such poor credit strength that it will eventually not be able to find sufficient means through operating cash flow or reliable government subsidies to meet its debt obligations.³⁰ or a devaluation or depreciation of the host country's currency has resulted in increased costs that cannot be passed through to the users. In theory, the late-payment risk could be handled by increasing the project company's working capital sufficiently to cover

29 See publications by Stanford University's Program on Energy and Sustainable Development on electricity-market design.

30 The risks of bankruptcy depend on the laws of the host country and on whether the output purchaser is an SOE or a purely private company. An SOE may not legally be able to declare bankruptcy, with the government ultimately being responsible for its debts.

the delay in receiving payment; however, determining the amount of additional working capital is difficult, because the period of delay can change based solely on the actions of the SOE. Moreover, the fact that the SOE is consistently late in making payments suggests that its problems could lead to a total stoppage of payments.

An analysis of projects that closed from 1990 to 2018 indicated that payment guarantees in the electric sector were used globally as shown in Table 2.2.

TABLE 2.2
Electricity Purchases by Public Sector Entities and Payment Guarantees, 1990–2018

REGION	(1) TOTAL PROJECTS	(2) PUBLIC ENTITY POWER PURCHASER	(3) PAYMENT GUARANTEE	(2) AND/OR (3)
East Asia & Pacific	1,106	424	161	545
Percentage		38%	15%	49%
Europe & Central Asia	737	104	74*	175
Percentage		14%	10%	24%
Latin America & the Caribbean	2,019	400	111	489
Percentage		20%	5%	24%
Middle East & North Africa	101	58	26**	77
Percentage		57%	26%	76%
South Asia	778	307	170	446
Percentage		39%	22%	57%
Sub-Saharan Africa	306	136	55***	176
Percentage		44%	18%	58%

Source: PPI Database, World Bank.

Notes: * Includes 9 revenue guarantees; ** Includes 14 revenue guarantees; *** Includes 1 revenue guarantee

As can be seen in Table 2.2, for most regions, approximately 15 to 25 percent of power projects have required payment guarantees.

Guarantee of Payment Obligations of an SOE

In infrastructure PPP projects, guarantees of the payment obligations of an SOE are likely to be required where an SOE is not seen as creditworthy—for example, if an SOE is dependent on government subsidies to cover its operating costs or otherwise is not financially healthy, or does not have a track record of entering into commercial transactions with the private sector.³¹ Various instruments have been used by the government to

31 For more on the need for government guarantees based on the payment history of SOEs in Southeast Asia, see Dodd, Harrison, and Thompson 2017.

give comfort to the private sector, from guarantees to letters of comfort and keep-well agreements, depending on the needs of the private sector and how much the government is willing to commit to the projects.³²

It should be noted that, in addition to explicit guarantees backstopping SOE obligations, SOEs often enjoy an implicit guarantee as well. In some countries, SOEs cannot file for bankruptcy; if an SOE is unable to meet its obligations, the government, as shareholder, may be responsible for covering these obligations.

For an example of such mechanisms, see Case 3.1: The Evolution of Comfort Letters and Guarantees in Indonesian Electric Power Projects.

Guarantee of Payment Obligations of a Government Ministry or Subnational Government Entity

From the government's perspective, it is already directly liable for the obligations of the line ministry or agency or, in some cases, subnational government, and a guarantee from the MoF adds nothing to the government's total liabilities. However, from the private investors' or lenders' perspective, a project that provides services to the line ministry may be subject to commercial disputes that can delay payments from the ministry. A guarantee from the MoF can be structured to ensure prompt payment in the same way that a letter of credit (L/C) can provide for payment before the resolution of a dispute in a regular commercial transaction. Additionally, the MoF might be seen as having greater financial resources than the line ministry, which has a limited budget based on annual budget allocations. In the case of subnational governments, investors may need to conduct thorough due diligence before determining whether the central government would step in or bail out the payment obligations of a subnational government. This varies drastically from jurisdiction to jurisdiction, based on local laws and regulations, unless there is an explicit guarantee from the central government.

2.2.5 RISK OF EARLY TERMINATION AND GUARANTEES OF TERMINATION PAYMENTS

Early termination is a major issue and concern for governments and investors. A termination payment is the payment that the government owes to the project company when a concession agreement is terminated following the dispute resolution mechanism referenced in the concession or PPP agreement and the government takes control of the project. This can be expressly defined in the contract (now common practice) or left to dispute resolution to resolve the level of damages. Where it is expressly set out, the amount of compensation will be linked to specific circumstances, including natural force majeure, project events of default, and government events of default. The government's obligations and exposure are different under each circumstance, as determined by termination payment formulas in the concession agreement; hence, it is important that the triggers be structured carefully.

Government guarantees will be sought for termination payments in cases where private investors are concerned about the credit of the contractual counterparty, whether a line ministry, subnational government, or SOE. Therefore, termination payment guarantees are really a subset of payment guarantees. However, even without a government guarantee, termination payments represent a potentially large contingent liability for the counterparty and its guarantor and therefore represent a significant fiscal risk that needs to be managed carefully.

As discussed in Section 1.2, lenders to infrastructure projects are risk-averse and want to see their debt repaid under any circumstances. Therefore, even in the case of project-company default, debt service is usually covered by the termination payment in most PPP contracts. Governments often have a hard time understanding why they should still pay project debt when the project was terminated due to the fault of the project company. The rationale is that the remaining asset is still the government's to keep and re-tender, and the revenues from

³² Keep-well agreements between a parent company and subsidiary typically contain provisions whereby the parent agrees to maintain a given level of equity in the subsidiary or agrees to ensure that certain financial ratios are maintained by the subsidiary. Unlike a guarantee, a keep-well agreement does not create a legal obligation on the part of a parent to honor a subsidiary's debts.

the asset will remain in the government's (or new concessionaire's) hands. Without a termination payment, a government would be incentivized to see the private investor default, because it would then receive the asset without having paid for it, which creates a moral-hazard scenario.

In the case of government default, typical termination formulas may include, at a minimum, debt repayment, repayment of sponsor equity, and an agreed (modest) return on equity. Compensation may also include full foregone future profits on equity, alongside other fees and payments owed to make the project sponsors whole (that is, to receive the same or similar compensation as if the project had not been terminated). This is often heavily negotiated. An alternative to stipulating a formula in the termination payment documents is to use the market value of the asset if the asset can be sold to a third party, though this can be more difficult to do in EMDEs where comparable transactions are limited since the market is not so liquid. Because the payout from a government default can be large, governments should generally try to ensure that the triggers are under their control (such as changes in laws) to avoid taking on unnecessary obligations. However, they are not always successful in doing so. For example, wars and other hostile events are generally considered government events, regardless of how the war started.

Finally, in the case of shared risks such as prolonged force majeure as a result of natural disaster, the rule of thumb is first to turn to commercial markets for insurance against natural disasters and other natural force majeure risks, where available at a reasonable price. After applying the proceeds of the insurance to the termination payment, generally, formulas will split the risk between the government and the project company (for example, debt plus a portion of equity), though there is some variation in this across various markets.³³

Guarantees of Termination Payments

Guarantees for termination payment risk are similar to guarantees for payment risk discussed in Section 2.6 above, where the termination payment is considered a payment obligation of the contracting agency. Because termination amounts tend to be very high, lenders will seek a guarantee to provide additional comfort in the event there is an enforcement action on the underlying contract due to termination. Where lenders would like a government guarantee for termination payments, but there is reluctance to do so on the part of government, there have been some creative alternatives to a payment guarantee. One recent example is a “put and call option agreement” (PCOA) for a power project in Nigeria. The PCOA can require a government to buy a project (the “put”) if the project's PPA is terminated (thus providing a payment for the project, similar to a termination payment). The government is also given the option to purchase the project (the “call”) under certain circumstances, such as concessionaire's default. For an example of a PCOA, see Case 2.7: Put and Call Option Agreement as an Alternative to Government Guarantees in Nigeria.

2.3 ACCEPTABILITY OF GOVERNMENT GUARANTEES AND THE ROLE OF INTERNATIONAL FINANCIAL INSTITUTIONS

In some cases, additional credit enhancement is needed even with a government guarantee. This is because the level of a developing country government's sovereign debt ratings affects the ability of its guarantees to be accepted by project investors and by financial markets. Investment-grade ratings are preferable and gain ready acceptance. For example, Chile had an investment-grade rating when it issued government guarantees for its toll road program.

³³ For examples of appropriate termination clauses, see World Bank 2019a.

Most EMDEs have below-investment-grade foreign currency sovereign debt ratings, as well as below-investment-grade global-scale local currency debt ratings.³⁴ Such countries are often those that most need to issue guarantees for their projects (because they are seen as riskier places to do business).

Guarantees issued by governments with lower sovereign debt ratings (B1/B+ or lower), or with no ratings, are unlikely to carry much weight, unless they are bolstered by multilateral development banks or similar institutions. Even governments with BB- and above, but below investment grade, can get better terms and tenors with the assistance of credit enhancement from DFIs. Many multilateral institutions, as well as some bilateral agencies, have a variety of guarantee and insurance products³⁵ that use the agency's own investment-grade (or equivalent) balance sheet to provide investors with additional comfort. If the guarantee or insurance policy is triggered, the multilateral or bilateral institution will first pay the investors. In some cases, it will seek to get repaid through its own counter-guarantee with the government. In this way, the multilateral institution is effectively replacing the government's rating with its own, thus making the financing package much more attractive.

The World Bank Group offers a number of guarantee and insurance products that support both the public and private sectors to mobilize commercial finance for infrastructure, including through MIGA and the International Bank for Reconstruction and Development / International Development Association (IBRD/IDA, or World Bank). A comparison of the MIGA products and the World Bank guarantee is summarized below.³⁶

TABLE 2.3
A Comparison of World Bank Guarantees and MIGA Insurance/Guarantees

	WORLD BANK	MIGA
Risk Coverage	Government/parastatal obligations and credit risk	Political risks; payment risks of sovereigns, sub-sovereigns and eligible SOEs
Eligible Investment Instruments	Debt or payment obligations (international or domestic)	Equity, debt, and any other forms of investment (international)
Pricing	IBRD and IDA loan equivalency, with risks managed through lending-program size	Market-based pricing; premium considers operating costs, and country and project risks
Government Indemnity (Counter Guarantee)	Yes	No, only rights of subrogation; but requires host country approval (often by non-objection)
Eligibility Criteria	Priority projects for the government	Long term foreign investment or financing
Major Clients	Host governments	Private-sector entities

34 Foreign currency and global-scale local currency debt ratings allow credit-strength comparisons to be made among issuers in different countries. A third type of debt rating, "national scale" ratings, allow comparisons only among issuers located in the same country.

35 For more information on this topic, see Matsukawa and Habek 2017, Pereira dos Santos 2018 and World Bank 2016b.

36 The table and more information can be found in World Bank 2016b.

CASE 2.1

KENYA IPPs LIMITING GOVERNMENT UNDERTAKINGS TO POLITICAL FORCE MAJEURE³⁷

In 2009, several IPP projects in Kenya were structured with 20-year BOO concession contracts and tendered to private sector developers. One of them, the Thika Power Project, represented the first time that an international commercial bank has provided long-term financing to a power project in Kenya on a limited-recourse basis. The innovative project financing and credit structure helped the sponsor successfully raise the project debt while minimizing the government's contingent liabilities associated with the government support that was needed to make the project bankable in Kenya.

Kenya Power and Lighting Company (KPLC or Kenya Power), the offtaker, understood that it was necessary to provide credit support for the PPA that it would be signing. A potential source of such support was a Government of Kenya (GoK) guarantee; however, given Kenya's track record with IPPs, the GoK was reluctant to provide guarantees to support what it considered to be a creditworthy offtaker in a self-sustaining power sector. Based on the feedback and market sounding, an innovative guarantee structure that limited the government's contingent liabilities was provided for new IPPs that KPLC tendered at that time.

A short-term liquidity facility (a revolving letter of credit), backed by a sovereign guarantee and full cash collateral, was an alternative option, following the standard practice for private power projects of this type in Sub-Saharan Africa. However, KPLC also wanted to avoid the "cash trap" in the traditional L/C structure, to maximize the use of its capital and cash balance. As such, KPLC would need some form of support for investors and lenders to be comfortable with its ability to raise L/Cs to back its short-term obligations under the PPAs.

The key challenge was therefore to find a payment security arrangement that was acceptable to all key parties, including the GoK, KPLC, and the international lenders and investors.

An innovative payment security arrangement was structured with three key elements: KPLC L/Cs backstopped by an IDA political risk guarantee to support short-term liquidity; a PPA with KPLC; and a letter of support with the GoK focusing on specific events under its control, both of which have termination payment clauses that will be guaranteed through breach-of-contract cover by MIGA.

More specifically, the letter of support commits the GoK only to the following obligations:

- Not to interfere in the electricity sector in Kenya and to allow KPLC to be run as a commercial entity;
- Assistance with authorizations and permits, while requiring that KPLC comply with the terms of such authorizations; and
- Payment of compensation during political force majeure events, including changes in laws and other force majeure events affecting KPLC.

This structure was acceptable to the investors and lenders because, at the time, Kenya had a relatively strong utility offtaker, a relatively independent regulator with a transparent tariff-setting regime, and a history of competitive bidding processes to award IPP concessions. This structure allowed the project to raise financing without a full payment guarantee by the GoK for KPLC's obligations and substantially limited the government's obligations under the guarantee to political risks, the majority of which were in the government's control.

³⁷ This case study is a condensed version of the paper by Jason Lu et al. 2013.

CASE 2.2

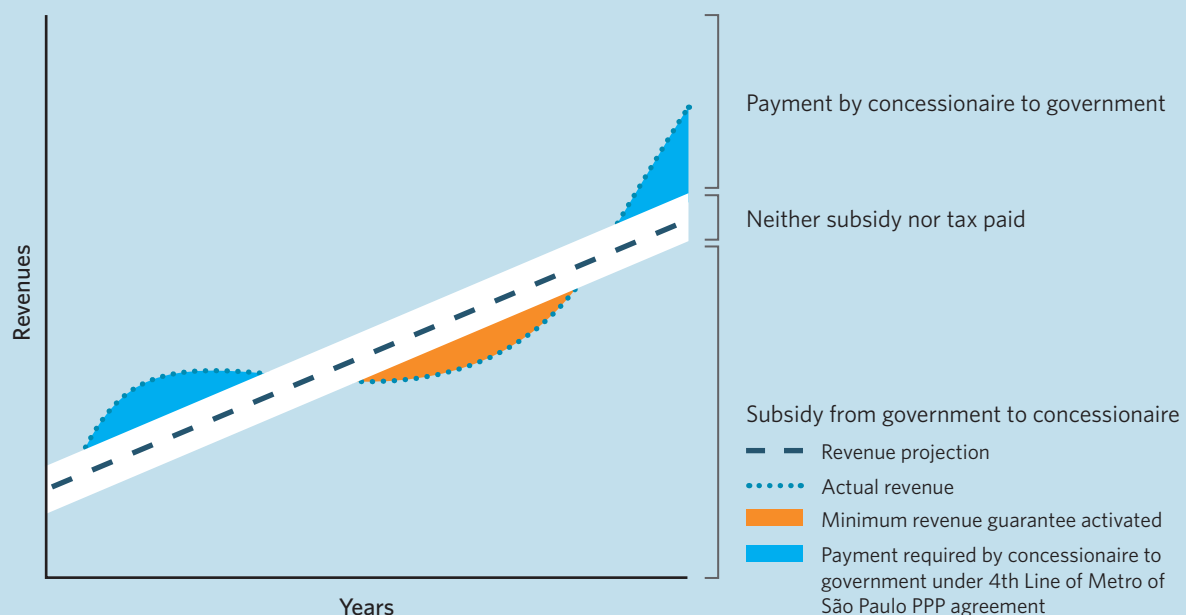
MINIMUM REVENUE BANDS TO MITIGATE DEMAND RISK IN BRAZIL

In 2005, the State Government of São Paulo, Brazil, announced the intention to bid a 30-year contract to build Line 4 of the Metro of São Paulo. The mechanism to mitigate revenue risk to implement this PPP was based on minimum and maximum demand levels. This minimum revenue guarantee structure ensures that private partners with guaranteed revenues are still incentivized to maximize demand.

Minimum revenue guarantees are triggered when the revenues collected by the concessionaire fall below predetermined levels. For transportation projects, particularly greenfield projects, the demand risk can be quite high. Demand projections often overestimate users; other infrastructure may compete with the planned project; or the population may not be interested in paying the cost of services. As a result, minimum revenue guarantees for PPP transportation projects are commonly used to mitigate the demand risk. A typical minimum revenue guarantee activates when revenues dip below a predetermined level over the life of the concession.

FIGURE 2.1

Minimum Revenue and Revenue Sharing Thresholds in the 4th line of Metro of São Paulo



The mechanism used for the minimum revenue guarantee for Line 4 of the Metro of São Paulo uses bands of either government subsidy or concessionaire taxation based on the projected base demand level. Within a 10 percent variation from the base projected demand—meaning the real demand is between 90 and 110 percent of the projected demand—there will be neither subsidy nor taxation. There are then two other bands of protection, the first within a variance between 10 to 20 percent of the projected demand, and the second at more than 20 percent variance from the projected demand. The two lower floors, where demand is more than 10 percent lower than projected, require payment from the government to the concessionaire. The two higher bands, where demand is more than 10 percent greater than projected, require payment from the concessionaire to the government.

If the demand level is 10 to 20 percent less than projected, the government subsidizes the concessionaire's loss by making up for 60 percent of the unmet demand. If the demand level is more than 20 percent lower than projected, the government subsidizes the concessionaire's loss by making up for 90 percent of the unmet demand.³⁸ In the case of a higher demand than projected, the concessionaire pays a portion of its additional revenue, depending on which band (above the projected demand level) the real demand for the service falls. Through this mechanism, if demand falls below the base case level, the government provides compensation to the private partner. If demand exceeds the base case level, the government gets a share of the extra profits. In this way, the private partner's exposure to lower demand and thus lower revenues is mitigated, while the government still benefits from the upside potential. The concessionaire is throughout motivated to maximize demand since the concessionaire shares the risk of low utilization and the benefits of high utilization.

³⁸ World Bank 2012.

CASE 2.3

MINIMUM REVENUE GUARANTEES IN SEOUL'S METRO LINE 9

Metro Line 9 was the Republic of Korea's first private metro-rail investment project under a build-transfer-operate (BTO) scheme, with a 30-year concession. Seoul Metropolitan Government (SMG), which was running its eight existing metro lines, decided in 2005 to entrust operation of its ninth metro line to the Seoul Metro Line 9 consortium, which included a consortium of sponsors, led by Hyundai Rotem group (a subsidiary of Hyundai) and a set of financial investors, led by Macquarie Group (MKIF).

The consortium was responsible for design and construction; engineering and manufacturing; testing and commissioning; and O&M. Based on this scope of work, the estimated cost at financial close was \$1.2 billion. The contribution of the national and Seoul governments was paid against completion of specific verifiable milestones, certified on a monthly basis by an independent engineer.

The revenue model consisted of two parts, over a concession term of 30 years. The first part was farebox revenue. It was estimated the line would carry 760,000 passengers every day (in 2013), for an annual total reaching six million train-kilometers. The second part was ancillary businesses. This included lease rentals from underground shopping centers and advertisements at stations, on trains, and in convenience stores.

This project was supported by an MRG provided by SMG for the first 15 years of operation. Subject to actual revenues being no less than 50 percent of concession agreement forecasts, SMG would provide revenue support for up to 90 percent of inflation-adjusted concession-agreement fare-revenue forecasts for the first five years; 80 percent for years six to 10; and 70 percent for years 11 to 15 of the concession term.

As it turned out, SMG finances were put under stress due to the annual payouts for the MRG. Because of the MRG guaranteed rate of return of 13 percent, if ridership fell below projections, the city had to pay the company millions of dollars each year. MKIF and other investors were paid \$11.8 million in 2010, \$26.2 million in 2011, and \$34.5 million in 2012. Through this system, SMG paid a total of \$154.22 million to the private operator from 2009 to 2013.

In light of this situation, SMG initiated negotiations on fare escalation and elimination of the MRG. Subsequently, there was a major reshuffle of private investors. In October 2013, MKIF and Hyundai Rotem sold their shares for about \$707 million, making way for capital participation by 11 investors. These included two asset management companies (Hanhwa Asset Management and Shinhan BNP Paribas Asset Management) and Kyobo Life Insurance, Hanhwa Life Insurance, and Heungkuk Life Insurance.

SMG signed a new contract with the restructured Seoul Metro Line 9 corporation. In the revised agreement, the MRG (and the minimum rate-of-return guarantee) was replaced with a cost-compensation system. If actual revenue from the subway did not cover operating costs, the operator would be compensated for its losses only. Under the revised agreement, SMG expects to decrease financial assistance over the next 26 years, from \$4.9 billion to \$1.9 billion.

This case shows that providing an MRG with a guaranteed rate of return can be extremely expensive for the government. Other methods of compensation must also be considered and modeled to see which bring the most value for money.

Source: World Bank 2016a.

CASE 2.4

RISKS OF AN OVERLY OPTIMISTIC DEMAND FORECAST IN SPAIN

From 1998 to 2004, nine toll road concessions were awarded in Spain, with extremely optimistic traffic projections based on Spain's economic growth at the time.³⁹ Spain's infrastructure development was at an all-time high, and it had the most kilometers of motorways of any European country. The concession contracts included a clause for Responsabilidad Patrimonial de la Administración (RPA), which has its origins in the legal doctrine of avoiding “unjust enrichment,” which states that “individuals are entitled to a compensation from the government for any injury or damage caused to any of their property or rights, except in cases of force majeure, if the injury is a result of normal or abnormal functioning of public services.” Thus, the RPA essentially represented a government guarantee.

Years later, Spain was affected by the European financial crisis, and the recession, alongside the existence of untolled, free alternative routes, resulted in traffic levels that were only a fraction of what was expected. Although attempts were made to restructure the debt, they were unsuccessful, and by 2014 the nine toll roads had filed for bankruptcy, leaving an unpaid debt of more than €5 billion. Under the RPA, the government must buy out the company in distressed circumstances, but such a large amount would increase Spain's budget deficit during a recession. Protracted negotiations with lenders and project owners followed, with the government delaying its payout of the RPA through election cycles and changing regulations. Eventually, the lenders sold their debts (at a steep discount) to hedge funds that continue to demand payment in courts.⁴⁰

The Spanish toll road case shows that even in a developed country, inadequate demand studies and subsequent economic crises can create liabilities that are damaging to both the government and the private investors and lenders, even with a guarantee in place. Thus, upfront project preparation—including realistic demand analysis—continues to be the most critical factor in ensuring the success of a given project.

³⁹ EDHEC Infrastructure Institute-Singapore 2018.

⁴⁰ Stothard 2017.

CASE 2.5

EVOLUTION OF FOREIGN EXCHANGE GUARANTEES IN VIETNAM

Vietnam's Government Guarantee and Undertaking (GGU) was used for several power projects in the 2000s and covered payment obligations by government counterparties as well as foreign currency convertibility. However, in more recent deals, such protections have been pared back.

One key change in these more recent amendments to the GGU relates to foreign currency convertibility. Because the Vietnamese dong is not a convertible currency, the guarantee of foreign currency on availability, convertibility, and remittance has been a key bankability issue for many projects in Vietnam. Early PPPs in the 2000s, such as Phu My 2-2, Phu My 3, and the Mong Dzung power project, relied on full government guarantees of convertibility and repatriation. However, in 2011, the government of Vietnam issued the Prime Minister's Official Letter No. 1604, which reduced the scope of government guarantees, including capping the guarantee on foreign currency convertibility at 30 percent for BOT thermal power plants. Subsequently, the PPP regulation Decree 15, passed in 2015, specifically provides that only certain PPP projects may be considered for a foreign currency guarantee. Such projects include those that (a) require in-principal approval by the National Assembly; (b) are included in the government's investment program; or (c) are designated as important by the prime minister on an ad-hoc basis. Decree 15 further establishes that the prime minister will determine and appoint the agency that will provide the foreign currency guarantee on the basis of several factors at any given time, namely the country's socioeconomic development criteria, foreign currency policies, the government's foreign currency capability during a given period, and the project's characteristics.

The above changes to the scope of a guarantee seem consistent with the government of Vietnam's interest in reducing the scope of government guarantees (or capping them) and protecting its hard currency reserves in recent years. This has caused some consternation for investors. Meanwhile, as the Vietnamese domestic banking market develops, a few domestic banks have shown interest and capacity to provide long-term finance for power projects in Vietnam, despite their relatively small scale. Developing local banking and capital markets are the ultimate solution to address the currency mismatch/foreign exchange and long-term financing issues for infrastructure financing in EMDEs. The so-called "bankability" of infrastructure projects is also a relative term—what is not bankable for foreign commercial banks may not be an issue for domestic banks in certain circumstances. A proven track record, a creditworthy offtaker, and a more established domestic banking market have reduced the necessity for a guarantee for foreign currency convertibility in order to attract private partners.

CASE 2.6

RISKS OF FOREIGN EXCHANGE RATE GUARANTEES EMBEDDED IN PPAs

In order to address foreign exchange risks in PPAs, foreign lenders tend to require tariffs to be indexed to a foreign exchange rate (normally, the U.S. dollar) to ensure their revenue stream. Through such indexation, the host government has given either an explicit foreign exchange rate guarantee (if the government has guaranteed the PPA) or an implicit guarantee (if the power purchaser is an SOE). This effectively passes the risk of devaluation to the government. However, where there is an external shock that creates a large devaluation, governments often cannot shoulder the burden and must renegotiate the contract.

In the early 2000s, Stanford University's Program on Energy and Sustainable Development conducted a detailed study of instances when PPAs were renegotiated in a broadly representative group of developing countries that attracted a substantial amount of IPP investment. Almost all the PPAs that were renegotiated contained elements that were indexed to the U.S. dollar exchange rate. Table 2.4 shows the extent of the decline in the U.S. dollar value of a local currency revenue stream indexed to domestic inflation.

TABLE 2.4

Decline in U.S. Dollar Value of Other Currencies

COUNTRY	PERIOD OF DEVALUATION	PERCENTAGE DECLINE FROM PEAK (%)
Argentina	Q4:2001 – Q4:2002	63
Brazil	Q4:1998 – Q4:1999	32
Indonesia	Q2:1997 – Q2:1998	52
Malaysia	Q2:1997 – Q2:1998	30
Pakistan	Q3:1995 – Q4:2001	25
Philippines	Q2:1997 – Q2:1998	25
Thailand	Q2:1997 – Q2:1998	32

Note: Percentage decline from peak is calculated by averaging the U.S. dollar value of inflation-indexed local currency revenues for the four quarters preceding devaluation and comparing this result with the average value of the four quarters following devaluation. The period of devaluation lists the final quarter of the period of peak valuation and the final quarter of the period following devaluation.

The implication of this table is that, when the U.S. dollar value of an inflation-indexed domestic revenue stream declines by 25 percent, the government will find it politically impossible to increase electricity tariffs sufficiently to pass through the costs of foreign exchange-indexed PPAs and will seek to renegotiate the PPAs. Although renegotiation provides a way for the parties to salvage a project that may otherwise be terminated and for the host government to avoid the cost of honoring its guarantee, it is a course of action that incurs other costs, because a forced renegotiation can be viewed as expropriation and may greatly impair the government's ability to arrange infrastructure finance in the future.

Although the risks associated with guaranteeing foreign exchange rates is stark for governments, it is unlikely that foreign lenders will take currency risk either. The ideal way to mitigate these risks going forward is to focus on developing a strong local currency market, with a deep pool of deposits and savings, which will reduce reliance on foreign currency lending to infrastructure projects in the future.

CASE 2.7

PUT AND CALL OPTION AGREEMENT AS AN ALTERNATIVE TO GOVERNMENT GUARANTEES IN NIGERIA

The Azura-Edo IPP is a 459 MW gas-fired electric power generation project located in Edo State, Nigeria. The project's financing, which closed in December 2015, totaled \$876 million and was provided by a combination of commercial banks, IFC, OPIC, and FMO, the Dutch development agency. The project was able to attract financing for a number of reasons. First, the sponsors, led by Amaya Capital, were strong. Second, the structure included several types of credit enhancements, including a World Bank payment guarantee and MIGA political risk insurance for a portion of the commercial bank debt, and MIGA political risk insurance for the sponsors' equity.

The project's PPA is with Nigeria Bulk Electricity Trading PLC (NBET), an SOE established in 2010 to be Nigeria's sole power purchaser. NBET resells the power it has purchased to Nigeria's electric power distribution companies. The PPA tariff included capacity payments (payable as long as the plant is available or deemed available to generate electricity) that cover the scheduled principal and interest under the loan agreements.

A sovereign guarantee of NBET obligations was sought by the private sector, because NBET was newly established. However, the government of Nigeria was reluctant to provide such a guarantee, due to concerns regarding risk exposure to the contingent liabilities associated with the guarantee, which led to the creation of a unique alternative to cover termination payments under the PPA, the PCOA.

If the project's PPA is terminated, the PCOA provides that the government can be required to buy the project (the "put") at a price that, at a minimum, will repay the project's debt. The government is also given the option to purchase the project (the "call") under certain circumstances, such as a project default under the PPA. As a result, the PCOA was considered a compromise. From the lenders' perspective, it has the same effect as a termination payment covering the project's debt, but from the government's perspective, it is clear that the payment is for the purchase of assets (the plant or shares) rather than a bailout of the private party's debts. In the end, however, both a PCOA and a government guarantee are dependent on the government's ability to honor its contractual obligations.

CHAPTER 3

STRUCTURING AND NEGOTIATING GOVERNMENT GUARANTEES

3.1 FORMS AND SUBSTANCE OF GOVERNMENT SUPPORT: FROM COMFORT LETTER TO GUARANTEE AGREEMENT

Government support may take many different forms, including comfort letters, letters of intent, keep-well agreements, letters of support, indemnity agreements, government undertakings, and guarantee agreements (or some combination, such as a “guarantee and undertaking,” or a “guarantee and indemnity”). The choice of nomenclature of the document, as well as its scope, is usually country-specific and dependent on the risk profile and allocation decided by the government or negotiated by the parties, and the macroeconomic and historical context. Generally, the fundamental difference between comfort letters, letters of support, and guarantees is that comfort letters are not intended to be legally enforceable, whereas guarantees are.⁴¹ A comfort letter is intended to inspire trust; if the trust turns out to be misplaced, the recipient of the comfort letter may not have any recourse. In the case of certain letters of support or guarantees, if the issuing government fails to fulfill its obligations, the holder of the letter of support or guarantee has a legal claim for compensation, depending on its losses, for an amount up to the maximum specified in the guarantee.

However, whether a document is considered a comfort letter, a letter of support, or a guarantee depends on more than the name on the document. Its actual provisions, as well as the intention of its issuance (for example, was it issued specifically to avoid the liability of a full guarantee?) determine the nature and scope of the government’s obligations and the extent to which the document is legally binding and enforceable. Although “letter of support” may sound less binding or enforceable than “guarantee,” the actual provisions of a letter of support can obligate a government as if the document were a guarantee. There is precedent that an international arbitration panel may rule against the host government based on a simple letter of support. More recently, letters of support in some African countries have been structured in such a way that they have been construed as enforceable by lenders.⁴²

The scope of comfort letters, letters of support, and guarantees can vary widely. A comfort letter can provide assurance that a government will undertake or maintain certain actions or policies that will strongly contribute to the success of the project that is the subject of the comfort letter. The specific actions or policies will depend on the project. Different projects in different infrastructure sectors have different needs, and a comfort letter

⁴¹ For example, in India, “Legally, the main difference between a guarantee and a letter of comfort lies greatly in terms of their enforceability. While sections 372A, 295, etc. of the Companies Act, 1956 specifically cover guarantee, there is no provision in any statute typically pertaining to a letter of comfort (unless of course such letter takes a form of a guarantee). Consequently, while a guarantee would be a legal binding commitment which can be enforced against the guarantor in the same manner as against the borrower, a letter of comfort is a mere moral obligation on the provider where chances of enforceability being minimum.” Ladha, Jhunjhunwala, and Shankar 2013.

⁴² For sample terms of reference for transaction advisors, see the PPP Legal Resource Center’s “Sample Terms of Reference (TORs) for PPP Advisors.”

can be tailored to them. Often, the wording used in comfort letters is rather vague (for example, it may include a promise to “resolve the problem” or “prevent an economic loss”), which makes them difficult to enforce. However, in Indonesia, letters of support that used the wording “shall cause [the SOE] to honor its obligations” were construed as enforceable guarantees in international arbitration. To that end, substance is far more critical than form. For more on this subject, see Case 3.1: Evolution of Comfort Letters and Guarantees in Indonesia.

The types of issues that can be addressed in a comfort letter or letter of support fall into three broad categories: general governmental policies; project-specific policies and actions; and financial conditions:

- General governmental policies specified in a letter of support can include an acknowledgement of the project’s importance to the economy of the host country; assurances against expropriation or discriminatory treatment; and support for governmental agencies that furnish inputs to the project.
- Project-specific support can include assurances regarding the project’s concession and permitted pricing; grants of real estate; exemptions from certain taxes and import duties; assurances against adverse changes in environmental laws and regulatory regimes; and assurances against the granting of competing concessions.
- Finally, financial conditions can be assured by promises of access to foreign exchange and permission to maintain bank accounts at domestic or foreign banks.

Although comfort letters may be sought as workarounds to avoid formal guarantees, their enforceability in practice means that both parties should seek legal advice to ensure that the implications of the document are understood. The ambiguous wording often included in comfort letters may satisfy both parties initially, but can, and often will, lead to problems once the project is underway, when the government, lender, or project party seeks action based on the statements included in the comfort letter. Oftentimes the comfort letter includes obligations with unclear terms that may or may not be enforceable.

3.2 BENEFICIARIES OF GUARANTEES

Normally, the beneficiary of a guarantee will be the project company. In such a case, the guarantee will potentially benefit the project’s lenders as well as its equity investors, based on the project’s financing documents, which will provide lenders with a security interest in the guarantee payments to the project company. In some situations, it may be more appropriate to make the project’s lenders the direct beneficiaries of a guarantee, and in others, the equity investors (although, if the equity investors are the direct beneficiaries, the project will probably be financed on an all-equity basis). In some cases, this structure may be dictated by local law, which sometimes states that a government cannot provide guarantees in favor of third parties.

3.3 PRINCIPLES IN NEGOTIATING GOVERNMENT GUARANTEES

If it is determined that a government guarantee is needed, instead of a comfort letter, the government should understand that government guarantees are a contract, so basic principles of good contracts also apply to guarantees.

First, contracts should be clear and leave minimum room for uncertainty that is likely to cause disputes in the future. To the extent possible, potential scenarios should be documented. One should avoid, as far as possible, future items that are “to be agreed.” This principle is especially important in the payment provisions. It should be absolutely clear exactly how much will be paid; if there are any deductions (taxes and amounts owed) or additional fees or interest charges; and if there are any caps to indemnities or other payment promises.

Contracts are assumed to be negotiated in good faith, which means that each party is being honest about the obligations it is willing to assume and will not take away the benefits of the contract from the other party.

A related principle is the enforceability of the contract. This is the assurance that the contract will be upheld in court or arbitration and that the parties will be legally bound to comply with the obligations in the contract. One way of assuring the enforceability of the contract is to have offshore dispute resolution (because local courts can sometimes be seen as biased toward the government party). However, even if an award is won in international arbitration, the award must still be enforceable in the jurisdiction of the contract or wherever the government has available assets, so that the winning party can receive the payment. Such enforceability is generally dependent on whether the country is a signatory to the New York Convention on the Recognition and Enforcement of Foreign Arbitral Awards.⁴³ For this reason, investors may be particularly wary of countries that are not yet signatories to this convention.

An added benefit of clear, good-faith-based and enforceable contracts is that they enable a smaller risk premium to be added to the private partner's price for supplying the infrastructure service, because the project's lenders have the added comfort of knowing what to expect, and knowing that the obligations in the contract will be met or damages will be payable.

3.4 COMMON ELEMENTS OF GOVERNMENT GUARANTEES

Although the form of the government guarantee may vary, guarantees that are contractually enforceable tend to have several common elements, including the following:

a. *Payment Mechanism*

When and how the guarantee payment is processed has a large impact on lenders' acceptance of the guarantee, because payments that come after loans have already defaulted will not be as attractive as payments that occur in time to repay debts when due. In the most lender-friendly cases, the payment is due upon notice from the project company. An example is as follows:

"If any Contract Party shall fail or be unable to duly punctually and fully pay any such Guaranteed Obligation, Guarantor shall, immediately after written notice from the Project Company, pay such Guaranteed Obligation, or cause such Guaranteed Obligation to be paid. This Guarantee is a guarantee of due and punctual payment and is not merely a guarantee of collection. This Guarantee is in no way conditioned or contingent upon any attempt to collect from the Contract Parties."

To avoid doubt, sometimes it is even specified that the guarantee is not the last resort but rather could be called immediately, for example:

"The payment obligations of the Guarantor under this Government Guarantee shall be obligations and debts of the Guarantor, and accordingly no Developer Party and no agent of the Lenders shall be obliged before enforcing such obligations: (i) to take proceedings or obtain awards or judgments or make or file any claim against the [SOE being guaranteed] or any other person in any court or elsewhere; or (ii) to enforce any other security or guarantee, if any, held by such Developer Party or agent of the Lenders in respect of the obligations of [SOE being guaranteed]."

However, if the underlying contract is conditional and subject to defenses, this type of guarantee may cause a situation in which the government must claw back a guarantee obligation if a court rules in its favor.

In other instances, the guarantee may not be due and payable until a long cure period has passed, or until a favorable outcome has been obtained through a dispute resolution procedure. A sample clause might say: "Amounts in dispute under the [PPP contract] shall not be deemed due and owing until after the resolution of any dispute arising in connection with such amounts payable in accordance with the dispute resolution

⁴³ A list of the signatories can be found at <http://www.newyorkconvention.org/countries>.

procedures set out in this contract.” This is more beneficial to the government, giving it more time to rectify the issue before payment must be made.

A related issue is how the payments are made. Lenders prefer lump-sum payments, because debts will likely have been accelerated through cross-default clauses in the financing agreements, and they will want to exit projects in default as soon as possible. However, depending on the amount, governments may not have the ability to make such lump-sum payments if there has not yet been a budget allocation for that amount and may wish to make the payments over a period of time (however, interest payments will also be due in such instances), though extension of the payment period beyond the life of the loan is unlikely.

b. Cure Periods

The guarantee triggers in the contract, including payment defaults and other risks, should be structured with long enough cure periods so there is a reasonable opportunity to fix the problems that threaten to call the guarantee. Generally, all parties will want to see the project continue rather than be terminated, so it is usually in each party’s interest for there to be sufficient time for the government to remedy the issue. It is important to bear in mind, however, that from the private party’s perspective, there is an inherent tension between giving time to allow issues to be resolved and needing to service debt payments. This tension can be eased somewhat with a debt-service reserve fund. Ideally this fund is equal to at least six months’ debt service, so that the government has a minimum of six months to try to fix problems before the government’s guarantee can be called.

c. Validity and Duration of the Guarantee

It is important to ensure that the guarantee remains valid even if the underlying contracts are cancelled or terminated, because guarantee payouts often take longer than the term of the contract. The term of the guarantee will depend on what the guarantee covers and who is the beneficiary. If the guarantee is to support debt financing, the guarantee can fall away once the debt is repaid (usually debt tenors are significantly shorter than the underlying project contracts). If the guarantee is to support the equity investors for the life of the project, its language will state that the guarantee will remain in full force and effect until all of the obligations being guaranteed have been discharged. It is also possible to set the term of the guarantee to when the offtaker’s creditworthiness meets a defined threshold or to cover specific risks such as the construction phase of the project. Furthermore, it is important to specify when a claim under the guarantee can be submitted following the termination of the agreements. The sample below, for example, provides that all claims must be submitted within a year:

“This Government Guarantee is a continuing guarantee and is fully effective as of the date hereof. This Government Guarantee is irrevocable and shall remain in full force and effect until the Guaranteed Obligations have been fully and unconditionally discharged and for any further period during which any Developer Party has any rights remaining under any Guaranteed Documents; provided, that claims (if any) under this Government Guarantee shall be made no later than the date that falls twelve (12) months from the first date on which all the Guaranteed Documents have expired or terminated.”

d. Dispute Resolution

Often, guarantees are invoked in situations where there is an ongoing dispute, in which case it is likely the guarantee will also be subject to dispute between the parties. In such cases, a clearly defined dispute resolution mechanism is essential. Such a clause is also evidence that the guarantee is intended to be enforceable. Where appropriate, disputes may be referred to a panel of experts to make a determination on the government’s liability. The form of dispute resolution is also important. Generally, private investors in developing countries would prefer international arbitration (or mediation) in the event of disputes, because local court systems may not be seen as sufficiently well governed or transparent. For this reason, a government

without a track record of honoring contractual obligations will find it easier to attract investment if it agrees to international arbitration in a neutral venue (i.e. outside of the guarantor's home country). However, governments will often prefer to use their own legal systems (whether through courts or local arbitration) for cost and convenience reasons, or be required to do so by law. Especially in the case of countries that are middle-income or higher, or otherwise have a more advanced legal system, the forum and venue for dispute resolution is a point of negotiation.

A standard clause on dispute resolution will include a period for amicable resolution of the dispute between the parties through discussions, usually a period anywhere between one to six months. If the mechanism used is international arbitration, the clause will also state the forum and rules to be used (often the rules of the forum or the International Centre for Settlement of Investment Disputes or International Chamber of Commerce rules). It will specify that the decision of the tribunal shall be final and binding. The clause may also specify the number of arbitrators and how they are to be chosen.

Typically the guarantee agreement and the underlying project agreement will have joinder clauses so that the two can be arbitrated at the same time to avoid multiple dispute resolution proceedings. In such a scenario, once the obligation is validated at the SOE or ministry level, the guarantee would become simultaneously payable.

In the event of a dispute, it is common for the parties to choose to renegotiate the contract rather than go to dispute resolution. International arbitrations can be time consuming and costly, and generally it is in both parties' interest to try to settle the dispute. Often, renegotiations result in an extension of the contract term or an adjusted cost of services, which allows the government to spread out the payout of damages over time.

e. Waiver of Sovereign Immunity

Because the issuer of the guarantee is a sovereign, there is a possibility that it can invoke sovereign immunity if taken to arbitration, which would drastically undermine the value of the sovereign guarantee. Sovereign immunity is a legal doctrine derived from the theory that all states are equal; therefore, one state cannot judge another state in its courts. The doctrine has two elements: immunity from jurisdiction states that a sovereign cannot be a defendant in court proceedings or arbitration (unless it has expressly given its consent) and immunity from execution protects a states' assets from being seized to carry out an arbitral award. Therefore, it is important that there be an express waiver of sovereign immunity in a government guarantee so that the dispute resolution clause (and its subsequent awards) are enforceable.

The extent of sovereign immunity is determined by the law of the forum for dispute resolution (the arbitral seat or court location) and varies from country to country. In some countries (China, for example), the concept of sovereign immunity is absolute, unless expressly waived. In other jurisdictions, submission to arbitration under the contract is sufficient to imply that there has been a waiver of sovereign immunity. A more restrictive view of sovereign immunity can also distinguish between activities of a sovereign nature, which enjoy immunity, and activities of a commercial nature, which do not enjoy immunity.

The safest approach from an investor's perspective is to have an explicit waiver of sovereign immunity drafted into the agreements. A standard sovereign immunity clause will require that the government acknowledge that its obligations under the guarantee are commercial obligations arising from commercial transactions rather than governmental or public acts and will waive the government's right to claim immunity, including for enforcement proceedings against any of its properties, assets, or revenues. Sometimes, governments will request to carve out specific assets from waivers of sovereign immunity. Unless such carve-outs are restricted to customary limitations, such as for diplomatic or military assets, they tend to affect the desirability and the value of the guarantee.

f. Government's Rights

Because the government is providing a potentially costly backstop to the project, it should have certain rights and protections under the guarantee documents (meaning the guarantee and the underlying project documents). For one, there may be pre-defined situations under which the government may take over the project in order to try to resolve an issue (known as sovereign step-in rights). Such triggers are often negotiated to ensure there is not too much overreach by the government, particularly if there are also lender step-in rights as well. Even if an explicit sovereign right is not stated, the documents should require that the government receives information about the project's operating and financial performance on a timely basis. This should include copies of all information provided to the project's lenders or, if relevant, rating agencies. Providing advance warning to the government of deteriorating project performance can put the government in a much better position to try to assist in fixing the project's problems, so as to minimize its exposure under the guarantee.

3.5 THE ROLE OF GOVERNMENT ADVISERS

Given that the needs of each party to a PPP differ, it is crucial that each party has sufficient knowledge and resources to protect its interests and achieve a balanced PPP structure. If the parties are not able to achieve this balance, one side may eventually deem the deal unfair, increasing the risk of disputes or project failure at a later date.

The number of PPPs that a typical line ministry or even MoF may do each year is small, compared to a typical transaction adviser who covers several markets. Transaction advisers tend to have a deeper understanding of current market conditions for infrastructure finance and more experience in developing, structuring, and negotiating projects. Thus, it is recommended that governments complement their own capacities with outside advisers, as needed. This is especially important in cases where private sector lenders and investors have their own advisers, who are advocating to get them the best deal, such as asking for additional government support. It will be important for the government to use advisers, as necessary, to evaluate the merit of such demands.

Transaction advisers should be engaged at the project feasibility stage and should remain until financial closure, and include firms that can provide technical, financial, and legal advice. Technical advisers may have already been engaged to do the pre-feasibility study for the project, before it was announced as a PPP, but the selected private sector participants may provide technical inputs as part of their bids or may suggest technical changes in their negotiations with the government. These suggestions may improve the project's chances of obtaining financing, may benefit the sponsor to the detriment of the government, or may benefit both parties. To protect its interests, the government needs to have competent technical advisers available until closing of the project's financing. To avoid creating wrong incentives for the advisors to push bad projects to reach closings, the compensation for advisors is typically based on retainers or a combination of retainer and success fees (the notable exception is legal advisors, who generally still use time-based billing systems).

Legal advisers assist the government with drafting or reviewing the concession (or similar) agreement, as well as other agreements that feature the government entity as counterparty (such as offtake agreements, land leases, fuel-supply agreements, direct agreements, and government guarantees). Lawyers are also responsible for reviewing the underlying project contracts—including the construction contracts, sales agreements, and operations and maintenance agreements—and ensuring that the private investor can meet its obligations under the concession agreement and that risks are minimized. A local legal adviser is critical to assist with regulations and permits and land and security issues. For larger cross-border project financings, an international firm may

also be needed to support development of the project and finance documents, particularly because most project financings are executed under U.S.⁴⁴ or U.K. law.

Governments will also need a financial adviser with experience in structuring and financing infrastructure projects. It is important that the financial adviser be available at the project's inception, to assist in structuring the opportunity that is presented to potential project sponsors and lenders, conduct market soundings, help evaluate financial proposals, and assist in negotiations with the selected sponsor regarding the respective responsibilities of the sponsor and the government. Sometimes, the financial consultant will be the lead advisor and manage the other advisors, integrating outputs in a project structure that serves the government's objectives while ensuring bankability.

Additionally, a market consultant may be helpful, especially in the case of projects that do not have long-term output contracts. Project sponsors will have their own market consultants (lenders will also insist on having them). The report of the sponsor's consultant may provide the basis for a demand for support from the government. The government will be at a significant disadvantage in negotiations with the sponsor if it does not have its own consultant providing an independent opinion.

⁴⁴ If U.S. law is used, it will typically be the law of the State of New York.

CASE 3.1

THE EVOLUTION OF COMFORT LETTERS AND GUARANTEES IN INDONESIAN ELECTRIC-POWER PROJECTS

In the 1990s, Indonesia sought to expand its electric power-generating capacity by attracting private sector firms to develop projects that would sell their outputs to the state-owned electric utility, Perusahaan Listrik Negara (PLN). In Indonesia, the retail electricity tariff is below the average cost of generation, leaving PLN with a deficit. The MoF provides funding to PLN to bridge the gap, which is referred to as the public service obligation (PSO). Given that the PSO is critical to PLN's solvency, developers and lenders have in the past sought confirmation from the government that the PSO will continue to be paid, so that PLN will be in a position to meet its commitments under the PPAs. The government provided comfort letters or support letters to some of the projects. These stated that the government of Indonesia "would cause" PLN to "honor its obligations" under the Electricity Sales Contract (ESC) or PPA, and importantly provided an avenue to international arbitration in the event of any disputes under the support letters. The government's approach proved successful, and 27 private projects were developed.

Unfortunately, the Asian financial crisis that struck in 1997 greatly reduced Indonesia's near-term need for more electric power. Additionally, with the steep drop in the rupiah (against the dollar) affecting tariff revenues, some project prices were unsustainable for PLN. Additionally, Indonesia was required to pass an austerity package to receive aid from the IMF, which required putting on hold unnecessary power projects. Consequently, several planned projects with signed PPAs were postponed, and the government and PLN sought to renegotiate contracts for projects already in operation, in order to negotiate lower prices and offtake obligations. Although some sponsors accepted the renegotiated terms, others, such as geothermal developer Mid-American Energy Holdings (which was covered by an OPIC political risk insurance policy), took their claims to international arbitration and won on the basis of the support letter, implying that, in spite of the letter's "soft" language, tribunals considered it a binding obligation on the part of the issuer.

In more recent years, the government of Indonesia has continued to support IPPs, although it has tried to avoid direct recourse to the MoF (with a few exceptions). For example, in 2006, the government entered into the JBIC Umbrella Note of Mutual Understanding, an agreement with the Japanese Bank for International Cooperation (JBIC) intended to provide a basis for the Indonesian government's support of IPPs benefiting from JBIC export-credit support. In 2011, the MoF issued a regulation (MoF Regulation No. 139/PMK.011/2011) that permits a business viability guarantee letter (BVGL) for IPPs related to the government's second "fast-track" power-generation program. PLN must request the letter from the Minister of Finance. The BVGL is issued by the MoF, addressed to the project companies, and covers the risk of non-payment and/or termination of the agreement. The BVGL may be granted for the period from pre-construction to construction, and/or for part or all of the operation period. The BVGL is a mechanism to ensure that the MoF funds PLN, so that PLN can fulfill its payment obligations to the IPP. Under Regulation 173/2014, in the event of non-payment and/or termination, the project company is required to submit the BVGL claim through PLN. Although project companies do not have direct recourse to the MoF under the BVGL, under contract law, the MoF still has a primary legal obligation to procure performance by PLN. If the MoF fails to do so, it may be liable for payment of damages to the project company.

Guarantee Fund: Another mechanism is the Indonesia Infrastructure Guarantee Fund (IIGF), which was established by the Indonesian government in 2009 to provide guarantees for the obligations of government contracting agencies (GCAs) under PPP infrastructure projects, including some power projects. The 2,000 MW Central Java project was issued the first IIGF guarantee in 2011 (alongside an MoF co-guarantee). The IIGF Guarantee Agreement is provided under the framework of Presidential Regulation No. 78 of 2010. As in the case of a BVGL, the IIGF Guarantee Agreement is also subject to an application process submitted by PLN. The

guarantee will cover certain PLN obligations that would adversely affect the investment of the project company. Unlike the BVGL, under the IIGF Guarantee Agreement, the project company, as the beneficiary, may directly claim the benefit from the IIGF.

IIGF was created to ring-fence the government's liabilities with respect to guarantees, but that is also its weakness. Investors often raise the concern that IIGF's capital is not sufficient for multiple guarantees, because as soon as one is called, it may wipe out the reserves. Therefore, for large projects, such as Central Java, the Indonesian government may still be required to be a co-guarantor, with the IIGF acting as administrator of the joint guarantee.

Both IIGF and BVGL offer a buffer between the project company seeking recourse and MoF. For the IIGF, the guarantees can be administered directly, as long as there are sufficient funds. The BVGL requires an application process through PLN. However, both forms of guarantee administration, like the comfort letter, eventually lead back to the MoF, which is responsible for ensuring that the SOE (PLN) meets its obligations.

CHAPTER 4

MANAGING FISCAL RISKS FROM GOVERNMENT GUARANTEES

From the government's perspective, managing the fiscal risks from government guarantees for PPPs starts with ensuring that: (a) the legal and regulatory framework is sound; (b) the sector is moving towards sustainable practices; (c) the processes for identifying, selecting, and preparing projects for PPPs is clear and followed; (d) approval mechanisms by fiscal authorities are in place; and (e) the project has a strong underlying economic rationale, value for money, and appropriate risk allocation as detailed in Chapter 1.

Once a guarantee is issued, managing its risks is similar to managing the risks of any of the government's other contingent liabilities. These are liabilities for which payment is needed only if some uncertain future event or circumstance occurs, so the occurrence, value, and timing of the payment may all be unknown.⁴⁵ For this reason, the risks from government guarantees are often only accounted for when the guarantee is called or when there is a good likelihood of the guarantee being called, which does not allow the government to be able to assess properly its fiscal impact in advance. Thus, contingent liabilities must be monitored, and the fiscal risk of guarantees provided to a project must be assessed on a regular basis throughout the life of the project.

It is important to understand a government's additional fiscal risks, because the probability of a guarantee's being called is highly unlikely to be independent of other risks. History has shown that guarantees are often called during times of economic crises. A recession in the domestic economy is likely to affect all projects, even if it does not increase each project's risks in the same proportion. In the event of a macroeconomic crisis, a sudden decline in the foreign exchange rate, and a sharp increase in domestic interest rates, will create financial problems for a broad range of corporate borrowers, not just infrastructure projects. Financial crises that might trigger the payment of guarantees issued by a government may also create the need for the government to provide support to other institutions that are not protected by an explicit guarantee, such as the domestic banking system, subnational governments, or SOEs. Investors, debt markets, foreign exchange markets, and rating agencies may all expect the government to support these critical institutions in the event of an economic crisis. Although the government is under no legal obligation to do so, it may nevertheless feel compelled to provide this support. The amounts of such support are referred to as "implicit liabilities."

To help think through the various types of contingent liabilities, Brixi and Mody⁴⁶ devised a "fiscal risk matrix" that divided risks into four types, based on whether a liability is direct or contingent, and whether it is explicit or implicit:

- **Direct liabilities:** Predictable liabilities in terms of amount and timing;
- **Contingent liabilities:** Liabilities that will arise only on the occurrence of a defined, uncertain event;

⁴⁵ Shendy, Martin, and Mousley 2013.

⁴⁶ Saxena 2017.

- **Explicit liabilities:** Liabilities that are created by law or contract, including PPP contracts; and
- **Implicit liabilities:** Liabilities for which the government has no legal responsibility, but which represent moral obligations imposed on the government by public expectations.

The definitions above can be combined in a matrix. Examples of each type of liability are shown in the Table 4.1.

TABLE 4.1
Liability Types

	DIRECT LIABILITY	CONTINGENT LIABILITY
Explicit Liability	Social-security payments	Deposit insurance
	Sovereign debt	Guarantees of borrowings by sub-sovereign entities
Implicit Liability	Future costs of public-investment projects	Default of sub-sovereign entity on non-guaranteed debt
		Support to the banking system

Case 4.1 shows an example of how Peru calculates its direct and contingent liabilities.

A worst-case analysis for government guarantees should consider that the government is likely to need to provide support to other sectors (such as the financial institutions and SOEs), in addition to infrastructure projects. If the guarantees' probabilities of being called are highly correlated, or if several unrelated risks should occur simultaneously, and the claims against the government turn out to be much greater than the expected payouts, governments will need to consider how to handle this contingency.

It should be noted that government guarantees of third-party (government contracting agencies) obligations, particularly with regards to obligations under PPP contracts, are covering obligations that already exist, so the ultimate fiscal impact to the government is similar with or without the guarantees. In other words, it is typically the primary obligation under the PPP contract (rather than the guarantee) that created the liabilities; the guarantee is simply ensuring that such liabilities are honored when triggered. Similarly, if the government were to procure the project through other means, it could still incur significant contingent or direct liabilities. For example, if an SOE is tasked with developing the project and then issues hard currency bonds to raise the financing, the government would likely be implicitly or explicitly guaranteeing those bonds.

The rest of this chapter details some of the techniques and best practices to manage the fiscal risks from government guarantees throughout the life cycle of a project.⁴⁷

4.1 INSTITUTIONAL ARRANGEMENT FOR RISK MANAGEMENT

The line ministry or other implementing agency (such as a subnational government or SOE) that owns each project generally bears the frontline responsibility for preparing the project and requesting a guarantee, as well as for monitoring the operational and financial performance of projects which have been issued guarantees, although in some cases a centralized PPP unit or coordinating body may bear these responsibilities. As noted in Chapter 1, risks are first identified at the project-preparation stage, and any potential government liabilities arising from the PPP contract should be flagged by the line ministry or the state-owned utility (and quantified,

⁴⁷ For further information on managing the fiscal risks from government guarantees, see World Bank 2019b.

if possible) at that stage. This reporting should also identify steps that can be taken to address problems the projects are experiencing that might make it more likely a guarantee will be called. Risks should be reported to a central entity, usually the MoF, which is ultimately responsible for risk management related to PPPs.

Once such information is received by the MoF, the ministry should analyze the information (requesting additional information if necessary) in light of the overall portfolio of existing liabilities, to determine whether the government can afford the additional liabilities arising from the proposed PPP. This analysis usually entails reviewing the overall direct and contingent liabilities from the project, valuing them, and comparing them against the fiscal space in the budget. It is best practice for the MoF to assess the need and affordability of the guarantee on a portfolio basis and approve any direct and contingent liabilities before the project is implemented.

Sometimes, contracts that create liabilities for the government must also be approved by parliament. Once the project is under way, the MoF is responsible for the proper accounting of the PPP and associated guarantees on the government's balance sheet (see Section 4.4 for more on government accounting of PPPs and guarantees.) The MoF can also estimate the total exposure on a normal and worst-case scenario basis, account for and disclose the potential liability, and find a way to fund potential outcomes.

4.2 EXPOSURE UNDER GOVERNMENT GUARANTEES FOR PPPs

As noted earlier, it is important that the government produces an accounting of its total exposure under the guarantees it has issued. For any given planning period, an expected payout with respect to each guarantee issued by the government should be estimated, and the sum of these expected payouts should be compared to the government's current and projected financial resources.

Even though the government's total exposure represents an estimate, it can be calculated with relative precision to enable the government to realize when the amount reaches a level that may require reducing the issuance of new guarantees. Some governments also set clear ceilings or upper limits on the amount of guarantees to which the government is willing to be exposed, and it needs to know when those limits are close to being met. Similarly, a reasonable estimate of the government's liabilities with respect to its guarantees is necessary to enable the government to take steps to assure that it has access to the financial resources necessary to pay its liabilities.

Measuring government contingent liabilities associated with guarantees for specific PPP projects or concessions is an area yet to be fully developed. Often, historical calls on financial guarantees or government guarantees of external debt are used as proxies for measuring the fiscal risk of government guarantees for PPPs, which ignores the complexities and nuances of PPP projects. As mentioned in Chapter 2, most government guarantees for infrastructure projects are conditional and provided to cover specific risks, including the risk of failure of government contracting agencies to perform or to pay according to the conditions of the underlying concessions or PPP contracts (i.e., performance guarantees or conditional payment guarantees), which are very different from government guarantees for SOEs borrowing for infrastructure investments that often have the features of financial guarantees.

In practice, measuring government exposure of guarantees for infrastructure PPP projects often depends on a number of factors: the nature and scope of the government undertakings covered by those guarantees (which determines the exposure of the government obligations when the guarantees are called and ultimately settled for payment), and the probability that those guarantees get called. Thus, estimating government exposure to guarantees for PPPs can theoretically be thought of as analogous to how financial institutions calculate their expected loss:

$$\text{Expected Loss} = \text{Exposure at Default (EAD)} \times \text{Probability of Default (PD)} \times \text{Loss Given Default (LGD)}$$

EAD is the total value a bank is exposed to when a loan defaults. In PPPs, the EAD equivalent for a government guarantee would be the face value of the government guarantee at the time of default. Credit default swap

methodology, as explained in many corporate finance textbooks, can be used as proxy to measure government exposure to guarantees for sub-sovereign and SOE borrowing, but is less useful for infrastructure PPP projects where the government rarely provides financial or credit guarantees as discussed earlier.

PD describes the likelihood of a default over a particular time horizon. Estimating PD of a government guarantee for PPP projects is more complicated than a loan as it depends on the nature and risks of the government guarantee as well as the credit strength of the Guaranteed Entity as mentioned earlier. For example, political and regulatory risk guarantees should have a rather small probability of being called, because those risks are largely in the control of the government (except, arguably, for political violence or wars, or radical changes of regimes or policies). Furthermore, government guarantees on early terminations have rarely led to final termination payment, because in reality most PPPs or concessions that had disputes were continued through restructuring and renegotiations. A study by the Global Infrastructure Hub found 48 instances of renegotiation in 146 projects for which data was available, which roughly equates to one in every three projects.⁴⁸

LGD represents the percentage of the loan unrecovered by the lender after selling the underlying asset or collateral in the event of a default. For infrastructure PPPs, in the rare cases of unsolved/unsettled early terminations, the amount of payment would depend on the triggers and the counterparties responsible for those triggers (see Section 2.6). Even in cases in which governments finally make termination payments, they are often in exchange for the underlying project assets that have realizable value. Thus, the actual exposure of the government guarantees under such scenario would be offset by the value of the assets transferred.

Going back to PD, there are various models of different levels of sophistication for evaluating the risks and probabilities of contingent liabilities that may be realized from individual projects. These can be summarized under credit rating, statistical, financial, and structural models.⁴⁹ Credit ratings are primarily used by ratings agencies, though few PPPs in developing countries are rated. In such cases, the government can potentially use the methodology papers that ratings agencies publish for the respective industries, to help the government conduct its own internal ratings (see Case 4.2: Managing Contingent Liabilities from Eskom in South Africa). At a high level, the historical data on default rates of EMDE infrastructure project finance loans collected by rating agencies⁵⁰ can be used as a rough indicator. Statistical techniques such as Monte Carlo simulation involve finding analogous statistics, such as loan-default rates, to estimate the probability of default. Financial modeling involves assessing the firm's finances (using, for example, its balance sheet, income statement, and cash-flow statement) under various scenarios in order to determine its ability to service debt. In structural models, a guarantee is viewed as a put option, and option pricing theory is used to calculate default probabilities.⁵¹ A summary of each of the methods and their key characteristics is set in Table 4.2.

In conjunction with these tools to assess the probability of default of government guarantees, a relevant tool provided by the World Bank and IMF is the Public-Private Partnerships Fiscal Risks Assessment Model (PFRAM).⁵² The PFRAM model is an Excel-based tool that provides a template for gathering data; quantifying the impact of a PPP project or portfolio of projects on the government's deficit and debt; and performing a sensitivity analysis based on changes in both macroeconomic and project-specific assumptions.

Case 4.1 shows an example of how Peru calculates its direct and contingent liabilities.

48 Global Infrastructure Hub. 2018.

49 World Bank 2019b.

50 Both Moody's and S&P's have published reports on this topic: 1995-2016 Global Bank Loan Unrated Project Finance Default And Recovery Report by S&P's, November 20, 2018; and Infrastructure default and recovery rates, 1983-2018 by Moody's, August 6, 2019.

51 World Bank 2019b.

52 The PFRAM Excel tool can found within the PPP Tools at <http://www.worldbank.org/en/topic/publicprivatepartnerships/brief/ppp-tools-T2>.

TABLE 4.2**Summary of Key Characteristics of Four Commonly Used Credit Risk Assessment Methodologies for Government Guarantees**

METHODOLOGY	CREDIT RATING	STATISTICAL MODELS	FINANCIAL MODELING	STRUCTURAL MODELS
Description	Key risk factors are scored and aggregated to arrive at an overall risk rating	Econometric analysis to predict financial distress (dependent variables) based on firm characteristics (independent variables)	Entities' finances are modeled under alternative scenarios (deterministic or stochastic) to assess their ability to service debt	Estimate probability of distress based on firm leverage and asset volatility using insights from option pricing theory
Information and capacity required	Detailed qualitative and quantitative information about rated entities Understanding of fundamental risk drivers per industry	Sufficiently large dataset of historic financial distress events, paired with relevant firm characteristics to calibrate model; Statistical knowledge	Entities' finances; understanding of relationship between scenario variables and entities' financial performance Modeling capacity	Asset values or other firm characteristics and their volatility and future growth rates Modeling capacity; understanding of financial theory
Advantages	Flexible in analyzing specific risk drivers; intuitive and easy to explain; analytically less demanding; significant third-party information available	Can capture specific risks to government when based on internal data based on historic information	Can capture highly specific information and risk characteristics; allows for statement on loss distribution if stochastic (e.g. unexpected losses)	Simple formula
Disadvantages	Requires understanding of risk drivers in each industry; subjective to opinion of analyst or rating committee	May be too mechanical if it does not allow for judgement; may be backward looking if only using historic data	Complex and high resource demand; tendency to model macroeconomic scenarios may overlook importance of idiosyncratic factors	Requires estimate of equity values and volatility; may be too mechanical, not allowing for judgement
Outputs	Ordinal risk rating (e.g. letters)	Credit score (similar to risk rating); probability of distress	Scenario losses (deterministic) or loss distribution (stochastic)	Probability of distress
Governments and institutions using methodology	Indonesia; Ghana; South Africa; Sweden; Thailand Rating agencies; financial institutions; World Bank	Turkey Academia (Altman Z score); financial institutions	Indonesia (in progress); South Africa (in progress); Sweden Project finance; financial institutions	Philippines; Sweden in past KMV and Merton models; financial institutions

Source: World Bank Treasury.

4.3 BUDGETING AND PAYING FOR GOVERNMENT GUARANTEES

A government's ability to fund payments with respect to its issued government guarantees depends on the following factors:

- The amount of cash it has on hand at the time a guarantee must be funded, including through any special or sovereign funds;
- Its ability to raise taxes, fees, customs revenues, and other sources of general revenue;
- The additional revenues that will be produced by the growth of the domestic economy;
- Its ability to borrow from multilateral agencies, private sector banks, capital markets, and, occasionally, other governments; and
- The extent to which the government may need funds to address other unexpected needs that occur at the same time one or more guarantees are called.

Because the actual levels of government revenue and expenditure are subject to substantial uncertainty (depending on macroeconomic variables), the IMF recommends that governments (a) make explicit the cost of guarantees at the time of their issuance, and (b) ensure adequate budgetary provisions exist for making payments if and when guarantees are called. A distinction is made between cash budgeting and accrual budgeting, whereby the former considers only the current period's expected cash receipts and expenditures, whereas the latter captures the long-term financial consequences of current decisions, by estimating and making provisions for the cost of the guarantees at the time of issuance. Although the latter may be more transparent, like the accrual accounting discussed in Section 4.4 below, it also requires higher technical capacity.⁵³ Therefore, many EMDEs continue to use cash budgeting.

Even with cash-based budgeting, a country should ideally budget for likely guarantee payments in each medium-term budget and annual budget cycle, perhaps through the budget's contingency line, given the uncertain nature of the spending, or through other budget flexibility instruments that allow for reallocation if needed. This is aligned with the move away from cash-flow-based accounting, as described in Section 4.4, and creates transparency for the legislature and other observers about the amount of guarantees being issued by the government. The European PPP Expertise Center notes:

Sound budget rules should be such that Governments examine state guarantee proposals (i.e., exposure to risk) in the same way they consider spending proposals (i.e., cash disbursements). Incorporating the cost of bearing risk into budgets is advisable. If budget rules require governments to take account of the cost of a sovereign guarantee when it is issued, the temptation to use sovereign guarantees unwisely will be much reduced. Governments should also reflect in their annual budgets the expected cost of meeting calls under their state guarantees, an allowance for administration costs and a margin to cover uncertainties.⁵⁴

However, although this is the ideal scenario, in many developing country governments, expenditures exceed revenues, and available cash balances are usually necessary to conduct normal operations. In such cases, any surplus cash could be used to reduce indebtedness. Therefore, although pre-funding guarantees through the budget cycle may be an aspirational goal for EMDEs issuing guarantees, it is also important to consider other methods of funding guarantees.

a. Guarantee Funds

Another method of ensuring adequate resources for funding guarantees is for the government to contribute to a special fund. In some cases, the amount set aside is equal to the expected payment under each guarantee

⁵³ Saxena 2017.

⁵⁴ European PPP Expertise Centre 2011.

during the budget period. In others, the amount is based on the amount of donor support, or what the government budget can afford, or some special funding regime (such as fuel levies). The resources can be actual or notional (below-the-line accounts that are pooled in the treasury single account, which has the effect of setting aside resources that can be used when needed for meeting obligations).⁵⁵ Of course, the biggest benefit to this approach is the supposed “ring-fencing” of contingent liabilities (that is, keeping the liabilities off the government’s balance sheet)—assuming that the guarantee payments are limited by the amount in the fund—and ensuring some liquidity to pay for a guarantee when called. For more information, see Case 3.1: The Evolution of Comfort Letters and Guarantees in Indonesian Electric Power Projects.

Additionally, the existence of such a pre-funding account, and the amounts held in it, could be important if lenders doubt the ability of the government to make good on its guarantees, or if it is needed to assure rating agencies of the government’s ability to make payments pursuant to a guarantee that supports the rating of capital markets’ debt issued by the project that is the subject of the guarantee. Moreover, having a dedicated fund may also allow additional resources to be allocated to the reviewing and monitoring of guarantees, creating an additional layer of scrutiny of the project (such as Indonesia’s IIGF model).

However, there are several problems with this approach. First, it is unlikely that sufficient resources can be set aside in such a fund to cover more than a few projects, and it would also not be cost-effective to do so. Furthermore, the source of funding for the fund is not always sustainable. Therefore, such funds may not assure lenders of their creditworthiness, due to their inherent limits. In the case of IIGF, recent transactions with international lenders combined an IIGF guarantee with an MoF guarantee, which essentially turned the ring-fencing concept into a “first-loss” concept instead—diluting the benefit to the government of having funds dedicated to meeting its guarantee obligations. Furthermore, the assumption underlying such a fund is that the projects in the portfolio of projects being guaranteed have probabilities of default that are independent, whereas, as noted in Section 4.1, the conditions that result in a guarantee being called are often likely to result in more than one being called (that is, the probabilities of default for all of the guarantees in the portfolio are unlikely to be independent).

b. New Borrowing

Another way for EMDEs to make the payments required under the guarantees they have issued is to access funding from MDBs and commercial banks. However, the availability and terms of such new borrowing will be contingent on the conditions in effect at the time the government needs to borrow. This approach may work if there is a single project-related issue. However, if there is a larger crisis, more borrowing could be very difficult and costly, or a major debt restructuring may be needed, which would complicate further borrowing.

4.4 GOVERNMENT ACCOUNTING

a. General Principles

An important step in managing the risks entailed by government guarantees is an adequate accounting of all government liabilities. However, the interpretation of “adequate” has changed and continues to evolve. Unlike large corporations—which use accrual accounting—governments have traditionally used “cash accounting,” whereby all receipts and expenditures are recorded during the period in which they occurred. Historically, guarantees were not accounted for until there were actual related cash flows, that is, when the guarantee was called (See Box 4.1 for a description of different types of government accounting.)

⁵⁵ Saxena 2017.

This gave the illusion of positive financial reports in the short term and created obvious difficulties in enabling governments to manage the associated fiscal costs, particularly during debt crises. Therefore, with the encouragement of the IMF, governments have begun to move toward accrual accounting, which has the benefit of allowing for better information for decision-making. As noted by the African Legal Support Facility publication, *Understanding Power Project Financing*, “a move towards accrual accounting may be part of a wider financial sector reform program that looks to improve government operations across the board as well as to contribute to the long-term sustainability of public finances, given the ability for governments to anticipate and react more readily to wider risks or threats to the financial health of a country.”⁵⁶ However, when compared to cash accounting, accrual accounting does have two

notable downsides—it requires a higher level of sophistication to implement because it is based on written commitments rather than actual expenditures, and, by disclosing its contingent liabilities upfront, it may put the country at a comparable disadvantage when it comes to sovereign borrowing. For this reason, accrual accounting is currently used primarily in OECD countries, rather than in more developing countries.

BOX 4

Four Types of Government Accounting

Cash accounting: Receipts and expenditures are recorded in the period in which they occur.

Modified cash accounting: Cash receipts and disbursements that are committed in a budget year are recorded and reported during the year and for a specified period after the end of the budget year.

Accrual accounting: Transactions (that is, commitments) made by the government are reported when they occur, without regard to when the cash transactions that fulfill these transactions occurred.

Modified accrual accounting: Accrual accounting is used, but certain assets (such as fixed assets) and liabilities are not included.

b. *Accounting for PPPs*

Although the decision to implement a project through a PPP may be heavily influenced by the fact that the government can avoid an initial cash outlay, the accounting treatment of the project may not achieve the same effect of avoiding impact on the government’s financial statements. The IMF’s *Government Finance Statistics Manual 2014* may require the project to be included in the government’s financial statements if an analysis of the project’s risks, rewards, and control suggests that the government is the “economic owner”⁵⁷ of the project, even if it is not the legal owner.⁵⁸ Similar treatment may be required by International Public Accounting Standard 32, *Service Concession Arrangements: Grantor*, published by the International Public Sector Accounting Standards Board (IPSASB).⁵⁹

c. *Accounting for Guarantees*

For governments converting to accrual accounting, the preferred standards are those of the IPSASB, which is an independent organization whose operations are facilitated by the International Federation of Accountants (IFAC).

56 African Legal Support Facility and Commercial Law Development Program 2016.

57 According to the United Nations System of National Accounts 2008, the definition of economic owner is “the institutional unit entitled to claim the benefits associated with the use of the entity in question in the course of an economic activity by virtue of accepting the associated risks.”

58 International Monetary Fund 2014, Sections A4.61–A4.65.

59 IPSAS 32, *Service Concession Arrangements: Grantor*, International Public Sector Standards Board, http://www.ifac.org/system/files/publications/files/B8_IPSAS_32.pdf.

Prior to deciding how to account for contingent liabilities, the government should determine when liabilities should be recognized. A liability is an obligation that has not yet been paid; therefore, under cash accounting, no liabilities are recognized, because only cash payments are reported. Using modified cash accounting, liabilities may be recognized if they are expected to be paid soon (for example, within 60 days) after the end of the reporting period, although they may instead be shown as expenditures within the reporting period. With modified accrual and full accrual accounting, essentially all liabilities are recognized.

With respect to the recognition of liabilities, in 1995 the Public Sector Committee of IFAC (the predecessor of the IPSASB) noted that most countries use similar criteria to determine when a liability should be recognized. These criteria are: (a) the future outflow of economic resources is probable, and (b) the amount of this outflow is measurable. The Public Sector Committee noted further that, “It is not simply uncertainty in and of itself that distinguishes a contingent liability from a liability as there may be considerable uncertainty about the measurement of certain liabilities. In the case of a contingency, it is the event or events creating the obligation that is uncertain, in addition to any measurement uncertainty.”⁶⁰

Thus, a guarantee should be recorded as a contingent liability in cases where the occurrence of an event capable of triggering the guarantee is regarded as “probable,” or more than 50 percent likely. As a practical matter, even if the uncertainty around guarantees means they are unlikely to be recorded as liabilities, governments can still disclose them in footnotes to their financial statements.

4.5 DISCLOSURE⁶¹

It has been shown that the timely disclosure of the financial commitments of governments has benefits in terms of increasing transparency, generating democratic debate about the benefits and risks of government undertakings, and otherwise holding the government accountable for the decisions it makes and for the contracts into which it enters. Contracts with a government counterparty—such as PPP contracts and guarantees—are public goods, given that it is the taxpayers and users who will ultimately pay for the services. Disclosure of key elements of PPP projects the government procures also creates a “higher level of confidence in the fairness of the process, better quality of bids, and the potential for the formulation of improved policies and practice relating to PPP in the long run.”⁶²

Therefore, best practice is moving toward transparency and disclosure of the terms of PPP contracts, including guarantees, with redactions for areas with confidentiality concerns (usually defined as commercially sensitive information, trade secrets, strategic and public-interest-related confidential information, and so on). Some governments publish all contracts on their websites. Others may have Freedom of Information Acts that permit citizens to access materials upon request. Additionally, several countries, such as Chile and South Africa, disclose the aggregate guarantee exposure to the legislature as part of the annual budget law process. Finally, disclosure of guarantees can be part of the financial reporting of the government, particularly for countries still using cash-based accounting, where disclosure may not be automatically included in the accounting principles.

60 IFAC Public Sector Committee 1995, paragraph .039. For comprehensive standards on government accounting, see International Monetary Fund 2014.

61 Disclosure issues related to PPPs are discussed in World Bank, the Construction Sector Transparency Initiative, the Organization for Economic Co-operation and Development, and PPIAF 2016.

62 World Bank et al 2016.

4.6 COST AND PRICING OF GUARANTEES

Pricing government guarantees for infrastructure PPPs can be very complicated, regardless if it is based on cost or risk, or a combination of both, because the ultimate payment obligations of the government are mostly conditional and scenario-based as discussed in Section 4.2. Most developing country governments do not charge for guarantees. If a project has a positive economic rate of return, but its ability to cover third-party financing costs is tight, or the government decides to pass on the savings from lower financing costs (resulting from government guarantees) to end consumers, it is appropriate to provide a guarantee at no cost, or not to charge a guarantee fee that covers the full cost of the guarantee.

Although most developing country governments do not charge for guarantees, it is still worth analyzing guarantees from cost or pricing perspectives. Charging for guarantees provided by the government can provide discipline for the decisions made by both the government and the recipient of the guarantee. If the government were not to charge for the guarantee, project sponsors and their lenders would almost always seek and accept guarantees, even if a guarantee were not necessary to finance the project.⁶³ Charging a fee for the guarantee forces the recipient of the guarantee to weigh the benefits of the guarantee against its cost, and thus makes it less likely that a guarantee will be provided in a situation where it is not necessary.

Similarly, from the government's perspective, charging a fee for a guarantee emphasizes that, although a guarantee does not require an immediate outlay of cash, it is not free. Charging fees also offers some assurance to the public that the credit of the government is not being squandered by politically motivated decisions that benefit favored domestic or foreign investors.

Whether a government charges for a guarantee or not, government guarantees incur a cost to the government from carrying contingent liabilities, which may affect the government's ability to borrow and borrowing costs in the future.

4.7 DEBT SUSTAINABILITY AND IMPACT ON RATING

Defining and accounting for contingent liabilities is now looked at closely by international organizations such as the IMF and credit rating agencies when assessing sovereign debt, due to the risks described elsewhere in this guidance book.

When assessing risk, the IMF looks at the entity that can call the guarantee. If it is an external (foreign) lender, this classifies the contingent liability as external debt. As part of the debt sustainability analysis (DSA), the IMF looks at how these contingent liabilities may affect the ability of the country to service its debt. This contributes to the assessment of fiscal risk and is something that countries must bear in mind when issuing guarantees for projects with foreign financing, because such guarantees could affect their overall debt ceiling, as determined by the IMF. However, because governments are not required to disclose all of their potential exposures to future fiscal liabilities through guarantees, not all government-guaranteed private sector foreign debt is included in the IMF's risk analysis. Therefore, countries must also continue to keep track of their own fiscal risks, rather than rely on the IMF's analysis.

⁶³ Two possible reasons that project sponsors or lenders would decline a guarantee is if the guarantee were to come with conditions they regard as intrusive or onerous, such as overly detailed monitoring and reporting requirements, or if the process of obtaining the guarantee were to significantly delay closing of the project's financing.

There is very limited discussion about the impact that government guarantees for PPPs have on sovereign ratings, except to some extent by rating agencies. For example, according to Moody's, public-private partnerships have limited impact on government debt—thus far, around the world, “the credit strength of most public sector entities has proved resilient to contractual and contingent PPP risks.”⁶⁴ According to Standard & Poor's debt analysis of PPPs in the United States,⁶⁵ upfront payments, toll revenues, gas taxes, or appropriations often back government commitments to PPPs. Thus, “because of the issuance structure, the PPP debt issuances are often free from the constraints of a government's debt affordability models.” Fitch, however, assumes that a government's liabilities under a PPP project are the equivalent to the debt outstanding on the project (because, in the event of an early termination, that is the liability that will need to be paid out). It then incorporates the grantor's liabilities into the issuer default rating (IDR) analysis of the government, based on relevant criteria. The termination amount may be considered a contingent liability that will come due during the term of the project, or be added to the grantor's debt, where appropriate. How a default under a framework agreement would be reflected in the grantor IDR, including whether it would be treated as a restricted default of the grantor and/or related sponsor government, would depend on several considerations, including the nature of the default and the materiality of the obligation⁶⁶

⁶⁴ Moody's 2016.

⁶⁵ Standard & Poor's 2015.

⁶⁶ Fitch 2016.

CASE 4.1

CALCULATING EXPOSURE TO CONTINGENT LIABILITIES IN PERU

In Peru, line agencies must seek approval of the Ministry of Economy and Finance (MEF) when issuing commitments under PPP contracts that require a guarantee by the MEF, such as an MRG. To evaluate such guarantees, the MEF calculates: (a) the default probability, and (b) the total credit exposure from the liabilities.

As described by Cigdem Aslan and David Duarte,⁶⁷ both models have a similar framework and include the following steps:

- **Identification**—Identify sources of risk that affect the probability of default (for example, disruptions of access to water for water-sanitation projects and lack of traffic for transportation projects);
- **Modeling**—Select a method (most commonly a Brownian-motion process) with which to model the behavior of the risk variables that trigger the contingent liability;
- **Integration**—Tailor the risk models according to the contractual clauses on the commitments; and
- **Quantification**—Estimate the probability of default using Monte-Carlo simulations.

This computes the probability of default, and the exposure from the contingent liability in the event of project default. These variables are used to calculate the yearly expected nominal payments arising from contingent liabilities, according to the following formula:

$$EL = PD \times LGD \times EAD$$

where:

EL = Expected loss in the event of default

PD = Probability of default of the guarantee

LGD = Effective loss if the guarantee defaults

EAD = Exposure of the responsible institution if the guarantee defaults

The first parameter (PD) is calculated using the model mentioned above. Loss due to default is assumed to be 100 percent. Finally, to calculate the total stock of its guarantees, the present value of the annual expected loss is obtained by discounting, using the Commercial Interest Reference Rate (CIRR).

Besides its being good practice in managing fiscal risks, Peru is obligated to calculate the total stock of its guarantees, because it has a regulatory cap on the stock of guarantees for PPP projects that can be outstanding at any given moment. This cap is set in the decree at seven percent of GDP, but is revisable by the MEF every three years. In this way, Peru properly takes account of, budgets for, and caps the contingent liabilities associated with guarantees.

⁶⁷ A significant portion of this case study is derived from Aslan and Duarte 2014.

CASE 4.2

MANAGING CONTINGENT LIABILITIES FROM ESKOM IN SOUTH AFRICA

The National Treasury of South Africa is exposed to contingent liabilities from guarantees to Eskom, the state-owned electric utility. The government supports Eskom in its capital expenditure program to increase the generation of electricity and improve transmission and distribution. To do so, the government guarantees Eskom's borrowing from creditors and also provides guarantees for power purchase agreements between Eskom and IPPs.

Risks from government guarantees are analyzed and monitored by the Credit Risk Directorate of the Asset and Liability Management Department at the National Treasury. The Credit Risk Directorate submits reports and recommendations to the Fiscal Liabilities Committee, which in turn advises the MoF. Focusing on explicit contingent liabilities, the National Treasury identifies its risk as outstanding guaranteed debt (as reported in the budget) plus termination payments to IPPs, payable in the case of prolonged non-honoring of payment obligations from Eskom under the power purchase agreements.

The Credit Risk Directorate at the National Treasury developed a credit risk assessment methodology that is primarily based on the credit rating, but which also sometimes involves financial modeling to assess risks. The rating methodology scores Eskom's risk factors, including business risks and financial risks, and aggregates them to an internal credit score. This score is then translated into default probabilities. Credit scores and default probabilities are used in internal reports to the Fiscal Liabilities Committee and the Minister of Finance, to monitor Eskom's creditworthiness and to support decisions with respect to managing future exposure to Eskom. The National Treasury is also in the process of developing risk-based guarantee fees and contingency reserves.

Source: World Bank 2019b, as summarized from Bachmair, Aslan, and Maseko 2019.

CHAPTER 5

GUIDELINES FOR GOVERNMENTS

As described in this guidance book, government guarantees should only be considered after rigorous analysis, market sounding, appropriate advice, and careful coordination among different government departments. Unfortunately, this is rarely the case in many developing countries. Government guarantees are often requested or rushed through towards the end of the project preparation right before closing, leaving no time for the government to conduct appropriate due diligence, analysis, and coordination. Such last-minute guarantees often fundamentally change the risk allocation of the underlying project and the risk profile for the government and can also harm the integrity of the procurement process, if the guarantee was not discussed in the project preparation process or included as part of the bidding documents. Hurried implementation of guarantees can be dangerous for the government and should be avoided.

The government should establish a system, process, or mechanism to plan, coordinate, and manage its risk exposure ahead of time. The line ministries in charge of project development and approvals should coordinate closely with the MoF, which should measure and disclose the government's exposure and obligations on a regular basis.

Many countries have established a centralized PPP unit to oversee the government's undertakings and obligations under different PPP and privately financed projects. Just because the government does not provide any explicit guarantees does not mean it has no risks. The underlying concessions or PPP contracts may have many explicit or imbedded clauses that require the government to perform certain contractual and financial undertakings, which should also be carefully analyzed and managed.

The following steps should be undertaken to facilitate the successful development and financing of infrastructure projects without providing more support than is actually needed to develop the project.

5.1 PROJECT SELECTION

The government should only provide guarantees or other support to carefully selected projects, developed through a transparent process, that are in line with the government's development priorities, are recommended and verified through a careful sector-planning exercise, and are economically and financially sound. In other words, the first question that government officials should be asking is not whether they should provide a guarantee to a project, but whether this is the right project to be supported by the government. How does the project fit into the country's overall sector planning? Should the project be developed through public procurement or a PPP? What are the main objectives or motivations for the government to choose a PPP—is the private sector needed for additional financing, or for increasing efficiency?

Some factors for selecting projects are as follows:⁶⁸

- All infrastructure projects should be first prioritized based on the public investment planning process, which may be based on:
 - Their real socio-economic return compared to their costs and risks, as validated by performing a thorough pre-feasibility or feasibility study, a cost-benefit analysis, an options analysis or some other prioritization process;
 - The extent to which they are in line with the government's development plan (which should reflect each project's real economic return) and sector planning, such as a least-cost development plan in the electric power sector; and
 - Public disclosure and consultation to determine the level of public support.
- Projects should be separated into two categories—(a) those that are to be financed by the private sector, and (b) those that are to be financed by the government.
- Projects to be financed by the private sector may be determined by
 - A value-for-money analysis;
 - The project's commercial and financial viability;
 - The amount of government support necessary for each project to obtain financing;
 - Fiscal risk and responsibility;
 - Any other factors according to the criteria and guidelines of each country.
- The final list of infrastructure projects should be determined by the government's available budget for infrastructure, based on its own resources and the additional resources to be supplied by MDBs and development partners, considered in relation to: (a) the cost of publicly financed projects, and (b) the total amount of support needed for privately financed projects.

5.2 RISK ALLOCATION

Appropriate and balanced risk allocation is one of the most critical factors for successful PPPs. The risks that should be transferred to the government and backed up through a government guarantee or other support should be determined as follows:

- Guarantees should be targeted at the risks that make it difficult or impossible for a project to attract lenders and equity investors. A government should prioritize risks that are within its control, such as political and regulatory risks. Direct or straight financial guarantees—rare in PPPs—should be avoided, unless there are compelling reasons. Extra caution should be exercised when considering foreign exchange rate guarantees. The government cannot control its exposure under such guarantees, and its exposure can be unlimited.
- Market conditions should be recognized through a market sounding that identifies key participants, and which of them is in the best position to assume which risks, and why. The risk appetite of the key participants and potential participants in the market should be explored. The government should review and check if there are any similar or comparable transactions (precedents) and how they were negotiated and structured under similar circumstances in the country or region. For example, should the government be responsible or provide a guarantee for natural force majeure risks such as outbreaks of epidemics? Or should the government only step in when the private insurance market is not available on commercially reasonable terms?

⁶⁸ For more detailed information on project identification, screening and appraisal, please see World Bank 2017a.

- The government should analyze which risks are under the government's control and which fall outside its control. The government can be more willing to cover those risks under the government's control, such as political risks, including expropriation and regulatory changes.
- There should be a fair and balanced risk allocation that does not offer more government support than is needed. Ultimately the government needs to understand the rationale of risk allocation in order to decide whether to provide certain guarantees or supports, and for which risks. The Global Infrastructure Hub's Risk Matrix provides a good guidance in that regard.⁶⁹
- The government's risk and exposure in the worst-case scenario should be recognized through rigorous analysis. The government should have a plan of action if the government guarantee is called. The plan should address how the guarantee payments can be funded, as well as how to avoid greater liability under the guarantee (if the maximum amount has not been called), and how to manage the liabilities that might arise if similar guarantees have been provided for other projects.
- Government guarantees or supports have cost implications. In other words, every risk has a cost that may need to be reflected in its price. Governments need to consider the tradeoffs between costs and benefits. If risks have been allocated to the government, then the private sector should not ask for the same level of pricing or compensation. Guarantees for which fees are charged, if any, should be priced to cover the cost to the government, and, where appropriate, to reflect the benefits to the project sponsor.
- Risk allocation must be properly reflected in the legal documentation (with the help of transaction advisers), with an adequate, market-tested dispute resolution mechanism to allow for fair and transparent resolution of disputes.

5.3 RISK MANAGEMENT, GOVERNANCE, AND MANAGING CONTINGENT LIABILITIES

There are a number of ways in which a government can manage or reduce its direct liabilities and contingent liabilities resulting from its support of PPP projects:

- Create accountable government institutions with stages of approval for any contingent and direct liabilities by the MoF and reporting requirements by the line agencies.
- Decide whether a government guarantee or other support will be needed and provided early on (during project preparation and development). The decision should be transparent. It should also be included in the bidding documents made available to all potential investors and bidders, because the availability of a guarantee will affect the risk and return profile of the underlying project and the pricing and value of the PPP.
- Regularly evaluate contingent and direct liabilities across the whole of government to understand the magnitude of the risks, using robust models that estimate the probabilities of default and the extent of the exposure.
- Consider creating an exposure limit on contingent liabilities arising from PPPs, either through a ceiling on the overall amount of contingent liabilities from PPPs, a maximum present value of commitments, or a maximum annual expected contingent payment to PPPs.
- Ensure that contingent liabilities are visible in the budgeting process, by provisioning for them, or at least by disclosing them in the government accounting.
- Regularly compile and disclose information on PPP projects with the general public.

⁶⁹ Global Infrastructure Hub 2016.

Although a government guarantee or other support is often required and can be a necessary credit enhancement tool to make the transaction financeable, it is often an interim measure to help the government speed up the delivery of infrastructure assets and services, before successful sectoral and regulatory reforms or SOE counterparties become creditworthy from the investors' perspective. The government in EMDEs should continue to address more fundamental issues in each sector, including regulations, pricing, and subsidies that have affected the creditworthiness of contracting agencies or SOE counterparties. Overreliance on government guarantees or support will only delay the necessary sectoral and regulatory reforms and ultimately expose the government to unsustainable liabilities.

By following these guidelines, countries can better utilize, negotiate, and manage their government guarantees to get more infrastructure projects developed, maximizing the benefits of government guarantees while reducing risks.

BIBLIOGRAPHY

- African Legal Support Facility and Commercial Law Development Program. 2016. *Understanding Power Project Financing*. Washington, D.C.: United States Department of Commerce.
- Araya, Gonzalo, Jordan Schwartz, and Luis Andres. 2013. “The Effects of Country Risk and Conflict on Infrastructure PPPs.” Policy Research Working Paper No. 6569. Washington, D.C.: World Bank.
- Aslan, Cigdem, and David Duarte. 2014. “How Do Countries Measure, Manage, and Monitor Fiscal Risks Generated by Public-Private Partnerships? Chile, Peru, South Africa, Turkey.” Policy Research Working Paper 7041. Washington, D.C.: World Bank.
- Bachmair, Fritz Florian, Cigdem Aslan, and Mkhulu Maseko. 2019. “Managing South Africa’s Exposure to Eskom: How to Evaluate the Credit Risk from the Sovereign Guarantees?” Policy Research Working Paper. Washington, D.C.: World Bank.
- Baeza, M. de los Ángeles, and Jose Manuel Vassallo. 2010. “Private Concession Contracts for Toll Roads in Spain: Analysis and Recommendations.” *Public Money & Management* 30: 299–304.
- Bain, Robert, and Lidia Polakovic. 2005. “Traffic Forecasting Risk Study Update 2005: Trough Ramp-Up and Beyond.” Standard & Poor’s.
- Basel Committee on Banking Supervision. 2004. “Annex 4, Supervisory Slotting Criteria for Specialised Lending, Table 1 – Supervisory Rating Grades for Project Finance Exposures.” In *International Convergence of Capital Measurement and Capital Standards: A Revised Framework*, edited by Basel Committee on Banking Supervision, 198–204. Basel: Bank for International Settlements.
- Bova, Elva, Marta Ruiz-Arranz, Frederik Toscani, and H. Elif Ture. 2016. “The Fiscal Cost of Contingent Liabilities: A New Dataset.” IMF Working Paper. Washington, D.C.: International Monetary Fund.
- Cangiano, M., et al. 2006. *Public-Private Partnerships, Government Guarantees, and Fiscal Risk*. Washington, D.C.: International Monetary Fund.
- Castalia Limited. 2010. Pakistan: *Contingent Liabilities from Public Private Partnerships*. Consultant Report. Washington, D.C.: World Bank.
- Chew, William H. 1997. “Comments on Managing Exchange Rate- and Interest Rate-Related Project Exposure: Are Guarantees Worth the Risk.” In *Dealing with Public Risk in Private Infrastructure*, edited by Timothy Irwin et al. World Bank Latin American and Caribbean Studies. Washington, D.C.: World Bank.
- Dentons. 2013. “A Guide to Project Finance.” <https://www.dentons.com/en/insights/guides-reports-and-whitepapers/2013/april/1/a-guide-to-project-finance>

- Dodd, Nathan, David Harrison, and Benjamin Thompson. 2017. "Southeast Asia: Government Guarantees – To Be or Not to Be." Mayer Brown JSM. <https://www.lexology.com/library/detail.aspx?g=f99a9f4b-7505-4586-b80c-5bdd37bf9710>
- EDHEC Infrastructure Institute-Singapore. 2018. "Tome La Siguiente Salida (Take the Next Exit): A Case Study of Road Investments Gone Wrong."
- Engel, Eduardo, Ronald Fischer, and Alexander Galetovic. 1997. "Infrastructure Franchising and Government Guarantees." In *Dealing with Public Risk in Private Infrastructure*, edited by Timothy Irwin et al. Washington, D.C.: World Bank.
- European PPP Expertise Centre. 2011. "State Guarantees in PPPs: A Guide to Better Evaluation, Design, Implementation and Management."
- Fitch Ratings. 2016. "Rating Public-Sector Counterparty Obligations in PPP Transactions."
- Fraser, Julia. 2005. "Lessons from the Independent Private Power Experience in Pakistan." Energy and Mining Sector Board Discussion Paper. Washington, D.C.: World Bank.
- Global Infrastructure Hub. 2016. "PPP Risk Allocation Tool." <https://ppp-risk.gihub.org>.
- Global Infrastructure Hub. 2018. *PPP Contract Management Report*. <https://managingppp.gihub.org/report/>.
- Hemming, Richard. 2006. *Public-Private Partnerships, Government Guarantees, and Fiscal Risk*. Washington, D.C.: International Monetary Fund.
- Inter-American Development Bank and World Bank. 2016. "Peru: Metro Lima Line 2." Multilateral Development Banks' Collaboration: Infrastructure Investment Project Briefs. Washington, D.C.: World Bank.
- International Federation of Accountants (IFAC) Public Sector Committee. 1995. "Accounting for and Reporting Liabilities, Study 6."
- International Monetary Fund. 2014. *Government Finance Statistics Manual 2014*. Washington, D.C.: International Monetary Fund.
- Irwin, Timothy C. 2003. *Public Money for Private Infrastructure: Deciding When to Offer Guarantees, Output-Based Subsidies, and Other Fiscal Support*. Washington, D.C.: World Bank.
- Irwin, Timothy. 2007. *Government Guarantees: Allocating and Valuing Risk in Privately Financed Infrastructure Projects*. Washington, D.C.: World Bank.
- Irwin, Timothy, et al., eds. 1997. *Dealing with Public Risk in Private Infrastructure. World Bank Latin American and Caribbean Studies*. Washington, D.C.: World Bank.
- Irwin, Tim, Samah Mazraani, and Sandeep Saxena. 2018. *How to Control the Fiscal Costs of Public-Private Partnerships. International Monetary Fund Fiscal Affairs Department*. Washington, D.C.: International Monetary Fund.
- Kantor, Mark. 2000. "International Project Finance and Arbitration with Public Sector Entities: When is Arbitrability a Fiction?" *Fordam International Law Journal* 24 (4).
- Ladha, Nidhi, Aditi Jhunjunwala, and Nivedita Shankar. 2013. "When Does a Letter of Comfort become a Contract of Guarantee?" *Chartered Accountant Practice Journal* (January).
- Leigland, James, and Chris Shugart. 2006. "Is the Public Sector Comparator Right for Developing Countries?" Gridlines Note No. 4. Washington, D.C.: Public-Private Infrastructure Advisory Facility (PPIAF).

- Lu, Jason, et al. 2013. "Maximizing World Bank Group Synergies through Collaboration and Innovation: Lessons Learned from the Thika Power Generation Project in Kenya." IFC Smart Lessons. Washington D.C.: International Finance Corporation.
- Magnusson, Tomas. 1999. "Sovereign Financial Guarantees." UNCTAD, UNDP, and UNITAR Workshop on Management of a Debt Office in Tbilisi, April 19–22.
- Marsh & McLennan Companies' Asia Pacific Risk Center. 2017. "Closing the Financing Gap: Infrastructure Project Financing in Asia." <https://www.marsh.com/ph/insights/research/closing-the-financing-gap-infrastructure-project-bankability-in-asia.html>
- Mas, Ignacio. 1997. "Managing Exchange Rate- and Interest Rate-Related Project Exposure: Are Guarantees Worth the Risk." In *Dealing with Public Risk in Private Infrastructure*, edited by Timothy Irwin, et al., 109–128. World Bank Latin American and Caribbean Studies. Washington, D.C.: World Bank.
- Matsukawa, Tomoko and Odo Habeck. 2017. *Review of Risk Mitigation Instruments for Infrastructure Financing and Recent Trends and Development. Trends and Policy Options No. 4*. Washington, D.C.: World Bank.
- Mody, Ashoka, and Dilip Kumar Patro. 1996. "Methods of Loan Guarantee Valuation and Accounting." In *Infrastructure Delivery: Private Initiative and the Public Good*, edited by Ashoka Mody. Washington, D.C.: World Bank.
- Mody, Ashoka. 2002. "Contingent Liabilities in Infrastructure: Lessons from the East Asian Crisis." In *Government at Risk: Contingent Liabilities and Fiscal Risk*, edited by Hana Brix Polackova and Allen Schick. Washington, D.C.: World Bank and Oxford University Press.
- Monteiro, Rui S. 2007. "PPP and Fiscal Risks: Experience of Portugal." Paper presented to the International Seminar on Strengthening Public Investment and Managing Fiscal Risks from Public–Private Partnerships, sponsored by the International Monetary Fund, the Hungarian Ministry of Finance, and the International Center for Economic Growth – European Center, Budapest, March 7–8.
- Moody's Investors Service. 2016. "Most public-private partnerships have limited impact on debt metrics for government." Press release, February 22.
- Moody's Investor's Service. 2018. "Default Research: Default and Recovery Rates for Project Finance Bank Loans, 1983–2016."
- Moszoro, Marian W., et al. 2015. "Institutional and Political Determinants of Private Participation in Infrastructure." <https://ssrn.com/abstract=2508474> or <http://dx.doi.org/10.2139/ssrn.2508474>.
- OPIC (Overseas Private Investment Corporation), et al. "Important Features of Bankable Power Purchase Agreements for Renewable Energy Projects." <https://www.opic.gov/sites/default/files/files/10%20Elements%20of%20a%20Bankable%20PPA.pdf>.
- Pereira dos Santos, Pablo. 2018. Introductory Guide to Infrastructure Guarantee Products from Multilateral Development Banks. IDB Technical Note 1611. Washington, D.C.: Inter-American Development Bank.
- Petrie, Murray. 2002. "Accounting and Financial Accountability to Capture Risk." In *Government at Risk: Contingent Liabilities and Fiscal Risk*, edited by Hana Brix Polackova and Allen Schick. Washington, D.C.: World Bank and Oxford University Press.
- Polackova Brix, Hana, and Allen Schick. 2002. *Government at Risk: Contingent Liabilities and Fiscal Risk*. Washington, D.C.: World Bank and Oxford University Press.
- PricewaterhouseCoopers. 2013. "Towards a new era in government accounting and reporting." <https://www.pwc.com/gx/en/psrc/publications/assets/pwc-global--ipsas-survey-government-accounting-and-reporting-pdf.pdf>.

- Pulido, Daniel, et al. 2018. *The Urban Rail Development Handbook*. Washington, D.C.: World Bank.
- Regional Center for Renewable Energy and Energy Efficiency. 2016. *Egyptian Solar PV Feed-in-Tariff Procedures for Large Scale Projects: A Guideline for Investors*. Eschborn, Germany: Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ).
- Saxena, Sandeep. 2017. *How to Strengthen the Management of Government Guarantees*. Washington, D.C.: Fiscal Affairs Department, International Monetary Fund.
- Schick, Allen. 2002. "Budgeting for Fiscal Risk." In *Government at Risk: Contingent Liabilities and Fiscal Risk*, edited by Hana Brix Polackova and Allen Schick, 79–97. Washington, D.C.: World Bank and Oxford University Press.
- Shendy, Riham, Helen Martin, and Peter Mousley. 2013. *An Operational Framework for Managing Fiscal Commitments from Public-Private Partnerships: The Case of Ghana*. Washington, D.C.: World Bank.
- Standard & Poor's. 2015. "Credit FAQ: How Standard & Poor's Treats Public-Private Partnerships in U.S. State and Local Government Debt Analysis."
- Stothard, Michael. 2017. "Hedge Funds to Fight Spanish Government for Toll Road Payout." *Financial Times*, December 4.
- Wells, Louis T., and Rafiq Ahmed. 2007. *Making Foreign Investment Safe: Property Rights and National Sovereignty*. New York: Oxford University Press.
- World Bank. 2012. *Best Practices in Public-Private Partnerships Financing in Latin America: The Role of Guarantees*. Washington, D.C.: World Bank.
- World Bank. 2016a. "Financial Viability Support: Global Efforts to Help Create Commercially Viable PPPs." Partnerships IQ. Washington, D.C.: World Bank.
- World Bank. 2016b. "World Bank Group Guarantee Products Guidance Note." https://ppp.worldbank.org/public-private-partnership/sites/ppp.worldbank.org/files/documents/PPPCCSA_WBGGuarantees_Final%20_%20English%20_Printed%20Oct%202016.pdf.
- World Bank. 2017a. *Public-Private Partnerships: Reference Guide Version 3*. Washington, D.C.: World Bank. <https://pppknowledgelab.org/guide/sections/83-what-is-the-ppp-reference-guide>
- World Bank. 2017b. *Africa's Pulse (English)*. Washington, D.C.: World Bank Group.
- World Bank. 2018. *Assessing the Fiscal Implications of Public-Private Partnerships Supported by the World Bank Group: Guidance for World Bank Group Staff*. Internal Note.
- World Bank. 2019a. *Guidance on PPP Contractual Provisions*. Washington, D.C.: World Bank.
- World Bank. 2019b. *Assessing and Managing Credit Risk from Contingent Liabilities - A Focus on Government Guarantees*. Washington, D.C.: World Bank.
- World Bank, et al. 2016. *A Framework for Disclosure in Public-Private Partnerships*. Washington, D.C.: World Bank.
- Xu, Yelin, John F.Y. Yeung, and Shaohua Jiang. 2014. "Determining Appropriate Government Guarantees for Concession Contract: Lessons Learned from 10 PPP Projects in China." *International Journal of Strategic Property Management* 18 (4): 356-367.



