

PUBLIC-PRIVATE PARTNERSHIP FUNDS OBSERVATIONS FROM INTERNATIONAL EXPERIENCE

Michael Schur

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Public–Private Partnership Funds: Observations from International Experience

Michael Schur
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ABSTRACT

Public–private partnerships (PPPs) change how governments work. They introduce competition into the provision of public services, mobilize additional expertise and financial resources, adopt life-cycle asset management within a results-based approach, base payments to service providers on performance, and allow governments to reduce the risks they bear. These innovations can help deliver public services faster, at a lower cost, and at higher quality. To achieve these benefits, however, the right projects need to be identified, and PPPs need to be developed and implemented effectively.

Many countries have established funds to help finance their PPP programs. This paper examines the international experience with three types of funds: viability gap funds, lending facilities, and guarantee funds. Each type of fund has a very precise purpose. That is, they are designed to address a specific constraint to developing bankable PPP projects.

The analysis yields several important lessons: Funds should only be set up to address specific problems. Dedicated funds can provide better incentives, concentrate expertise, and promote PPPs. However, a dedicated fund is not always necessary to address a problem and a poorly designed fund can have unintended consequences. Finally, the design elements of a fund should support its purpose.

SUMMARY

1. The Asian Development Bank (ADB) is helping the People's Republic of China investigate the use of funds and other facilities for providing government financial support to public-private partnerships (PPPs). ADB has since hired Castalia to examine international experience with such funds and the issues to consider in their design.
2. This paper examines three types of funds: viability gap funds, lending facilities, and guarantee funds. The analysis yields several important lessons.

Funds Should Only Be Set Up to Address Specific Problems

3. Each type of fund has a very precise purpose. That is, they are designed to address a specific constraint to developing bankable PPP projects. If the constraint is not apparent in a particular country, there is no need for the fund.
4. Funds are costly to the government, both in terms of administration costs and the application of fiscal support to a PPP project. This government support can be direct (such as viability gap funding or loans) or contingent (such as a guarantee). Either way, this support entails an opportunity cost and thus should be weighed against other government priorities; the government should only support PPPs where this provides value for money (VfM) or helps the government meet other important policy objectives.
5. This means that a government should be careful in rushing to set up a fund. It is important that a fund is designed to address a key constraint to PPP project development that can only be relieved through targeted government action. The absence of the hoped-for level of PPP financing is not itself a sufficient reason to set up a PPP fund.
6. This paper examines a number of funds that have been set up without identifying a specific problem. For example, the Fundo Garantidor de Parcerias Público Privadas (FGP) was set up in Brazil to address investors' lack of confidence in the government's commitment to honor its obligations under a PPP contract. While this lack of confidence is indeed a problem in Brazil, many of the state governments of Brazil have already set up their own guarantee funds. This may have contributed to the fact that the FGP has received only one application since it was established in 2004. As such, its initial asset allocation of \$2 billion has largely remained idle.

Dedicated Funds Can Provide Better Incentives, Concentrate Expertise, and Promote PPPs

7. A separate, dedicated fund can provide advantages over and above the alternative of delivering government support directly from a government ministry. While the advantages differ somewhat between the three types of funds, there are some common advantages.
8. A dedicated fund, possibly set up as a fully transparent, commercialized state-owned enterprise (SOE) or as an extension of an existing commercialized entity
 - (i) would be expected to manage its own balance sheet—this provides for clearer incentives, and would reduce the risk of the facility coming under political pressure;

- (ii) would be able to pay more market-related salaries than a government body, and hence will be better able to attract staff with the necessary skills;
- (iii) can increase awareness of the PPP program and send a signal about the government's commitment to PPPs;
- (iv) can improve staff performance incentives by tying performance to remuneration; and
- (v) can also provide PPP policy coordination and centralized support to help implementing agencies develop PPPs.

However, a Dedicated Fund Is Not Always Necessary to Address a Problem

9. The government does not necessarily have to set up a dedicated fund to address every constraint to PPP project development. Establishing a dedicated fund will take time and effort. As such, the government should explore alternative options.
10. For example, governments can increase access to long-term PPP debt finance through a lending facility or through guarantees on commercial borrowing, tenor extension facilities, refinancing guarantees, and exchange rate guarantees.

Further, a Poorly Designed Fund Can Have Unintended Consequences

11. A fund needs to be well designed to achieve its purpose. A poorly designed fund may not only fail to deliver benefits, it may have harmful unintended consequences.
12. For example, all of the viability gap funds examined cap the amount of grant funding available to a project. This can have negative unintended consequences:
 - (i) There is a risk that subsidy caps can lead to suboptimal project design—if, for example, projects are creatively restructured to require less subsidy while reducing economic benefits.
 - (ii) The cap may prevent projects in less financially viable sectors (such as sanitation) from being developed as PPPs.

The Design Elements of a Fund Should Support Its Purpose

13. Various design elements should support a fund in achieving its purpose. First, funds should design their product offering to suit the precise problem(s) they are trying to address. For example, the India Infrastructure Finance Company Limited (IIFCL) was set up to address the fact that the long-term debt market is underdeveloped. As such, the IIFCL provides financial products that fill the gap in the market, including loans and guarantees on commercial borrowing. However, products can be provided at market rates.
14. Second, most funds use eligibility criteria to ensure that they only support projects when this helps with their purpose. For example, the Treasury Infrastructure Finance Unit (TIFU) in the United Kingdom was established to address the lack of liquidity in the market by lending to PPPs that could no longer obtain private finance. As such, TIFU only lent to projects that could not secure sufficient private finance to reach financial close on a timely basis.

15. Third, a fund's source of funding is important in signaling to investors that the products provided by the fund are creditworthy. For example, for a government guarantee to be effective, investors must be confident that the guarantee fund will have sufficient funds to make the required payments if a guarantee is triggered. To generate this confidence, a guarantee fund must be endowed with a strong asset base that is not subject to annual budget appropriations.

ABBREVIATIONS

ADB	-	Asian Development Bank
BANOBRAS	-	Banco Nacional de Obras y Servicios Públicos (National Development Bank of Mexico)
CPEG	-	Contract Payment Enhancement Guarantee
FGP	-	Fundo Garantidor de Parcerias Público Privadas (Mexico)
FONADIN	-	Fondo Nacional de Infraestructura (National Infrastructure Investment Fund) (Mexico)
IIF	-	Indonesia Infrastructure Finance
IIFCL	-	India Infrastructure Finance Company Limited
IIGF	-	Indonesia Infrastructure Guarantee Fund
IPDF	-	Infrastructure Project Development Facility (Pakistan)
NHDP	-	National Highway Development Program (India)
PPP	-	public-private partnership
SOE	-	state-owned enterprise
TIFIA	-	Transportation Infrastructure Finance and Innovation Act (United States)
TIFU	-	Treasury Infrastructure Finance Unit (United Kingdom)
VfM	-	value for money
VGf	-	viability gap fund
VGP	-	viability gap payment

I. INTRODUCTION

1. Public-private partnerships (PPPs) change how governments work. They introduce competition into the provision of public services, mobilize additional expertise and financial resources, adopt life-cycle asset management within a results-based approach, base payments to service providers on performance, and allow governments to reduce the risks they bear. These innovations can help deliver public services faster, at a lower cost, and at higher quality. To achieve these benefits, however, the right projects need to be identified, and PPPs need to be developed and implemented effectively.
2. Many countries have established funds to help finance their PPPs programs. This paper, prepared under pillar 4 of the Operational Plan for PPPs of the Asian Development Bank (ADB), draws on the experience of other countries and development partners to identify key issues to be considered in using PPP funds in developing East Asia.¹
3. PPP funds need to build on an understanding of the appropriate role of government. International experience has clarified that a government should only provide financial support to PPPs where this provides value for money (VfM) or helps the government meet other important policy objectives. For example, government support can be used to do the following:
 - (i) Improve project quality, which in turn improves competition, drives down prices, and increases the likelihood of success of the PPP program.
 - (ii) Increase the use of PPPs. The benefits of PPPs (efficient procurement, life-cycle improvements, well planned maintenance, and service improvements) may not be captured by the relevant implementing agency. Government support can provide the incentives required to motivate even reluctant users to implement good PPP projects.
 - (iii) Reduce the cost of private finance, which in turn reduces the funding requirement, from users or the government.
 - (iv) Improve opportunities for specific parties to participate in the PPP program, for example local lenders and local equity investors, smaller investors, and new/poor consumers.
4. Government support can be coordinated through the establishment of a variety of funds. This report discusses three PPP funds and facilities:
 - (i) viability gap funds (Section 2),
 - (ii) lending facilities (Section 3), and
 - (iii) guarantee funds (Section 4).
5. Project development funds are another common type of fund. International experience with, and the key implementation issues for, project development funds are discussed in a separate ADB paper.² As such, this type of fund is not covered in this report.

¹ The report is funded under ADB. 2014. Technical Assistance to the People's Republic of China for Financing Private-Public Partnerships. Manila (TA 8869-PRC).

² See Craig Sugden. 2016. People's Republic of China: A Model Project Development Fund for Public-Private Partnerships. *EARD Working Paper Series*. No. 2. Manila: ADB.

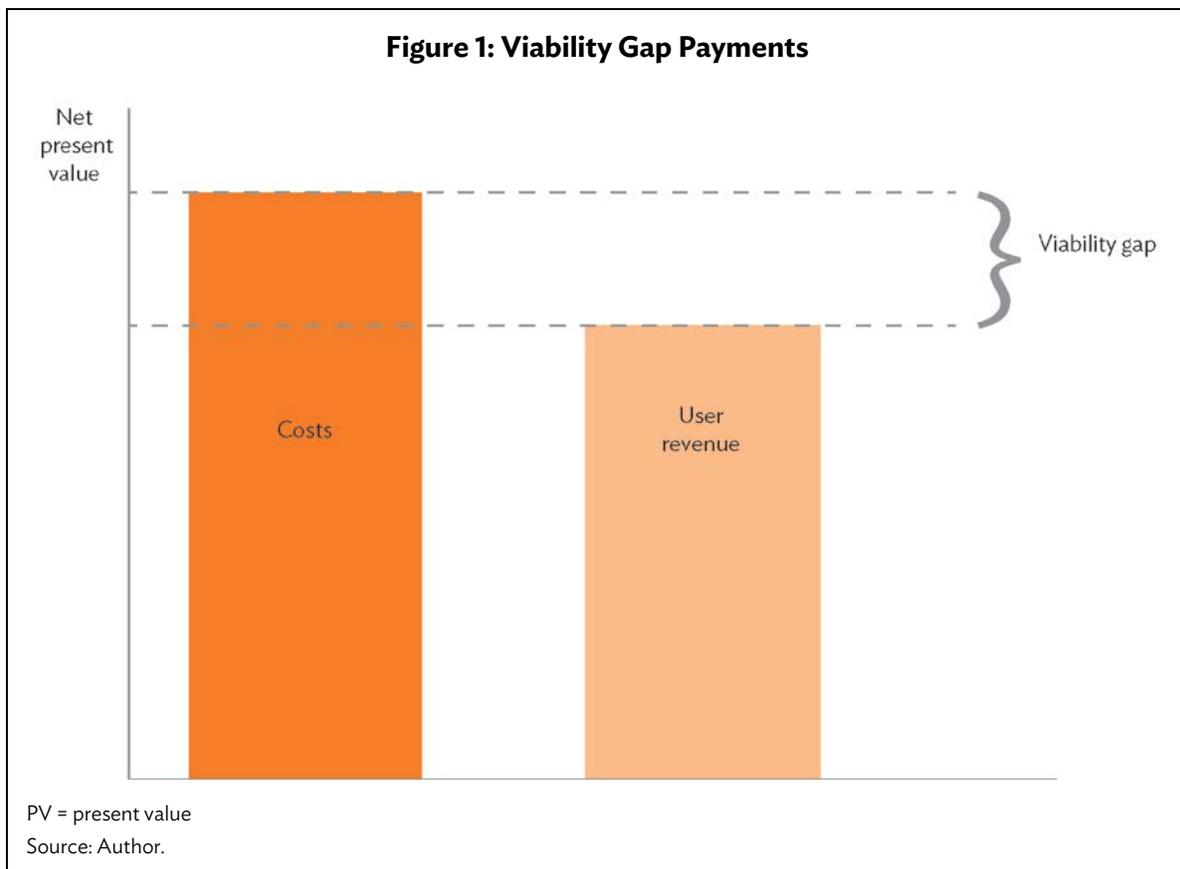
6. For each of these funds, the report discusses
 - (i) an analytical framework that identifies the specific problem the fund is designed to address (its purpose);
 - (ii) international experience; and
 - (iii) key design considerations, including how a fund compares to other options for addressing the problem.

II. VIABILITY GAP FUNDS

7. This section describes the widely used or “traditional” way in which viability gap funds (VGFs) are applied, and then provides an analytical framework that gives rise to a different approach to viability gap funding.

A. Traditional Approach to a Viability Gap Fund

8. The traditional approach to VGFs starts from the premise that when user fees are not sufficient to fully recover the costs of the project, including the costs of finance, the project is said to have a viability gap, and the government may want to contribute funding through subsidies to fill this gap and ensure that the PPP is attractive to private investors. This is reflected in Figure 1:



9. The purpose of government subsidies is to make sure projects that produce a net economic or social gain are financially viable. There are two broad reasons why an economically justified project may not be financially viable:
 - (i) First, infrastructure projects can create wider public benefits that are not captured by direct users, and are therefore not reflected in the price users are willing to pay for the service. For example, users of a railway may not be willing to pay for the broader environmental benefits of the project, such as lower vehicle emissions.
 - (ii) Second, user fees can be deliberately set below consumers' willingness to pay to keep user fees at a socially acceptable level.
10. Subsidies to PPPs can be structured in a number of ways. One way is for the government to make up-front cash contributions to the project. Subsidies provided in this way are generally called viability gap payments (VGPs). Alternatively, governments can make regular payments to the private company based on the availability and quality of the service it is contracted to provide. A third option is for governments to pay a fee per user, such as number of vehicles on a toll road.
11. Many countries have set up specialized funds to administer and provide subsidies as VGPs; these are called VGFs.

B. Analytical Framework for an Alternate Approach to a Viability Gap Fund

12. International experience with VGFs has been mixed. While there have been some successes, in many cases, VGFs have not led to sustained and substantive PPP programs. In other instances, while they may have been successful in disbursing funds, it is more debatable whether these have necessarily been allocated to projects yielding the highest economic benefits. Where this has occurred, it is likely that the VGF was set up without a clear sense of the problem it is designed to address.
13. This section sets out an analytical framework for an alternative VGF, focused on identifying the key constraint the fund is meant to overcome. It is based on a number of principles that shape the reason why an alternate understanding of a VGF may be required:
 - (i) the difference between funding and financing, and
 - (ii) the need to distinguish the *investment* decision from the *procurement* decision.
14. This section then discusses the limitations of the traditional approach.

1. Difference between Funding and Financing

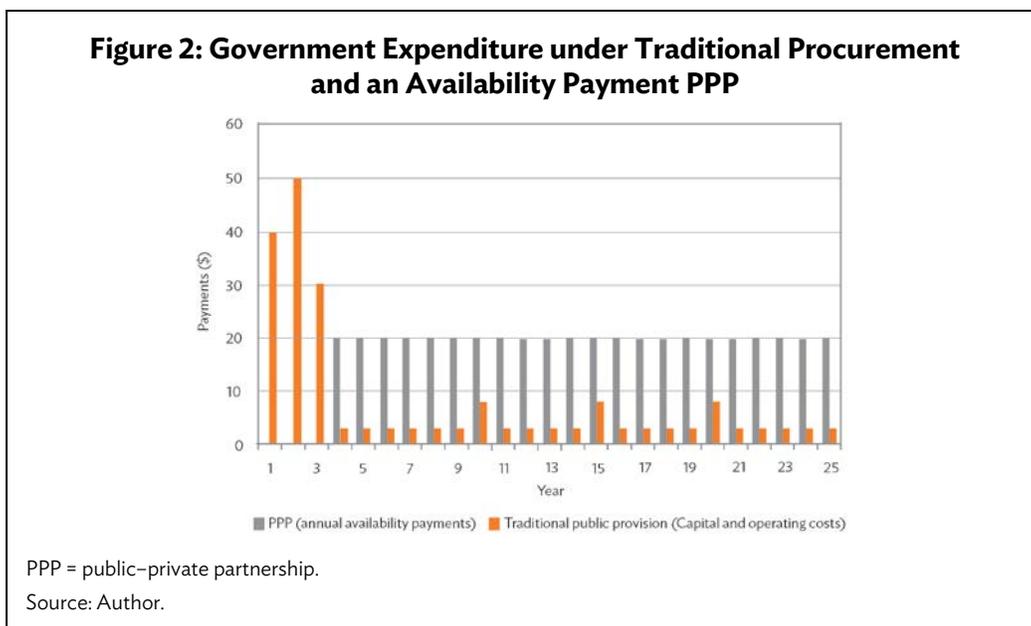
15. Many countries continue to see PPPs as a means of delivering public infrastructure that the government cannot otherwise afford, rather than a means of achieving VfM. This view confuses PPP funding with financing:
 - (i) *Funding* refers to how the project will be paid for over time. The costs of the project, including the costs of financing, must be covered at all times by payments from either the government (i.e., taxpayers) or users.

- (ii) *Financing* refers to the need to deal with the mismatch in timing between up-front development costs and future revenues. Finance can consist of either debt or equity. What makes financing different from funding is that financing must be repaid.
16. PPPs do not provide “extra funds,” and thus their primary purpose is not to overcome a lack of budget revenue and an inability of the government to pay for public services. They can, however, help manage fiscal constraints on government borrowings at a particular point in time by mobilizing additional sources of financing. Even this financing benefit is just temporary, as PPPs can only defer fiscal obligations, rather than make them disappear altogether. Countries that struggle to attract sufficient capital for infrastructure development tend to have policies that confuse funding and financing, trying to address funding shortfalls through financing structures.
17. By contrast, countries with successful infrastructure policies tend to focus on the important linkages between funding and financing. Unless projects are fully funded, they can never be financed. Predictable and sustainable funding models reduce financing risks and ensure that a PPP program does not create systemic financial risks for the economy. In turn, efficient financing is important for minimizing funding requirements and for increasing the number of projects that meet investment standards. Financial market inefficiencies that add to the cost of financing will be borne by either the government or users of the infrastructure, increasing the burden of funding for projects.

2. Need for the Investment Decision to Precede the Procurement Decision

18. All infrastructure projects invariably involve some form of fiscal support, either explicit (such as subsidies or grants) or implicit (such as the opportunity cost of using land in a particular way). The reasons for explicit support include the following:
- (i) In the post global financial crisis PPP environment, many governments are taking a much more pragmatic approach to risk allocation, understanding that expecting the private sector to bear too much risk can backfire. For example, currently many greenfield toll road PPPs either share traffic risk or the government takes the risk until such time as reliable traffic data are available.
 - (ii) As a country’s PPP program matures, the government typically moves toward more complex and politically sensitive PPP projects, such as public transport projects, and pursues PPPs in new sectors, including social sectors such as health where projects do not produce revenue.
19. Since all projects (PPP or otherwise) must be fully funded before they can be financed, and since taxpayers will increasingly play an important role in the funding of PPPs, it is logical to ensure that only the best projects—those that provide the greatest benefit to society—receive funding. This is the *investment* decision, and is entirely independent of, and must always precede, the *procurement* decision, which considers how the project is best delivered to maximize VfM.
20. Countries that understand this, including Australia, have instituted a “budget rule” for all infrastructure projects, to ensure that investment decisions are not confused with procurement ones. Typically, this works as follows:

- (i) The government, usually through its Treasury or finance department, imposes a requirement that the implementing agency must support its proposed infrastructure project with a business case that includes a cost–benefit analysis.
 - (ii) The government examines the business case and determines whether it is willing and able to provide the required funding.
 - (iii) The project is then fully budgeted for in the implementing agency’s forward capital and operating budget, ensuring that
 - (a) all potential projects (regardless of procurement method) compete for the same finite funds, thus ensuring that projects are appropriately prioritized in terms of strategic importance and highest net economic benefits; and
 - (b) the choice of procurement method is not prejudiced by the perceived budget impact, that is, the government dispels the common misconception that PPPs are an alternative to government borrowing.
21. Once the project is fully funded, the government makes the procurement decision by examining which delivery method will provide VfM. This decision only makes sense if the project is worth investing in in the first place. Thus, delivering a project as a PPP is always a procurement decision, based on VfM considerations, and only after the investment decision has been made.
22. If PPP procurement is found to deliver the best VfM, an implementing agency’s original capital and operating budget for the project under traditional procurement is converted into a stream of government payments to the private party in line with the PPP payment mechanism. For example, the PPP may involve annual availability payments from the government to the private sector for the duration of the operating period, as shown in Figure 2. Importantly, the stream of cash payments is sufficient to cover all expected operating and capital costs, as well as the cost of private finance. Any capital savings from PPP procurement (after allowing for procurement costs) may be left in the budget of the implementing agency in order to incentivize PPP procurement.



23. If PPP procurement is not found to deliver the best VfM, the project can go ahead under a different procurement methodology.ncy’s forward capital and operating budget, ensuring that

3. Limitations of the Traditional Approach to a Viability Gap Fund

24. The traditional approach to VGPs assumes that the key purpose of a VGF is to subsidize the difference between user fees and project costs, including finance costs. However, the mix of user fees and/or taxpayer payments should really be independent of how the project is financed and delivered. Roads, for example, are frequently 100% funded by taxpayer payments, given significant externalities associated with road congestion. Similarly, public infrastructure, such as schools and hospitals, rely on very low user fees. These policy choices should not necessarily change simply because a project is being privately financed.
25. In some instances, it would not be possible to change the balance between user fees and taxpayer payments just because the project is being privately financed. Take, for example, the case of a greenfield road, where it is extremely difficult to predict the ramp up in traffic demand in the absence of any reliable data. It would not be possible in such circumstances to expect the private sector to take full traffic risk—the project would not be bankable. This is no different to the publicly funded alternative, where it would not be possible to rely on user fees to fully fund the project at all times. In the alternative approach to VGPs, it is recognized that projects must be fully funded before they can be financed, and how they are funded is independent of how they are financed.
26. As we will see later, this is one of the failings of the traditional approach to VGF. The prescribing of VGP caps presupposes the best mix of taxpayer and user fees, which should differ from project to project, and would not arise if the differences between funding and financing were properly understood.
27. Traditional VGPs can also potentially be harmful to a PPP program to the extent that they create a parallel system for funding PPP projects, circumventing the disciplines of the budgetary process and the need for all projects, regardless of procurement method, to compete for the same limited funding.
28. When different projects compete for separate sources of government funding, it hinders the government’s ability to prioritize across the full spectrum of projects and ensure that only the best projects are funded. Essentially, such projects jump straight to the procurement decision and skip the investment decision.
29. In the worst case, this can create perverse incentives for implementing agencies to design a project as a PPP even when this method of procurement is not suitable and the project yields relatively low economic benefits. That is, if an implementing agency cannot secure funding for a project through the budget process, it may be encouraged to redesign it as a PPP and seek funding from a subsidy fund.

C. Alternate Approach to a Viability Gap Fund

30. In the alternative approach to a VGF, it is assumed that all projects are prioritized on the basis of contribution to economic outcomes and funding mixes are independent of how the project is to be financed. Implementing agencies receive budget funding for priority projects net of any

expected user fees. Specific priority projects for which budget funding has been provided are procured as PPPs if and only if they provide VfM.

31. In this environment, when considering whether to procure a project as a PPP, implementing agencies may compare the level of funding required under PPP procurement to that under traditional procurement in present value terms. From the perspective of the implementing agency, the funding required under PPP procurement may appear higher, because the cost of private finance is higher than the cost of government borrowing. This may motivate a budget-constrained implementing agency to proceed with traditional procurement.
32. Of course, from the perspective of the government as a whole, its cost of borrowing is lower only because it can use its taxing powers to repay loans. Because of these taxing powers, lenders to government consider that it is unlikely to default, leading to lower interest rates on borrowings. This in no way removes the riskiness of the project. The fact is that when risk emerges, it is the taxpayers that fund the risk. If this was not the case, the logical consequence would be that the government would finance everything and replace commercial sources of finance. Since it is generally agreed that this would not be a desirable outcome, it is clear that it is the expected returns of the project and the risks associated with them, rather than the costs of debt for public or private financiers, which determine the cost of capital. Allocating these risks to the private sector is valuable to the government; the transfer of such risks to the private sector incentivizes it to manage those risks and results in better cost and time certainty outcomes during implementation. This value is referred to as *transferable risk*.
33. It is possible for the cost of a PPP to appear higher than the conventional project, when it is actually lower when transferable risks are accounted for. When this is the case, it makes sense to incentivize implementing agencies to use PPP procurement.
34. This can be achieved through the use of a VGF—a different type of VGF to the traditional fund discussed previously. Such funds can provide implementing agencies with the *additional* funding required to procure the project as a PPP. This VGF should not cover the entire cost of the project, since it is additional to the implementing agency’s budget allocation for procuring the project traditionally. The marginal addition of the VGF is what makes the PPP viable.
35. Under the traditional understanding of a VGF, the purpose of the fund is to make a PPP financially viable. The VGF is designed to fill the funding gap between project revenues and costs. Under the alternate model of a VGF, the purpose of the fund is to incentivize implementing agencies to use PPP procurement for suitable projects while ensuring that a PPP is financially viable. It provides VGPs to fill the gap between an implementing agency’s budget allocation and the cost of procuring the project as a PPP.

D. International Experience

36. Many countries have implemented traditional VGPs. However, there is no international experience with the alternate model of VGPs.
37. A selection of traditional VGPs are examined to bring out the essential features of such funds and the lessons from their use:
 - (i) Fondo Nacional de Infraestructura (FONADIN) in Mexico

- (ii) Scheme for Financial Support of PPPs in Infrastructure (commonly known as the Viability Gap Funding Scheme) in India
 - (iii) Infrastructure Project Development Facility (IPDF) in Pakistan.
38. Each is described and a full comparison is provided in Table . The analysis shows that VGFs differ across a number of dimensions including their
- (i) purpose,
 - (ii) source of funding,
 - (iii) use of eligibility criteria,
 - (iv) operating procedures, and
 - (v) performance.

1. Fondo Nacional de Infraestructura (FONADIN) in Mexico

a. Purpose

39. Prior to the Calderon administration (2006), Mexico had two failing infrastructure funds: the Fund for the Support of the Rescue of Highway Concessions (FARAC) and the Infrastructure Investment Fund (FINFRA). Under the National Infrastructure Plan by President Calderon, FARAC and FINFRA were subsumed into FONADIN, the National Infrastructure Investment Fund.
40. FONADIN's objective is to procure new contracts for highway concessions purchased by FARAC and mobilize private sector investment in other sectors by providing grants to make PPPs financially viable. FONADIN is under the management of BANOBRAS, the National Development Bank of Mexico.

b. Source of Funding

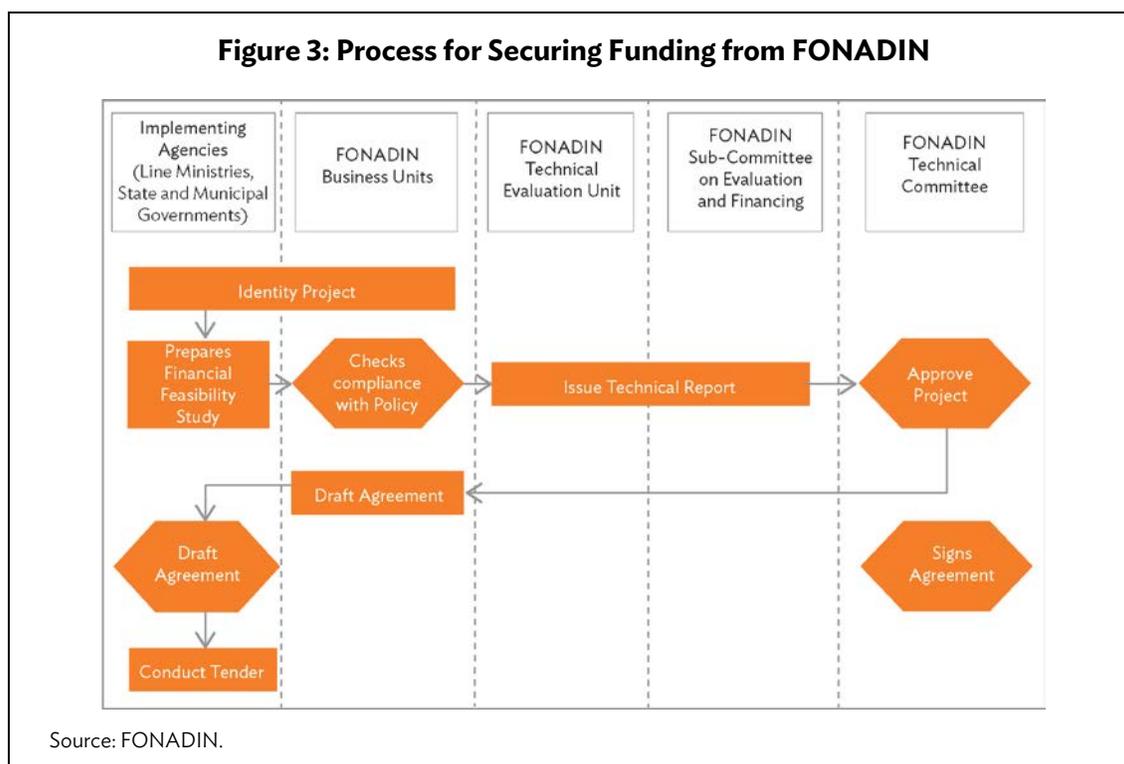
41. FONADIN does not obtain any annual funding from the Treasury. It had an initial capitalization of \$3.3 billion in 2008 from the dissolution and transfer of assets from FARAC and FINFRA. It also receives revenues from existing public toll roads.
42. FONADIN offers reimbursable services (risk capital, subordinated debt, and guarantees) and nonreimbursable support (subsidies for project studies and VGF). The returns from reimbursable services are directed toward the nonreimbursable support.

c. Operating Procedures and Eligibility Criteria

43. FONADIN applies the following criteria when selecting projects to receive grants:
- (i) The project must generate revenues through user fees.
 - (ii) The subsidy cannot exceed 50% of total investment.
 - (iii) The private investor equity contribution must be at least 20% of total investment.
 - (iv) The project must belong to one of the following sectors: telecommunications, transport, water and sanitation, environment, or tourism.

- (v) FONADIN does not cover two large sectors—electricity and hydrocarbons—as they are managed by two large national monopolies: Mexican Petroleum (PEMEX) and the Federal Electricity Commission (CFE).

44. Projects that pass the criteria receive funding according to the process described in Figure 3.



d. Performance

45. FONADIN has made multiple contributions to PPP projects, particularly in the transport sector. In 2010–2012, every dollar of FONADIN subsidy generated \$7 of private investment in infrastructure.³
46. However, FONADIN’s success has been restricted by several political and financial challenges to the wider PPP program:
- (i) Local government officials remain skeptical of private involvement in infrastructure and prefer to retain control of currently publicly funded projects.
 - (ii) Despite the complexity and rigor of the PPP projects, political pressure for fast approval has resulted in poorly conceived and failing projects.
 - (iii) Improper risk allocation has generated unusually high credit risk for implementing agencies, leading to failed PPP tenders (footnote 3).

³ World Bank Institute. 2012. *Best Practices in Public–Private Partnerships Financing in Latin America: The Role of Subsidy Mechanisms*. Washington, DC.

2. **Viability Gap Funding Scheme in India**

a. **Purpose**

47. In 2004, the Government of India launched the Scheme for Financial Support of PPPs in Infrastructure, now more commonly known as the Viability Gap Funding Scheme. The purpose of the scheme is to provide financial support in the form of grants to PPP projects to make them commercially viable.
48. The National Highway Development Programme provided further impetus to the creation of the scheme, as discussed in Box 1.

Box 1: The National Highway Development Programme in India

The National Highway Development Program (NHDP) was established under three principles:

- (i) To help recover some of the total investment cost of NHDP, some segments would need to be tolled.
- (ii) Toll rates should be set according to an “inclusive approach” that maintained socially acceptable prices even if this meant toll revenues would not cover all costs for some projects.
- (iii) Public–private partnerships (PPPs) should be the preferred mode for developing the network.

Combined, these principles meant that a significant portion of the NHDP would be implemented as PPPs, but that many segments would not be financially viable. Therefore, allocating subsidies to projects would allow the interstate highway network to be developed on a geographically or demographically neutral (or *inclusive*) basis. This would allow economically disadvantaged and remote regions—where the ability to pay was lower and construction costs were higher—to access subsidies to make local road investments financially viable.

In other words, national highways have been the chief recipient of subsidies to date and were effectively the trial case for India’s general viability gap payment program.

Source: World Bank Institute. 2012. Best Practices in Public–Private Partnerships Financing in Latin America: The Role of Subsidy Mechanisms. Washington, DC.

b. **Source of Funding**

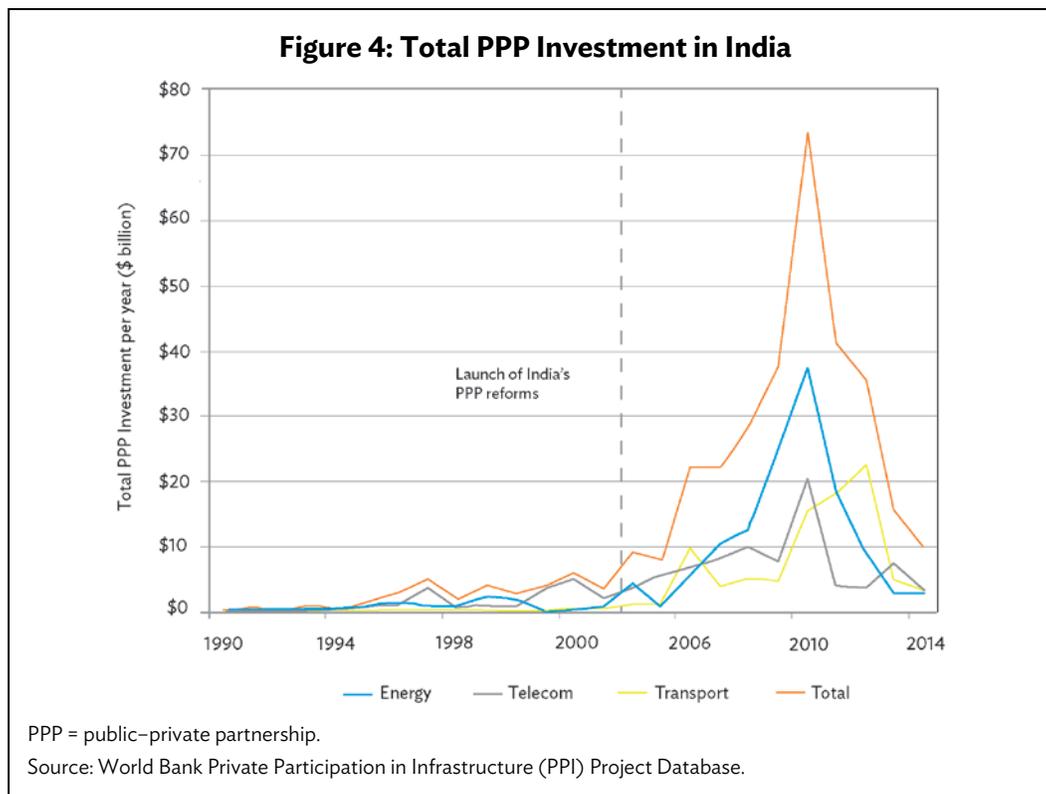
49. The Viability Gap Funding Scheme is managed by the national PPP Cell in the Ministry of Finance. Funds for the scheme are appropriated on an annual basis in the national budget. Each year, the scheme can approve projects with a cumulative value of up to 10 times its annual appropriation, to ensure that the scheme’s commitments do not exceed the expected budgetary allocation. In addition, the Ministry of Finance provides the scheme with a \$44 million revolving fund to make disbursements to projects, which is later replenished by the Ministry of Finance. Its budget is replenished annually by the government. The revolving fund and the annual limit on approvals provide security to investors by effectively demonstrating available funding for disbursements.

c. Operating Procedures

50. The scheme provides up-front capital grants at the construction stage. These grants may not exceed 20% of the project cost and are disbursed only after the private company has made its required equity contribution. Implementing agencies or state governments may provide additional grants, but these may not exceed an additional 20% of the project cost. No economic cost-benefit assessment is performed, relying instead on sector regulation and competitive procurement to identify the need for government contribution.
51. The procurement process uses the lowest government contribution as the key criteria to select the winning concessionaire. In some cases, a negative subsidy has been bid, meaning the government earns money on the contract.

d. Performance

52. The adoption of India's current PPP policies, including the Viability Gap Funding Scheme has been associated with a large upswing in private investment as shown in Figure 4.



53. From 2005 to 2009, 23 PPP projects with a total investment of \$3.5 billion have received grants (where the average grant size is 20% of the project value). This is just 3% of total private investment in core infrastructure (\$115.8 billion). To the extent that total investment can be attributed to the Viability Gap Funding Scheme, every dollar in grants is associated with \$170

of private finance. This only accounts for grants through the Scheme and does not include other government subsidies.

3. Infrastructure Project Development Facility in Pakistan

a. Purpose

54. The Infrastructure Project Development Facility (IPDF) is designed to bridge the gap between expected revenues and costs for PPP projects to make such projects financially viable. In doing so, the fund aims to make infrastructure services affordable for the country's most socioeconomically disadvantaged groups.

b. Eligibility Criteria

55. The IPDF only grants funds to projects that meet the following criteria:
- (i) The grant must not be more than 20% of the present value of the cost of the project.
 - (ii) Disbursement of the grant must be linked to the achievement of measurable outcomes by the private party.
 - (iii) The project must belong to one of the following sectors: transport and logistics, mass urban public transport, municipal services, or energy projects.
 - (iv) Users of the service must be unable to afford a tariff, or the implementing agency must not be able to afford the project from their budget.
 - (v) The grant is used only to reduce the tariffs charged to socioeconomically disadvantaged groups of users.
56. The last two criteria ensure that the fund achieves its purpose of making infrastructure services affordable for disadvantaged groups.

c. Performance

57. Since the establishment of the IPDF in 2006, there has been little progress in the PPP program at the federal level. There are several reasons for this, including changes of government, high levels of bureaucracy, lack of understanding of PPPs in the public sector, no standardized documentation or history, difficulty obtaining quality projects due to turf issues, lack of investor confidence due to the political instability in Pakistan, and high and volatile interest rates.⁴
58. However, the success of PPPs at the provincial levels indicates the potential for large-scale projects. Sindh province has closed \$601 million worth of PPP projects since the PPP act was enacted in 2010, with several more projects in the pipeline (footnote 4).

⁴ S. Shukla, et al. 2015. PPPs in Pakistan: The Road Ahead. Webinar. <http://einstitute.worldbank.org/ei/webinar/ppps-pakistan-road-ahead> (viewed 25 August 2015).

Table 1: Summary of Viability Gap Funds

	FONADIN (Mexico)	Viability Gap Funding Scheme (India)	Infrastructure Project Development Facility (Pakistan)
Objective	Mobilize private investment into PPPs by providing grants to make PPPs commercially viable for investors	Mobilize private investment and expertise to meet India's infrastructure needs by providing grants to make PPPs commercially viable	Combat huge deficit in infrastructure funding by subsidizing PPP projects so that socioeconomically disadvantaged users are able to afford services
Governance	Managed by BANOBRAS (national development bank of Mexico)	PPP Cell—Ministry of Finance	Managed by VGF Company that was established by the Ministry of Finance
Source of Funding	Dissolution and transfer of assets from FARAC and FINFRA	Portion of government budget; revolving fund of \$44 million	Portion of government budget; transfers from Ministry of Finance
Products Offered	Grants, reimbursable services (risk capital, subordinated debt, and guarantees) and nonreimbursable support (subsidies for project studies and general subsidies)	Up-front VGPs and performance-based VGPs	Outcomes-based VGPs for capital and/or operational expenses
Operating Procedures	Implementing agency submits project proposal, business unit evaluates proposal and prepares financial proposal, studies and technical evaluations unit reviews financial proposal and issues a technical report, technical committee reviews project and either approves or rejects it	Implementing agency submits proposal, which is reviewed by PPP cell; empowered institution (interministerial committee) approves proposal and allocates funding	Institution will seek approval from VGF company for a specific PPP project; private party will enter competitive selection process; tripartite agreement between institution, VGF company, and private party
Sectors	Telecommunications, transport, water and sanitation, environment, and tourism	Transport, water and sanitation, electricity, and telecommunications	Transport and logistics, mass urban public transport, municipal services, and energy projects
Eligibility Criteria	Subsidy cannot exceed 50% of total investment, private investor equity must be at least 20% of total investment, revenues must be generated through user fees	VGP cannot exceed 20% of total project cost, although another government entity may match VGP up to another additional 20%	Net economic benefit ≥ 0 , ratio of present values of VGP to true cost ≤ 0.2 , funds must be used to reduce burden on most socioeconomically disadvantaged users, disbursement of funds linked to achievement of measurable outcomes

continued on next page

Table 1 *continued*

	FONADIN (Mexico)	Viability Gap Funding Scheme (India)	Infrastructure Project Development Facility (Pakistan)
Challenges	2008 global financial crisis resulted in a 22% decrease in private investment in infrastructure, reluctance from local officials to engage in PPPs, poorly prepared projects due to strong political pressure to get quick approval, private investors and commercial lenders want FONADIN to assume more risk, shortage of technical capacity, cumbersome PPP laws	Initial opposition from state governments due to lack of capacity, burden of preparing proposals, and loss of control over publicly-funded projects; 40% VGP rule may lead to suboptimal project designs and may limit eligibility of projects in cost-varying sectors	High levels of bureaucracy, lack of standardization of documents, low levels of PPP expertise, low levels of investor confidence due to political instability, and jurisdictional and turf issues
Effectiveness	PPI/VGP ratio in 2008–2009 = 7 (\$7 of private finance for every dollar of subsidy); 60% of total capital costs for projects that have received direct subsidies comes from private sector investment (>target level 58%)	In 2005–2009, infrastructure investment increased by more than 400%; PPI/VGP ratio in 2005–2009 = 170; revolving fund and limits on annual government commitments have ensured that the allocation budget amount has not been exceeded	Successful at the provincial level; Sindh province counts total investment in the infrastructure sector at \$601 million to date

PPI = private participation in infrastructure, PPP = public–private partnership, VGF = viability gap fund, VGP = viability gap payment.

Sources: World Bank Institute. 2012. *Best Practices in Public–Private Partnerships Financing in Latin America: The Role of Subsidy Mechanisms*. Washington, DC; World Bank and Government of Pakistan. 2010. *Operational Design for the Project Development Fund and for the Viability Gap Fund*. Final report prepared by Cambridge Economic Policy Associates. Washington, DC: World Bank.

E. Key Design Issues

59. This section discusses the key issues to consider when designing a VGF. In doing so, it also shows that international experience with VGFs does not adhere to the principles set out in the analytical framework for an alternate VGF—the difference between funding and financing and the need to separate the investment and procurement decisions.
60. This does not mean that a country should never implement a traditional VGF. While a well-functioning budget system should obviate the need for an alternate source of subsidies, the reality is that budget systems in developing countries are often ineffective. When this is the case, a traditional VGF can compensate for gaps in the budget system.
61. However, care must be taken in setting up a traditional VGF. Such funds can impose a number of harmful unintended consequences if not well designed. This section discusses how such complications can be avoided.
62. Typical questions to ask in considering if a VGF is needed includes:
 - (i) Is there a capital contribution (and, if so, when) leaving the contractor perhaps to bid for this and take the risk of future year payments being more or less than estimated?

- (ii) Or is there an annual deficiency subsidy? And, if so, is this based on price or volume or both?
- (iii) Solutions obviously vary by sector (e.g., power, transport, or other) and national economic and political background.
- (iv) If there is a capital contribution, there is a question of timing of payment (i.e., not taking away construction risk from the contractor by paying upfront, but then requiring a bridging loan).

63. These issues are discussed in more detail later. Finally, this section also discusses the benefits in setting up a dedicated VGF.

1. Funds Should Not Create a Parallel Funding System to the Budget Process

64. As discussed earlier, traditional VGFs have the potential to create a system for funding PPP projects parallel to the standard budget process, the danger being that the fund becomes a system for funding inferior projects. For example, implementing agencies may turn to a traditional VGF to fund their “pet projects” that could not secure funding through the budget process.

65. VGFs can employ policies to limit such perverse outcomes. Most importantly, funds should only consider projects that have already been identified as government priorities, and where the government has already demonstrated a commitment to funding the project. For example, the project may have already been approved through the budgetary process or a government investment strategy (such as an implementing agency’s forward plan, or a sector strategy). There is no evidence that any of the VGFs examined have such policies in place.

a. Viability Gap Payments Should Not Be Capped

66. All of the countries examined apply caps to the VGP a fund can contribute. In Mexico, for example, the cap is 50%, but exceptions can be made for high-priority projects. In Pakistan, the cap is 20%. This means that user fees or other government payments must provide the remaining funding (50% in Mexico and 80% in Pakistan).

67. Caps on VGPs are generally motivated by the following arguments:

- (i) Limiting the VGP can have a stronger mobilization effect, as a given amount of fiscal resources is combined with a larger amount of private finance. As a result, more infrastructure projects get developed.
- (ii) To the extent that financial viability is an imperfect proxy for economic viability—that is, economic benefits are correlated with demand and willingness to pay, and therefore correlated with the revenue potential of a project—then the cap on the VGP helps to prioritize more economically viable projects.

68. However, both these arguments fall away with an understanding of the analytical framework discussed earlier. First, capping government funding does not mobilize private finance. Indeed, if a project is not fully funded by the government or users, it will not be financially viable and will not attract private financing. Once the need to fully fund a project is recognized, then the VGP or overall level of subsidy becomes a policy choice. That is, the government decides how

much of the project's costs will be funded by users and how much by government. Once this is understood, the idea of capping subsidies is nonsensical.

69. Second, VGP caps are not an effective tool for prioritizing projects. It is not at all clear, for example, why government funding should be capped for projects that have high net economic benefits, but revenue from users is insufficient to recover all costs, including return on and off capital. This is particularly so if the government simultaneously imposes limits on tariffs that determine user revenues and the rates of growth in such tariffs over time.
70. The problem with capping a VGP is therefore not only that it does not achieve its stated purpose, but that it can have negative unintended consequences:
- (i) There is a risk that VGP caps can lead to suboptimal project design—if, for example, projects are creatively restructured to require a lower VGP while reducing economic benefits.
 - (ii) Another concern is that the cap may prevent projects in less financially viable sectors (water, sanitation, and urban transport, for example) from being developed as PPPs. For example, if the government was contemplating investing in a drinking water project that generated very high net economic benefits, then it would not hesitate to provide a subsidy, even as high as 100% of the capital and ongoing cost of the project, particularly if community ability to pay was very low. Now if that same project is procured as a PPP and the VGP is capped below what is required, the project may not be able to proceed.

b. Viability Gap Funds Should Not Discriminate among Sectors

71. All the funds examined designate priority sectors in their eligibility criteria. Again, this falls out of a lack of understanding of why the investment decision needs to go before the procurement decision.
72. The government may very well wish to target their infrastructure funding to priority sectors. However, this should occur when making the investment decision—when the government decides which projects to fund regardless of procurement method. That is, the government's priorities should already be reflected in the pipeline of projects that request a VGP (in the traditional or alternate sense). This means that there is no need for a VGF to target any particular sector.

c. Viability Gap Payments Should Not Change the Desired Risk Allocation

73. When structuring VGPs, effort should be made to ensure the desired risk allocation is unchanged. Reducing the risks allocated to the private sector would reduce its incentives to manage those risks, threatening VfM. Increasing the risks allocated to the private sector would increase their financing costs, and could even make the project unbankable.
74. For example, requiring VGPs upfront—before the construction period begins—can reduce the level of construction risk allocated to the private sector and may therefore affect the project's VfM. Conversely, applying the VGP later in the concession period would mean the concessionaire is required to seek additional financing (such as a bridging loan) and would therefore increase overall financing costs.

d. Benefits of a Dedicated Viability Gap Fund

75. The purpose of a traditional VGF is to provide the VGP required to make a project financially viable. The purpose of an alternate VGF is to provide the VGP required to incentivize an implementing agency to use PPP procurement for a suitable project.
76. However, the government does not necessarily have to set up a dedicated fund to achieve either of these aims. As discussed earlier, it can implement a budget rule to ensure that implementing agencies are provided with a forward budget to fully cover the cost of future government payments to the PPP. Such a policy is followed in many countries, including Australia, New Zealand, South Africa, and the United Kingdom.
77. Establishing a dedicated fund will take time and effort. As such, it should provide advantages over and above budget appropriations to justify this cost. These advantages are listed below.

e. A Viability Gap Fund Can Provide Centralized Support to Help Implementing Agencies Develop High-Quality PPPs

78. Disbursing VGPs requires staff with the skills to assess projects, estimate costs, and conduct VfM analysis. A separate fund, potentially set up as a transparent, commercialized state-owned enterprise (SOE) or as an additional facility within an existing commercial entity, would be able to pay more market-related salaries, and hence will be better able to attract staff with the necessary skills.
79. Given the concentration of these valuable skills, the fund could be set up with a wider mandate than simply disbursing funds. The fund could also be designed to assist implementing agencies with PPP structuring to ensure appropriate risk allocation, and hence VfM. This would be useful in countries where this role is not already being provided by a centralized agency such as a PPP center.

f. A Dedicated Fund Increases Awareness of the PPP Program and Sends a Signal about the Government's Commitment to PPPs

80. A dedicated fund is incentivized to increase awareness among implementing agencies of the benefits of PPPs. This increased awareness can raise the number of PPP projects entering the pipeline, thereby growing business for the fund.
81. A dedicated fund can also increase awareness among potential investors. A large up-front capitalization attracts attention by showing investors that there is “money on the table”—that the government has already committed to funding PPPs.

III. LENDING FACILITY

82. This section sets out the challenges in accessing reasonably priced, local-currency, long-term PPP finance. It then discusses how providing public debt through a lending facility can address these challenges.

A. Analytical Framework for a Lending Facility

1. Challenges in Financing PPPs

83. Debt finance for PPPs typically comes from banks or capital markets. Yet, in developing countries, banks may not be willing to lend for infrastructure projects they view as risky. Further, financial markets are usually undeveloped and project bond markets in local currency do not exist. When financial markets are underdeveloped or highly risk-averse, the interest rate that lenders impose may not be warranted by the riskiness of the project.
84. PPP concessionaires may also seek finance in foreign currencies, but they will need to bear the risk of foreign exchange movements. In many developing countries, exchange rate risk cannot be hedged over the long term because only short-term hedges are available.
85. Even in countries with developed financial markets, the tenor of bank loans is typically significantly shorter than the project payback period or the economic life of most infrastructure projects.
86. This generates four unattractive options for financing PPPs:
- (i) Repay short-term debt before the end of the concession—this prevents the stretching of finance over the life of the asset and therefore imposes inefficiencies.
 - (ii) Refinance short-term debt—this imposes the risk that finance will cost more in the future.
 - (iii) Borrow internationally—this imposes exchange rate risks that may be difficult or costly to hedge for the concessionaire.
 - (iv) Finance PPPs using internal corporate finance—this option is generally only available to large conglomerates that are able to borrow against their balance sheets on corporate bond markets. As smaller firms are unable to access such finance, they are less likely to bid for PPP projects. This reduces competition for PPP projects. Further, this option is unlikely to be sustainable in countries with prudential regulations around single-borrower limits. When only a small number of conglomerates are able to win PPP contracts, banks soon approach the limit of what they are allowed to lend to a single borrower.
87. All of these options increase the cost of finance, which in turn can feed back into a project's funding requirements. At a country level, this feedback loop means that efforts to address financial market inefficiencies can reduce the government's funding burden and increase the number of projects that meet investment standards.

2. Purpose of a Lending Facility

88. One way to address financial market inefficiencies is for the government to provide public debt finance—at reasonable rates, in local currency, and of an appropriate tenor and grace period—when financial markets are unwilling or unable to do so.
89. There is often concern that public debt will diminish the benefit of the due diligence and project monitoring undertaken by private sector investors on driving superior cost and time-certainty outcomes. However, the private sector is incentivized to perform when they are invested in the project through equity. Equity at risk is what helps ensure VfM:

- (i) Private developers are incentivized to design and build assets on time and within the agreed budget.
 - (ii) Private operators are incentivized to deliver quality infrastructure service and to maximize asset utilization.
90. It is considerably more debatable whether PPPs require private debt finance to achieve the required incentive effects. In theory, private lenders are incentivized to apply rigor to the due diligence assessment and monitoring of a PPP project. Private finance also allows for risk transfer. However, if the government has to provide debt guarantees in order to attract private lenders, the risk is transferred back to the government.
91. This means that a mix of public and private debt finance can often be desirable, as the public sector has access to longer-term and often cheaper debt given its better credit rating. Further, if the government provides a portion of the finance required through subordinated debt, it can reduce risks to other lenders and facilitate access to additional private finance.
92. Reasons why governments may choose to provide debt finance for PPP projects include the following:
- (i) **Improving availability or reducing cost of finance.** When private capital markets are underdeveloped, disrupted, or highly risk-averse, the availability of long-term finance may be limited and governments may choose to provide finance at terms that would otherwise be unavailable. This finance can still be provided at commercial rates. The difference is that the government, backed by a better credit rating and the public balance sheet, may be less risk-averse than the private sector and willing to take risks the private sector is not yet willing to take.
 - (ii) **Making use of official development assistance.** Governments often have access to official development assistance finance on concessional terms, which they may pass on to lower the cost of infrastructure projects.
 - (iii) **Improving economic efficiency and intergenerational equity.** Access to long-term debt would allow the repayment of debt principal to be stretched over the life of the underlying asset. This increases economic efficiency. Economic efficiency is maximized when infrastructure is paid for over time, in proportion to its use, with larger payments made in the future if the use of the asset is expected to steadily increase. Short-term debt forces funding to be front-loaded, meaning that today's taxpayers pay for future benefits, when both users and taxpayers are likely to be better off. Such front-loading is inefficient and also leads to intergenerational inequity, unless the government itself uses long-term finance to pay for the up-front support
 - (iv) **Avoiding excessive risk premiums.** The government may consider the risk premium charged by the private sector for the project to be excessive, in relation to the actual project risks. This can be a difficult call to make, since financial markets are usually better at assessing risk than governments, but can apply particularly for new projects or markets, or during financial market disruptions
 - (v) **Mitigating government risk.** Where project revenues depend on regular payments from the government, this creates a risk for the private party, which will be reflected in the project cost. Where reliability of government payments may be in doubt, this means that providing subsidies or payments upfront in the form of loan or grant finance, rather than ongoing payments, could improve the bankability and lower the cost of the project.

93. Of course, public money should be used to finance PPPs on the basis that the government only lends to projects that provide net benefits to the economy. Financing should also be applied at a commercial rate so as not to undercut the market. Further, decisions to use public funds to finance PPPs should be weighed against other government priorities.

B. International Experience

94. This section discusses the international experience with public lending facilities that provide debt to PPPs. These include the
- (i) Transportation Infrastructure Finance and Innovation Act (TIFIA) program in the United States,
 - (ii) India Infrastructure Finance Company Limited (IIFCL),
 - (iii) Treasury Infrastructure Finance Unit (TIFU) in the United Kingdom, and
 - (iv) Perseroan Terbatas Indonesia Infrastructure Finance (IIF).
95. Each is described and a full comparison is provided in Table . The analysis shows that lending facilities differ across a number of dimensions, including their
- (i) purpose,
 - (ii) products offered,
 - (iii) use of eligibility criteria,
 - (iv) source of funding and finance, and
 - (v) performance.

1. The Transportation Infrastructure Finance and Innovation Act Program

a. Purpose⁵

96. The TIFIA program's goal is to fill market gaps and leverage low-cost public lending by attracting substantial private and other nonfederal coinvestment in critical improvements to the nation's surface transportation system.
97. The program was created because state and local governments that sought to finance large-scale transportation projects with tolls and other forms of user-backed revenue often had difficulty obtaining financing at reasonable rates due to the uncertainties associated with these revenue streams. Toll and other project-based revenues are difficult to predict, particularly for greenfield projects.
98. TIFIA credit assistance is often available on more advantageous terms than in the financial market, making it possible to obtain financing for needed projects when it might not otherwise be possible.
99. The program is implemented by the Department of Transportation.

⁵ US Department of Transportation. Policy Initiatives – TIFIA. <http://www.transportation.gov/tifia/overview> (updated 14 May 2015).

b. Products Offered

100. The TIFIA program offers three distinct types of financial assistance designed to address the varying requirements of projects throughout their life cycles (footnote 5):
- (i) **Secured (direct) loan.** Offers flexible repayment terms and provides combined construction and permanent financing of capital costs. Maximum term of 35 years from substantial completion or the useful life of the project being financed by TIFIA, whichever is less. Repayments can start up to 5 years after substantial completion to allow time for facility construction and ramp up.
 - (ii) **Loan guarantee.** Provides full-faith-and-credit guarantees by the federal government and guarantees a borrower's repayments to nonfederal lenders. Loan repayments to a lender must commence no later than 5 years after substantial completion of the project.
 - (iii) **Standby line of credit.** Represents a secondary source of finance in the form of a contingent federal loan to supplement project revenues, if needed, during the first 10 years of project operations, available up to 10 years after substantial completion of the project.
101. TIFIA credit, which must have a lien on par with senior creditors in the event of bankruptcy, liquidation, or insolvency, can be subordinate as to cash flows absent such an event. The amount of federal credit assistance may not exceed 49% of anticipated eligible project costs for a TIFIA secured loan and 33% for a TIFIA standby line of credit.⁶

c. Source of Funding

102. The TIFIA program is governed by the Federal Credit Reform Act of 1990 (FCRA), which requires the Department of Transportation to establish a capital reserve to cover expected credit losses before it can provide TIFIA credit assistance. Congress places limits on the annual subsidy amount available.
103. The program was allocated \$750 million in 2013 and \$1 billion in 2014 from the Highway Trust Fund. Any budget authority not obligated in the fiscal year for which it is authorized remains available for obligation in subsequent years.⁷

d. Performance

104. The TIFIA program has been very successful. Figures from the Department of Transportation indicate that every dollar of federal funds can provide up to \$10 in TIFIA credit assistance (including loans and guarantees) and support up to \$30 in transportation infrastructure investment.
105. In terms of loans only, the Department of Transportation has approved over 50 TIFIA loans totaling more than \$22 billion. Private investment in projects receiving TIFIA loans was \$78 billion, implying a ratio between TIFIA and private finance of 1:3.5.⁸

⁶ US Department of Transportation. 2015. *TIFIA Program Guide*. Washington, DC.

⁷ US Department of Transportation. Policy Initiatives – TIFIA – FAQs. <http://www.transportation.gov/tifia/faqs> (updated July 2013).

⁸ US Department of Transportation. Projects Financed by TIFIA. <http://www.transportation.gov/tifia/projects-financed>

106. As a result of this success, Congress has increased funding to TIFIA to \$1 billion per year. There is also legislation in train that will allow TIFIA financing to be used for smaller-scale projects, such as those for bicycles and pedestrians. Likewise, there is great interest in implementing similar facilities to finance water and park infrastructure projects in the future.

2. India Infrastructure Finance Company Limited

a. Purpose

107. The long-term debt market in India is not sufficiently developed to be able to source the affordable long-term funds required to entice private investment. This is attributed to the following constraints:

- (i) Absence of benchmark rates for raising long-term debt from the market
- (ii) Asset–liability mismatches given the short-term tenor of debt available from most financial institutions
- (iii) High cost of long-term debt.⁹

108. As such, the IIFCL seeks to fill the gap between the long-term lending capabilities of Indian lenders and the requirements of long-term infrastructure projects.

b. Source of Finance

109. The IIFCL is financed by the following:

- (i) Rupee-denominated debt raised in the domestic market through instruments such as taxable bonds, tax free bonds, and long-term loans from the Life Insurance Corporation and the National Small Savings Fund. This debt is typically of a tenor of 10 years or more. This debt is raised directly by the IIFCL, but often carries a government guarantee
- (ii) Debt from bilateral or multilateral institutions such as the World Bank and Asian Development Bank
- (iii) Foreign currency debt, on approval by the government
- (iv) Short-term debt from banks/financial institutions to manage any asset–liability mismatch (footnote 9)

c. Products Offered and Operating Procedures

110. The IIFCL offers financial assistance to PPPs through long-term debt, subordinated debt, take-out financing, and refinancing of commercial banks and public financial institutions.

111. These products are administrated by the lead bank to the project—the primary private sector lender. That is, the lead bank is responsible for the disbursement and recovery of the loans

⁹ ADB. 2011. Mandate of India Infrastructure Finance Company Limited: Scheme for Financing Viable Infrastructure Projects through a Special Purpose Vehicle Called the IIFCL and Take-Out Finance Scheme. Accelerating Infrastructure Investment Facility in India. Manila.

advanced by the IIFCL. This helps reduce administration costs and ensure IIFCL debt is delivered on the same terms as private finance (unless they choose to provide subordinated debt).¹⁰

112. IIFCL lending is directed toward a wide range of sectors, including transportation, power, urban infrastructure, gas pipelines, infrastructure projects in special economic zones, and international convention centers and other tourism infrastructure projects.
113. IIFCL lending is also governed by specific lending terms, as discussed in Box 2. These conditions help ensure that the IIFCL remains financially sustainable.

Box 2: Key Lending Terms of the India Infrastructure Finance Company Limited

Project Debt

The terms at which the project company can access long term debt shall not be inferior to the terms at which refinanced debt is available to the project company.

The total lending by the India Infrastructure Finance Company Limited (IIFCL) to any project company shall not exceed 20% of the total project cost. Loans will be disbursed in proportion to debt disbursements from financial institutions.

The rate of interest charged by IIFCL shall be such as to cover all funding costs including administrative costs and guarantee fee, if any.

Recovery of IIFCL loans shall be pair passu with (treated the same as) project debt (other than subordinate debt) till 80% of the project debt (other than subordinate debt) of the lead bank and financial institutions consortium (inclusive of interest due) has been recovered. Thereafter, the lead bank and financial institutions consortium would assume the payment risk as guarantors of the IIFCL loan from that stage onward.

Subordinated Debt

The concession agreement should provide for an escrow account that would secure the annual repayment of this subordinate debt before returns on equity are paid. The subordinate debt shall not exceed 10% of the total project cost and shall form part of the maximum limit of 20%. The subordinate debt to be borrowed by the project company from any or all sources shall not exceed one half of its paid-up and subscribed equity.

Interest on subordinate debt shall be 2%–3% higher than the highest interest charged by any bank in the consortium of lenders for the project. There may be a moratorium of 4–5 years on the repayment of interest due in respect of the subordinate debt.

Repayment of the principal shall not commence before 6–7 years from the commercial operation date of the project and shall extend between a period of 12 and 15 years from the commercial operation date.

Source: Government of India. 2009. Financing Infrastructure Projects through the India Infrastructure Finance Company Limited (IIFCL). The Secretariat for the Committee on Infrastructure, Planning Commission. New Delhi, India.

d. Performance

114. As of March 2015, the IIFCL had approved 342 projects, and disbursed \$12 billion in lending, generating \$110 billion in private investment.

¹⁰ Government of India. 2009. Financing Infrastructure Projects through the India Infrastructure Finance Company Limited (IIFCL). The Secretariat for the Committee on Infrastructure Planning Commission.

115. Among other initiatives and policy changes, this helped in a rapid rollout of PPP projects that caused India to be the world's largest recipient of PPP investments during 2008–2012, according to Public–Private Infrastructure Advisory Facility data.
116. Indeed, total investment in infrastructure increased from 5% to 7% of gross domestic product over the previous two planning periods (2002–2007 to 2007–2012). In particular, private investment increased from 22% to 37% of total investment in infrastructure over the same period, implying a threefold increase in absolute terms.¹¹

3. Treasury Infrastructure Finance Unit in the United Kingdom

a. Purpose

117. TIFU was set up following the global financial crisis, which greatly restricted the ability of PPPs to raise finance. The number of private lenders in the market dropped sharply and those that remained required much higher rates. TIFU was established to address the lack of liquidity in the market by lending to PPPs that could no longer obtain private finance.¹²
118. The goal was to instill confidence in commercial lenders to resume lending for infrastructure projects. Given this goal, subsidizing loans was not required. As such, long-term loans were provided, at either a fixed or floating rates, at terms comparable to the commercial lenders.
119. In 2010, the government decided that the market had recovered, and shut down TIFU.

b. Eligibility Criteria

120. TIFU had the means to finance 100% of the required debt. However, it preferred the private sector to raise all or most of the project debt, with the equity holders bearing the majority of the primary risk. As such, TIFU only considered lending to projects when
- (i) a project could not secure sufficient finance to reach a financial close on a timely basis;
 - (ii) the proposed private sector finance was not representative of terms and conditions generally available in the market; or
 - (iii) a project was at risk of delay due to a genuine lack of investor engagement.
121. These measures were designed to ensure that
- (i) private lenders were not crowded out,
 - (ii) the market was not distorted,
 - (iii) TIFU could exit its lending positions, and
 - (iv) conflicts of interests were managed with the public sector acting as both lender and project counterparty.

¹¹ A. Roy. 2015. Innovative Financing: The Case of India Infrastructure Finance Company. Overall Winner in the 2015 PPIAF PPP Short Story Competition.

¹² This and next section from Ed Farquharson and Javier Encinas. 2010. The UK Treasury Infrastructure Finance Unit: Supporting PPP Financing during the Global Financial Crisis. *Public–Private Partnerships Solutions*. March.

c. Operations

122. Although TIFU was a Treasury-based unit accountable to ministers and wholly funded by the Treasury, its lending activities were similar to those of any commercial bank. TIFU had a staff of up to seven professionals with substantial private sector project finance experience. They considered applications for loans to PPP projects, negotiated the terms of any such loans on a commercial basis, and monitored and managed the loan portfolio, like a bank. TIFU had its own due diligence procedures and an internal credit committee composed of Treasury officials and independent banking professionals.

d. Performance

123. TIFU financed only one major project—the Greater Manchester Water project in 2009. However, this was enough to keep private finance open to the PPPs.¹³
124. According to a United Kingdom National Audit Office report, the Treasury’s willingness to lend improved market confidence, and, as of July 2010, 35 further projects had been agreed without public lending.¹⁴
125. The success of TIFU led the Treasury to begin lending directly to PPPs in 2012. As with the TIFU initiative, the intention is that the facility will be available for a temporary period and that loans, priced at market rates, will be refinanced as market conditions improve. Unlike TIFU, however, loans will only be made alongside existing commercial lenders and for a minority of the senior debt requirement.¹⁵

4. PT Indonesia Infrastructure Finance

a. Purpose¹⁶

126. The IIF, launched in 2010 by the Ministry of Finance, is a commercially focused, professionally managed, private nonbank financial institution. The IIF was designed as a catalyst for an infrastructure financing sector. It aims to be a one-stop infrastructure financing entity.

b. Funding and Finance Source

127. The IIF is jointly funded by the Government of Indonesia, the Asian Development Bank, the International Finance Corporation, and two local banks.
128. It is financed by a 25-year subordinated loan from the World Bank and the Asian Development Bank. In addition, the IIF uses its good credit rating to borrow from domestic institutional

¹³ House of Commons Committee of Public Accounts. 2011. Financing PFI Projects in the Credit Crisis and the Treasury’s Response. Ninth Report of Session 2010–11.

¹⁴ National Audit Office. 2010. Financing PFI Projects in the Credit Crisis and the Treasury’s Response. Report by the Comptroller and Auditor General.

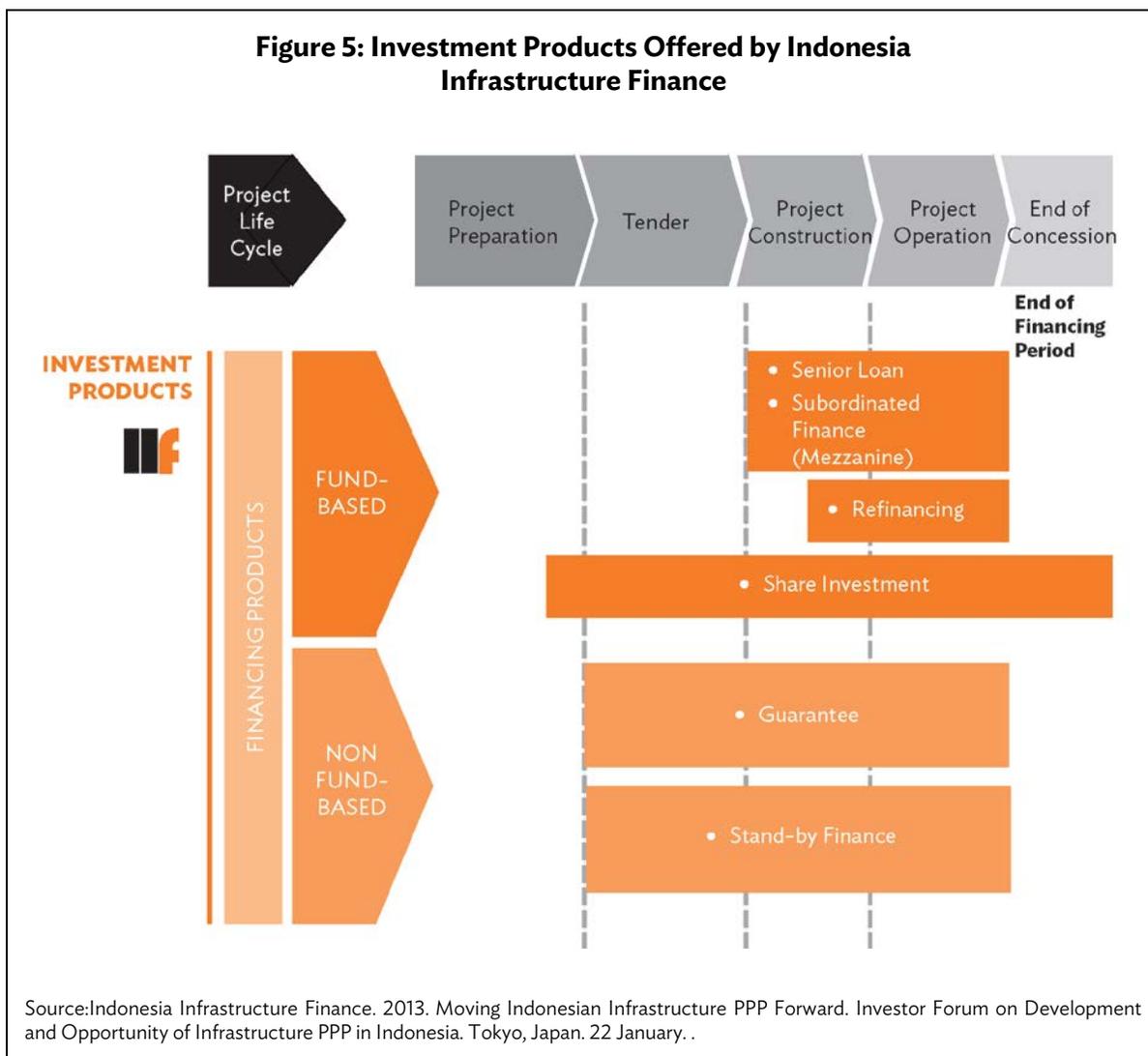
¹⁵ Mark Hellowell and Veronica Vecchi. 2012. The Credit Crunch in Infrastructure Finance: Assessing the Economic Advantage of Recent Policy Actions. http://www.sps.ed.ac.uk/___data/assets/pdf_file/0010/95797/Economic_future_of_PPP_-_MH_and_VV.pdf (accessed 2 September 2015).

¹⁶ This and the next section refer to IIF. Overview. http://iif.co.id/en_US/overview-2/

investors and banks looking for long-term placements with risk margins higher than sovereign and large corporate offerings.

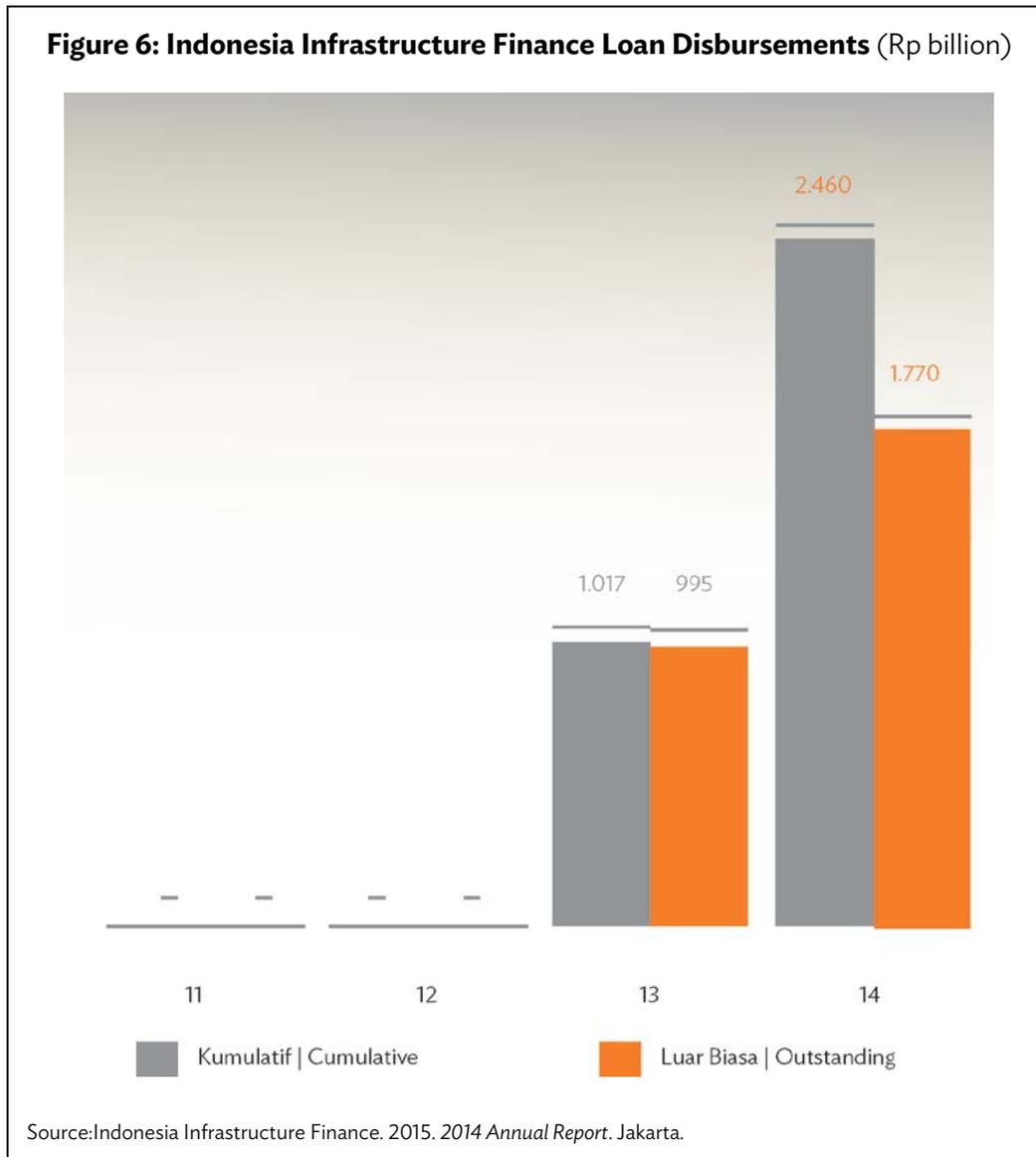
c. Products Offered

129. This finance is channeled into long-term fund-based products such as senior loans, mezzanine finance and equity participations, and non-fund-based products such as guarantees and fee-based services, as shown in Figure 5. Such products are provided at market rates and fees. Given its goal, the IIF also provides transactional advisory services to implementing agencies developing PPPs.



d. Performance

130. While the IIF has made a number of loans to infrastructure projects in recent years (**Error! Reference source not found.**6), it has yet to lend to a PPP. This reflects the lack of progress in the PPP market in Indonesia.



C. Key Design Issues

131. This section discusses how lending facilities can be designed to better achieve their purpose of improving access to long-term debt finance for PPPs.

Table 2: Summary of Lending Facilities

Facility	Transportation Infrastructure Finance and Innovation Act (United States)	India Infrastructure Finance Company Limited (India)	Treasury Infrastructure Finance Unit (United Kingdom)	Indonesia Infrastructure Finance (Indonesia)
Objectives	To supply credit assistance to large-scale transportation projects at rates better than would normally be available to the market. The main goal is to leverage government funds by attracting private coinvestment.	To encourage long-term private financing for viable infrastructure projects including transportation, energy, water sanitation, as well as social and commercial infrastructure projects. IIFCL seeks to fill the gap between the long-term lending capabilities of Indian lenders and requirements of long-term infrastructure projects.	Set up as a colender on major PPP projects where the private sector was unable to fund the entire requirement. Main objective was to instil confidence in commercial lenders to resume lending for infrastructure projects.	To strengthen and further enable the Indonesian finance sector to finance commercially viable infrastructure projects. The goal being to increase PPP growth by improving the long-term debt market. IIF also acts as a strategic advisor to the government.
Governance	The Department of Transportation Credit Council provides policy direction and makes suggestions to the Secretary to select projects for credit assistance. The Credit Council consists of the Deputy Secretary of Transportation, who serves as chair, and various other agency administrators across the transportation sector.	The lead bank will undertake an initial appraisal of the project, and then present it to the IIFCL who will approve funding. The IIFCL is not required to undertake any independent appraisal. The lead bank is also responsible for undertaking periodic evaluation of the project with stipulated milestones and performance levels regarding the receipt of IIFCL funds.	A Treasury-based unit, accountable to ministers and wholly funded by the Treasury. Staff consist of Treasury officials and independent bankers. The loan process and portfolio management is undertaken in the same manner as a commercial bank.	Formed by and under the Ministry of Finance of Indonesia. IIF is jointly funded by the Government of India, Asian Development Bank, International Finance Corporation, Deutsche Investitions- und Entwicklungsgesellschaft, and Sumitomo Mitsui Banking Corporation
Eligibility Criteria	The criteria differ with the type of project, but must be consistent with federal funding rules for transport infrastructure in terms of minimum size and creditworthiness. The project should also be able to begin the contracting process in less than 90 days.	For a PPP to be eligible, it must be commercially viable, it must be in a regulated industry, or set up under a government agreement. It must also be in an approved sector.	TIFU only considers lending to a project when (i) a project cannot secure sufficient finance to reach a financial close on a timely basis; (ii) the proposed private sector funding is not representative of terms and conditions generally available in the market; or (iii) a project is at risk of delay due to a genuine lack of funder engagement.	Focuses on commercially viable infrastructure projects.

continued on next page

Table 2 *continued*

Facility	Transportation Infrastructure Finance and Innovation Act (United States)	India Infrastructure Finance Company Limited (India)	Treasury Infrastructure Finance Unit (United Kingdom)	Indonesia Infrastructure Finance (Indonesia)
Nature of Funding	For PPPs, TIFIA offers secured direct loans, loan guarantees, and standby lines of credit. Loan pricing is roughly equivalent to US Treasury bonds and can fund a maximum of 49% (formerly 33%) of the project costs.	IIFCL offers financial assistance to PPPs through long-term debt, subordinate debt, take-out financing, and refinancing of commercial banks and public financial institutions. The total amount lent to a project company must not exceed 20% of the total project costs. As regards to take-out financing, direct lending to the project must not exceed 10% of total costs and total lending including take-out financing must not exceed 30% of total project costs.	TIFU has means to fund 100% debt required. It prefers the private sector to raise all or most of the project debt, with the equity holders bearing the majority of the primary risk. Long-term loans are available at either a fixed or floating rate, at terms comparable to the commercial lenders.	IIF offers senior debt, subordinated debt/mezzanine financing, bridge financing, take-out financing, and/or refinancing.

PPP = public-private partnership.

Sources: ADB. 2011. Mandate of India Infrastructure Finance Company Limited: Scheme for Financing Viable Infrastructure Projects Through a Special Purpose Vehicle Called the IIFCL and Take-Out Finance Scheme. Accelerating Infrastructure Investment Facility in India; IIF. 2013. Indonesia Infrastructure Finance: Moving Indonesian Infrastructure PPP Forward. Presentation to Investor Forum on Development and Opportunity of Infrastructure PPP in Indonesia; PWC. 2014. Indonesia Infrastructure Landscape. www.pwc.com/id/en/publications/assets/indonesia-infrastructure-landscape.pdf (viewed 2 September 2015); Ed Farquharson and Javier Encinas. 2010. The UK Treasury Infrastructure Finance Unit: Supporting PPP Financing during the Global Financial Crisis. *Public-Private Partnerships Solutions*. March; US Department of Transportation. 2011. TIFIA Project Oversight and Credit Monitoring Guidance; US Department of Transportation. 2015. *TIFIA Program Guide*. http://www.fhwa.dot.gov/ipd/pdfs/tifia/tifia_program_guide.pdf (viewed 2 September 2015); House of Commons Committee of Public Accounts. 2011. Financing PFI Projects in the Credit Crisis and the Treasury's Response. Ninth Report of Session 2010-11.

a. Lending Facilities to Undertake the Project Due Diligence Typically Provided by Private Lenders

132. Private finance's key usefulness is that it provides an additional layer of project due diligence, as lenders want to ensure that the project will be able to service its debt throughout the project cycle. This due diligence by private lenders means that the capital structure is optimized, the risk allocation is scrutinized, and equity returns are genuinely linked to incentives and private performance. Thus, when private debt is replaced with public debt, it is important to put in place the procedures and institutional arrangements that ensure that this due diligence is still undertaken. This is a key design challenge for public lending facilities.
133. Of the facilities examined, TIFU stands out as having made a particular effort to operate like a commercial bank. For example, it hired professionals with private sector project finance

experience, put in place its own due diligence procedures, and had an internal credit committee comprising independent banking professionals.

b. Benefits to Setting Up a Lending Facility as a Separate Government Entity

134. The government does not necessarily have to set up a separate entity to provide public debt to PPP projects. There are two broad options:

- (i) **A dedicated long-term lending facility.** Such a facility could be set up as a transparent, commercialized SOE—a separate statutory authority under control of the finance ministry—or as an additional facility within an existing commercial entity. It would assess loan applications independently of the government. The facility would be provided with an initial equity investment, from the government and/or donors, and would then be responsible for its own financial sustainability. That is, it would be required to maintain a sustainable capital base through the interest paid on its loans. The facility could also be charged with making a profit.

The IIFCL (a special purpose vehicle) and the IIF (a private nonbank financial institution) are both separate entities outside a government department.

- (ii) **A facility to onlend government debt or official development assistance financing.** Developed country governments and many developing country governments can issue long-term, local currency-denominated bonds on international capital markets. Most developing country governments can also borrow on concessional terms from donor agencies such as the Asian Development Bank. The government can onlend this debt to PPP projects. The government may charge commercial interest rates on this debt or it may wish to subsidize the project by passing on the lower interest rates it pays to its lenders.

The TIFIA program (in the US Department of Transport) and TIFU (in the UK Treasury) are both onlending facilities.

135. While a dedicated long-term lending facility will take more time and effort to set up, it provides advantages over and above onlending, particularly where financial markets are less developed and government capacity is likely to be weaker. These advantages are listed in the following.

c. Clearer Incentives

136. As an SOE, a lending facility would also be expected to manage its own funds. This provides for clearer incentives and would reduce the risks of the facility coming under political pressure. That is, the facility will have the incentive to estimate the risks of each loan correctly to ensure it does not make any decision that could damage its financial sustainability.

137. In contrast, under the onlending arrangement, public funds are used for a public purpose—that is, providing support for PPP projects. The decision to lend to a project is a political decision, administered by the finance ministry.

138. This creates complex objectives and accountabilities. There are numerous reasons the government may want to support a particular PPP project, ranging from the more objective to the purely political. There can be no a priori rules, with regard to any individual project, which would govern how much risk the government should take on through its onlending. In this

situation, it will be difficult to monitor the quality of individual loan decisions and hold staff accountable for such decisions.

d. Reduce Exchange Rate Risk

139. Under the onlending arrangement, the government may accept official development assistance financing from donors. Such financing carries exchange rate risk. Since the objective of the on-lending is to provide long-term, local currency debt, this risk cannot be passed on and must be borne by the government.
140. In contrast, the lending facility would be funded by equity from donors and/or the government. As an equity holder in the facility, donors would bear any exchange rate risk.

e. Limit Government Exposure

141. Under the on-lending arrangement, the government's exposure—the amount of money it could lose—would include all onlending.
142. In contrast, the government's exposure under the lending facility would be limited to its equity in the facility. Of course, it is important to understand the limits of such separation. In theory, if the lending facility issues too many bad loans, the government can let the facility fail. In practice, this may not be politically feasible.

f. Attract Necessary Skill

143. Public provision of debt requires project assessment skills that are not typical of the skills found among government personnel. Instead, experience with conducting due diligence for project finance is more likely to be found in the private finance sector.
144. A lending facility set up as an SOE will be able to pay more market-related salaries than a government body and hence will be better able to attract staff with the necessary skills. Also, through a management contract with a reputable financial institution, such a facility can improve staff performance incentives by tying performance to remuneration. In general, such performance pay is not possible in the public sector.

g. Provide PPP Policy Coordination

145. Lending facilities can also be used to provide PPP policy coordination and enforcement, by establishing clear rules and requirements for when financing will be available. This can particularly apply when a financial institution is set up specifically to serve the needs of a PPP program.

h. Lending Facilities May Also Provide Other Products That Improve Access to Long-Term Finance

146. Instead of, or in addition to, providing loans themselves, lending facilities can support private lenders to lend for longer tenors.

Guarantees on commercial borrowing

147. The government could also provide guarantees on commercial borrowing in order to encourage longer tenors. That is, the government would guarantee the repayments of the PPP project's debt. The TIFIA program, the IIFCL, and the IIF all offer such guarantees.
148. Theoretically, guarantees on commercial lending can achieve the same result as the government borrowing money and providing a loan directly to the PPP project—the government and the commercial lender would take on the same level of risk, and the PPP project would receive the same tenor and amount of finance.
149. However, in most developing countries, the corporate bond market is very thin, and there is no market for bonds issued for project finance. This means that it would be expensive, if not impossible, to issue long-term debt for a PPP project, even if it was backed by a government guarantee. In contrast, government bond markets tend to be more liquid. When this is the case, government lending is likely to result in better loan terms than private debt covered by a guarantee.
150. A developing country government may still wish to provide guarantees for other reasons. For example, the IIF aims to catalyze the development of a private infrastructure finance market. Thus, it may still offer guarantees in order to increase the private sector's experience with project finance.

Tenor extension facility

151. The government can encourage the private sector to lend for longer tenors by providing lenders with a prearranged option for exiting a loan through a tenor extension facility. Such a facility is designed to take over long-term loans issued by commercial lenders if the lender chooses to exit the loan after a predetermined period. The terms on which the commercial lender can exit will be agreed upon before the loan is issued. If the lender chooses to exit the loan, the tenor extension facility would be used to pay the lender the outstanding principal of the loan. The agency managing the facility would then take over the management of the loan. The borrower would repay the remainder of the loan to the agency managing the facility. All other borrowing terms would remain the same.
152. The tenor extension facility should be set up within an agency with experience in managing loans, such as a country's development bank.
153. None of the facilities examined provide a tenor extension facility. However, the IIFCL provides a similar service by refinancing commercial loans and by offering take-out financing, that is, a commitment to provide permanent financing following the construction of a project.

IV. GUARANTEE FUND

A. Analytical Framework for a Guarantee Fund

154. This section discusses how the purpose of a guarantee fund is to provide confidence to investors that the government will honor its obligations under a PPP contract, particularly its obligations under various risk guarantees.
155. It then discusses why risk guarantees are used and why risk guarantees should not be used for the wrong reasons.

1. Purpose of a Guarantee Fund

156. The primary purpose of a guarantee fund is to provide guarantees to the private sector that the implementing agency will honor its obligations under the PPP contract. These obligations can be both contingent liabilities (such as risk guarantees) and direct liabilities (such as availability payments).
157. As mentioned earlier, in the postglobal financial crisis PPP environment, many governments are taking a much more pragmatic approach to risk allocation, understanding that expecting the private sector to bear too much risk can rebound. Moreover, as their PPP programs evolve, and relatively low-risk and high-earning PPPs are bid out, the PPP pipeline shifts to more complex and politically sensitive PPPs. These projects may also be greenfield, meaning a new asset is constructed. Greenfield projects are higher risk because there is less information with which to estimate demand. The government may also pursue PPPs in new sectors, including those where projects do not produce revenue, such as in the health and education sectors.
158. In these circumstances, the government will need to take on more risk to make these projects bankable. Measures to take on risk generate contingent liabilities for the government. Thus, the government's stock of contingent liabilities should also be expected to increase over time. As the government takes on more risk, investors may require greater assurances that the risk allocation will actually be enforced and that the government will honor its obligations under the contract.
159. PPP contracts generally feature various levels of credit enhancement, designed to ensure that the private investor is protected in the event of the government's default on its obligations. If the default cannot be repaired, it is common for such contracts to include buyout provisions, where the government accepts the liabilities of the project and pays out the investor in a way that compensates for the breach of contract.
160. When this is not enough to satisfy investors, a guarantee fund can provide investors with security over and above the credit enhancement mechanisms already incorporated into the contract. This is likely to be particularly relevant when the government counterparty is a subsovereign entity, such as a local government or district water utility. Guarantee funds are public entities with some degree of operational independence from the government, and a separate balance sheet that insulates the fund from year-on-year changes in fiscal policy. The government can improve project bankability by providing guarantees for specific risks.

161. The government can reduce the cost of private finance and improve project bankability by providing guarantees against key risks, including demand risk and finance risks.

2. Demand Risk Guarantees

162. If the private party does not believe that the project will have sufficient funding at all times to meet the financing obligations, it will not be bankable. The government can improve project bankability by rebalancing the allocation of risk and enhancing the reliability of funding through a minimum revenue guarantee. Minimum revenue guarantees can shift demand risk from the concessionaire to the government. Under such a guarantee, the government grants the concessionaire a minimum level of revenues for a concession period. Each time period (usually yearly), the government pays any difference between the minimum revenue guarantee and actual revenue. It is a contingent liability for the government, and a form of insurance—against demand being lower than expected—for the private party. Minimum revenue guarantees reduce funding risk and make the PPP more attractive to investors.

3. Financial Guarantees

163. As discussed earlier, a key problem in most developing countries is access to long-term project finance. An alternative solution to public debt is for the government to issue financial risk guarantees including the following:

- (i) **Refinancing risk guarantees.** “Refinancing” means taking on new debt to pay off existing loans. “Refinancing risk” is the risk that the cost of debt moves between the time of taking out the initial debt and the time when refinancing is required. A PPP concessionaire will need to refinance its debt if it is unable to obtain a financing package with a long enough maturity to match the project’s length. Consequently, if they are willing to bear the refinancing risk at all, the private sector will only do so by building large risk margins into their proposals against interest costs rising, adding to the cost of the project and worsening its VfM to the government.¹⁷ The government can reduce the refinancing risk (both upside and downside) to the concessionaire by issuing a guarantee. The government’s options for the guarantee include
 - (a) Taking on the full refinancing risk. The logic being, since the risk event is almost entirely outside the control of the financier, it should not suffer excessively nor profit from the event
 - (b) Sharing the risk between the concessionaire and customers, by including in the PPP contract or regulation a clause that ensures the benefits or costs of refinancing are reflected in the price paid for the asset or service.
 - (c) Sharing the risk between the concessionaire and the government. For example, the United Kingdom imposes a 70:30 split of refinancing risk between the government and investors, respectively.
- (ii) **Exchange rate risk guarantees.** Access to foreign finance increases the concessionaire’s financing options. Foreign finance may be lower-cost and longer-term than domestic finance. However, foreign finance involves exchange rate risk, which in turn increases the cost of finance. As for refinancing risk, a PPP concessionaire has no control over

¹⁷ As well as being a risk, refinancing can provide an opportunity for the concessionaire to access debt on better terms. Lenders tend to offer better financing terms to projects with demonstrated track records, and projects that have already moved past initial risks, such as construction.

exchange rate movements, and thus there is no reason to allocate them this risk. Instead, the government could take on all or share this risk with the concessionaire in order to reduce financing costs.

4. Risk Guarantees Must Be Used for the Right Reasons

164. There are good, but limited, reasons for the government to issue risk guarantees and take on contingent liabilities:
- (i) The government is better able to manage the risk.
 - (ii) There is a need to reduce the risk to the private sector to improve project bankability.
165. One wrong reason for a risk guarantee is to avoid the scrutiny involved in securing government subsidies. That is, implementing agencies may try to hide subsidies as contingent liabilities and then request a risk guarantee to cover the liability. Such “pseudo” contingent liabilities are almost certain to be called upon and so are not actually contingent. That is, pseudo-contingent liabilities still need to be paid for, just like subsidies. However, they also impose another cost—greater budget uncertainty. This eliminates one of the key benefits of a PPP—cost certainty.
166. For example, if the government wants to build a toll road in an area where there may not be sufficient traffic to make such a road viable, it would need to subsidize tolls. However, such explicit applications for subsidies are politically difficult. Project promoters have another option: they can construct overly optimistic traffic forecasts, and then ask the government for a minimum revenue guarantee. Such a guarantee, because it is almost certain to be called upon, is as good as a subsidy.
167. The motivation for hiding subsidies as contingent liabilities is that contingent liabilities are politically less visible, do not need to be reflected in the year’s budget, and may be easier to get approved. Implementing agencies have another incentive to hide subsidies as contingent liabilities, because the former are expected to derive from their budgets, while the latter sit on the balance sheet of the government or a guarantee fund.

B. International Experience

168. This section discusses international experience with guarantee funds including the following:
- (i) Indonesian Infrastructure Guarantee Fund (IIGF)
 - (ii) Fundo Garantidor de Parcerias Público – Privadas (FGP) in Brazil
 - (iii) Contract Payment Enhancement Guarantee (CPEG), provided by BANOBRAS, the development bank of Mexico.
169. Each is described below and a full comparison is provided in Table 3. The analysis shows that guarantee funds differ across a number of dimensions including their
- (i) purpose,
 - (ii) source of funding and finance,
 - (iii) institutional structure,
 - (iv) operating procedures,

- (v) use of eligibility criteria, and
- (vi) performance.

1. Indonesian Infrastructure Guarantee Fund (IIGF)

a. Purpose

170. The Government of Indonesia has prioritized attracting private investment, expertise, and efficiency to help meet the country's increasing demand for infrastructure.
171. As such, the government established the Indonesian Infrastructure Guarantee Fund (IIGF) in 2009 as the "single window" to provide guarantees designed to mitigate the private sector's exposure to the risk of the government's failure to honor its obligations under a PPP contract.

b. Source of Funding

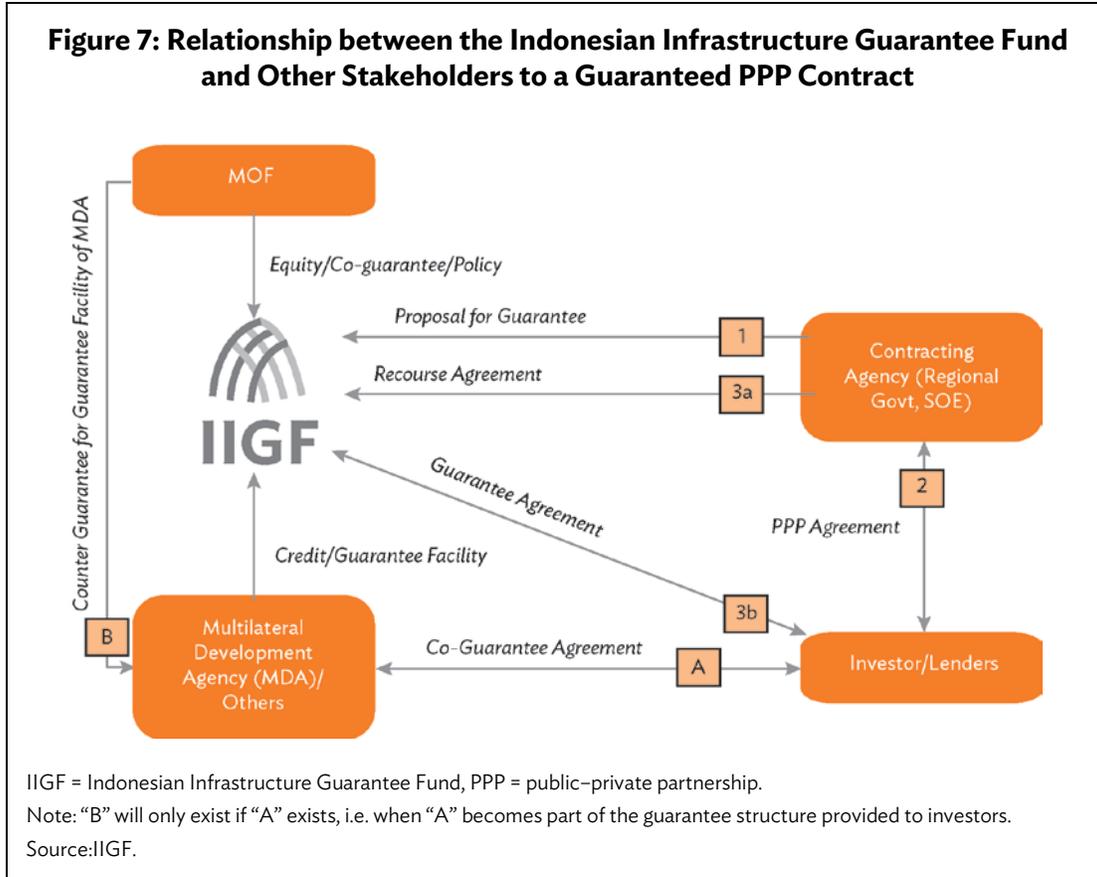
172. The IIGF is a state-owned company under the Ministry of Finance and operates in accordance with Indonesian legislation. The IIGF is capitalized by a contribution from the government's budget of approximately \$1 billion. The IIGF can also access financial assistance from the World Bank under the IIGF Project (IGFP). The IIGF offers guarantees backed by its own capital and by financial support provided under the IGFP. The IIGF charges fees for its services. The fees are set at a level designed to ensure financial sustainability.

c. Operating Procedures

173. Implementing agencies apply to the IIGF for guarantees for each PPP project. The IIGF then assesses the feasibility of the project. If the project qualifies for support, the IIGF will structure the guarantee as either a single guarantee provided by the IIGF or coguarantee provided by the IIGF and another institution such as a multilateral development agency. The IIGF then issues an In-Principle Approval. This is disclosed in the tender document to the investor, along with the guarantee fee which has to be paid by the winning bidder. Figure 7 shows the relationship between the IIGF and other stakeholders to a guarantee.

d. Performance

174. The IIGF has issued only one guarantee to date, although it currently has several guarantee applications under consideration. In the first year of its operation, it provided a guarantee to the Central Java Power Plant Project. The project is a \$3 billion coal-fired power plant designed to provide electricity for 7.5 million people.
175. The lack of progress in issuing guarantees is attributable to a number of factors:
- (i) The lack of projects in the PPP pipeline in general
 - (ii) Delays in progressing those projects in the PPP pipeline. Indeed, there are currently four projects in the IIGF pipeline that have been significantly delayed. The IIGF has not rejected any guarantee application so far.



- (iii) A lack of understanding among implementing agencies and investors about the potential benefits of a guarantee from the IIGF. For example, a private investor offered the same bid for a recent toll road project with and without the IIGF's guarantee. The implementing did not end up using the IIGF's guarantee for the same project, although the IIGF had approved the guarantee.

2. *Fundo Garantidor de Parcerias Público Privadas (FGP) – Brazil*

a. Purpose

176. In 2004, legislators in Brazil enacted a law seeking to regulate PPPs (Law n.11.079/04). A guarantee fund—the *Fundo Garantidor de Parcerias (FGP)*—was created as part of this reform. The purpose of the FGP is to provide guarantee of payment for money liabilities assumed by implementing agencies that enter into a PPP contract. The FGP guarantees payments from the government party to private investors against the assets of the fund. The FGP was introduced to protect investors against what is known as "Brazil risk." The term relates to the country's history of

- (i) non-honored contracts by the Government of Brazil,
- (ii) default in foreign debt (particularly in the 1980s),
- (iii) political instability, and

- (iv) cases where judgments made by the Brazilian judicial system have been influenced by political and ideological views.¹⁸

177. Further, delays in payments to government suppliers and contractors and contract terminations are not uncommon, as discussed in Box 3.

Box 3: Delays in Payments

Delays in payments to suppliers and contractors and contract terminations are not uncommon in Brazil. Among other factors, these delays are caused by shortcomings in the budgetary process:

- (i) inadequate multiyear planning; and
- (ii) extensive revenue earmarking and a small proportion of discretionary expenditures, which leads any fiscal adjustment to rely heavily on curtailing investment.

Further, litigation against government default has limited effectiveness. The government has legal privileges that lead lawsuits to take years before a final court decision, and public assets cannot be seized by judicial order.

As a result of these problems, major public works that take 2 or 3 years to be concluded, such as roads and irrigation channels, have suffered from unpredictability of funds. This often leads to losses for investors, but also for the government, due to contract fines and other compensation payments.

The resultant uncertainty related to government payments has led contractors to increase the price of their bids.

A public-private partnership financial structure poses even more challenges to investors than a traditional public works pay-as-you-go contract. In a public-private partnership, private investors finance the entire cost of the project up-front, relying on future expected revenues for their returns. Therefore, the bankability of a PPP project depends crucially on the predictability of future government payments, especially if the proportion of user charges in total revenues is low. Any uncertainty related to government payments would lead the private sector to increase the price of their bids. This in turn decreases value for money to the government.

Source: World Bank Institute. 2012. Best Practices in Public Private Partnerships Financing in Latin America: The Role of Guarantees. Washington, DC.

b. Source of Funding

178. The FGP is funded by a trust fund of public assets including cash, public bonds, real estate, and stocks. Its initial endowment consisted of \$2 billion worth of stocks and \$50 million worth of public bonds.

179. The FGP has mechanisms and policies in place to provide investors with a solid and reliable guarantee. These include the following:

- (i) **Professional management.** The FGP is managed by a federal financial institution (Bank of Brazil) specialized in the management of third-party funds and accredited by the Securities Commission to carry out this activity.
- (ii) **Absence of leverage.** The FGP is prohibited from granting guarantees when the present value of all guarantees issued exceeds the value of all assets.

¹⁸ Amauri Machado. 2007. Public-Private Partnerships and Bank of Brazil's Role. Institute of Brazilian Issues, Minerva Program.

- (iii) **Guarantee quality.** The type of guarantee to be granted to the private partner is matched with specific types of assets in the FGP portfolio according to their liquidity (Table 3). This precaution ensures that commitments made by the FGP can be readily honored and settled.

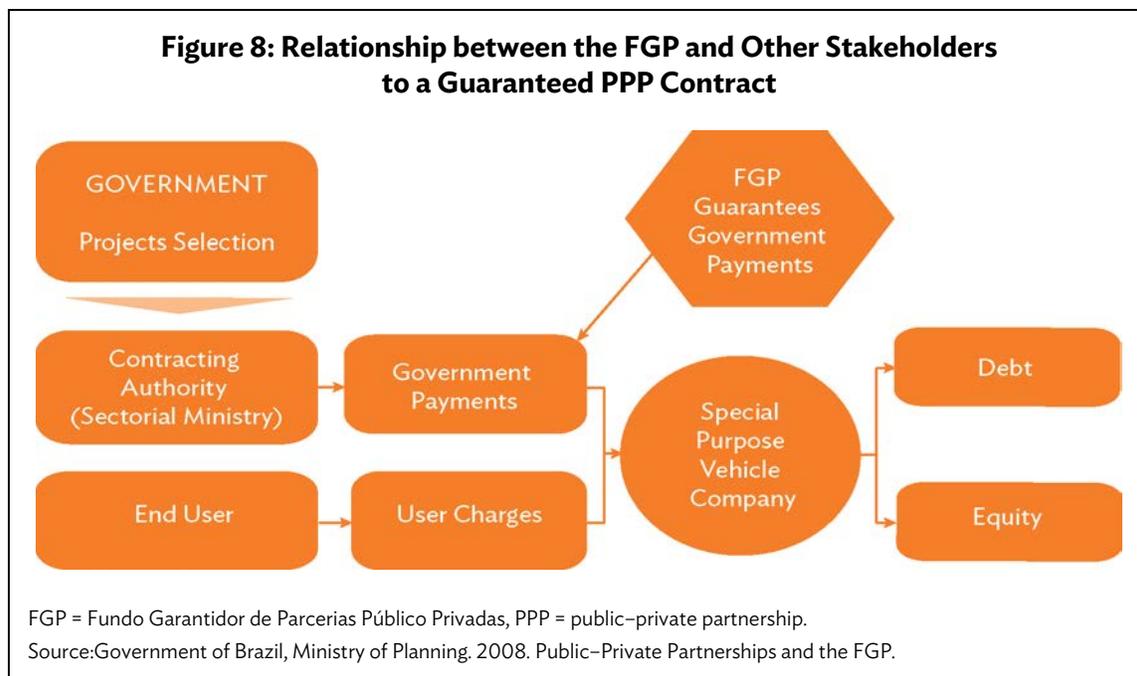
Table 3: Asset and Guarantee Matching

Financial Product	Asset
Guarantee	Money, public bonds, stocks, and money from credit
Bond	Public bonds, assets, and credit rights
Fiduciary transfer/mortgage	Real estate properties, chattel
Pledge	Movable property

Source: World Bank Institute. 2012. *Best Practices in Public–Private Partnerships Financing in Latin America: The Role of Guarantees*. Washington, DC.

c. Structure and Operating Procedures

180. The structure of the FGP has many advantages:
- (i) The FGP is legally considered a private entity, and therefore public sector legal privileges do not apply.
 - (ii) Its assets are off-budget and are not subject to the unpredictability of funds flows arising from shortcomings in the budgetary process.
 - (iii) The transfer of assets to the FGP did not imply a fiscal impact.
 - (iv) Similar structures had already been tested. For instance, the Export Guarantee Fund was put in place in 1997 and has worked adequately since then.
 - (v) The FGP scheme was well accepted by the private sector.
181. The FGP is only used to fund Federal PPP projects; it can't offer guarantees for States or Municipalities. This is presumably due to the fact that many of the state governments of Brazil have set up their own guarantee funds.
182. The guarantee is provided free of charge to the private partner.
183. Figure 8 illustrates the relationship between the FGP and other stakeholders to a guaranteed PPP contract.



184. In case of default, the FGP covers payment 45 days after it is due, or after 90 days if the public authority does not recognize the debt without a formal justification. Figure 9 shows the process for triggering the guarantee.

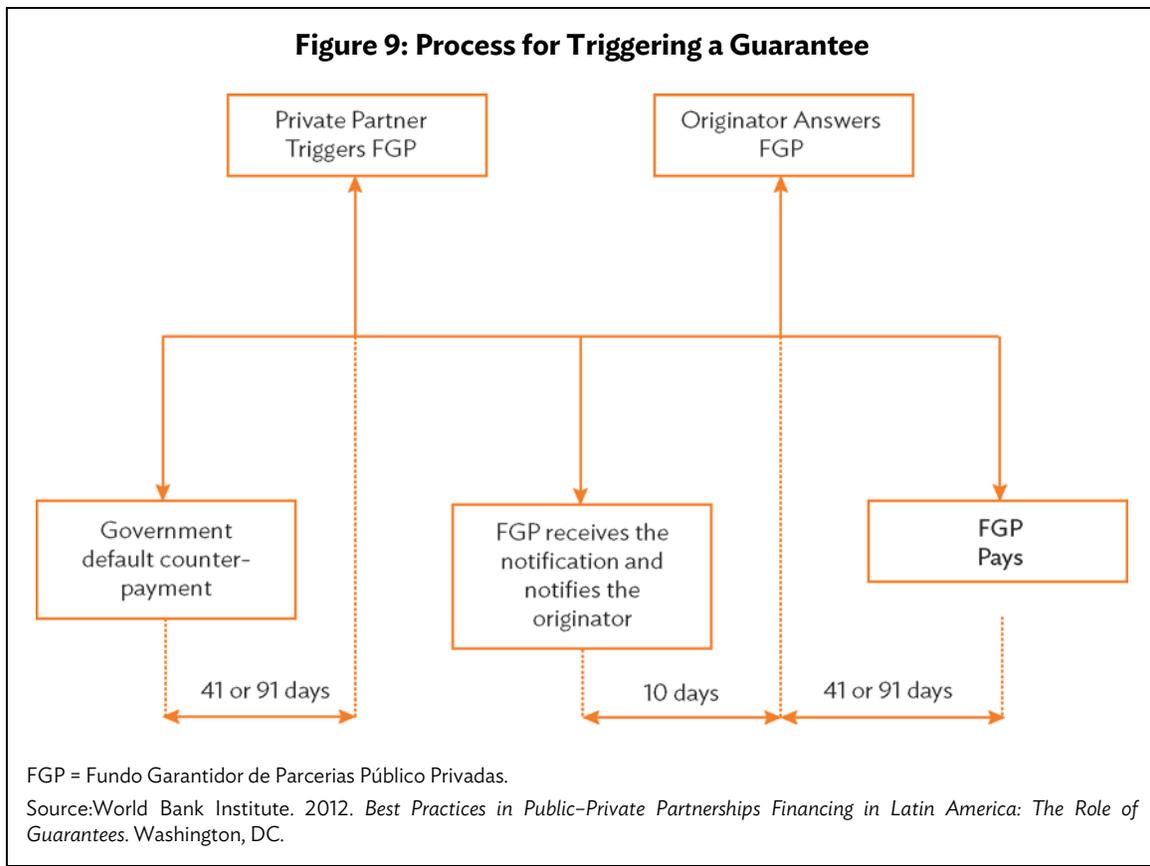
d. Performance

185. Despite these advantages, the government drastically cut the budget of the FGP from \$2 billion to \$200 million in 2011.

186. This is because the FGP's assets had remained idle for lack of PPP projects. There has only been one application for a guarantee from the FGP—the Pontal Irrigation Project.

187. Several reasons have been identified for the lack of usage of the guarantee fund:

- (i) Investors perceive the FGP to be encumbered by bureaucracy and administrative procedures. They therefore believe that the approval of payments by the FGP would be slow.
- (ii) States in Brazil have developed strong PPP systems and reliable guarantee arrangements which have been used as an alternative.



3. Contract Payment Enhancement Guarantee – Mexico

a. Purpose

188. Traditionally in Mexico, PPP projects have been supported by standard long-term credit facilities provided by BANOBRAS, the country’s development bank. In 2007, BANOBRAS introduced a guarantee known as CPEG. The aim of CPEG is to help subnational entities (states and municipalities), which have low credit ratings, attract private investment to PPP projects.

b. Source of Funding

189. Unlike other guarantee funds around the world, there is no separate or dedicated funding for guarantees provided under CPEG. Instead the guarantees are funded by the balance sheet of BANOBRAS. Guarantees provided under CPEG are further supported by a counterguarantee from the federal government over the commitments of BANOBRAS.

c. Performance

190. Since 2007, BANOBRAS has issued only one CPEG. It was issued to a state government to attract private investors to bid for four of the states’ PPP projects: a cultural center, a hospital,

and two roads. BANOBRAS set a limit of 1 billion pesos (\$60 million) for the guarantee and a tenor up to 30 years.

191. This lack of guarantees has been attributed to the fact that the guarantee does not cover construction risk. That is, the guarantee only covers availability payments, which begin following the construction period. In contrast, loans provided by BANOBRAS are made available during the construction period. This may encourage implementing agencies to pursue debt instead of a guarantee. From the perspective of the implementing agency, a long-term loan from BANOBRAS will also help them improve project bankability. However, a subsidized loan does not actually address the key problem—lack of confidence in the government’s commitment to its obligations under the PPP contract—and so will not deliver VfM compared to a guarantee.
192. Further, financial guarantees are not well known in Mexico, and BANOBRAS is perceived as a lender more than a guarantor, and is relatively inexperienced in providing guarantees.
193. Overall, BANOBRAS’s lending activity seems to be in conflict with its provision of guarantees. There have been reported occasions when an implementing agency has approached BANOBRAS for a guarantee but was offered a loan instead. This internal competition in financing instruments reinforces the view of BANOBRAS as a lender rather than a guarantor.¹⁹

Table 4: Summary of Guarantee Funds

	Indonesia Infrastructure Guarantee Fund (Indonesia)	Fundo Garantidor de Parcerias Público Privadas (Brazil)	Contract Payment Enhancement Guarantee (Mexico)
Objective	To provide guarantees for PPP projects; improve creditworthiness, particularly the bankability of PPPs; improve good governance, consistency, and transparency in guarantee provision; minimize the possibility of sudden shock to the state budget and to ring-fence the government’s contingent liability	To provide guarantee of payment for money liabilities assumed by implementing agencies that enter into a PPP contract. The FGP guarantees payments from the government party to private investors against the assets of the fund	To help subnational entities (states and municipalities)—which have low credit ratings— attract private investment to their PPP projects
Governance	Managed by the Ministry of Finance and operates in accordance with Indonesian legislation	Managed by Banco do Brasil and is subject to Federal PPP law, regulation and statutes, the regulation of the Brazilian Securities Commission, as well as all applicable rules given by the Brazilian central bank.	Managed by BANOBRAS

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¹⁹ World Bank Institute. 2012. Best Practices in Public–Private Partnerships Financing in Latin America: The Role of Guarantees. Washington, DC.

Table 4 *continued*

	Indonesia Infrastructure Guarantee Fund (Indonesia)	Fundo Garantidor de Parcerias Público Privadas (Brazil)	Contract Payment Enhancement Guarantee (Mexico)
Source of Funding	The IIGF is capitalized by a one-off contribution from the government's budget. It can also access financial assistance from the World Bank under the Infrastructure Guarantee Fund Project.	FGP is funded by a trust fund of public assets including cash, public bonds, real estate, and stocks.	CPEG is funded by the balance sheet of BANOBRAS
Products issued	IIGF guarantees which are backed by the IIGF's own capital; IIGF guarantees backed by financial support provided under the Infrastructure Guarantee Fund Project Indonesia Infrastructure Guarantee Fund (Indonesia)	Subordinated guarantees; pledges and charges (both floating and fixed); mortgages over the assets of the fund; guarantees over assets of special trusts fully owned and established by the FGP Fundo Garantidor de Parcerias Público Privadas (Brazil)	Credit lines Contract Payment Enhancement Guarantee (Mexico)
Operating Procedures	Contracting agency will make an enquiry to the IIGF regarding the potential guarantee coverage for a PPP; the IIGF will provide the contracting agency with the eligibility criteria, detailed checklist for the application package, as well as environmental and social safeguards requirements; contracting agency will submit an application; IIGF undertakes feasibility assessment; conducts guarantee structuring; issuance of in-principle approval	Provided for all PPPs awarded by federal agencies	BANOBRAS looks at the financials of the subnational entity applying for the guarantee, its laws, legislative approvals, and regulatory framework. Further, BANOBRAS will look at the source of cash flows to make the PPS payments.
Sectors	Transportation, toll road/highway, irrigation, water, waste, telecommunication and informatics, electricity, and transmission and/or oil and gas distribution.	Interurban roads, rodovias, airports, and recently, hospitals, complex prisons, administrative centers, stadiums	All sectors
Eligibility Criteria	The PPP projects that can be guaranteed by the IIGF are those whose private partner selection is conducted in compliance with Presidential Regulation No. 13/2010	The FGP is only used to fund Federal PPP projects; it can't offer guarantees for States or Municipalities. This is presumably due to the fact that many of the state governments of Brazil have set up their own guarantee funds	This guarantee is applicable to PPS projects.

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Table 4 *continued*

	Indonesia Infrastructure Guarantee Fund (Indonesia)	Fundo Garantidor de Parcerias Público Privadas (Brazil)	Contract Payment Enhancement Guarantee (Mexico)
Effectiveness	Only one guaranteed issues. Many PPP projects have been evaluated, but have failed to reach financial close, meaning the guarantee has yet to be issued. This is primarily due to failures outside the IIGF to progress projects.	FGP has only provided one guarantee since its establishment	Since 2007, BANOBRAS has issued only one CPEG. It was issued to a state government to attract private investors to bid for four of the states' PPP projects: a cultural center, a hospital, and two roads
Challenges	Dealing with issues outside the IIGF such a political issues	Bureaucracy and administrative procedures delaying payments; high transaction costs; States in Brazil have developed strong PPP systems and reliable guarantee arrangements which have been used as an alternative	Guarantees do not cover construction risk; financial guarantees are not well known in Mexico, and BANOBRAS is perceived as a lender more than a guarantor; BANOBRAS offering loans when implementing agencies approach them for guarantees.

PPP = public-private partnership.

Sources: Government of Brazil, Ministry of Planning. 2008. Public-Private Partnerships and the FGP; World Bank Institute. 2012. *Best Practices in Public-Private Partnerships Financing in Latin America: The Role of Guarantees*. Washington, DC; Indonesia Infrastructure Guarantee Fund. <http://www.iifg.co.id> (viewed 8 September 2015).

C. Key Design Issues

194. This section discusses how guarantee funds can be designed to better achieve their purpose of improving investors' confidence that the government will honor its obligations under a PPP contract.

1. Benefits to Setting Up a Guarantee Fund as a Separate Government Entity

195. While there are a number of institutional options for the setting up of a guarantee fund, the key attribute is some degree of operational independence from the government, and a separate balance sheet that would insulate the fund from year-on-year changes in fiscal policy.

196. In deciding whether it is worth setting up a guarantee fund, the government needs to consider what benefits can be derived from such organizational independence. The benefits need to be compared to the alternative of the government issuing guarantees through a government department, such as the finance ministry.

197. The IIGF and FGP are both dedicated guarantee funds, while CPEG is administered by BANOBRAS, Mexico’s development bank.

2. Reduce the Cost of PPPs

198. Guarantees provided by separate funds enhance the government’s promise to honor its obligations under a PPP contract by separating the payout under the guarantee from the government’s discretionary exercise of its powers and by providing recourse to a stronger credit risk. The resultant reduction in risk for investors lowers the cost of finance for the PPP. This in turn reduces the funding required, allowing for lower tariffs and/or lower government funding.
199. To be successful, the guarantee provided by the guarantee fund must be more creditworthy than a guarantee provided by the finance ministry. As discussed earlier, this is possible when the guarantee fund is endowed with a stronger asset base and is not subject to annual budget appropriations.
200. A further aspect of creditworthiness, from the point of view of a PPP project sponsor, is the timeliness of payment and the risks of conflict associated with enforcing contractual obligations. A separate guarantee fund could settle obligations more promptly because it would not have to secure annual budget appropriations—congressional action will no longer be necessary in order to disburse the special funds. The concessionaire may also feel that a dispute with or legal action against such a fund is less risky than being involved in a conflict with the government.

3. Give the Government Greater Certainty

201. PPPs create fiscal risks for the government. Shifting PPP liabilities to a separate entity with limited liability can ensure there are no hidden risks in the government accounts. The government’s exposure is limited by its equity in the fund. However, as per the lending facility, the exposure may be greater in practice, as it may not be politically feasible to let the guarantee fund fail.
202. However, if the guarantee fund is properly governed and is operated prudently, the government will enjoy greater, albeit not perfect, certainty. Over time, if private investors are brought into the fund, the separation between the government and the fund can be deepened, and hence the government would gain more certainty.

4. Improve Incentives for PPPs

203. One of the key risks for the government in implementing a PPP program is that PPPs may be procured for wrong reasons. One wrong reason is cost shifting. Implementing agencies may promote PPPs if government obligations under such contracts do not come out of their budgets, but are approved under a separate budget appropriation by the finance ministry. Another wrong reason for PPPs, as discussed earlier, is to hide subsidies as pseudo–contingent liabilities.

204. The government can address this problem through internal review procedures. In practice, however, such internal review processes do not always work well and are subject to political pressures.
205. A guarantee fund can add to the government's armory of devices for ensuring the quality of the PPP program. A separate entity with commercial governance and with a base of assets which it will want to protect will have more incentive to identify true risks of projects. For example, if the guarantee fund has a management contract with a reputable firm, such a firm will want to protect its brand in undertaking project reviews, and will be less subject to political pressures or to being captured by line ministry interests.

5. Attract Necessary Skill

206. As per the other types of funds, a guarantee fund set up as an SOE will be able to pay more market-related salaries than a government body, and hence will be better able to attract staff with the necessary skills. It would also be able to tie performance to remuneration.

6. Promote PPPs and Leverage Experience

207. Organizations responsible for providing guarantees for PPPs face conflicting objectives: on the one hand, they have to be prudent, and to make sure they do not take on unnecessary risks. On the other hand, they need to help promote appropriate PPPs, which may not otherwise happen. For example, the finance ministry is caught in a bind: it appropriately sees its first job as being the fiscal guardian, but it runs the risk of being seen as the bottleneck in the PPP program.
208. A specialist guarantee fund may have better incentives to resolve this conflict. For example, it is possible to prepare a management contract which would ensure that the management team is remunerated best if it appropriately balances the risks and helps make deals happen. This would happen if performance pay is dependent both on closing deals and on meeting prudential requirements.
209. Under such a contract, a dedicated fund would also be incentivized to increase awareness of the benefits of guarantees, and providing technical assistance to implementing agencies. This would be particularly useful for newer guarantee funds. The experiences of the IIGF and CPEG show that even after more than 5 years of operations, demand for their services is still constrained by a lack of understanding among implementing agencies and investors about the potential benefits of a guarantee.

7. Avoid Internal Competition

210. When guarantees are provided by agencies that also provide other financial products, internal competition may arise. This may mean that decisions about government support are based on internal politics rather than which product can best improve bankability and VfM.
211. This has been particularly apparent in BANOBRAS, which provides loans, guarantees, and other financial services. Internal competition between CPEG and the bank's larger, more experienced loans area is credited with the lack of demand for guarantees.

212. A dedicated fund, concentrated on providing only guarantees, is unlikely to encounter such conflicts.

8. A Guarantee Fund Needs a Strong and Stable Funding Base

213. To be successful, the guarantee provided by the guarantee fund must be creditworthy. That is, investors must be confident that the guarantee fund will have sufficient funds to make the required payments if a guarantee is triggered. To generate this confidence, a guarantee fund should
- (i) be endowed with a strong asset base that generates stable revenue (for example, bonds);
 - (ii) have procedures to ensure that the expected value of liabilities matches the expected value of its assets; and
 - (iii) not be subject to annual budget appropriations.
214. Both the IIGF and the FGP meet these criteria (although the FGP’s funding base has since been reduced). CPEG, as a subsidiary of BANOBRAS, also meets these criteria, although not on its own accord.
215. Other nonessential options for increasing the creditworthiness of a guarantee fund include the following:
- (i) A guarantee fund can be backstopped by an AAA– institution, such as a multilateral development bank. Such a backstop could be in the form of a contingent loan, which is disbursed in the event that cash flow is required to meet a guarantee call.
 - (ii) A guarantee fund can charge fees for its guarantees. This adds to its revenue base. Fees can be set above, below, or equal to the expected value of the guarantee payout depending on whether the guarantee fund is profit-motivated. Lower fees or the absence of fees will mean a heavier reliance on other revenue streams or government appropriations.
216. Among the funds examined, only the IIGF has these additional mechanisms in place.

V. CONCLUSION

217. This report has examined the experience of other countries and development partners to identify key issues to be considered in using PPP funds in the People’s Republic of China. The funds examined include viability gap funds, lending facilities, and guarantee funds. The analysis has demonstrated several important lessons.

A. Funds Should Only Be Set Up to Address Specific Problems

218. Each type of fund has a very precise purpose. That is, they are designed to address a specific constraint to developing bankable PPP projects. If the constraint is not apparent in a particular country, there is no need for the fund.

219. Funds are costly to the government, both in terms of administration costs and the application of fiscal support to a PPP project. This government support can be direct (such as viability gap funding or loans) or contingent (such as a guarantee). Either way, this support entails an opportunity cost and thus should be weighed against other government priorities; the government should only support PPPs where this provides VfM or helps the government meet other important policy objectives.
220. This means that a government should be careful in rushing to set up a fund. It is important that a fund is designed to address a key constraint to PPP project development that can only be relieved through targeted government action. The absence of the hoped-for level of PPP financing is not itself a sufficient reason to set up a PPP fund.
221. This report examines a number of funds that have been set up without identifying a specific problem. For example, the FGP was set up in Brazil to address investors' lack of confidence in the government's commitment to honor its obligations under a PPP contract. While this lack of confidence is indeed a problem in Brazil, many of the state governments of Brazil have already set up their own guarantee funds. This may have contributed to the fact that the FGP has received only one application since it was established in 2004. As such, its initial asset allocation of \$2 billion has largely remained idle.

B. Dedicated Funds Can Provide Better Incentives, Concentrate Expertise, and Promote PPPs

222. A separate, dedicated fund can provide advantages over and above the alternative of delivering government support directly from a government ministry. While the advantages differ somewhat between the three types of funds, there are some common advantages.
223. A dedicated fund, possibly set up as a fully transparent, commercialized SOE or as an extension of an existing commercialized entity
- (i) would be expected to manage its own balance sheet—this provides for clearer incentives and would reduce the risk of the facility coming under political pressure;
 - (ii) would be able to pay more market-related salaries than a government body, and hence will be better able to attract staff with the necessary skills;
 - (iii) can increase awareness of the PPP program and send a signal about the government's commitment to PPPs;
 - (iv) can improve staff performance incentives by tying performance to remuneration; and
 - (v) can also provide PPP policy coordination and centralized support to help implementing agencies develop PPPs.
224. However, a dedicated fund is not always necessary to address a problem.
225. The government does not necessarily have to set up a dedicated fund to address every constraint to PPP project development. Establishing a dedicated fund will take time and effort. As such, the government should explore alternative options.

226. For example, governments can increase access to long-term PPP debt finance through a lending facility or through guarantees on commercial borrowing, tenor extension facilities, refinancing guarantees, and exchange rate guarantees.

C. A Poorly Designed Fund Can Have Unintended Consequences

227. A fund needs to be well designed to achieve its purpose. A poorly designed fund may not only fail to deliver benefits, it may have harmful unintended consequences.
228. For example, all of the VGFs examined cap the amount of grant funding available to a project. This can have negative unintended consequences:
- (i) There is a risk that subsidy caps can lead to suboptimal project design—if, for example, projects are creatively restructured to require less subsidy while reducing economic benefits.
 - (ii) The cap may prevent projects in less financially viable sectors (such as sanitation) from being developed as PPPs.

D. The Design Elements of a Fund Should Support Its Purpose

229. Various design elements should support a fund in achieving its purpose. First, funds should design their product offering to suit the precise problem(s) they are trying to address. For example, the IIFCL was set up to address the fact that the long-term debt market is underdeveloped. As such, the IIFCL provides financial products that fill the gap in the market, including loans and guarantees on commercial borrowing. However, products are provided at market rates.
230. Second, most funds use eligibility criteria to ensure that they only support projects when this helps with their purpose. For example, the TIFU in the United Kingdom was established to address the lack of liquidity in the market by lending to PPPs that could no longer obtain private finance. As such, TIFU only lent to projects that could not secure sufficient private finance to reach financial close on a timely basis.
231. Third, a fund's source of funding is important in signaling to investors that the products provided by the fund are creditworthy. For example, for a government guarantee to be effective, investors must be confident that the guarantee fund will have sufficient funds to make the required payments if a guarantee is triggered. To generate this confidence, a guarantee fund must be endowed with a strong asset base that is not subject to annual budget appropriations.

Public–Private Partnership Funds

Observations from International Experience

To help improve public service delivery, many countries have established funds to help finance their public–private partnership (PPP) programs. This paper examines the international experience with three types of funds: viability gap funds, lending facilities, and guarantee funds. Each type has a very precise purpose and is designed to address a specific constraint to developing bankable PPP projects. The analysis reveals that funds must be designed well to address specific problems and that dedicated funds can provide better incentives, concentrate expertise, and promote PPPs. With this knowledge, ADB is helping the People’s Republic of China investigate the use of funds and other facilities for providing government financial support to PPPs.

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