

REALIZING THE POTENTIAL FOR PROFITABLE INVESTMENT IN AFRICA

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Public-Private Partnerships

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I. Introduction

Public-private partnerships (PPPs) refer to arrangements where the private sector supplies infrastructure assets and infrastructure-based services that traditionally have been provided by the government. PPPs are involved in a wide range of economic and social infrastructure projects, but they are mainly used to build and operate roads, bridges and tunnels, light rail networks, airports and air traffic control systems, prisons, water and sanitation plants, hospitals, schools, and public buildings. PPPs can be attractive to both the government and the private sector. For the government, private financing can support increased infrastructure investment without immediately adding to government borrowing and debt, and user charges are a source of government revenue. At the same time, more skilful management in the private sector, and its capacity to innovate, can lead to increased efficiency; this in turn should translate into higher quality and/or lower cost services. In other words, PPPs can offer better *value for money*. For the private sector, PPPs present business opportunities in areas from which it was in many cases previously excluded.

II. COUNTRY EXPERIENCE

A number of advanced OECD countries now have well-established PPP programs.

Undoubtedly the best developed of these is the United Kingdom's *Private Finance Initiative*

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² The views expressed in this paper are those of the author and do not necessarily reflect the views of the IMF or IMF policy. For a more detailed discussion of PPPs, see Hemming and others (2006).

(PFI), which began in 1992. The PFI is currently responsible for about 14 percent of public investment, with projects in most key infrastructure areas. Other countries with significant PPP programs include Australia (and in particular the state of Victoria) and Ireland, while the United States has considerable experience with leasing (which shares characteristics with PPPs). Many continental Western European countries, including Finland, Germany, Greece, Italy, the Netherlands, Portugal and Spain, now have a number of PPP projects, although their share in total public investment is quite small. Reflecting a need for infrastructure investment on a large scale, but weak fiscal positions, a number of countries in Central and Eastern Europe, including the Czech Republic, Hungary, and Poland, have embarked on PPPs. There are also fledgling PPP programs in Canada and Japan. PPPs in most of these countries are dominated by road projects. In addition, PPP-type arrangements are being used to develop a trans-European road network.

In the rest of the world, PPPs have made fewer inroads. However, Chile, Colombia, and Mexico have used PPPs to promote private sector participation in public investment projects in Latin America. Chile has a well-established PPP program that has been used for the development of roads, airports, prisons, and irrigation. In Colombia, PPPs have been used since the early 1990s, but early projects were not well designed. A relaunched PPP program emphasizes road projects. In Mexico, PPPs were first used in the 1980s to finance roads, but unsuccessfully. Since the mid-1990s, Mexico has used PPPs with greater success for a growing number of public investment projects in the energy sector, and there are plans to extend the use of PPPs to the provision of other services. Some other countries, and most notably Brazil, are planning significant use of PPPs. As in Europe, a regional approach to infrastructure development in Latin America that would involve PPP-type arrangements is under consideration.

While PPPs are beginning to take off in Asia, especially in Korea, the Philippines, and Singapore (and, as noted above, also in Japan), progress elsewhere is limited, although there is strong interest in PPPs in some other countries, including India, Indonesia and Thailand. In Africa, South Africa is a clear regional leader, and has embarked upon or is developing PPPs

in a number of sectors. Few other African countries have very much experience with PPPs or other forms of private sector involvement, other than in the power and water sectors (e.g., in Cote d'Ivoire and Senegal).

III. CHARACTERISTICS OF PPPS

A typical PPP takes the form of a *design-build-finance-operate* (DBFO) scheme. Under such a scheme, the government specifies the services it wants the private sector to deliver, and then the private partner designs and builds an asset specifically for that purpose, finances its construction, and subsequently operates the asset (i.e., provides the services deriving from it). This contrasts with traditional public investment, where the government contracts with the private sector to build an asset but the design and financing is provided by the government, and the government then operates the asset once it is built. The difference between these two approaches reflects a belief that giving the private sector responsibility for designing, building, financing, and operating an asset will lead to increased efficiency in service delivery. In particular, *bundling* DB&O will provide an incentive for the private sector to design and build assets with features that enhance the quality or lower the costs of service provision.

The government is in many cases the main purchaser of services provided under a PPP. These services can be purchased either for the government's own use, as an input into providing another service, or on behalf of final consumers; the services provided by a prison, a school, and a free-access road (or freeway) fall into these respective categories. Private operators also sell services directly to the public, as with a toll road or railway. Such an arrangement is often referred to as a *concession*, and the private operator of a concession (the concessionaire) pays the government a concession fee and/or a share of profits. Typically, the private operator owns the PPP asset while operating it, and the asset is transferred to the government at the end of the operating contract, usually for less than its true residual value (and often at zero or a small nominal cost). In this case, PPPs are often referred to as *build-operate-transfer* (BOT) schemes.

The private sector can raise financing for PPP investment in a variety of ways. Where services are sold to the public, the private sector can go to the market using the projected income stream from a concession (e.g., toll revenue) as collateral. Where the government is the main purchaser of services, shadow tolls paid by the government (i.e., payments related to the demand for services) or, in most cases, service payments by the government (which are based on continuity of service supply, rather than on service demand) can be used for this purpose. The government may also make a direct contribution to project costs (in the form of equity, loans, or subsidies), or it can guarantee private sector borrowing. PPP financing is often provided via a *special purpose vehicle* (SPV) in the form of a consortium of banks and other financial institutions which combine and coordinate the use of their capital and financial expertise.

PPPs appear to be particularly well suited to providing economic infrastructure. This is primarily for three reasons. First, sound projects that address clear bottlenecks in the road, railway, ports, power and other key sectors are likely to have high economic rates of return, and therefore to be attractive to the private sector. Second, in economic infrastructure projects, the private sector can be made responsible not only for constructing the infrastructure, but also for providing the principal services related to it, and tailoring asset design specifically to this purpose (this is the bundling argument). Third, to the extent that these services are supplied directly to final users, charging is both feasible and, from an efficiency standpoint, desirable. Social infrastructure projects are somewhat different in these regards, in that high social returns but often low economic returns mean that the private sector does not usually supply social services such as health care and education. At most, the private sector provides some economically viable ancillary services, such as hospital and school maintenance. Charging for government-supplied social services is also not commonplace. Hence, social infrastructure PPPs probably offer the prospect of smaller efficiency gains than economic infrastructure PPPs, although this does not mean that they are not justified on value-for-money grounds.

IV. REQUIREMENTS FOR SUCCESS

Compared to public investment and government provision, the services delivered to consumers and the government by a PPP offer some combination of higher quality and lower cost. A key requirement for success is *contractible service quality*. If the government can specify the quality of services it wants the private sector to supply, and can translate these into measurable output indicators, then it can enter into a contract with the private sector which links service payments to service delivery. The less clearly specified are the contract conditions, the greater the likelihood that costly renegotiation of the contract will be needed during the operating period.

There also has to be either *competition or incentive-based regulation*. There tends to be only limited scope for competition in the supply of infrastructure assets and services, because sunk costs are often large, many infrastructure services require the setting up of extensive networks (which introduces an element of natural monopoly), and the government is in many cases the main purchaser. Open bidding for contracts provides the principal opportunity for fostering competition in a PPP setting. Where a private sector monopolist is free to sell services to the public (e.g., where it charges road tolls), regulation is also necessary to contain monopoly profits and otherwise protect consumer interests. Profit sharing with the government is a form of regulation.

Adequate *risk transfer from the government to the private sector* is crucial to getting the full benefit from an inflow of private capital and a change in management responsibility. PPP projects are exposed to a range of different risks, including construction delays and cost overruns; problems with service availability and quality; uncertainty about the future need for a service; and changing asset values. Many of these risks can and should be managed by the private sector, and the more risk that remains with government, the less likely it is that a PPP is a more efficient alternative to public investment and government provision of services. This is clearly something that the government should focus on in deciding whether to embark upon a PPP, and in negotiating the terms of a PPP contract. As noted below, risk transfer is also relevant to determining the proper accounting and reporting treatment of PPPs.

V. Institutional Framework

Governments seeking to introduce PPPs need to pay attention to various aspects of the supporting institutional framework. *Political commitment and good governance* are a must. A PPP is a major commitment on the part of the private sector, which needs to know that politicians are also committed to private sector involvement. Uncertainty in this regard gives rise to political risk that is not conducive to making long-term business decisions. At the same time, potential private partners need to know that the government is fair in its dealing with the private sector, and will meet the commitments it makes under PPPs. It is also important to establish clear channels of responsibility and accountability for government involvement in PPPs. Corruption in government would be a serious obstacle to successful PPPs, in the same way that it prevented successful privatization.

Appropriate legal backing can provide reassurance to the private sector that contracts will be honored. In some cases this will require changes or additions to existing laws.

The comparative success of Chile's concessions program can be attributed in significant measure to the fact that it is backed by a comprehensive concessions law that addresses not only the basic requirements for effective concessions (the bidding process, rights and obligations of parties, property appropriation etc.), but also the handling of possible disputes and the cancellation and transfer of contracts.

PPPs also require the development of *expertise in government*. This covers the full range of skills required to manage a PPP program. One common complaint about PPPs from the private sector is that bidding and contracting take much longer than in the private sector. Thus one of the functions of Partnerships UK, a specialized government agency in the United Kingdom, is to promote PFI projects among government departments by providing financial, legal, and technical advice and assistance to support contract negotiation and procurement. The PPP Unit of the National Treasury of South Africa also provides detailed guidance and

technical assistance related to assessing the feasibility and management of PPPs. A BOT Center in the Philippines serves a similar purpose.

The government will also have to refine its approach *project appraisal and selection*. First and foremost, the decision whether to undertake a project at all, and then the choice between traditional public investment and government supply of services or a PPP to implement it, should be based on technically sound cost-benefit and value-for-money comparisons. These are particularly important to avoid a possible bias in favor of PPPs simply because they involve private finance, and in some cases generate a revenue stream for the government, although proper fiscal accounting and reporting is also required to achieve this.

The decision as to whether a worthwhile project (i.e., one that offers sufficiently large economic or social returns) should be undertaken by the government directly or as a PPP should be informed by a *public sector comparator* indicating the cost of public provision. This is used as a benchmark for determining whether the best private sector bid for a PPP contract—which will reflect the efficiency gains from private provision, higher private sector borrowing costs, and the costs to be borne by the government under the PPP—should be accepted by the government. The use of public sector comparators is increasingly becoming the norm in countries with significant experience with PPPs.

Finally, care is needed in using PPPs to benefit particular groups of individuals, firms or regions. If this is done, potential efficiency gains are inevitably conceded in the process. But where using PPPs in this way is politically unavoidable, the aim should be for the government to select the most efficient project and then to compensate the private sector (e.g., through an explicit budget subsidy) for taking on noncommercial objectives.

VI. FISCAL ACCOUNTING AND REPORTING

As already noted, by accessing private capital PPPs can help to ease fiscal constraints. However, they also offer opportunities to bypass expenditure controls, and to move public investment off budget and debt off the government balance sheet, mainly to meet externallyor self-imposed fiscal rules or targets. However, the government may still face potentially
large fiscal costs, especially over the medium to long term. In particular, resort to guarantees
to secure private financing can expose the government to considerable risk, which has hidden
and often higher costs than traditional public financing. An internationally accepted
accounting and reporting standard for PPPs, which is currently lacking, should promote
transparency about the fiscal consequences of PPPs. In the process, by helping to close
loopholes that enable PPPs to be misused, this should make increased efficiency rather than a
desire to meet fiscal targets their main motivation.

Existing accounting and reporting standards cover cash payments to and from government under PPPs, the transfer of PPP assets to government, and the calling of guarantees. In thinking about an internationally accepted accounting and reporting standard, perhaps the most problematic issue relates to *accounting for limited risk transfer*. When PPP projects do not transfer significant risk to the private sector, the current best practice is to classify PPP assets as government assets. Eurostat uses a simple rule to determine whether a PPP exposes the government to too much risk, while the state of Victoria in Australia and the United Kingdom make a more detailed judgment. If the government does bear too much risk, PPP assets are placed on the government balance sheet, PPP investment is treated as public investment, and PPP debt is treated as a government liability. However, attempting to classify PPP assets as either government or private assets is not necessarily an appropriate way of accounting for risk transfer, since it is insensitive to the fact that PPPs are intended to share risk according to which party can manage it best.

An approach to accounting and reporting that fails to reflect the degree of risk sharing could either discourage PPPs where the private sector is prepared to bear significant but not most risk or, more seriously, tempt governments to tailor PPPs to meeting the requirements for classification as private investment by giving up off value for money to secure risk transfer to the private sector. This would both defeat the objective of using PPPs to derive efficiency gains, and disguise the longer-term fiscal implications of many PPPs. To address these

problems, it is important that governments disclose comprehensive information on PPPs, including the known and potential future fiscal costs, which primarily take the form of contractual service payments and guarantees. Box 1 contains minimum disclosure requirements for PPPs recommended by the IMF.

Box 1. Disclosure Requirements for PPPs

Budget documents and end-year financial reports should include an outline of the objectives of a current or planned PPP program, and a summary description of projects that have been contracted or at an advanced stage in the contracting process (their nature, the private partner or partners, and capital value). In addition, the following more detailed information should be provided for each PPP project or group of similar projects:

- Future service payments and receipts (such as concession and operating lease fees) by government specified in PPP contracts over for the following 20-30 years.
- Details of contract provisions that give rise to contingent payments or receipts (e.g., guarantees, shadow tolls, profit sharing arrangements, events triggering contract renegotiation), with the latter valued to the extent feasible.
- Amount and terms of financing and other support for PPPs provided through government onlending, or via public financial institutions and other entities (such as special purpose vehicles) owned or controlled by government.
- How the project affects the reported fiscal balance and public debt, and whether PPP assets are
 recognized as assets on the government balance sheet. It should also be noted whether PPP assets are
 recognized as assets either on the balance sheet of any special purpose vehicle.

In countries with significant PPP programs, disclosure could be in the form of a *Statement on PPPs* which is part of the budget documentation and accompanies financial statements. Within-year fiscal reports should indicate any new contracts that have a significant short-term fiscal impact. PPP contracts, or summaries of their key features (preferably in standardized format), should also be made publicly available.

VII. GUARANTEES

Government guarantees provided in connection with PPPs are a source of risk for the government. A guarantee legally binds a government to take on an obligation should a clearly specified uncertain event materialize, and as such gives rise to a *contingent liability*. A defining characteristic of guarantees and contingent liabilities is uncertainty as to whether the government will have to pay, and if so the timing and amount of spending. This

uncertainty is the principal source of complication in determining the fiscal costs of PPPs, and the main cause of problems guarantees and other contingent liabilities create for fiscal management. The focus here is on explicit guarantees with a legal basis rather than implicit guarantees that are based on expectations (e.g., that the government would bail out the private sector if a PPP fails).

Guarantees may be an appropriate form of government intervention, in particular to shield the private sector from risk that it cannot anticipate and control. Thus many PPP contracts provide for *minimum revenue guarantees* that limit the private operator's exposure to demand risk when demand is influenced by government policy, and for *exchange rate guarantees* when hedging possibilities are limited. However, guarantees are not usually subject to the same degree of scrutiny through the budget process as regular spending. This causes a number of problems.

- It is difficult to verify that a guarantee is the appropriate fiscal policy instrument to use to meet a particular objective.
- The door is open to use guarantees to bypass fiscal constraints, in which case they can have a hidden and even unintended impact on the stance of fiscal policy.
- Allowance is not usually made in the budget to cover the costs of called guarantees, and little prior consideration is given to the best way to reorient spending or to mobilize revenue should it prove necessary to meet these costs.
- A 'guarantee culture' is created where the private sector (and in some cases international financial institutions and bilateral lenders) seek guarantees as an alternative to managing risk themselves.
- Because guarantees are valuable to beneficiaries and provided at the discretion of government, they can undermine governance.

These problems are compounded by the fact that guarantees can often have potentially significant fiscal consequences. Governments therefore need to be in a position to manage their risk exposure because of guarantees, and to this end the key step to take is full disclosure. Box 2 contains disclosure requirements for guarantees recommended by the IMF. However, a significant challenge in attempting to meet these requirements is posed by measurement, which is a topic that is taken up by Tim Irwin.

Box 2. Disclosure Requirements for Guarantees

Irrespective of the basis of accounting, information on guarantees should be disclosed in budget documents, within-year fiscal reports, and end-year financial statements. Guarantees should ideally be reported in a fuller *Statement of Contingent Liabilities* which is part of the budget documentation and accompanies financial statements, with updates provided in fiscal reports.

A common core of information to be disclosed annually for each guarantee or guarantee program is as follows:

- A brief description of its nature, intended purpose, beneficiaries, and expected duration.
- The government's gross financial exposure and where feasible, an estimate of the likely fiscal cost of called guarantees.
- Payments made, reimbursements, recoveries, financial claims established against beneficiaries, and any waivers of such claims.
- Guarantee fees or other revenue received.

In addition, budget documents should provide:

- An indication of the allowance made in the budget for expected calls on guarantees, and its form (e.g., an appropriation, a contingency).
- A forecast and explanation of new guarantees to be issued in the budget year.

During the year, details of new guarantees issued should be published (e.g., in the Government Gazette) as they are issued. Within-year fiscal reports should indicate new guarantees issued during the period, payments made on called guarantees, and the status of claims on beneficiaries, and update the forecast of new guarantees to be issued in the budget year and the estimate of the likely fiscal cost of called guarantees.

Finally, a reconciliation of the change in the stock of public debt between the start and end of the year should be provided, showing separately that part of the change attributable to the assumption of debt arising from called guarantees.

To impose control over the use of guarantees, quantitative ceilings could be placed on guarantees and other explicit contingent liabilities where risk exposure is high. Ceilings could apply to flows or stocks. Governments should anyway appropriate in the annual budget

the expected cost of guarantees in that year, even if this is only an approximate amount. Where valuation is possible, governments should also consider budgeting for the full cost of guarantees over their lifetime. This will subject guarantees fully to the rigors of budget discipline. Budgeting for guarantees requires a multiyear appropriation, possibly in connection with the use guarantee or contingent liability funds. However, budgeting does not require that funds should be earmarked to covering the cost of called guarantees. Earmarking may help to impose discipline on the budget process, it does so at the cost of flexibility. Charging guarantee fees may also contribute to the control of guarantees.

VIII. DEBT SUSTAINABILITY ANALYSIS

Debt sustainability analysis is usually based on a fairly narrow concept of public debt. Often this is restricted to gross debt in the form of government securities and loans to government, although sometimes the focus is on net debt, excluding government deposits, government securities held by social security funds and other government entities, and loans made by government. Yet judgments about debt sustainability are not independent of the government's nondebt obligations, and this is illustrated by PPPs.

PPPs give rise to obligations on the government to purchase services from a private operator and to honor calls on guarantees, and to other financial obligations. These known and potential future costs on the government can influence debt sustainability in much the same way as if the government had incurred debt to finance public investment and provide a service itself, in that more fiscal adjustment is needed to stay on a desired debt path. They should therefore be taken into account when undertaking debt sustainability analysis. There are two ways to do this.

• PPP obligations could be added to public debt. These obligations would comprise the present value of contractual service payments, calls on guarantees, and other known and contingent expenses, less known and contingent and receipts. Debt sustainability would then be judged by reference to public debt plus PPP obligations, and resort to

PPPs when debt is unsustainable would require a larger primary surplus (or smaller primary deficit).

• An analytically equivalent approach is to count known and potential future PPP costs as future primary spending. In this case, debt sustainability is judged by reference to public debt alone, and resort to PPPs when debt is unsustainable would require additional fiscal measures to meet the original primary surplus/deficit target.

On balance, the latter is probably a better approach, in that it avoids the need to treat the present value of net future payments by the government under PPP contracts as a liability, which has little immediate prospect of being accepted by accountants or statisticians. However, the implementation of this approach does require that the disclosure requirements for PPPs and guarantees referred to above are met. If there are difficulties in valuing guarantees, the emphasis should instead be on scenario analysis to stress test debt projections with respect to different assumptions about calls on guarantees. In this case, the general presumption should be that, all other things being equal, judgments about debt sustainability are more cautious in countries that have provided extensive guarantees.

While there is inevitably a fair degree of imprecision in debt sustainability analysis in the presence of PPPs, it should be noted that taking into account present value of net future payments by the government under PPP contracts is likely to have an impact on policy advice only where debt sustainability is already a concern. Where this is the case, borrowing to finance traditional public investment would also be a concern, and it is more likely that governments will be tempted to use PPPs to circumvent fiscal targets. This being the case, a conservative approach is warranted. If debt sustainability analysis points to significant risks being entailed by a proposed PPP program, a ceiling could be placed on the overall size of the program. Such a ceiling could usefully be specified in relation to the capacity of the country to service future obligations under the PPP program, proxied by its future stream of revenue.

REFERENCE

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Public-Private Partnerships

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What are PPPs?



- Private sector involvement in building infrastructure assets and providing services derived from those assets.
- Emphasis is on economic and social infrastructure that has traditionally been provided by the government.
- PPP contracts stress long-term service delivery rather than asset creation; services can be provided to the government or directly to final consumers.

Why PPPs?



- Private sector management and innovation should lead to increased efficiency.
- Advantages of bundling asset creation and service provision.
- Risk is borne by whoever can manage it best.
- Increased scope for user charges.
- Private financing can support increased infrastructure investment without adding to government borrowing and public debt.

Characteristics of PPPs



- A design-build-finance-operate (DBFO) scheme is a classic PPP.
- A PPP with user charges is a concession.
- Private sector owns the PPP asset, but under a build-operate-transfer (BOT) scheme the asset is eventually transferred to the government.
- PPPs are often implemented by special purpose vehicles (SPVs).
- A distinction can be made between economic and social infrastructure.

What is a successful PPP?



- Comparison should be with traditional public investment and government supply of services.
- A successful PPP delivers either higher-quality or lower-cost services than government (i.e., it offers better value for money).
- Efficiency gains have to be large enough to cover higher private sector borrowing costs.

Requirements for Success



- Service quality should be contractible.
- Competition or incentive-based regulation is needed.
- Risk transfer is essential.
- The institutional framework should be characterized by:
 - Political commitment and good governance.
 - A legal system that provides assurances to the private sector.
 - Appropriate expertise and practices in government.
 - Managing a PPP program
 - Project appraisal and selection
- PPPs should not be burdened with noncommercial objectives.

What are the concerns?



- PPPs are chosen over traditional public investment and government supply of services to move public investment off budget and debt off the government balance sheet.
- However, the government still bears considerable risk, and faces potentially large fiscal costs.
- Proper accounting and reporting of the fiscal implications of PPPs is essential to prevent their misuse, and to make increased efficiency their main motivation.

Accounting and Reporting



- Existing accounting and reporting standards cover cash payments by and to government, the transfer of PPP assets to government, and calling of guarantees.
- Under Eurostat rules, and in Australia and the United Kingdom, limited risk transfer results in: PPP assets being placed on the government balance sheet; PPP investment being treated as public investment; and PPP debt being treated as a government liability.
- Classifying PPP assets as government or private sector assets does not do justice to the fact that PPPs are designed to share risk.

An Alternative Approach



- An alternative accounting and reporting approach would be to record PPP assets on private sector balance sheets, consistent with legal ownership.
- The fiscal costs and risks associated with PPPs would then be assessed, quantified, and disclosed.
- Transparency about PPPs and guarantees is key to managing fiscal costs and risks.
- The IMF has proposed some disclosure requirements for PPPs and guarantees.
- Assessing the quantitative implications of guarantees is difficult.

Debt SustainabilityAnalysis



- PPP costs and risks should be taken into account when assessing debt sustainability.
- This requires quantification of expected future costs and risks.
- Scenario analysis is recommended where quantification is difficult.
- It may be necessary to control fiscal costs and risks by imposing limits on the use of PPPs and guarantees.