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HOW TO CONTROL THE FISCAL COSTS OF PUBLIC-PRIVATE PARTNERSHIPS

This note discusses what finance ministries can do to ensure that public-private partnerships (PPPs) are used wisely. By inviting private participation in infrastructure development and service provision, PPPs can help improve public services. Yet, strong governance institutions are needed to manage risks and avoid unexpected costs from PPPs. While in the short term, PPPs may appear cheaper than traditional public investment, over time they can turn out to be more expensive and undermine fiscal sustainability, particularly when governments ignore or are unaware of their deferred costs and associated fiscal risks. To use PPPs wisely governments should (1) develop and implement clear rules for their use; (2) identify, quantify, and disclose PPP risks and expected costs; and (3) reform budget and government accounting frameworks to capture all fiscal costs comprehensively.

Introduction

A PPP as defined here is a project governed by a long-term contract between a government and a company in which the company makes an investment in an asset and, using that asset and perhaps other assets made available by the government, provides services to the government or the public. The company is usually private, but may be state owned, and is typically established specifically for the purpose of the PPP. The services are usually ones for which the government has traditionally been responsible, such as those provided by roads, railways, schools, hospitals, prisons, or airports. The government usually continues to have some responsibility for the quality of the services and to bear some of the attendant risks of providing them. At the end of the contract, control of the asset typically reverts to the government. The key characteristics of PPPs include the following:

- A long term (often 25 years or more);
- A single contract for design, construction, maintenance, and operation;
- Private financing and execution;
- Performance-linked remuneration for services; and
- Risk sharing between government and the private partner.

PPPs can be broadly grouped into two kinds: (1) government funded—when the government pays for the services by way of predetermined payments over the term of the contract for making the asset available (availability payments) or payments per volume of services provided, and (2) user funded—when users pay fees for the services. The latter are often called *concessions*. If users pay, the government may still subsidize the investment or guarantee the company's debt or revenue. Various combinations of these two funding arrangements are possible.

PPPs existed long before the term was invented (Klein 2015). In the 19th century, for example, many railways were financed under concessions that offered investors government-guaranteed returns (Irwin 2007, chap. 2). Concessions went out of fashion in the middle of the 20th century, as skepticism about private provision grew. They returned to prominence in the 1990s (Figure 1), including with toll-road concessions (for example, in France, Spain, Chile, Mexico) (Gómez-Ibáñez and Meyer 1993; Gómez-Lobo and Hinojosa 2000; Ruster 1997). In the early 1990s, the United Kingdom pioneered government-funded PPPs, under the banner of the Private Finance Initiative (see, for example, Engel, Fischer, and Galetovic 2014, chap. 2). The 1990s also saw a new wave of investments in the power sector, notably in Asia, in which independent power producers financed investments made under power-purchase agreements with state-owned utilities, sometimes backed by government guarantees (Gray and Schuster 1998). While not called PPPs at the time, these projects had structures similar to

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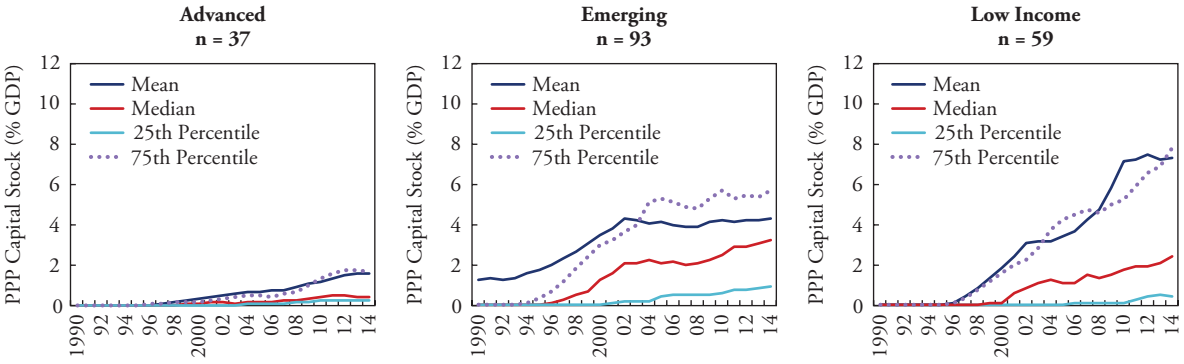
Figure 1. Public-Private Partnerships' Capital Stock by Economy Type



Source: IMF, Investment and Capital Stock Database 2017.

government-funded PPPs. Such projects remain popular, including in Africa (Eberhard and others 2016).

Not all projects that get called PPPs are PPPs as defined here. For example, projects in which the main purpose of government participation is to encourage private investor participation, but that otherwise involve no risk sharing, would not be called PPPs under the definition used here.

This note focuses on issues that mainly come to the fore when projects are undertaken as PPPs. It leaves aside issues that also arise when projects are traditionally financed, such as the preparation of public investment plans, feasibility studies, and cost-benefit analyses.[1] The note concentrates on the control of costs, leaving aside the equally important issue of maximizing projects' economic and social benefits.

Challenges for Fiscal Management

PPPs pose several challenges for fiscal management:

PPPs may not always be efficient. Whether PPPs offer governments a better deal than traditional public investments is controversial—and not a question this note seeks to answer. The issue is not whether private firms are better than governments at constructing assets or running businesses. Construction and operations can be separately contracted out to private firms even when projects are publicly financed. What matters is whether the government benefits by writing a single contract with a firm that is responsible for coordinating investment and operations over the life of the project, while the government itself focuses on specifying the outputs it wants and then monitoring whether they have been provided as contracted. PPPs offer promise if conventional projects are plagued by delays, cost overruns, corruption, or insufficient maintenance, as they often are. Yet a government that finds it difficult to manage traditional public investments is likely to also struggle to manage PPPs. Governments usually pay less to borrow than the private companies that finance PPPs, but this does not make PPPs more expensive than public investment when the cost of risk bearing is considered (Brealey, Cooper, and Habib 1997; Klein 1997). In any case, a significant fiscal benefit of PPPs may be the easing of the introduction of user fees, no matter how efficient the provision. The theoretical arguments about the efficiency of PPPs are complex. Unfortunately, empirical evidence is scarce because few experiments allow fair comparisons of PPPs with traditionally financed projects. If PPPs are to be used wisely, the ministry of finance must usually take steps to ensure that their costs are controlled.

PPPs may be used to bypass budgetary constraints. Governments may be tempted to use PPPs because they can undertake investment without initially having to report any new spending or debt (Quiggin 2004; Hemming and others 2006; Heald and Georgiou 2011; IMF 2011a, appendix 2). In a government-funded PPP, the government may not have to pay anything until the asset has been constructed and the service is being delivered. In the long

[1]For a fuller treatment of the issues, see Akitoby, Hemming, and Schwartz (2007); Aslan and Duarte (2014); Harris (2003); Hemming and others (2006); World Bank Group (2013); World Bank (2017); and World Bank, Asian Development Bank, and Inter-American Development Bank (2014); as well as to the papers collected in Brixi and Schick (2002) and Schwartz, Corbacho, and Funke (2008).

term, however, if the involvement of a private partner does not lead to reduced costs of constructing and operating the project, the amount the government pays will be the same as in a traditional public project. In the case of user-funded PPPs, the government may pay nothing during construction, but, as well as possibly facing calls on guarantees, it must give up the right to collect fees from the project's users. Because they can be used to circumvent traditional limits on the deficit and debt, PPPs can undermine the effectiveness of these limits.

PPPs expose the government budget to risks. User-funded but government-guaranteed PPPs make government spending uncertain. Most of the time, no expenditure may be needed, but every now and then guarantee calls may require large outlays (for examples, see Bova and others 2016), especially if a sharp economic downturn causes many guarantees to be called at once. Of course, traditional public investments also create fiscal risks. Cost overruns in a traditional project may quickly become budget overruns, and lower-than-forecast demand for a user-funded publicly financed project leads directly to shortfalls in government revenue, not losses for a concessionaire. Legitimate concerns about the risks of PPPs should not distract attention from the possibly larger risks of traditional public investments.

The fiscal risks from PPPs are sizable. While PPPs do not create fiscal risks of the size created by recessions, wars, financial crises, and major natural disasters, the risks are not small. A survey of 80 advanced and emerging market economies showed that the average fiscal cost of PPP-related contingent liabilities that crystallized during 1990–2014 was about 1.2 percent of GDP, while the maximum cost was 2 percent of GDP (Bova and others 2016).[2] With the increasing use of PPPs by countries, the size of associated risks is likely to grow, too.

PPPs can reduce the government's ability to absorb fiscal shocks. In government-funded projects, the main issue for public finances is not the uncertainty of spending, but its inflexibility: the government must promise to pay fixed amounts for the service for as long as 30 years, or longer. While spending on traditional public investments can be scaled back if needed, spending on PPPs cannot. PPPs thus make it harder for governments to absorb fiscal shocks, in much the same way that government debt does. Of course, if the government is normally too quick to cut investment and maintenance, the inflexibility is not an unmitigated cost.

The following sections of this note describe some of the steps a ministry of finance can take to control the net fiscal costs of PPPs, including costs that constitute fiscal risks.

Identifying the Costs of PPPs

PPPs can impose fiscal costs through the direct and contingent liabilities assumed by the government, including under the contractual terms. The most common types include capital subsidies, such as viability-gap payments; availability payments; volume-based payments for services, such as shadow tolls or subsidies; tax incentives; payments related to the risks assumed by the government, such as revenue, exchange-rate, and interest-rate guarantees; payments related to regulatory risks, early termination, and extraordinary events; and payments arising from debt guarantees. Costs may also arise from renegotiations, disputes, and implicit guarantees—for example, in financially distressed projects.

Although the most important opportunities for managing the costs of a PPP arise before the project goes ahead, a ministry of finance may find that it must get control of a PPP program that is already underway. A systematic approach to the identification of fiscal costs would involve the following:

- Creating a database of existing projects that records their purpose, the contracting agency, the PPP company and its owners, the investment expected under the contract and each amendment, and the project's timeline (dates of contract tendering, signature, financial closure, construction commencement, operational commencement, and termination).
- Scrutinizing contracts to identify (potential) obligations. The ministry of finance should examine each PPP contract to identify its fiscal implications. If the government is the customer, the contract will contain the formula that determines how much the government will pay. If users pay, the contract may contain guarantee-like clauses and revenue-sharing agreements. In both cases, the contract will probably contain clauses specifying what happens if the project is terminated before its scheduled end, and these clauses may require the government to ensure that lenders (and perhaps equity investors as well)

[2]The cost of individual PPP failures generally tends to be relatively small. The survey, nevertheless, identified at least eight major episodes where costs were considered macrorelevant.

are fully or partly repaid. The finance ministry may need to consult lawyers and other experts, including the contracting agencies. In any case, the ministry of finance may want to create a special PPP unit that develops this expertise, as South Africa did, for example.

- Perusing PPP laws. These laws may explain which risks the government may bear and which it may not. The contracts themselves still need to be reviewed: some may predate the laws, others may contain unusual clauses, and still others may not be PPP contracts as defined in the country's PPP law, even if they are PPP contracts as defined here. The ministry of finance should seek legal advice, since the interpretation of the laws may not be obvious. A review of Brazilian PPP law notes, for instance, that the clause requiring concessionaires to undertake concessions at their own cost and risk is "not to be read literally". The clause refers to the "ordinary risks" of the concession, but not to its "extraordinary risks," which remain with the contracting agency and which include "the risk relating to unforeseeable or uncontrollable circumstances, such as acts of God, force majeure or extraordinary economic circumstances" (Guimarães Pereira 2014, 38–39). Tax laws, as well as the contracts, will also need to be examined to discover whether PPPs benefit from tax incentives.
- Identifying other potential sources of risks. The finance ministry must also consider situations that could put the government under pressure to increase spending or sacrifice revenue even though it has no legal obligation to do so. For example, successful bidders for PPP contracts may seek to renegotiate the contracts to raise their remuneration (Gómez-Ibáñez 2003; Guasch 2004; Engel, Fischer, and Galetovic 2014). Contracting agencies may be sympathetic to renegotiation if it leads to more investment. If a PPP company gets financially distressed, the government may feel obliged to bail it out, because the company's owners are influential or because a bankruptcy threatens to interrupt crucial services (Ehrhardt and Irwin 2004). When users are paying, the contracts may require user fees to increase according to a formula. Users may well protest an increase. If the government stops the increase, it may have to pay compensation to the PPP company.
- Disclosing information for external scrutiny. Finally, PPP contracts should be published (possibly with omissions of the kind permitted by freedom-of-information laws) so that all stakeholders can analyze them and point out possible problems—as is done, for example, in Australia and some countries in Latin America.

Estimating Costs

In assessing the net fiscal costs of PPPs—for proposed or existing projects—the main task of the ministry is to establish the baseline: how much should the government expect to pay, and how much should it expect to receive from concession fees, revenue-sharing agreements, and the like? The baseline estimates should have a horizon as long as the PPP contracts, like those published by the Portuguese Ministry of Finance (2016, 48) and the UK Treasury (2016). In answering these questions, the ministry should keep in mind the tendency (in traditional, publicly financed projects as well as in PPPs) for costs to be underestimated and revenue to be overestimated (Flyvbjerg, Bruzelius, and Rothengatter 2003; Bain 2009).

A second step is to estimate the government's exposure to risk, or the most it could be required to pay. If the government has guaranteed the debt of the company, but has no other obligations, the most it could pay is the amount of the guaranteed borrowing. If the government has given a revenue guarantee, the most it could pay is the amount it would owe if the company had no revenue of its own. Costs can also be estimated in scenarios that fall short of the worst case.

If the risks appear significant, the government can estimate the variability of its net payments and the present value of its obligations taking account of the cost of its risk bearing. The Chilean government does this for its portfolio of revenue guarantees for airports and toll roads (see Box 1, and, on methods, Irwin 2007, chap. 7).

If PPPs have been used for many years, the ministry of finance should calculate how actual spending on PPPs has compared with budgeted spending, and investigate the reasons for differences. The same goes for revenue if there are concession fees or revenue-sharing agreements. The future may, of course, be different from the past, especially if the PPP program is new and growing quickly, but historical information on the realization of risk (that is, differences between forecast and actual outcomes) should help in estimating future risks.

To gauge the size of debt-like obligations created by PPPs in which the government is the customer,

Box 1. Measurement and Disclosure of Revenue Guarantees in Chile

The Chilean government publishes an annual statement of contingent liabilities that discusses the risks the government is exposed to from various contingent liabilities, including revenue guarantees given to public works concessions. The report presents several measures of the costs and risk of these guarantees:

- The government's maximum payments in present values—both nominal and in percent of GDP—from each of the 25-odd current projects (This measure assumes the worst-case scenario of no traffic.)
- The expected (that is, probability-weighted) value of the payments in each of the next 20 years
- The 5th and the 95th percentile of the distribution of payments over the same period
- The present value of the expected payments net of expected revenue sharing for each of the projects, in both nominal terms and percent of GDP

The estimates come from a model that contains two main elements: a mathematical representation of the contractual terms that may require payments by or to the government, and a stochastic model of traffic revenue that makes assumptions about expected growth rates, volatilities, and correlations.

The analysis also includes historical data on the evolution of costs from such guarantees. A comprehensive list of all PPP concessions is annexed with the report to provide a measure of the size of the PPP portfolio.

Source: Chilean Budget Department 2015.

the ministry of finance can compute the present discounted value of the payments the government is contractually obliged to make. It can also estimate the PPP-related liability the government would recognize on its balance sheet under International Public Sector Accounting Standards (IPSAS) or similar accounting and statistical rules (see below). The PPP Fiscal Risk Assessment Model, or PFRAM, can be used to do this, as well as to analyze the allocation of risks (see Box 2).

Controlling Costs and Risks

Introducing Rules to Limit the Buildup of Risks and Deferred Costs

Infrastructure is vital and its benefits can be large. If the government does not invest in infrastructure and take some risks, those benefits may never be realized. Nevertheless, governments need to limit the possible costs of PPPs. Obligations should be assumed only when they are justified by their prospective benefits and only when the government is not already overcommitted. Once obligations have been assumed, risks need to be monitored and mitigated if possible. A ministry of finance should be especially attentive to the risks created by PPPs when contracting agencies have little experience with them and when the government measures its deficit and debt in a way that makes PPPs seem much less expensive than traditional public investments.

Governments may consider the following steps to strengthen their institutional mechanisms for controlling PPP-related costs:

A gateway process managed by the ministry of finance should be established. Contracting agencies should not be allowed to offer guarantee-like arrangements or enter into large multiannual spending commitments without prior review and approval by the ministry of finance. The ministry of finance should generally review proposed PPPs at several stages of a "gateway process";[3] for examples of such processes, see Australian Department of Finance (2016), Jin and Rial (2016), Irwin and Mokdad (2010), and South African National Treasury (n.d.). The first review should take place before the project has built up so much political momentum that it is hard to stop. Before any large contract is implemented, it should be approved by the council of ministers and, depending on the country's legal framework, possibly the legislature. The rules requiring review and prior approval should also apply to the renegotiation of contracts.

A framework for risk sharing should be developed. As a general principle, the government should bear only those risks that it controls, or at least strongly influences. If the government feels obliged to bear risks

[3]A gateway process is an institutional mechanism that empowers the ministry of finance to prevent a project from advancing through successive stages of the PPP cycle if it fails to meet certain critical conditions (for example, if the project does not offer value for money or is not affordable from a fiscal perspective).

Box 2. The PPP Fiscal Risk Assessment Model

The IMF, in collaboration with the World Bank, developed the PPP Fiscal Risk Assessment Model (PFRAM) to quantify the fiscal costs and risks of PPPs. The PFRAM provides a structured approach to gathering contractual information on PPPs to (1) estimate the project's impact on deficit and debt (under both cash and accrual accounting) and on contingent liabilities; (2) provide sensitivity analysis of key fiscal aggregates to changes in macroeconomic and project-specific parameters (for example, GDP growth, inflation, exchange rate, and project termination); and (3) identify the main fiscal risks, evaluating their likelihood and impact and discussing mitigation measures.

The PFRAM estimates the fiscal impact in line with International Public Sector Accounting Standards (IPSAS) 32 based on a five-step decision-tree:

- Who initiates the project? Central government, local government, or a state-owned enterprise?
- Who controls the asset, whether through ownership, beneficial entitlement, or otherwise?
- Who ultimately pays for the asset? Government, users, or a combination of the two?
- How are payments determined? Are they fixed or do they vary with inflation and other variables?
- Does the government provide additional support to the private partner—for example, subsidies, debt guarantees, minimum-revenue guarantees, equity injections?

The PFRAM includes a detailed assessment of project-specific risks, summarized in a risk matrix. It considers 11 main risks (with 52 subcomponents) related to governance, construction, demand, performance, financing, force majeure, material adverse government actions, changes in law, rebalancing of the contract's financial equilibrium, renegotiation, and project termination.

Source: IMF 2015b

over which it has little control (like those related to traffic levels or a floating exchange rate), it can seek to share the risk with the PPP company, for example, by providing only partial guarantees. Making the length of the contract variable can also reduce the need for guarantees (Engel, Fischer, and Galetovic 2001, 2014). More generally, a good legal framework can make it easier for the government to bear the right risks. PPP laws or standardized contracts can be used to set out the risks that the government will normally bear. Unsolicited proposals should usually be rejected.

Authority to pay should be clarified. In addition to limiting spending under guarantees, the government needs to ensure it has the legal authority to make the required payments in a timely manner. It may be possible to use budgetary contingency lines, standing appropriations, or supplementary budgets. Alternatively, guarantees can be written to allow payments to be made with a delay sufficient to include them in the next year's budget.

Clear lines of accountability must be established. Central review of major commitments must be combined with the decentralization of smaller decisions and contract monitoring. As in other areas of public management, contracting agencies must have primary responsibility for the management of the risks related to their work, including the contracts they let. They must therefore be given enough autonomy to do a good job.

Limits may be imposed. As well as ensuring that each contract is reasonable, the government needs a mechanism to ensure that the sum of its commitments is affordable. This is difficult if PPPs are considered one by one. What is needed is a limit similar to budgetary limits that apply to traditional public investments. There are at least three options (Funke, Irwin, and Rial 2013):

1. *PPP-specific limits*. Some countries have created a global limit on the size of PPP programs. The limit can apply to annual government spending. In Brazil, for example, the law limits total annual federal government payments to PPP companies to 1 percent of the government's revenue and limits each subnational government's payments to 5 percent of that government's revenue. In Colombia, the government is required to limit its annual PPP-related payments to 0.4 percent of GDP. In the United Kingdom, the executive has set a limit on PPP spending, expressed in pounds, over the medium term. Alternatively, the limit can apply to the stock of the government's commitments: in Peru, the law limits the value of the government's outstanding obligations to 7 percent of GDP. Similar rules have

Box 3. Disclosure of Public-Private Partnerships under the Fiscal Transparency Code

The IMF's Fiscal Transparency Code includes an indicator to assess the transparency of disclosures of fiscal risks related to public-private partnerships (PPPs). The code requires that obligations under PPPs are regularly disclosed and actively managed. Governments are expected, at a minimum, to publish annually their total rights, obligations, and other exposures under PPP contracts. For compliance with "good" and "advanced" practice, the code demands, respectively, disclosing the expected annual receipts and payments over the life of the contracts and imposing a legal limit on accumulated obligations.

Source: IMF 2014a.

been introduced in El Salvador and Honduras.[4] In Cambodia, where the biggest PPPs have involved government-guaranteed power-purchase agreements, the government limits the value of guarantees it will grant.

2. *Limits on commitments*. A second option, used in Finland and France, for example, is to budget not only for cash spent in the fiscal year but also for commitments made during the year. A global limit on commitments, set at a reasonable level, helps ensure that commitments in PPPs (and other multiannual contracts) are affordable. Compared with a PPP-specific limit, it allows trade-offs to be made between PPPs and traditional public investments—if the government makes less public investment, it can afford to invest more in PPPs and vice versa.
3. *Ordinary budget limits with new accounting*. A third option is to budget, as New Zealand does, according to accounting rules that treat (many) PPPs as public projects. A PPP, therefore, has roughly the same effect on the budget deficit and debt as does traditional public investment (see final section).

Disclosing Costs and Risks

The baseline forecasts of the government's payments and receipts under PPPs can be published and should be included, explicitly or implicitly, in any long-term fiscal projections—as recommended in the IMF's Fiscal Transparency Code (IMF 2014a). The Portuguese Ministry of Finance's report mentioned above includes a table showing projected payments in PPPs by year until 2042 in each of four sectors: roads, railways, health, and security. In the United Kingdom, the Treasury has published spreadsheets showing forecast payments by year and contract until 2060 (see spreadsheet accompanying HM Treasury 2016).

The fiscal risks created by PPPs can also be disclosed in statements of fiscal risk and similar documents, as recommended in the Fiscal Transparency Code (see also Cebotari and others 2009; Everaert and others 2009). Guarantees should be reported and the possibility of their being called analyzed. Spending commitments and their effect on the government's ability to absorb fiscal shocks should also be discussed. Chile and Colombia have been pioneers in this kind of reporting. The Chilean government reports the abovementioned analyses of the risks of the guarantees it has given to concessionaires in an annual report on contingent liabilities (Chilean Budget Department 2015, section III.1). The Colombian government discloses its contingent liabilities in PPPs in its annual report on the medium-term fiscal framework (Colombian Ministry of Finance and Public Credit 2016, section 7.4). PPPs are also discussed in the risk statements published by the Philippines Development Budget Coordination Committee (2015). Tax incentives can be listed in reports on tax expenditures.

Reforming the Accounting Used for Budgeting and Fiscal Rules

More important than disclosure, however, is how PPPs are treated in the accounts used to test the government's compliance with fiscal rules and other budgetary targets. As noted earlier, if investment in a PPP does not increase the government's deficit and

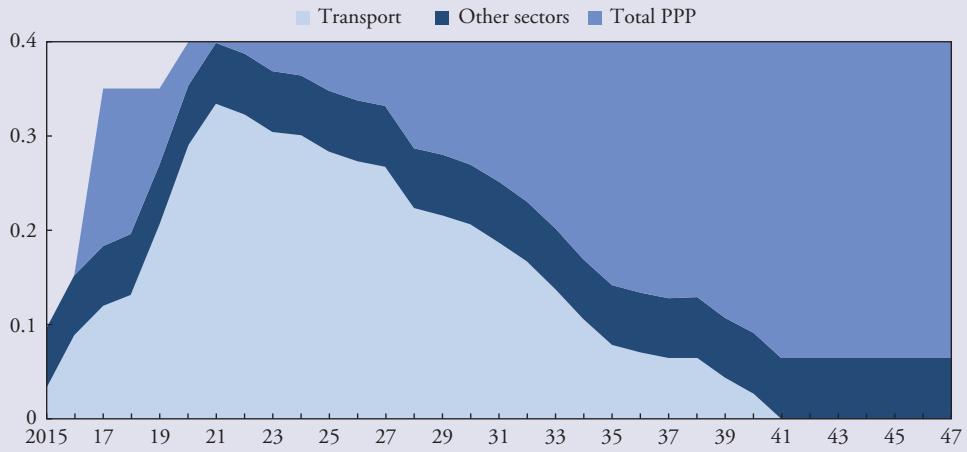
[4]See articles 22 and 28 of Brazil's Law 11,079 of 2004, article 13 of Peru's Decree-Law 1012 of 2008, article 20 of El Salvador's Decree-Law 379 of 2013, and article 26 of Honduras's Decree-Law 143 of 2010. On the United Kingdom, see HM Treasury (2013, 9). For Colombia, the limit does not have a legal basis; it is prescribed by a high-level executive body, the National Council of Economic and Social Policy.

Box 4. Disclosure of Public-Private Partnership–Related Costs in Colombia

Colombia's annual medium-term fiscal framework publishes a forecast of public-private partnership (PPP)-related costs over a 30-year horizon, which is the legally permissible maximum term of the contracts. The forecast shows how future costs are expected to relate to the annual ceiling (0.4 percent of GDP), and the space available for additional projects (figure 2). The forecast includes both firm obligations as well as expected payments for the risks assumed by the government. The fiscal framework also presents project-level information on the contingent liabilities from PPPs and the expected profile of contributions to the contingency fund, which the government maintains for meeting obligations arising from contingent liabilities.

Source: Colombian Ministry of Finance and Public Credit 2016.

Figure 2. Forecasts of PPP-related Annual Payments (Percent of GDP)



debt during the period of a project's construction, but traditional public investment does, the government may be inclined to use a PPP irrespective of its efficiency and irrespective of whether the associated costs and risks must be disclosed. The most powerful way of controlling the costs and risks created by PPPs is thus to ensure that the PPPs have the same effect on the most prominent measures of the debt and deficit as do traditional investments with an equal cost.

In accrual accounts and statistics, this is done by putting the assets constructed in PPPs on the government's balance sheet (even if the government is not the assets' legal owner) and having the government recognize a corresponding liability, initially of equal value. Because deficits in accrual accounts reflect such balance sheet changes, this typically ensures that PPPs affect the deficit in these accounts in the same way as traditional public investments. If the chosen deficit reflects the change in the government's net worth (as in the case of the net operating balance), neither PPPs nor traditional public investments affect the deficit during construction, but both increase debt during construction. More commonly, the most prominent accrual deficit reflects the change in the government's net financial worth (as in the case of net lending/borrowing), and both PPPs and traditional public investments increase the deficit and the debt during construction.

Some governments' balance sheets (for example, Australia's) have for several years included assets and liabilities in relation to PPPs in which the government is the customer. The treatment is natural, as these PPPs

are similar to financial leases, which accountants have for many years treated as creating assets and liabilities for the lessee. The International Public Sector Accounting Standard on "service concession agreements" (IPSAS 32) puts on the government's balance sheet any PPP in which, roughly speaking, the government controls the service that is provided and controls the asset at the end of the contract (for details, see IPSASB 2011)—irrespective of whether the government is the customer. When the United Kingdom adopted accounting standards that followed principles similar to IPSAS 32, it put most of its PPPs on the balance sheet.

Statistics on public finances also include some PPPs on the government's balance sheet. The *System of National Accounts 2008*, the *Public Sector Debt Statistics* guide, and the *Government Finance Statistics Manual 2014* all put PPPs on the government's balance sheet if the government is deemed to be the economic owner of the project's assets, whether or not it is the legal owner (European Commission and others 2009, 452–53; IMF 2011b, 81–85; IMF 2015a, 324–27). In the European Union, the statistical standards that underlie the union's debt and deficit rules are especially important and there is additional guidance on their application to PPPs (see Eurostat 2016a, section VI.4; Eurostat 2016b).

In cash accounts, a result similar to putting the PPP on the government's balance sheet could be achieved by treating the private partner as part of the government for accounting purposes. This would mean the PPP company's spending was counted as government spending in calculating the deficit (any payments by the government to the company would be eliminated in the consolidation). In addition, the company's debt would be counted for accounting purposes as public debt.

Conclusions

In countries where infrastructure bottlenecks exist and constrain economic activity, there is a good case for more public investment, whether financed traditionally or by means of public-private partnerships (Easterly and Servén 2003; Blanchard and Giavazzi 2008; IMF 2014b, chap. 3). In the early years of a PPP program, there may also be a good case for promoting PPPs to encourage innovation and to overcome the inertia of traditional ways of doing business—especially if the PPPs are undertaken at the same time as similar traditionally financed projects in a way that allows an independent empirical assessment of their relative costs and benefits. In the long term, however, PPPs will create problems for fiscal management so long as the government's accounts create the illusion that they are much less expensive than traditional public investment. Thus, if PPPs are to be used well, governments need to strengthen their infrastructure governance and introduce measures—including budgeting and accounting reforms—to control their costs.

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