

Understanding the fiscal effects of public-private partnerships

Briefing note for APEC meeting

1. Almost all APEC economies now use public-private partnerships (PPPs) to finance some public infrastructure. In one kind of PPP, which was widespread in the nineteenth century, and which has undergone a revival in the last two decades, the firm sells its services to users under a long-term contract with the government. Examples include privately financed toll roads, tunnels, bridges, and trains. Almost every APEC economy has at least few such PPPs. In another kind of PPP, pioneered by the British government in the 1990s as the private finance initiative, the firm sells its services to the government. Examples are privately financed hospitals and schools, in which the government still employs the doctors and teachers. Examples can also be found Australia, Chile, and Korea. Closely related are projects in which a private firm finances a power or water plant that sells its output to a state-owned utility. Such projects are common in China, Indonesia, Korea, Malaysia, the Philippines, and Thailand.

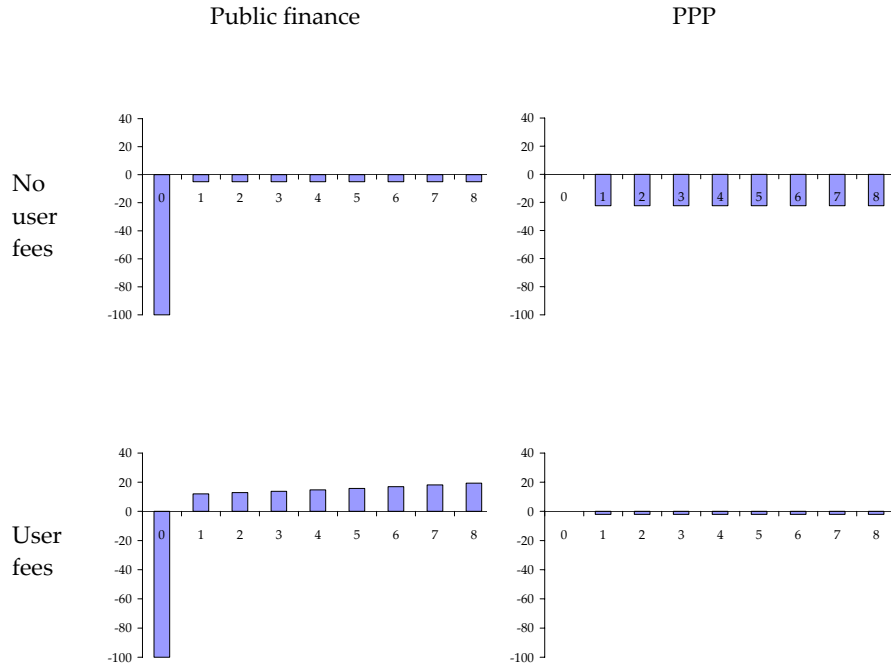
2. PPPs are controversial. On the one hand, they allow governments to take advantage of possible private-sector efficiencies and thus get public services more cheaply than otherwise. On the other hand, the motivation for using PPPs often seems to be to hide government debt, at the risk of increasing the government's costs in the long run. This note sets out a framework for thinking about the fiscal effects of PPPs and how APEC governments can help ensure PPPs are used only when they have real fiscal benefits.

Financial effects

3. The main fiscal effect of using a PPP instead of public finance is to defer government spending (Figure 1). This effect usually dwarfs any effect of the PPP on the government's net worth (the present value of revenue less than present value of spending). Depending on the accounting, this expenditure-deferring effect can make PPPs seem much cheaper than public finance; and encourage the use of PPPs even when they are more expensive.

4. In the kind of PPP in which the government purchases the services ("no user fees" in Figure 1), the government avoids having to pay for investment but must promise regular ("availability" or "unitary") payments to the firm over the life of the asset. Because the government usually is the only purchaser of the service, it usually must promise payments with a present value equal to the cost of the project.

Figure 1 PPPs initially reduce the government’s net cash outflows and later increase them



Note: The figures assume that the project with user-fees has a slightly negative net present value (at a discount rate of 10 percent), however financed. Thus, the government has to make small subsidy payments under a PPP. If the project generated more revenue the government’s operating cash flows under public finance would be more strongly positive, and under the PPP, the government might receive payments.

5. PPPs with user fees increase the government’s subsequent net spending in two ways. First, the government must forego revenue: it must cede to the firm the right to collect tolls. Second, it may have to supplement user fees with subsidies. The Chilean government, for example, subsidizes low-traffic concessions, for example, while collecting concession fees on other roads. Some governments also give guarantees. In the early nineteenth century, U.S. states guaranteed returns to investors in privately financed canals and railways. Today, Korea and Chile give revenue guarantees to road concessionaires. Because revenue is impossible to forecast precisely, governments must sometime make big payments—as in the case of the Incheon airport expressway in Korea.

6. PPPs may also create “implicit” liabilities. A toll road with less traffic than predicted, for example, may default on its loans, and the government may be pressured to take over the road and bail out the creditors, even in the absence of a legal obligation. Though the bail out is problematic, the true fiscal cost may be much less than the expenditure in the year of the bail out, since the government gets the road and may now collect tolls.

7. The problem in all these cases is that fiscal accounting usually misrepresents the effect of the government's decisions. The problem is most acute for governments that report on a cash basis. For them, public finance always seems expensive, because their accounting records the cash spent on investment, but ignores the asset that is created: nothing in their accounts anticipates the future benefits. PPPs, on the other hand, seem cheap, because obligations to make availability, subsidy, or guarantee payments don't count as debt: nothing in their accounts anticipates the future costs.

8. By contrast, governments that report according to modern accrual standards can see that investment increases the cash-flow-statement deficit, but leaves the income-statement deficit and net worth unchanged. So, public finance doesn't look so expensive. Moreover, some accrual accounting recognizes the liabilities created by some obligations to make payments to PPPs—so PPPs don't always look so cheap. Thus, for at least some choices between PPPs and public finance, modern accrual accounting reveals more or less the full effects of the choice.

9. But no accounting standards can be expected to give governments a perfect representation of their fiscal position. The liabilities created by guarantees, for example, typically remain unrecognized (despite impressive accounting and budgeting reforms in the United States). And accountants' desire to treat PPP assets and liabilities as either as wholly public or wholly private cannot always be reconciled with PPP contracts that share economic risks and rewards in complex ways.

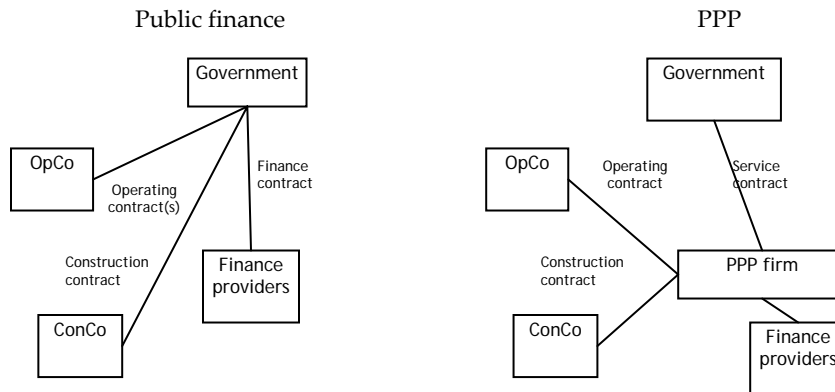
Real effects

10. PPPs have a real fiscal effect if they change the costs or revenues associated with providing the service. Higher revenues are possible if the private sector is better at stimulating demand or collecting bills from users—or if private financing changes the government's approach to setting prices. If a government has traditionally provided toll-free roads, drivers may vigorously oppose tolls on a new publicly financed road. Their opposition may be weaker if the road has to be privately financed because people understand that the firm must get some revenue if it is to invest. PPPs contracts also require periodic increases in tolls and may therefore lead to higher tolls over time. Thus, PPPs with user fees may impose a greater burden on users and a lesser burden on taxpayers. Whether this is good overall depends on the relative efficiency of user fees and taxes. But it represents a fiscal improvement.

11. Genuine fiscal improvements are also possible if private-sector efficiency lowers costs, holding quality constant. The inherent difference in private-sector

involvement between publicly financed projects and PPPs is, however, subtle (Figure 2). So the differences in costs may also be subtle.

Figure 2 Comparing concessions and public finance



Note: The figure assumes the government borrows, but the finance providers could be taxpayers.

12. In both options depicted in Figure 2, private firms can do all the construction and operation. Under public finance, however, the government must coordinate the construction and operating contracts. It must therefore understand the trade-off between construction and maintenance. And it must be able to determine where the fault lies if something goes wrong. Under a PPP, the government delegates these responsibilities to the PPP firm. The government's task is just to specify accurately and measurably the outputs the PPP firm should produce for the 20- or 30-year life of the project. If the government changes its mind, it will have to renegotiate a long-term the contract, which may be time-consuming and costly.

13. Some APEC governments have concluded that PPPs work well for certain assets (such as roads) whose desired outputs are relatively easy to predict and specify but not so well for information-technology systems, the government's demands on which are likely to change from year to year in ways that are difficult to predict when the contract is drafted. Some people argue that PPPs work poorly for hospitals for similar reasons.

14. There is, however, little evidence on the costs of PPPs and publicly financed projects. The European Investment Bank has reported that PPPs have higher forecast costs than public projects, but notes that this might merely reflect greater optimism in cost forecasts for public projects. Indeed, there's evidence from Britain that PPP projects are more likely than public projects to be delivered on time and on budget—which is promising, but doesn't answer the question of whether they are cheaper overall. More research is needed, perhaps facilitated by government willing to experiment with both approaches.

Drawing attention to real fiscal effects

15. What we consider here is how improved fiscal analysis and accounting can help attract governments' attention to the question of the real fiscal effects of PPPs.

16. Countries that still report according to cash accounting standards can do much to solve the problem by adopting modern accrual accounting and paying attention both to cash flows and to changes in net worth. International Public Sector Accounting Standards are a natural choice for financial reporting, and the IMF's *Government Finance Statistics Manual 2001* is a natural choice for (unaudited) government finance statistics. Countries that already report according to these, or similar, standards can usually continue to improve their reporting—and encourage the standard setters to improve their standards.

17. Progress can also come from undertaking analysis specific to the choice. Some governments undertake value-for-money analysis of PPPs, comparing the prospective costs of PPPs and a public-sector comparator. Given the possible subtlety of the difference between a publicly financed project and a PPP—and the difficulty of correctly accounting for differences in quality and the government's exposure to risk—such comparisons are likely to be rough. And they won't be very helpful unless the people doing the analysis have an open mind. Yet a requirement to undertake the analysis can focus attention on crucial issues that may be swamped in traditional fiscal accounting.

18. These value-for-money analyses involve long-term forecasts of government cash flows under public finance and under the PPP. Those forecasts can feed into government-wide 30-year fiscal forecasts. Such long-term forecasts can help make up for the drastic shortcomings of fiscal analysis based on traditional cash accounting and the significant shortcoming of fiscal analysis based on modern accrual accounting. With such forecasts, government decisions makers—and the public—can see the full prospective fiscal effect of PPPs and public finance. Australia, New Zealand, and the United States are APEC governments that have begun to publish long-term fiscal forecasts. More use could be made of them.

19. Improvements in project analysis and macroeconomic fiscal analysis must eventually come together in budgeting decisions at the level of each department. Victoria, Australia uses a technique that seems particularly helpful in this regard: it requires that departments have enough cash in their (provisional) budget to undertake a project publicly before they consider whether to do the project as a PPP. If a PPP is chosen, the authorized capital spending is replaced by an increase in departments' authorized operating spending. The department's interests are thus aligned with the government's.