



# CONTRACT-TYPE PUBLIC PRIVATE PARTNERSHIPS IN SERVICES

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## ABSTRACT

**Purpose:** Public Private Partnerships (PPPs) have been used in attempts to improve efficiency, effectiveness and innovation in infrastructure and services, and to enlarge public budgets in the short-term. There appears to be large potential scope for the greater use of PPPs in many countries, but it is crucial that the mistakes made elsewhere are avoided and that there is a transparent and robust system of regulation and support. This paper critically assesses some of the micro- and macro-economic reasons for using Public Private Partnerships (PPPs) for infrastructure and services.

**Design/methodology/approach:** This paper reviews some selected evidence related to policy arguments in favour of PPPs, and some potential shortcomings of PPPs in practice.

**Findings:** There are a number of reasons why PPPs can provide improved infrastructure and services, however, in practice these may often not be fully realised due to in-built incentives, biases and implementation shortcomings. A transparent and on-going evaluation for deciding on PPPs needs to be set up, and PPPs need to be used effectively compared to alternative funding sources. If not, there is scope for inefficiencies and misuse of PPPs. Necessary support for PPPs includes strong, robust

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and transparent regulatory and governance systems and the dissemination of good practice to all partners, as well as good quality advice and training.

**Originality/value:** The paper sets out a number of reasons for using PPPs, but also assesses potential drawbacks associated with them.

**Keywords:** Public Private Partnerships; PPP; budget enlargement; motivations

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## INTRODUCTION

In many countries, Public-Private Partnerships (PPPs) have become a relatively popular way of providing public infrastructure and services, and their use is supported by many international and national bodies (e.g. European Commission, 2012; OECD, 2012a, b; UN, 2011; World Bank, 2015; Bull, 2010). The main reasons cited for using PPPs include: introducing greater innovation, efficiency and effectiveness (mainly through introducing private sector techniques and inputs and greater competition); plus budget enlargement by bringing in private financing. Other broad reasons for the greater use of PPPs are grounded in: changing perceptions of the role of the public sector from being a provider of infrastructure and services to being an enabler and, usually, funder of them; moves to measures of public service provision success rather than output or input measures; and a shift of some public budgets towards the private sector.

Although PPPs have been used for millennia, in recent decades the UK has been an early adopter of PFI type PPPs. This is where the private sector funds upfront costs in return for a long-term payment, accounting for around 10% of public infrastructure (OECD, 2014, p.14). The use of PPPs has declined in the UK in recent years, arguably due to improved transparency, questions about value for money, inflexibility, austerity and changing accounting standards removing an accounting advantage of PPPs in terms of them counting as part of the national debt. This means that the high payments for existing PPPs will gradually decline until around 2028–9, and afterwards decline more rapidly until around 2050 (HM Treasury, 2016a, b).

Based on a variety of sources (including The Public-Private Infrastructure Advisory Facility (PPIAF) and Dealogic), Inderst (2016) estimate that total global volumes of PPPs have been around US\$60–\$100 billion in recent years (around 0.1% of GDP). Unlike Europe (EPEC, 2016), Asia is well below the global average: there appears to be considerable interest in PPPs, not only in infrastructure provision but also services<sup>1</sup>.

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<sup>1</sup>Less contractually based PPPs are more concerned with a partnership between stakeholders such as the ILO (2008, p.1, building on UN, 2001): ‘*voluntary and collaborative relationships among various actors in both public (State) and private (non-State) sectors, in which all participants agree to work together to achieve a common goal or undertake specific tasks. Partnerships may serve various purposes, including advancing a cause, to implement normative standards or codes of conduct, or to share and coordinate resources and expertise*’. However, while important (McQuaid, 2010), these are not the focus of the current paper focus.

There is no universal definition of PPPs (examples include: Hodge and Greve, 2013; OECD, 2008, pp.15–17; UN, 2011). The OECD (2014) states that:

*‘Public-Private Partnerships (PPPs) are long term contractual arrangements between the government and a private partner whereby the latter delivers and funds public services using a capital asset, sharing the associated risks.’*

Services are explicitly included in the World Bank’s (2014) definition of a PPP as a:

*‘long-term contract between a private party and a government agency, for providing a public asset or service, in which the private party bears significant risk and management responsibility’ (World Bank, 2014, p.17),*

and the European Commission’s (2004) Green paper on PPPs:

*‘forms of cooperation between public authorities and the world of business which aim to ensure the funding, construction, renovation, management or maintenance of an infrastructure or the provision of a service’.*

‘Contractual PPPs’ involve: private provision of infrastructure and/or services that are usually provided by the public sector for the *common good*, therefore involving some continued public sector involvement; mainly *private sector investment*, but usually funded over the long term by the public sector; the sharing of substantial *risks* (financial, technological and operation) related to the project’s design, build, operation or financing; *long-term projects and contracts*; and are *output* rather than input focused (for example, Malone, 2005).

The remainder of the paper assesses the various reasons for PPPs, and how and why some of these may not be realised. These broad overlapping factors are now discussed in terms of: budget enlargement; efficiency and value for money; certainty of expenditure and delivery; flexibility; financing costs; risk sharing; procurement process and transaction costs; legacy and public assets; and the wider impacts of PPP on the local economy.

## REASONS FOR PPPS

Major reasons for using PPPs, rather than usual public financing mechanisms, are often based on micro-economic arguments that they can: increase innovation, effectiveness and efficiency when providing public infrastructure and services; meet increased choice and quality of public services; and improve the equality of social services between different geographical areas (such as urban-rural) (for example, Thieriot and Dominguez, 2015; NHS Executive, 2004).

In addition to these motivations, PPPs can present more macro-economic opportunities for governments to access greater private finance and to ‘spend today and pay tomorrow’ (so-called ‘budget enlargement’). They can also provide opportunities for

private and NGO bodies to access major new income streams and markets, formerly reserved for public sector providers (McQuaid and Scherrer, 2010). For instance, the European Commission (2004) identified four main private sector roles in PPPs, the first about access to finance, and the others generally about improving delivery: providing additional capital; providing alternative skills in management and implementation; adding value to both the consumer and the general public; and identifying needs and the optimal use of resources.

### *Budget Enlargement*

PPPs have often been presented as a means of enlarging the effective public sector budget over the short-term (e.g. UNECE, 2008, 2012), through keeping much of the capital costs of PPPs ‘off’ the balance sheet. The OECD (2011) found that this was more important than value for money in some countries, while IOB<sup>2</sup> (2013) found that most PPPs were based on budget enlargement (additional financial mobilisation) reasons rather than on improved effectiveness.

International accounting standards have changed so more expenditure is shown ‘on balance sheet’, particularly where there is only a limited transfer of risk (McQuaid and Scherrer, 2010; House of Lords, 2010). The effects of these standards (e.g. Financial Reporting Advisory Board (FRAB), 2007) are sometimes unclear as they may depend on their exact interpretation by national and international bodies. If their rules are fully applied then this should lead to PPPs being compared more accurately to other procurement methods. Interestingly, a potential change from the former UK PFI to the PFI2 system is that now the public sector no longer pays for the project’s capital costs over the construction period, but rather over the life of the project (HM Treasury, 2016b). This may mean that costs are spread out over a longer period, which may mean that costs are spread out longer than under previous regulations requiring them to be included when paid.

Budget enlargement is especially attractive when there are major infrastructure needs. PPPs can allow official public debt to be kept lower than under ‘traditional’ procurement, and so improve the government’s position in international financial markets, or to meet debt limits on public borrowing. In addition, overall tax burdens in the medium term might be reduced if PPPs are more cost-effective than traditional public procurement. The evidence on the effects of PPPs on public finances is mixed (Hodge and Greve, 2007). If previously sheltered sectors undergo deregulation and economic structural change, then PPPs may raise efficiency (McQuaid and Scherrer, 2010, p.30). However, the efficiency gains from PPPs need to at least compensate for the extra financial and transaction costs that they incur, otherwise, the budget

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financing leads to a ‘fiscal illusion’ where the financial burden of PPPs is spread out over many years and is not seen immediately in public budgets. Therefore, it is essential that PPPs are adequately monitored and the true levels of risk, capital and revenue liabilities are shown, in a way consistent with international accounting standards. Without clear and transparent public accounts for PPPs, it is difficult to determine if PPPs increase or decrease the long-term tax and debt burden.

### *Efficiency and value for money*

Micro-economic factors focus on the potential for improving the efficiency, effectiveness and value for money of projects. It does this through the introduction of new (largely private sector) skills and practices, incentives and innovation, together with potential economies of scale and scope, and more efficient utilisation of assets and ‘cradle-to-grave’ or whole life asset management (European Commission, 2004; NHS Executive, 2004; HM Treasury, 2000, 2006; World Bank, 2009).

This is based to some degree on bringing concepts from New Public Management (NPM) into public sector management (McQuaid, 2010, 2016), although NPM may be in decline (Dunleavy et al., 2006). It remains to be seen if new forms of public and network governance influence future PPPs. Under PPPs, the public sector still has democratic accountability and responsibility for defining the service (or infrastructure characteristics) and choosing between the objectives, therefore seeking to ensure that the wider public interest is taken fully into account (McQuaid and Scherrer, 2010, p.29). It also decides on monitoring performance measures and standards of delivery, with performance measures including effectiveness measured in terms of outputs, service quality measures, efficiency, financial performance and process and activity measures (OECD, 2008).

A further reason for improved efficiency is the introduction of greater competition for, and the contestability of, the PPP. However, experience suggests that sometimes competition in PPPs can be limited, partly as economies of scale may limit competition to larger firms, technical and financial resources may restrict the numbers of firms able to bid, and PPPs are usually put forward by consortia (hence several potential competitors may be working together, reducing competition overall). PPPs generally have low numbers of bidders, therefore reducing the real level of competition and its potential benefits. In addition, under ‘traditional’ procurement there is often considerable competition (e.g. when tenders are requested to build, or design and build, infrastructure). In this way, the specific benefits of PPPs are in the way competition is introduced. However, compared to a purely public sector delivered project, rather than traditional procurement using outside (non-public sector) contractors, there is likely to be greater competition.

Hoppe et al. (2010) suggest that while PPP type contracts should have greater incentives for cost reductions than using a single contractor, quality might go up

or down. Current public operations may include additional services that are not explicitly set out in the contract – and so these will no longer be provided by the PPP. It is useful if such extra services (e.g. special treatment for those with disabilities) are made explicit and so are properly funded; in practice, however, this may not be the case.

Factors that may negatively affect PPP development and implementation include differing value and ethical systems of the public and private sector actors (OECD, 2008), poor design of contracts and inappropriate risk sharing, and a lack of accountability (Pollock et al., 2007; Pollock and Price, 2013). In terms of value for money, Barlow et al. (2013) argue that results for healthcare PPPs in the European Union, across different forms of financing and PPPs, have been mixed, and accommodation only PPPs (e.g. building and maintaining hospitals) have not seen the expected cost savings. Meanwhile, Torchia et al. (2015) found that while PPPs have been used to address internationally emerging public health issues, their effectiveness, efficiency and convenience are unclear.

A UK House of Commons (2011, p.3) Committee review argued that PFIs (Private Finance Initiative types of PPP) had been a better deal for private investors than the taxpayer. Similarly, there was a UK review of PFI in 2012 with changes made to the PFI model so as to improve transparency, value for money and partnership working (now called PF2) (HM Treasury, 2012; National Audit Office, 2009; Reynaers and Grimmelijsen, 2015). IOB (2013) found that evaluations tended to focus on resource sharing, and the issues of risk-sharing and revenue distribution in PPPs received little attention in half of the selected studies. Most goals were quite general (e.g. improved co-ordination) and few were output specific. Although most of the small number of PPPs reviewed had positive outputs, it was usually unclear if these were attributable to the PPP, and most evaluations were not particularly robust scientifically (e.g. scoring lowly on the Maryland Scale of Scientific Methods). Therefore, the conclusion is clear – few of PPP evaluations were based on rigorous and robust impact analysis.

### *Certainty of expenditure and delivery*

In general, public sector expenditure flows have greater certainty under PPPs. This is partly due to fixed costs (with an added inflation element) generally being agreed over the entire life of the project, with the developer usually taking the risk of cost overruns or increased costs above some agreed level, or of lower income than expected.

However, there may be greater difficulties in changing a PPP contract after it is signed (e.g. specification or design features are difficult to change). Other types of procurement may include greater temptation and scope for the project's public sector commissioner to change specifications at a late stage or during its development: this can incur large additional costs. PPPs usually therefore introduce greater

discipline to the public sector, although this could be achieved through better project planning, procurement and discipline among commissioners after signing the initial contract.

PPPs may restrict the decision makers' ability to alter or merge infrastructure as these are set out for decades in the contract. An example is if a group of social service facilities (e.g. schools) are to be amalgamated. The PPP funded ones are likely to be kept open even if circumstances have changed, while the other non-PPP facilities are preferred to be kept open. This can lead to the potential inefficient location of services in the long-term.

There are normally strong incentives for the private partner to complete PPP projects on time, as added costs or delay penalties can be incorporated into the contract. In some cases payments may not start until after completion, giving incentives especially where the developer has financing costs. The agreement of the design and build PPP may include streamlined land assembly, planning and other agreements, so reducing potential delays. Overall this can lead to shorter and more certain construction times, but other forms of procurement could also achieve them.

In terms of the certainty of maintenance, in the 1980s and 1990s in the UK, and elsewhere at other times, the maintenance of the public infrastructure (e.g. school buildings, roads, etc.) has been poor. This was because reduced maintenance was perceived as short-term 'savings' but with higher long-term costs due to the need for major, costly reconstruction later. PPPs can help reduce the risk of poor maintenance due to short-term public sector decisions as they normally include maintaining the infrastructure at a specified level over its life, even if budgets come under pressure elsewhere: the public sector commissioner has a legal obligation to pay the PPP contract, so they cannot cut maintenance.

### *Flexibility*

Circumstances and partnerships are likely to change over time, so PPPs need to adapt over time and this may require continued trust building and adaptation to changing local or wider circumstances (Bloomfield, 2006).

The lack of flexibility after a contract starts is a major problem with PPPs. For instance, if a hospital is built then it may not be easy to add in changes to, for example, information technology (including Internet provision, new processes for delivering services, etc.), opportunities or requirements for changing infrastructure standards (e.g. the need for greater energy efficiency or the addition of alternative energy sources such as solar panels), or changing the way of organising work (which may require changes to the physical structure of the building), etc. Therefore, the project may suffer from being 'locked-in' to a particular technological and organisational approach for many years, or the PPP contract may need to be renegotiated.



External changes may also affect the PPP. In the case of the Skye Bridge PPP, changes to European Union legislation on tax (VAT) for toll bridges forced the renegotiation of the original contract. An increase in tax affected the demand for the facility and therefore the income of the project.

### *Financing costs*

In general the capital and financing costs of PPPs are likely to be higher than public sector borrowings. So even with efficiency savings, PPPs may cost more than ‘traditional’ procurement. The rate of return expected on different types of PPP projects varies (e.g. schools versus toll roads) (OECD, 2014). When estimating the rate of return expected by private sector capital, financial indicators of PPP performance, particularly Internal Rate of Returns (IRR), are often used. However, these may be misleading (HM Treasury, 2013), except where related payment streams are flat, like an annuity. Cuthbertson and Cuthbertson (2012) found this assumption was rarely met, based on data on actual PFI-type PPPs, so the opportunity cost to the public sector and the potential scope for profit by the private sector were both understated. They suggested that outstanding debt may be a more reliable indicator of how much the annuity type payment assumptions are bent.

Overall, PPPs lack transparent monitoring (often due to the ‘hidden’ or non-transparent and non-public nature of the contracts). Monitoring often includes physical monitoring (e.g. the meeting of building codes or standards); but should also include the financial monitoring at project, public body (such as local authority) and national levels. It is important that full information on project contracts, and the financial models used by the public sector, be publicly available (and developers told of this requirement before bids are called for).

### *Risk sharing*

A key aspect of PPPs is the transfer and sharing of endogenous (controlled by the partners) or exogenous (beyond control of the partners) risk between the public and private sectors, so the party that is best able to is the one to bear the risk. These may include construction, operation, inflation, technological and demand risks. Exogenous risks are usually assumed by the public sector or shared (with the private sector partner getting a premium related to their share of the risk) (see OECD, 2008).

However, there will be pressure on the public sector to stop the private partners or the project from going bankrupt, or failing where projects are politically or economically ‘sensitive’, so the real risk is likely to rest more with them. The public sector may have to take back control of the operation at short notice, or find another provider or renegotiate the contract, all possibly at high cost. An example is the UK government having to be involved when a large firm, Carillion, went into liquidation early in



2018, with contracts covering many sensitive public service areas, including hospitals, maintaining Ministry of Defence housing, and school dinners (House of Commons, 2018; House of Commons Library, 2018; National Audit Office, 2018).

A further technological risk is that as PPPs are long-term contracts, these can tie the project to a specific type of technology, therefore reducing flexibility. It can also make it more difficult in future to introduce more modern technologies, leading to potentially costly re-negotiations, unless the contracts are carefully constructed and build in necessary flexibility.

### *Procurement process and transaction costs*

While some of the procurement costs are transferred to the PPP in terms of the private sector bidders developing their own solutions to meet the requirements of the PPPs, the complexity of projects over their life cycles may lead to poor protection of the public interest (Da Cruz and Marques, 2012). PPPs may lead to a reduction in protection of public resources through rigorous procurement procedures (Verhoest et al., 2016). Establishing dedicated PPP units in government (OECD, 2010) and the standardisation of PPP contracts (Van den Hurk and Verhoest, 2016) can help alleviate these problems. However, in a study of 19 European countries, Van den Hurk et al. (2016) found that support agencies for PPPs varied considerably, distinguishing four categories from sceptical systems of zero support to fully organised PPP systems.

The costs of developing PPP contracts are likely to be greater than under traditional procurement; this is due to their complexity and long-term nature leading to higher transaction costs. These transaction costs are mostly fixed; they therefore increase the minimum efficient sizes of PPPs and favour large organisations with their economies of scale or scope. There may be information asymmetries between the public partners (especially small local public bodies) and the private sector (particularly large experienced private firms), which can be exploited by the private partners in the contract or in negotiations on PPP projects. Over time, the public sector may also lose their expertise in the delivery of services going to PPPs and therefore suffer from further expertise and information gaps, especially in services where outputs are difficult to measure.

The procurement of PPPs can include systematic cognitive and social biases amongst the public sector actors commissioning PPPs and their partners, which may lead to non-rational decisions. Examples of behavioural biases include:

- hyperbolic discounting results in the preference for immediate payoffs to more ‘rational’ longer-term pay-offs, which is a fundamental aspect of budget enlargement PPP activity (Laibson, 1997);
- optimism bias may be present in many PPPs where the positives are given greater weight than potential negatives (Sharot et al., 2007);

- anchoring biases, where one characteristic of the project (e.g. the published opening date) is overly focused upon (Tversky and Kahneman, 1974);
- ‘availability cascade’, where a collective belief (such as the perceived efficiency of the private sector) is self-reinforced by repetition in public discourse (Kuran and Sunstein, 1999);
- framing effects, where different decisions are made depending on whether the effects are presented as a positive rather than a cost (e.g. focusing on “the project would be opened next year and the cost per year is small” rather than “the total cost over the lifetime is high”) (Tversky and Kahneman, 1981);
- and many other biases.

This is an area that would benefit from further research.

One way of widening perspectives on thinking about PPPs before they are commissioned is to have greater involvement of the public and future users of the services. Boyer et al. (2016) argue that, empirically, public involvement can improve the wider support for PPPs and the adaptation of project design to local conditions. However, the processes do not have much influence on the delivery of the project or imbalances of power between public and private sectors.

### *Legacy and public assets*

The legacy, both after the PPP starts and after it ends, needs consideration. As public sector officials are usually not directly involved in providing a service, PPPs may reduce the public sector’s ability to learn the lessons from providing service and so affect the development of future policy, and ‘learn’ from past experience, therefore repeating mistakes of the past, leading them to repeat policy mistakes due to a lack of corporate ‘memory’. Local public and SME knowledge may be lost if large external firms deliver most of the PPP. Therefore, mechanisms are needed to ensure that such knowledge continues to be accessible to the relevant public sector bodies.

The state of handing over a service or building after the end of the PPP needs careful consideration. If a contract states that the infrastructure is handed back to the public sector at the same standard after 30 years, it is important to explicitly state if this handing over is to be at the original building standards (e.g. in terms of energy efficiency, structural standards, IT etc.) or at the standards current at the date when handed over. If the former then what is being handed over may be a totally out of date structure.

PPPs have sometimes been used to realise value of land or other assets and so raise public expenditure. Some UK local authorities have generated land value by building schools on Greenbelt land and houses on former school sites (so allowing high housing land values to be realised). Planning permission might not have been given to building houses directly on the Greenbelt, so this might mean that local planning regulations have been influenced by the PPP (McQuaid and Scherrer, 2010).

### *Wider impacts of PPP on the local economy*

PPPs may assist in developing the capabilities of SMEs and larger firms in the local private sector, as they learn from joint ventures with larger national or international firms, as well as promote regional innovation (Kristensen et al., 2014). Potential also exists for gaining sub-contracts (e.g. services provision or facilities management). However, most PPPs are large, especially when projects are ‘bundled’ together in a package. Therefore, only lower level contracts or service provision may be available and they may have to deal with PPP main contractors who maintain considerable market power, limiting technology transfer and restricting development.

A negative impact on the public good can be a consequence of reducing the risks for a PPP. For instance, where the public sector agrees not to build or improve potentially competing roads near a PPP toll road (Plewik, 2000), can lead to a degree of monopoly power for the PPP and hinder future economic development of the region.

## CONCLUSIONS

It is important to create a clear and transparent policy and processes for the use of PPPs in various sectors, and to also identify and monitor the effects across the economy as a whole. It is essential that there is expertise to support this both nationally and at regional and local levels and in specific industrial sectors.

A clear and transparent *a priori* and on-going evaluation process for deciding on PPPs needs to be set up and compared to alternatives so as to identify the one offering best value for money over the entire lifespan of the infrastructure or service. Alternatives may be to use significantly improved ‘traditional’ procurement processes. Linked to this, a clear process for approving projects and recognising all their costs and benefits is needed, which includes developing criteria and instruments to measure each phase of a PPP and its overall value added to the economy and society over its lifetime.

All PPPs and their evaluation processes must be transparently and rigorously monitored – at project, regional, public agency and national level. This should be public and transparent, otherwise we cannot determine the benefits or otherwise of the PPPs: there is large scope for excessive profits or corruption.

In summary, there appears to be large potential scope for the greater use of PPPs, but it is crucial that the mistakes made elsewhere are avoided and that a transparent and robust system of support is set up.

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## **BIOGRAPHY**

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