

McQuaid, Ronald W.; Scherrer, Walter

**Working Paper**

## Changing reasons for public private partnerships

Working Papers in Economics and Finance, No. 2009-02

**Provided in Cooperation with:**

Department of Social Sciences and Economics, University of Salzburg

*Suggested Citation:* McQuaid, Ronald W.; Scherrer, Walter (2009) : Changing reasons for public private partnerships, Working Papers in Economics and Finance, No. 2009-02, University of Salzburg, Department of Social Sciences and Economics, Salzburg

This Version is available at:

<https://hdl.handle.net/10419/71869>

**Standard-Nutzungsbedingungen:**

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

**Terms of use:**

*Documents in EconStor may be saved and copied for your personal and scholarly purposes.*

*You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.*

*If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.*



# CHANGING REASONS FOR PUBLIC PRIVATE PARTNERSHIPS

RONALD W. MCQUAID AND WALTER SCHERRER

WORKING PAPER No. 2009-02

**WORKING PAPERS** IN  
**ECONOMICS AND FINANCE**

# **Changing reasons for public private partnerships**

Ronald W. McQuaid, Employment Research Institute, Napier University, Edinburgh, Craiglockhart Campus,  
Edinburgh, UK, [r.mcquaid@napier.ac.uk](mailto:r.mcquaid@napier.ac.uk)

Walter Scherrer, Department of Economics and Social Sciences, University of Salzburg, Kapitelgasse 5-7,  
Salzburg, Austria, [walter.scherrer@sbg.ac.at](mailto:walter.scherrer@sbg.ac.at)

## **Abstract**

This paper considers the micro- and macro-economic benefits and costs of Public Private Partnerships (PPPs) and some implications of implementing new international accounting standards IFRIC 12. If public sector financial costs are forced to move 'on balance sheet' then there are likely to be impacts on the use in PPPs by governments and other public bodies. This may move the basis of PPP choice towards a more 'level playing field' with other financing sources, potentially give a more realistic measure of future public commitments and liabilities and reduce incentives to use PPPs for budget enlargement. There may be a refocusing upon the potential efficiency gains of PPPs and potentially a reduction in their use, depending upon the exact interpretations of the standards and other factors.

---

## 1. Introduction

The types of, and motivations for, Public Private Partnerships (PPPs, including Public Finance Initiatives, PFIs) have varied over time, across sectors and agencies and between countries (see for example: the European Community's Green Paper on PPPs, CEC 2004; OECD, 2008; Grout and Stevens 2003). Significant motivations have been to increase efficiency and spread risk more appropriately compared to traditional financing methods and to reduce budget and borrowing constraints (HM Treasury 2003a, 2004, 2006; Lonsdale, 2005). However, new international accounting standards (International Financial Reporting Interpretations Committee (IFRIC): *12 Service Concession Arrangements*)<sup>1</sup> are likely to alter the scope of PPPs to expand budgets without increasing public borrowing (FRAB, 2007a, p.15), as there are material differences between accounting for PPPs under UK GAAP and the basis of accounting proposed by IFRIC. In the UK, the Treasury has stated: "Where a PPP arrangement meets the definition of a service concession arrangement within the meaning of IFRIC 12, the public sector grantor should report that infrastructure assets on its 'balance sheet'" (FRAB, 2007b). In which case issues concerning the efficiency and effectiveness of PPPs, compared to their alternatives, are likely to increase in importance and budget enlarging motivations may decrease.

The term PPP is restricted here to those projects involving private provision, but continued public funding, of services formally provided by the public sector, whereby the private sector partner assumes substantial financial, technological and operation risks in the finance, design, build and/or operation of the project, although it is recognised that PPPs may include other forms of partnership (see for instance: Malone, 2005). The paper does not seek to consider all of the advantages and disadvantages of individual types of PPP, such as resource availability, effectiveness, and legitimacy (Coulson, 2005; McQuaid, 2000), but rather concentrates on comparing the broader motivations and effects of PPPs, primarily focusing on the UK, and on some potential implications of changing policies such as IFRIC 12.

The next section provides a brief overview of PPPs in the UK and related typologies while sections 3 and 4 consider, respectively, general micro- and macro-economic reasons for government involvement. Section 5 discusses factors influencing the potential for sustainable overall (i.e. macro-economic) efficiency gains from using PPPs. Conclusions are drawn in the final section.

## 2. Background and types of PPPs

The UK has been a leader in the large-scale introduction of PPPs (for example: Ball et al., 2002). From the first Private Finance Initiatives (PFIs) (the forerunner of PPPs) in 1987 to the end of 2006, the UK

---

<sup>1</sup> Service concessions are arrangements whereby a government or other public sector entity grants contracts for the supply of public services - such as roads, airports, prisons and energy and water supply and distribution facilities - to private sector operators. They may allow: the operator to receive a financial asset (i.e. an unconditional contractual right to receive cash or another financial asset from the government) in return for constructing or upgrading the public sector asset; or the operator to receive an intangible asset, i.e. no more than a right to charge for the use of the public sector asset that it constructs or upgrades (a right to charge users is not an unconditional right to receive cash because the amounts are contingent on the extent to which the public uses the service). Both can exist in a single contract according to IFRIC 12 (IASB, 2006).

government had signed 590 PPPs, worth around £53 billion (HM Treasury 2007).<sup>2</sup> Both major UK political parties have widely used PPPs and although PFIs were initiated by a Conservative government (which was in power from 1979 to 1997), the number and value of new PPPs peaked in the years 2000 and 2003 respectively, after a sharp growth in the years just after the Labour government was elected in 1997.

The private sector has also played an important role in the dissemination of PPPs as the UK has a highly developed set of private institutions (funders, developers, project managers, operators as well as banks, legal firms etc.) and a growing secondary market whereby PPP projects can be 'sold on' by the developers of the project to other firms to carry on the contracts. This secondary market with refinancing of PPPs, usually after initial construction, was strongly criticised by the National Audit Office (2002) as the public sector gained relatively little from the large profits, especially in early PPPs. The public sector has also considerable experience in the UK. However, at a local level, individual public bodies may be inexperienced, so for any individual project the private sector will often have considerably more experience than the local public body, and may be better able to influence the long run terms and returns on projects to their advantage.

Three main categories of public private partnerships are set out below, concerning: provision of services (including infrastructure) to the public sector; ownership; and the selling of public sector services to others (such as through the exploitation of patents). In addition PPPs have, a fourth overlapping role in providing enabling organisations to provide common ground between public, private and Third (i.e. Not for Profit) sectors to promote economic and social development policies.

The first, most common, form of PPP concerns the provision of and/or operation of infrastructure. These PPP arrangements are where the public sector contracts to purchase services on a long-term basis, so as to take advantage of private sector management skills and also to provide an incentive for the private sector by incorporating a risk element in the private finance. This type of PPP includes concessions and franchises, where a private sector partner takes on the responsibility for providing a public service, including maintaining, enhancing or constructing the necessary infrastructure. The most common arrangements are PFI contracts, often involving the design, build, finance and operation (DBFO) of a particular asset, such as a hospital, school or road.<sup>3</sup> One simple way to classify PPPs is along the two continuums of: who operates the service; and who provides the facilities (building and/or equipment etc.). The first quadrant, combining service operation and facilities provision and involves build and operate schemes (where the private, and/or Third, sector both builds a facility and operates it for a defined period, such as 25 years, before handing it

---

<sup>2</sup> The UK government considers PPPs "to cover a range of business structures and partnership arrangements, from the Private Finance Initiative (PFI) to joint ventures and concessions, to outsourcing, and to the sale of equity stakes in state-owned businesses" (HM Treasury 2000, p. 8). The OECD (2008, p.12) defines PPPs "as an agreement between the government and one or more private partners (which may include operators and the financiers) according to which the private partners deliver the service in such a manner that the service delivery objectives of the government are aligned with the profit objectives of the private partners and where the effectiveness of the alignment depends on a sufficient transfer of risk to the private partners."

<sup>3</sup> In the USA the General Accounting Office (1999) suggested several types of PPPs including: Buy-Build-Operate (BBO) where the asset is sold to the private sector who improve and operate it; Build-Operate-Transfer (BOT) or Build-Transfer-Operate (BTO) where the facility is built and operated by the private sector, but transferred to the public sector at some agreed point; and Build-Own-Operate (BOO) where the public sector may give a franchise but ownership remains with the private sector.

---

back to the public sector, e.g. DBFOs). The second quadrant is where the private sector operates the service, while using public sector owned and supplied facilities; the third quadrant is where the private sector provides the facility, to be operated by public sector staff (or using private sector staff to maintain the facility and public sector staff to provide services based in the facility, such as health services, which may include some DBFOs where some staff remain in the public sector); while the final quadrant would be public sector provided and operated. In some cases the private firm may sell on their interests to other firms with, as mentioned above, a market for aspects of the ‘second phases’ of PPPs being developed in countries such as the UK.

FRAB (2007b, pp. 34) suggests that: “DBFO-type PPP contracts appear to exhibit the characteristics of service concession arrangements covered by IFRIC 12 ... One would therefore expect the private sector operator of such PPP contracts accounting under IFRS to apply IFRIC 12 ... Once it has been determined that the PPP arrangement is a service concession within the meaning of IFRIC 12 the grantor should record the infrastructure as an asset.” Importantly this suggests that the asset moves onto the public sector body’s balance sheet and counts effectively as increased borrowing. Some PPP contracts are not likely to be covered by IFRIC12, such as those that do not involve creating, or transferring, an asset or where the private company owns and retains the asset at the end of the contract. FRAB (2007b) discusses how public bodies in the UK should account for service concession arrangements, including PFI contracts. It argues that DBFO-type PPP contracts appear to exhibit the characteristics of service concession arrangements covered by IFRIC 12. The impact of these changes on the public borrowing requirement has yet to be seen, as there will be some discretion in what is considered to be included on the public balance sheet.<sup>4</sup>

The second category of PPP is concerned with the introduction of private sector ownership into state-owned businesses. This involves a range of possible structures including a stock market flotation, or the introduction of a strategic partner, or with the sale of either a majority or a minority ownership stake to the private sector. The sectors that PPPs have covered in the UK are diverse, contributing to over twenty departments or devolved governments and particularly in Transport (with 42.1% of all projects by value, £22.4 billion), Defence (10.6%) and Health (15.5%). In addition, the devolved governments (Scotland, Wales and Northern Ireland) fund a number of health, transport and other PPP projects.

The third type of UK PPP is generating commercial value from public assets, such as selling Government services into wider markets, and other partnership arrangements where private sector expertise and finance are used to exploit the commercial potential of Government assets. For example innovations from government research laboratories including defence research may be exploited through a PPP.

Fourth, PPPs have also been used as mechanisms to promote specific policies. These may range from general local economic development programmes to more specific policies aimed at helping the UK to meet the Lisbon Agenda targets for employment and productivity growth through improved ICT infrastructure (HM Treasury, 2005). To take a specific case, the UK Government set targets for both the competitiveness and the

extensiveness of the broadband market, including having the most extensive and competitive broadband market in the G7, although in the short term there may have been a trade-off between these goals, and focussing on rolling out broadband at the expense of competition (DTI, 2004). While effective PPPs involving government departments, which have appropriate experts and knowledge, can arguably be developed with hardware and software providers, account needs to be taken of the implications of rapid changes in technology (OECD, 2008).

There has been a range of economic, social and political reasons and motives for the growth of PPPs. These revolved: firstly around micro-economic arguments concerning the efficiency and effectiveness of public spending and; secondly, around budget or macro-economic factors (the availability of public investment resources). While both of these are important, there has been arguably an emphasis in the UK upon micro-economic factors – bringing in greater innovation and efficient management, as well as, especially in the 1980s and 1990s, being linked to a transfer of ownership and control from the public to private sector (HM Treasury, 2003a).

### **3. Micro-economic drivers of PPP**

A major part of the PPP agenda is to improve the efficiency and effectiveness of the provision of public services. This is done mainly through innovations from other, usually private sector, approaches, and the development of appropriate incentives to each party and the spreading of risk more appropriately compared to traditional financing (e.g. HM Treasury 2003a, 2006). Also important are greater asset utilisation, economies of scale and ‘cradle-to-grave’ or whole life asset management, the introduction of private sector management techniques, and suitable creation and enforcement of performance measures and incentives.<sup>5</sup>

A range of transparent financial and non-financial Key Performance Indicators, targets and associated sanctions, including comparisons with public sector or other benchmarks, can act as a significant incentive. They may cover efficiency, effectiveness in terms of outputs, service quality measures, financial performance and process and activity measures (OECD, 2008). In some cases (e.g. school maintenance in parts of the USA) achievement of Key Performance Indicators may result in the extension of a contract for a specified number of years before another open round of competition is enforced and so act as an important incentive.

The introduction of significant competition into PPPs, and the transfer of endogenous risks to the developer or operator, are important for efficiency and the consequent delivery of value of money.<sup>6</sup> PPPs can be seen

---

<sup>4</sup> FRAB (2007b) suggests that once an asset is deemed to be covered by IFRIC12 then it should be separated into service and infrastructure elements and also interest charges, if appropriate. The asset part then should be valued as normally for this generic type of asset.

<sup>5</sup> Economies of scale may be organisational (e.g. the organisation has breadth and depth of experience) or they may relate to the physical project (e.g. it may be technically more efficient to construct and/or maintain a series of buildings rather than doing one).

<sup>6</sup> Endogenous risks are where the private sector partners can act to ensure that the expected and actual outcomes are the same, while exogenous risk is beyond the control of the private sector partner, and may therefore often be borne by the public sector or shared (with the private sector partner receiving a risk premium related to their share) (see OECD, 2008).

---

as partway between privatisation and full government delivery (i.e. quadrant four above) in terms of risk allocation between them. The more functions in a PPP (e.g. one involving operation as well as designing and building a facility), the greater the potential risk to be transferred to those best able to take them (i.e. those who can deal with the risk at least cost), with demand risk particularly important where operations are involved. The level of competition for, and the contestability of, the PPP is crucial to ensure that there is suitable transfer of risk to the private partner, although experience suggest that sometimes in the UK competition has been limited.

The UK government (HM Treasury 2000, 2004) argues that PPPs enable them to tap into the disciplines, incentives, skills and expertise that private sector firms have developed in the course of their normal everyday business, while releasing the full potential of the people, knowledge and assets in the public sector. Here PPPs might be supportive for: changing the organisational structure of the units which provide the service; adjusting the organisational culture in order to better enable these institutions to meet the needs of customers, including those in the private business sector and; closing specific knowledge gaps. The private sector involvement, the Treasury (2000) argues further, should result in greater commercial incentives for delivering efficient and effective services, a greater focus on customer requirements, and new and innovative approaches to providing services or infrastructure. PPPs then may help improve the operation of state-owned enterprises or replace them with private providers. Meanwhile Government retains the responsibility and democratic accountability for: deciding between competing objectives; defining the chosen objectives, and then seeing that they are delivered to the standards required; and ensuring that wider public interests are safeguarded.

The micro-economic drivers of PPPs emphasize: the importance of choice for the provider of a public service; and the implementation schemes to exploit possible efficiency gains in the provision of public services (for example: NHS Executive, 2004). However, there may be no increase in choice of service or product for the ultimate user of the service. This partly reflects the outcomes of the debates since the 1980s concerning whether the public sector should have an enabling role, determining the form and level of public services but not primarily delivering them, or a role as sole provider of services (see for instance: Giloth and Mier, 1993). The increased role of PPPs suggests that the enabling view of government and governance has to a degree prevailed. Such microeconomic drivers of PPPs can also to be seen in the context of introducing and implementing New Public Management (NPM) concepts into the public sector. Within the NPM paradigm the Public Private Partnership policy is not merely an instrument for providing and financing public services, which ought to be considered on economic (efficiency, cost and risk) grounds, on a case by case basis, but also as a general policy to foster the implementation of private economic sector management principles and economic concepts in the public sector. However, critics argue that NPM is in decline (Dunleavy et al., 2006) and it remains to be seen if new forms of digit governance may parallel different forms of PPP type public financing.

There are a variety of related factors that have affected the development and implementation of PPPs such as varying value and ethical systems between the public and private sector actors (OECD, 2008; McQuaid, 2000), poor contractual design and arrangements and inappropriate risk sharing (based partly on limited



expertise, experience and capacity, especially at a local level), as well as accountability (Pollock et al., 2007).

In addition to the perceived benefits of an enabling approach, PPPs have potential problems concerning: the ability to learn the lessons from providing the service in order to develop a policy; the availability of actors who can carry out the service, be they in the private, public or Third sectors; and the danger of the organisation failing to 'learn' from past experience and so repeating mistakes of the past or 'reinventing the wheel' due to a lack of corporate 'memory'. The theoretical and empirical benefits of economies of scale may be outweighed by the disadvantages of lack of local knowledge and continuity on the part of large-scale providers. PPPs have also restricted the ability of decision makers to reduce their maintenance, or even provision, of facilities or which facilities to close at times of changing demand or budget tightening (see below).

Evidence related to experience with public private partnerships has been mixed (e.g. Joumard et al., 2004). Some projects have been considered a success, having been completed on time and budget and having proved to be a cost effective method of delivering public services; while others have failed to deliver the expected gains. In some cases there have been significant delays associated with the interpretation of relevant contracts, cost overruns experienced because parts of projects had not been fully submitted to competitive pressures, and bailouts in some cases by the public sector in a number of countries (see for example, WATIAC, 2004). In the UK there have been increasing problems with tendering, for example with few bidders completing detailed bids, or large changes made to the tender after the preferred bidder had been chosen, hence reducing the element of competition (NOA, 2007). Pollock et al. (2007) argue that the evidence provided by the Treasury on improved cost and time overrun in PPPs are fundamentally flawed and that the appraisal guidance provided in the Treasury's (2003b) 'Green Book' for comparing PPPs with other methods of procurement is biased to favour PFI. There have also been other criticisms of specific schemes (e.g. House of Commons Public Accounts Committee, 1998, 2003; NAO, 1999, 2002, 2007). Finally, the distribution of costs and benefits of new PPPs on different parts of society is important, especially where they are funded out of public expenditure, but has been under researched. By carefully specifying the terms of PPPs it may be possible to improve (or make worse) distributional effects. Of course, overruns are common in non-PPP projects, often due to poor planning resulting in changing specifications etc. during construction.

#### **4. Macro-economic drivers of PPP**

For most OECD member states it may be assumed that so far there exists only a minor macro-economic impact of PPP on macro-economic efficiency because – the United Kingdom, Australia, New Zealand being possible exceptions – this dimension of PPP appears to be relatively small. In the late 1990s there was a legacy of under-investment in public infrastructure (schools, hospitals, transport etc.) from the previous two or three decades. This was worsened as during the 1980s and 1990s local government, in particular, had

---

often reacted to budget constraints through reducing maintenance, resulting in a long-term repair and rebuilding backlogs, together with requirements to bring in new technology infrastructure.

EU and European Monetary Union rules on Member State budget deficits and debt (and the UK's 'Golden Rule', whereby public finances are balanced over the economic cycle) limit the amounts that public borrowing should rise. This encourages 'off balance sheet' funding where PPP finances do not appear as large capital expenditures in the year in which they occur, but rather as a series of smaller annual 'revenue' expenditures over the life of the project.<sup>7</sup> This can allow the speeding up of new infrastructure programmes with no apparent increase in public borrowing (i.e. a form of budget enlargement).

Reducing the overall tax burden (including social security contributions) is another driver of PPP. Tax competition within and outside the European Union – including from the new Member States – has made it difficult and risky to raise these ratios further. Pressures from globalisation and the ageing demographic structures also suggest that in the longer term significant tax rises are likely to be more difficult than in the past, so encouraging 'off balance sheet' expenditure.

Deregulation and economic structural change has made some sectors, which had been dominated by public firms, attractive for PPPs. Formerly sheltered sectors such as parts of the transport or health services have been pressured to, or are expected to, become more competitive markets with the entry of private competitors, the transfer of organisations from public to private, or the creation of 'internal markets' (internal to the public providers). Further, the European Union Green Paper on PPPs (CEC, 2004) and other development policies at the local, national and European Union levels (Jones, 2000) deliberately promoted network building between private and public partners, particularly in the fields of structural and regional policies.

In some cases the PPP mechanism is used to raise public investment for realising land values that would normally be unavailable to the public body without the PPP for political or land use planning reasons. For example, some local authorities have promoted PPPs that result in greenbelt or recreation sites (such as sports fields) being developed, partly due to limited funding or borrowing permission from central government. Normally such sites could not be developed because they are 'protected' by the planning system and other local and national policies (e.g. to promote sports and maintain the provision of sports fields). Private housing would not normally be allowed to be developed on such sites. However, under the PPP, proposals are made to build, for example, a school on such 'protected' sites, in the expectation that local people will not oppose a new public facility. The local authority (or other public body) is then able to sell the former school site for housing. According to the director of one education department "(w)e are realising and taking advantage of the land values coming as housing development" (SC, 2005). The net result is that the previous greenbelt is built upon and there is an increase in housing development in locations that local

---

<sup>7</sup> For example, a Lothian Regional Council's criteria for funding were to determine if it "was unable to procure the necessary funding via traditional procurement routes. Once this had been established, Lothian Regional Council examined different forms of PPPs with its principal objective being to ensure that CAPEX (capital expenditure) was 'off balance sheet'" (Scottish Parliament, 2002; see also House of Commons, 2001).

planning policies often would not necessarily have permitted. In this way PPPs can generate capital gains for the public authority (and other PPP partners, albeit with risks possibly being shared over future land prices etc.) that would not otherwise be available. In addition, in some cases normal planning conditions of a minimum level of social housing being included in housing developments appear to have been reduced (and clearly this affects the capital value of the site).

Finally, the IFRIC and hence EU and UK's changing attitude to, or clarification of, the financial treatment of PPPs is of importance. The new international accounting standards that have been adopted by the European Commission should fundamentally alter the scope of PPPs to enlarge short-term government budgets by transferring investment 'off balance sheet'. The UK government announced that it will move to reporting under European Commission adopted international financial reporting standards (IFRS) from 2009, with potentially important implications for PPPs (FRAB, 2007a). So, depending on the exact interpretations of governments and the way in which the standards are adopted as, there may be little budget 'enlargement' advantage in PPPs compared to 'ordinary' public sector borrowing or other financing. This would arguably bring PPP onto a 'level playing field' with other financing sources and also give a realistic measure of future public commitments and debt. Hence PPPs would be judged, compared to other financing and implementation mechanisms, relatively more on their efficiency and effectiveness basis than on budget enlargement (through a form of 'fiscal illusion' where current capital expenditure does not explicitly appear in government accounts as increased borrowing or liabilities). In those types of PPPs in which financial costs are forced to move 'on balance sheet' (albeit with the shifting of some more risk to the private sector) and the future liabilities counted as a component of national debt, it is likely that a change in the financial treatment of PPPs will have an impact in the UK and other EU Member States.

## **5. National efficiency gains or losses through PPPs**

In the context of PPPs and overall national efficiency, a major issue of concern is whether PPPs are used as a means to reduce the apparent tax burden, for example as measured by the tax to GDP-ratio? If activities can be shifted, at least partly, from the public sector to the private sector then it can be argued that, *ceteris paribus*, a reduction of the tax burden should be achieved. This may be only an apparent shift in tax burden as public sector liabilities will remain even if capital or operating expenditure is reduced in the short term. However, if PPPs actually improve efficiency then there could be a reduction in tax to GDP-ratios without a loss of service provision (and the reverse if PPPs are less efficient overall). For identifying the potential impact of PPPs on overall efficiency and tax to GDP-ratios several dimensions of PPPs have to be distinguished in order to define the relevant scenario for comparisons with alternative forms of providing and financing.

First, what is the alternative to PPP finance of a project that is relevant for comparison? The impact of PPP projects on overall efficiency will be different, for example according to whether the project: could not be accomplished otherwise; could only be achieved later or to a lower standard; or could be achieved only by debt finance. If a construct and operate-type project's construction would otherwise be funded mainly by

---

government debt, then a PPP will normally reduce debt, interest payments, and government spending on public sector staff and other costs. However, if the costs of the contract are allocated to current government expenditure, then there should not be any difference in operating costs between a PPP situation and direct government provision (assuming efficiencies are the same in each case and that all labour, capital and other costs, including pensions etc. are fully costed in). The capital expenditure on a public sector project will normally lead to an increase in debt, while the PPP expenditure may not be allocated against government capital expenditure but rather against revenue expenditure (although in a perfect market the long-term costs of each should theoretically be the same).

Second, it makes a difference if a PPP project is financed by government taxes or by user charges over its life cycle. User charge financed PPP projects may have a downward impact on the tax burden and tax to GDP-ratios, although some citizens might prefer paying user charges for the use of (semi-) private services to paying taxes for public goods (although different charging regimes would affect demand for services). However, if it is hard to avoid such expenditure there is – given equal efficiency of the alternatives – an equal burden on private income in both cases. User charges could then come very close to taxation, which is unproblematic if the principle of equivalence finance is considered to be superior to ability-to-pay-finance and if the supply of the service is the same in each case (arguably tax funded public provision, or a PPP based on an incorrect level of demand, could over or under estimate the supply and demand). There may also be distributional and equity issues as the burden of taxes and user charges will vary between individuals.

If a PPP project is financed by government debt, and if taxes are collected during the use and payback period of the project, then the contractual design could make a difference for tax burden-comparisons. Assuming that PPP and government funded projects are equally efficient, there should be no cash flow if the debt to pay for the project is paid back evenly every year. However, if the debt is paid back unevenly (e.g. in early years more interest but even amounts of capital are paid) then PPPs might result in relatively less expenditure in early years and more in later years – which may be politically expedient in the short term for a government. However, when inflation is considered the picture may differ according to contract details: if PPP payments go up with inflation then in later years there could be greater real public expenditure – and overall efficiency could be reduced.

Third, the statistical treatment of public expenditure may play a role in the time path of tax to GDP-ratios and thus in the interpretation of “efficiency gains”. Conventional public investment is treated as expenditure in public account statistics in the periods when projects are undertaken. In the case of PPP – e.g. when the public sector purchases services from infrastructure utilities – public expenditure may be spread over a much longer period. Consequently in periods when reliance on PPPs is increasing there will be a transitory reduction of public debt or expenditure and of the tax to GDP-ratios. Unless there are clear rules that future liabilities through PPPs need to be included with government debt liabilities then it is likely that governments may be attracted to PPPs as a means to finance projects ‘off balance sheet’. Without the explicit recognition of the scale of future public commitments being fully taken into account, the large scale use of PPPs can lead to major increases in public spending on capital projects and an associated short-term

economic stimulus. In the longer term capital expenditure may be less as the PPP commitments, like debt, must be paid, limiting future capital expenditure.

Fourth, PPPs can be used to realise the value of public assets that could not normally be achieved (for political or policy reasons). The example of building new schools on greenbelt land and then selling the former school site for housing has been discussed earlier. While such a transaction could possibly be carried out solely through public transactions, it may be more difficult to do so politically. In such cases PPPs could contribute to raising overall financial expenditure.

However, fifth, there may be changes in future freedom of action. There is a danger of long-term PPP contracts tying an organisation into a specific type of technology (or a particular building layout and usage) for decades, and hence reducing flexibility and the introduction of newer technologies in the future. For example if a PPP is used to build a hospital suitable for the current period, but then rapid technology, and/or the organisation of the activity, changes it may be very expensive to alter IT infrastructure and building layouts, so reducing future adaptability and efficiency and effectiveness. There is a further issue of the potential lack of competitiveness and higher prices in, for example, even minor alterations of infrastructure during the life of a PPP project depending on the contractual details.

As the different dimensions influencing a PPP interact, a comprehensive analysis would be needed into a large number of different cases or scenarios. Our analysis demonstrates that there is a broad scope of potential outcomes regarding the impact of PPP on overall efficiency and tax to GDP-ratios, and that there is no straightforward answer to the relationship between PPP and overall macro-economic efficiency.

## **6. Conclusions**

The use of Public Private Partnerships has grown until recently. In the UK the government has argued for PPPs on resource availability, efficiency and quality of delivery grounds while accepting continued government control and financing of most services and infrastructure. In general there appears to be a reluctance to increase the level of direct privatisation in most cases, although PPPs can in some cases be seen as a middle way between privatisation and public delivery, or as a means to introduce New Public Management concepts into public services.

Being confronted with large investment needs but with restrictions being placed on a government's ability to draw on borrowed money, new forms of investment finance unsurprisingly received the attention of policy makers. In different circumstances, PPPs are therefore primarily considered as a possible means to raise private funds and thus to close infrastructure gaps faster, and/or to improve the efficiency of the provision of infrastructure and services. More theoretical analysis of PPP would be useful, for instance through adapting principal-agent models, theories of co-operation, trust and partnership. One issue that remains crucial to the future impacts of PPPs is whether they offer genuine and sustainable increases in efficiency and effectiveness compared to the alternatives. If they do so then they should have a positive impact on future public resource availability, but if they do not then they may provide short-term financial and political benefits but at the cost of constraining future decision makers and placing greater pressures on public

---

finances in the longer-term. Our analysis demonstrates that there is a broad variety of potential outcomes regarding the impact of PPP on overall expenditure and efficiency.

The implementation of the new international accounting standards proposed by International Financial Reporting Interpretations Committee (IFRIC-12), and accepted by the European Commission, will have an important effect on the future use of PPPs. As the Treasury's Financial Reporting Advisory Board states "There will be an impact on budgets where the accounting treatment changes as a result of the proposals..." (FRAB, 2008), and current accounting procedures do not adequately take account of the "balance sheet" impacts, although this will vary for different users of PPPs. It may take some time to implement IFRIC-12 as each type of PPP may need to be considered separately by the relevant agency or government department and the details of future International Public Sector Accounting Standards become clearer. There will almost certainly be strenuous efforts to find ways of continuing to put public expenditure 'off balance sheet' either through new forms of PPPs or otherwise. For instance, assets might be provided through private sector classified organizations or sponsors that have a reason for the residual use of the assets created on its behalf, or through the private sector investing in Third sector organizations to enable them to undertake roles often undertaken by government (e.g. private investment in social housing), or through using unrealized gains on public assets as an input into a partnership.

Although there is some discretion in the government's exact interpretation of the accounting standards, and hence in what should be included on the public sector balance sheet, part of the public sector financial costs of PPPs will be forced to move 'on balance sheet' and future liabilities counted as a component of national debt. This would partly change the basis of the choice of using PPPs towards a more 'level playing field' with other financing sources and also give a more realistic measure of future public commitments and debt. Hence PPPs would be judged, compared to other financing and implementation mechanisms, on their efficiency and effectiveness basis, rather than on the basis of budget enlargement through leaving related liabilities 'off balance sheet'. Of course, issues such as value for money, efficiency, competition, capital availability, the politics of service provision (e.g. in the Health Service), contractual design and management, regulatory mechanisms and the sharing of risk will remain of key importance. Although the motivation for, and types of, PPPs differ across different EU Member States, levels of government and types of public body, the overall conclusion is that if new standards for accounting for PPPs are fully implemented then there may be a reduction in PPPs and a refocusing upon their potential efficiency gains. There remains a continued need for learning between public and private sector actors concerning the processes and outcomes leading to the future development, operation of Private Public Partnerships.

## **Acknowledgements**

The authors are grateful to two anonymous referees for their extremely useful comments. All views and errors remain those of the authors.

## **References**

- Ball, R., Heafey, M., and D. King (2002), *The Private Finance Initiative and Public Sector Finance, Environment and Planning C: Government and Policy*, 20, pp. 57-74.
- CEC (2004), *Green Paper on public-private partnerships and Community law on public contracts and concessions*, COM (2004) 327 (CEC, Brussels).
- Coulson, A. (2005), A plague on all your partnerships: theory and practice in regeneration, *International Journal of Public Sector Management*, 18, pp. 151-163.
- DTI (Department of Trade and Industry) (2004), *Second Report from the Trade and Industry Committee, Session 2003–04*, UK Broadband Market, HC 321 (HMSO, London).
- Dunleavy, P., Margetts, H., Bastow, S. and J. Tinkler (2006), *Digital era governance: IT corporations, the state and e-government* (Oxford University Press, Oxford).
- FRAB (Financial Reporting Advisory Board) (2007a), *Report for the period April 2006 to March 2007*, HC 664 (TSO London).
- FRAB (2007b), *Accounting for PPP Arrangements including PFI Contracts*, 10 December 2007, London, TSO, available online at: [http://www.aasdni.gov.uk/pubs/RABIG/RABIG%202007\\_23A.doc](http://www.aasdni.gov.uk/pubs/RABIG/RABIG%202007_23A.doc) (accessed 31 March 2008).
- FRAB (2008), *Accounting for PPP arrangements, including PFI, under IFRS*, 28 February 2008, London, TSO, available online at: [http://www.hm-treasury.gov.uk/media/E/B/frab90\\_accounting\\_for\\_ppp.pdf](http://www.hm-treasury.gov.uk/media/E/B/frab90_accounting_for_ppp.pdf) (accessed 30 June 2008).
- General Accounting Office (1999), *Public-Private Partnerships Terms Related to Building and Facility Partnerships* (GPO, Washington DC).
- Giloth, R. and R. Mier (1993), Co-operative Leadership for Community Problem Solving, in: Mier, R. et al. (Eds) *Social Justice and Local Development Policy* (Sage, Newbury Park CA).
- Grout, P. and M. Stevens (2003), The Assessment: Financing and Managing Public Services, *Oxford Review of Economic Policy* 19, pp. 215-234.
- HM Treasury The (2000), *Public Private Partnerships: the Government's Approach* (GSO, London).
- HM Treasury The (2003a), *PFI: meeting the investment challenge* (The Treasury, London). Available online at: [http://www.hm-treasury.gov.uk/media/648B2/PFI\\_604.pdf](http://www.hm-treasury.gov.uk/media/648B2/PFI_604.pdf) (accessed 05 January 2006).
- HM Treasury The (2003b), *Green Book, Appraisal and evaluation in central government* (The Treasury, London).
- HM Treasury The (2004), *Value for Money Assessment Guidance* (The Treasury, London).
- HM Treasury The (2005), *Lisbon Strategy for Jobs and Growth: UK National Reform Programme* (The Treasury, London). Available on-line at: [http://www.hm-treasury.gov.uk/media/093/DD/lisbon\\_jobs131005.pdf](http://www.hm-treasury.gov.uk/media/093/DD/lisbon_jobs131005.pdf) (accessed 05 January 2006).
- HM Treasury The (2006), *PFI: strengthening long-term partnerships* (The Treasury, London).
- HM Treasury The (2007), *PFI Signed Projects List - December 2004* (The Treasury, London). Available online at: [http://www.hm-treasury.gov.uk/documents/public\\_private\\_partnerships/ppp\\_pfi\\_stats.cfm](http://www.hm-treasury.gov.uk/documents/public_private_partnerships/ppp_pfi_stats.cfm) (accessed 21 September 2007).
- House of Commons Public Accounts Committee (1998), *The Skye Bridge* (42nd Report) (HMSO, London).
- House of Commons (2001), *The Private Finance Initiative (PFI), Research Paper 01/117* (House of Commons, London).
- House of Commons Public Accounts Committee (2003), *Delivering better value for money from the Private Finance Initiative*, (28th Report, Session 2002-2003) (HMSO, London).
- IASB (International Accounting Standards Board) (2006), *The International Financial Reporting Interpretations Committee Interpretation - IFRIC 12 Service Concession Arrangements* (IASB, London).

- 
- Jones, R.A. (2000), The European Union as a Promoter of Public-Private Partnerships, *International Journal of Public and Private Sector Partnerships*, 3, 1, 31-44.
- Joumard, I., Kongsrud, P. M., Nam, Y. and R. Price (2004), *Enhancing the effectiveness of public spending: Experience in OECD countries*, OECD Economics Department Working Paper (OECD, Paris).
- Lonsdale, C. (2005), Risk Transfer and the UK Private Finance Initiative, *Policy and Politics*, 33, 2, pp. 231-249.
- McQuaid, R.W. (2000), The Theory of Partnerships - Why have Partnerships? in: Osborne, S.P. (Ed.), *Managing public-private partnerships for public services: an international perspective* (Routledge, London) pp. 9-35.
- Malone, N. (2005), The Evolution of Private Financing of Government Infrastructure in Australia-2005 and Beyond, *Australian Economic Review*, 38, 4, 420-430.
- NOA (National Audit Office) (1999), *The Skye Bridge* (NAO, London). Available online at: [http://www.nao.gov.uk/publications/nao\\_reports/se1999\\_55.pdf](http://www.nao.gov.uk/publications/nao_reports/se1999_55.pdf) (accessed 5 May 2006).
- NOA (2002), *PFI Refinancing Update* (NAO, London). Available online at: [http://www.nao.org.uk/publications/nao\\_reports/01-02/01021288.pdf](http://www.nao.org.uk/publications/nao_reports/01-02/01021288.pdf) (accessed 05 January 2006.)
- NOA (2007), *Improving the PFI tendering process* (NAO, London).
- NHS (National Health Service) Executive (2004), *Public Private Partnerships in the National Health Service: The Private Finance Initiative Good Practice* (Treasury Taskforce, London).
- OECD (Organisation for Economic Development and Co-operation) (2008), *Public-Private Partnerships: In Pursuit of Risk Sharing and Value for Money* (OECD, Paris).
- Pollock, A.M., Price, D., and S. Player (2007), An examination of the UK Treasury's evidence base for cost and time overrun data in UK value-for-money policy and appraisal *Public Money and Management*, 27, 8, pp.127-33.
- Pollock A., Dunnigan M., Gaffney D., Macfarlane A., and F. Majeed (1997), What happens when the private sector plans hospital services for the NHS: three case studies under the Private Finance Initiative. *British Medical Journal*, 314, pp. 1266-71.
- Scottish Parliament (2002), *Report on Public Private Partnerships Volume 1: Report, SP Paper 653, Finance Committee 5<sup>th</sup> Report* (Scottish Parliament, Edinburgh). Available online at: <http://www.scottish.parliament.uk/business/committees/historic/finance/reports-02/fir02-05-vol01-03.htm> (accessed 21 September 2007).
- SC (Stirling Council) (2005), Stirling High School PPP Consultation 2 February 2005. Available online at: [www.stirling.gov.uk/stirlinghspppminutes020505.pdf](http://www.stirling.gov.uk/stirlinghspppminutes020505.pdf) (accessed 21 September 2007).
- WATIAC (Western Australia Technology and Industry Advisory Council) (2004), *Initiating and Supporting Major Economic Infrastructure for State Development: Opportunities for Government* WATIAC, Perth). Available on-line at: <http://www.wa.gov.au/tiac/opportunities/index.htm> (accessed 10 September 2005).