

THE SUBSTANCE OF ACCOUNTING FOR PUBLIC-PRIVATE PARTNERSHIPS

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INTRODUCTION

Much of the international attention devoted to Public-Private Partnerships (PPP) derives from public policy concerns about perceived or actual deterioration in those infrastructures believed to be prerequisites for sustained economic growth. This occurs in both industrialized and developing countries. A commentator in the *Financial Times* wrote about deteriorating US public infrastructure:

... unlike European countries including the UK, the US shows little sign of finding the will or the funding mechanisms to maintain what it has or to build anew. Mr Schwarzenegger spoke enviously of public-private partnerships in both Canada and the UK that have enabled these countries to start redressing their inadequacies (Gapper, 2008).

There is implied encouragement for the United States to adopt the PPP model in imitation of certain European countries. The United Kingdom pioneered the use of private finance for public infrastructure in the 1990s, though there were earlier precedents, particularly in Francophone and Spanish-speaking countries. International agencies for economic development in developing countries often promote PPPs as a funding mechanism, thus illustrating the worldwide importance of the accounting issues addressed in this paper (Grimsey and Lewis, 2007; Hemming et al., 2006; and Akitoby et al., 2007).

At this early stage, it is essential to clear away some terminological undergrowth which otherwise confuses debate. The UK Treasury (2008a) has defined terms in the following way:

Public private partnerships (PPPs) are arrangements typified by joint working between the public and private sector. In the broadest sense, PPPs can cover all types of collaboration across the interface between the public and private sectors to deliver policies, services and infrastructure. Where delivery of public services involves private sector investment in infrastructure, the most common form of PPP is the Private Finance Initiative (PFI).

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In the UK research literature and in UK policy circles, the term Private Finance Initiative (PFI) dominates in relation to service concession arrangements, which are the subject of this paper. Internationally, however, PPP is characteristically used instead and that practice is adopted here, except where referring to original sources that use PFI terminology.

Two issues have figured prominently in the recent literature about PPP projects, namely whether they deliver Value-for-Money (VFM) and how they should be accounted for, particularly by the public sector client. Governments in many countries have proclaimed the efficiency benefits of PPP but an attraction to governments has been that the PPP brings new capital assets without any public expenditure scoring of capital expenditure at the acquisition date or of the related liability.

Debates about infrastructure deficiencies typically contain two strands. First, the argument is often made that the private sector is inherently more efficient than the public sector. In the present public infrastructure context, it is contended that a private sector concessionaire will more efficiently manage the procurement and operation stages than a public authority. If this were the case, there would be potential VFM gains from adopting PPP in situations where conventional public funding is also available.

Second, there are privately or socially profitable investments that are not being undertaken because of some financial or institutional constraint (Heald, 1997). It is necessary to pinpoint these constraints, otherwise discussion of remedies proceeds in a vacuum. Sometimes the constraint is said to be the inability of public authorities to manage and deliver infrastructure projects. Sometimes the constraint is said to be that projects are 'not affordable' because of budgetary stringencies. Innovative use of the private sector via PPP is often canvassed as part of the solution. Whether this is the case depends upon the nature of the budgetary constraints perceived to be preventing conventional public funding. For example, *if* tolling of the PPP infrastructure is feasible, and *if* this does not directly or indirectly reduce public revenues, the potential for 'additionality' can be identified. If, however, the PPP infrastructure cannot be tolled, what happens is time re-profiling of publicly-borne costs from high upfront capital cost plus 'low' running costs to 'moderate' unitary payments to the concessionaire (i.e., private sector operator of the infrastructure). It might be expected that a severe recession, especially one that is concurrent across the major economies of the world, will give additional prominence to such arguments. Moreover, governments currently in office may apply very high implicit discount rates to costs occurring beyond their period of office, so the political calculus may diverge from the economic calculus promulgated in official guidance such as the UK Treasury's Green Book on project appraisal (Treasury, 2003).

One of accounting's most important impacts on government derives from its classificatory function. Determining which 'side of a line' a particular transaction falls can have profound implications for public policy. This impact

has intensified with the move of a number of industrialized countries from government accounting on a cash basis to accruals accounting closely linked to private sector regulation and practice. An archetypal case is the treatment of PPP assets.

This paper critically evaluates PPP accounting practice, as it has developed over a number of years, and the related financial accounting and reporting requirements. It leaves the analysis of the complex regulatory arena that has influenced the evolution of PPP accounting to a future article. It does not address the question of whether PPPs constitute 'good' or 'best' VFM, a vitally important topic that is outside its scope.

The analysis builds on the extensive research literature on PPP accounting. Working from knowledge of this literature the authors have examined regulatory material that is in the public domain. These two research resources have been supplemented by two others: face-to-face interviews with participants in the regulatory process and those implementing PPP accounting; and the participant-observer status of one of the authors. The interviews were conducted off-the-record, explicitly on the basis that there would be no attribution of opinions or acknowledgement that particular interviews had occurred. The working method was to submit a set of questions, relevant to that interviewee, in advance of the meeting. As this paper developed, interviewees were provided in advance with a draft version. Interviews were not recorded and limited notes were taken. The purpose was not to generate evidence that could be used but to confirm understandings of technical issues and to facilitate improvements in the technical exposition.

With regard to participant-observer status, one of the authors served a term as a member of the Financial Reporting Advisory Board (FRAB), which meets in private but publishes – after a one-meeting lag – all its working papers and comprehensive minutes of decisions. This practice began immediately after the *Freedom of Information Act 2000* came into force on 1 January, 2005. Participant-observer status conferred a deeper understanding of the technical issues; progress along the learning curve is faster when one is a participant in technical debates. The contribution of interviews and participant-observer status to this paper relates to process (e.g., speeding up the research and eliminating errors). The substantive evidence derives from the literature and from the analysis of documents in the public domain.

The paper is organized in the following way. The next section considers how two accounting criteria, each longstanding in other areas of financial reporting, have been used to determine balance sheet treatment. These are to assess which party to a PPP transaction (i.e., public sector client or private sector operator) bears the majority of risks and rewards or, alternatively, which party controls the asset. This is followed by a section examining UK experience with PPP accounting under UK GAAP, where there has been arbitrage between the accounting standard FRS 5A (ASB, 1998) and what purported to be an interpretation of FRS 5A (Treasury Technical Note 1 (Revised), henceforth

TTN1R) (Treasury Taskforce, 1999a). These approaches are based on ‘risks and rewards’. The subsequent section moves on to the United Kingdom’s adoption of IFRS as the anchor for accruals accounting in government, examining the reasoning behind the UK Treasury’s projection of IFRIC 12 (IASB, 2006) on to the public sector client. Operator accounting is separately analysed. This approach is based on control. We then examine the international developments through which the International Public Sector Accounting Standards Board (IPSASB) is developing similar ground, again using control and IFRIC 12. This is followed by a section which examines the national accounts treatment of PPP assets, which is – and is likely to continue to be – based on risks and rewards. The fact that the fiscal policy obligations of EU member states are calibrated on a national accounts basis, as is IMF Article 4 surveillance of member countries, gives this point high public policy salience. Finally, there is a brief conclusion.

TWO COMPETING CRITERIA: ‘RISKS AND REWARDS’ VERSUS ‘CONTROL’

Two kinds of accounting are central to the analysis of this paper: accounting as the basis for the financial reporting of entities that are legally obliged to report under Companies Acts or similar legislation (in some countries that now includes all government entities); and national accounts which are the basis for macroeconomic forecasting and policy and for various forms of international surveillance of the fiscal health of governments. These are the preserve of different professional groupings: accountants who are professionally qualified under the regulations of accountancy institutes licensed by governments; and economic statisticians who generally work for national or supra-national governmental bodies.

United Kingdom accounting regulators (when the Accounting Standards Board (ASB) was the top-level regulator under UK GAAP) and the Office for National Statistics (ONS) in its continuing implementation of Eurostat rules and guidance,¹ used the reasoning of ‘risks and rewards’ to determine the balance sheet treatment of PPP assets. With UK government moving to IFRS with effect from 2009–10,² the criterion in public sector client accounting switched from risks and rewards to control.

Three important research questions arise:

- (1) To what extent does the adoption of a risks and rewards criterion lead to consistent decisions across financial reporting entities?
- (2) To what extent will the switch from risks and rewards to control alter balance sheet treatment in financial statements?
- (3) How does the treatment of PPP assets differ between financial statements and the national accounts?

In relation to (1), evidence will be presented that there has been inconsistency, attributable in substantial part to arbitrage between different formulations of

risks and rewards. The answer to (2) is necessarily tentative, as the change from UK GAAP to IFRS took place in 2009–10 and an IPSASB standard is currently under development. Moreover, changes of treatment might be attributable to the way in which the risks and rewards criterion had previously been implemented rather than to inherent differences between risks and rewards and control. On (3), substantial differences of concept and application are identified, even when financial statements and national accounts both used the risks and rewards approach.

The line-drawing that is fundamental to the classificatory function of accounting requires the prior specification of the decision criterion. One of the resulting difficulties is that clarity of specification is required (so that individual accountants can implement, and their auditors approve the treatment, or disagree), but this clarity may then lead to the devising of institutional and contractual relationships that place particular transactions and assets 'just on the desired side' of the line. The desire to give definitive answers – On or Off balance sheet; consolidate or do not consolidate – raises the stakes.

Risks and Rewards in the Context of Leasing Standards

United States accounting standard-setters were the first to issue official pronouncements on the accounting treatment of leases. As early as 1949 the Committee on Accounting Procedures (CAP) required lessees to include footnote disclosures relating to the amounts and timing of lease payments and any other important terms of the leases. The Accounting Principles Board (APB), which succeeded CAP as the US standard-setter, issued four opinions on the issue which essentially retained the same disclosure requirements.

Reliance on disclosure alone was abandoned by the Financial Accounting Standards Board (FASB); it published *SFAS 13 Accounting for Leases* (FASB, 1976), which required different accounting treatments for different types of leases. This was the first accounting standard that adopted the risks and benefits (or rewards in UK terminology) approach in determining whether a lease is an operating or a financing lease. Specifically, the standard provided that:

... a lease that transfers substantially all of the benefits and risks incident to the ownership of property should be accounted for as the acquisition of an asset and the incurrence of an obligation by the lessee and as a sale or financing by the lessor (FASB, 1976, para 60).

This approach was essentially followed by the International Accounting Standards Committee (IASC), which published IAS 17 in September 1982 (IASC, 1982), and by the UK's Accounting Standards Committee (ASC), which published SSAP 21 (ASC, 1984) in August 1984. For example, in order to distinguish between a finance lease and an operating lease SSAP 21 defined the former 'as one in which the lessee has substantially all the risks and rewards associated with the ownership of the asset, other than the legal title' (para 8).

The rationale of this approach is based on the concept that accounting should reflect the substance, not the form, of a transaction. Thus, standard-setters considered that transactions resulting in transfers of risks and rewards are in substance acquisitions or sales of assets and therefore should be accounted as such. The concept of control was not the basis of any of the leasing standards discussed above. It is possible that control as a criterion for determining whether a lease represents a sale was not used because the leasing standards preceded the publication of conceptual frameworks which define assets with reference to control. For example, in its *Statement of Principles*, published in 1999, the ASB defined assets as 'rights or other access to future economic benefits *controlled* by an entity as a result of past transactions or events' (ASB, 1999a, para 4.6, italics added).

Control in the Context of Consolidation Standards

The concept of 'control' in financial accounting is mostly associated with the issue of consolidated statements. Through the years, accounting practice as to which entities an investor company should include in its financial statements has changed dramatically. In the USA, during the early days of consolidation (late 1890s and early 1900s), 100% ownership of an investee's shares was a necessary condition for a company to be included in the consolidated statements of the investor company. Subsequently, substantially-owned subsidiaries (e.g., at least 75% owned) were also consolidated, then majority-owned (51% owned) and then any subsidiaries in which the holding company had a controlling interest (either directly or indirectly held). According to IAS 27, the current IASB (2003c) standard on consolidation, ownership is no longer a criterion for consolidation but it is an indicator (usually the most obvious one) that control exists.

What constitutes control has been the subject of protracted deliberations related to IASB's consolidation project which was added to its agenda in June 2003. As the IASB indicated in Exposure Draft 10 *Consolidated Financial Statements*, published in December 2008, 'the main objectives of the project are to improve the definition of control' (IASB, 2008, para 1). Such long deliberations are indicative of the difficulty of making the concept of control operational, even in the context of consolidation from which it emanated.

Relationship between Risks and Rewards and Control

The relationship between risks and rewards and control is complex. The allocation of risks and rewards can be taken as an indicator of where control lies. In some circumstances, control might be an indicator of the allocation of risks and rewards, in the sense that control of management operations may create opportunities to shape where risks and rewards fall. However, it is possible to construct scenarios where there is control but where the majority of risks and rewards fall elsewhere. Take, for example, the structure of a pyramid holding

company with five tiers, at each of which the tier above holds 51% of the voting share capital. The holding company controls a company at tier 5 and will consolidate it as a subsidiary; however, the group's exposure to the risks and rewards of that company is only 3.5%.

A key appeal of the risks and rewards criterion is that its subject matter is more amenable to quantification. While attractive, this is also the reason for the erosion of risks and rewards as a criterion. If the task is to partition a fixed economic reality, quantification of risks and rewards is genuinely helpful in terms of informing judgement. If, however, the representation of economic reality, if not its substance, can be readily reconfigured in relation to pre-set lines, then quantification provides a tool for justifying desired accounting treatments. Writing about control systems, Hood (1994) noted that such systems, rather than improving with usage, might wear out through a process of auto-destruction. This vulnerability to auto-destruction can be seen in relation to the risks and rewards criterion. Examples include the manipulability of the 90% rule for leases in SSAP 21 (many leases just meet the test) and balance sheet decisions for PPP projects. This is one of the reasons why the IASB jointly with FASB are considering a new approach towards a leasing standard, requiring lessees to record an asset and liability, equal to the present value of the committed rental payments, and an asset and a liability equal to the fair value of any renewal option, residual value guarantee and/or contingent rent provisions in the lease (Nailor and Lennard, 2000). No distinction between operating and capital leases will exist and hence no determination of whether a lease transfers risks and rewards to the lessee will need to be undertaken.

ACCOUNTING FOR PPP ASSETS UNDER UK GAAP

In the 20 years since landmark announcements by the then Conservative Government, PPPs have become a significant procurement mechanism. Instead of procuring capital assets, governments contract with the private sector for the provision of specified services. Over this period the conceptual, technical and implementation issues arising from PPP accounting have proved difficult to resolve.

Client Accounting under UK GAAP

The chronology of client accounting indicates the nature of those difficulties. The Treasury established the FRAB in 1996 in order to inject an 'independent element' into accounting regulation for the switch by UK central government from cash to accruals with effect from 2001–02. The FRAB, subsequently put on a statutory basis by the *Government Resources and Accounts Act 2000*, has frequently drawn attention to the unsatisfactory condition of PPP accounting. In FRAB's First Report (FRAB, 1997, para 2.11.1), it noted with regard to the draft Financial Reporting Manual:

The application of GAAP to PFI projects is a complex subject. Detailed guidance is being developed by the Public Sector and Not-for-Profit Committee of the Accounting Standards Board. We accept that, for the time being, the Manual can only give a broad indication of the accounting treatment, but will return to this when detailed guidance is available.

In its Tenth Report, FRAB (2007c, Executive Summary, para 6) noted:

A particular area of interest that has been the concern of the Board for a long time is accounting for transactions financed by the Private Finance Initiative (PFI). The Board has expressed its concern over the level of inconsistency in accounting for PFI across different parts of the public sector, although there is some consistency within sectors.

The most convenient way to start is to examine how PPP assets are accounted for under UK GAAP. Table 1 provides an analysis of PPP schemes by government department: this includes both a department's own PPP schemes and those of public sector organizations for which it is responsible. This table shows that 13% of schemes by number are on the public sector balance sheet whereas 87% are off. However, in terms of value, the picture is quite different: 43% On and 57% Off. Table 1 shows that this divergence is a result of Transport having 40% of the total value and a ratio of 88% On: 12% Off. The possibility that these variations are solely attributable to the objective characteristics of the particular schemes within departmental spheres of responsibility will be rejected below.

Table 2 presents the chronology of accounting regulation for PPP after the first FRAB (1997) Report, extending the chronology established by Hodges and Mellett (2002 and 2005). Throughout the 2001–2 to 2008–9 period of accruals accounting with UK GAAP as the anchor, there was a tension between FRS 5A and TTNIR. Formally, the former is a standard whereas the latter is an interpretation, intended to assist public sector bodies with unfamiliar accounting transactions. In practice, they came to be viewed as competitor standards, creating the opportunity for arbitrage between them. An extensive consultancy business developed for accountancy firms to give advice in advance to both clients and bidders as to whether potential PPP projects would be On or Off the balance sheet of the public sector client.

Although never documented in the public domain, it became part of the common knowledge of participants in the PPP procurement process that, as auditors, PricewaterhouseCoopers and KPMG were more likely to pronounce a project Off than were Deloitte.³ The National Audit Office (NAO) became known to be much more insistent on On treatment than the appointed auditors of the Audit Commission. The NAO, headed by the Comptroller and Auditor General who is an Officer of Parliament, has more capacity to dispute accounting treatments with the Treasury. In contrast, the Audit Commission was constrained by the Government's control framework over the National Health Service (NHS) and local authorities which directly linked funding/permissions to off-balance sheet treatment. Moreover, the Audit Commission itself could not instruct its appointed auditors which included private firms as well as its own

Table 1
Balance Sheet Treatment of Signed PFI Deals (October 2007)

	<i>Is Capital Value Scored On or Off the Departmental Balance Sheet (On/Off)?</i>					
	<i>No. of Schemes</i>		<i>Total Capital Value (£m)</i>		<i>Percentage of Capital Value</i>	
	<i>On</i>	<i>Off</i>	<i>On</i>	<i>Off</i>	<i>On</i>	<i>Off</i>
Cabinet Office	1	1	330	18	95%	5%
Crown Prosecution Service	1	0	0	22	0%	100%
Department for Business, Enterprise and Regulatory Reform	1	2	22	41	35%	65%
Department for Children, Schools and Families	1	114	21	4,762	0%	100%
Department for Communities and Local Government	0	48	0	1,333	0%	100%
Department for Culture, Media and Sport	0	14	0	236	0%	100%
Department for Environment, Food and Rural Affairs	0	17	0	1,508	0%	100%
Department for Transport	21	30	19,938	2,771	88%	12%
Department for Work and Pensions	0	1	0	990	0%	100%
Foreign and Commonwealth Office	1	1	17	74	19%	81%
Health	5	88	243	9,769	2%	98%
Home Office	0	26	0	849	0%	100%
Inland Revenue	1	7	182	658	22%	78%
Ministry of Defence	12	39	2,267	3,495	39%	61%
Ministry of Justice	26	2	725	51	93%	7%
Northern Ireland Executive	7	26	327	737	31%	69%
Scottish Government	3	98	32	4,647	1%	99%
Welsh Assembly Government	1	23	7	515	1%	99%
TOTALS	81	537	24,110	32,475	43%	57%

Note:

No balance sheet information was available for two Scottish Government schemes, so they have been excluded from these figures.

Source: Calculated from http://www.hm-treasury.gov.uk/media/B/E/pfi_signeddeals_231007.xls (last accessed 22 February, 2008).

staff. In private, there is recognition by many auditors that TTN1R was used to dilute FRS 5A by clients and their financial advisers. A fall-back defence of allowing this practice was that off-balance sheet treatment had become 'industry practice'; it was also believed to be what ministers desired.

FRS 5A approaches the question as to whether a particular asset should be on the balance sheet of an entity in terms of which party bears the majority of the risks and rewards, not in terms of ownership. Figure 1 shows an analysis

Table 2
Chronology of UK Accounting Regulation of Public-Private
Partnerships

<i>Date</i>	<i>Development</i>
September 1997	Treasury Taskforce (1997) published Technical Note 1, in the context of a perceived absence of guidance in UK GAAP as to how the public sector client should account for PPP assets.
December 1997	ASB published an exposure draft that proposed the amendment of its 'substance over form' standard, FRS 5 (ASB, 1995), in order to deal specifically with PPP accounting.
September 1998	ASB published FRS 5A (ASB, 1998); this related specifically to PPP accounting and was motivated by a desire to avoid 'bad' practices that ASB believed it had purged in the private sector returning via the public sector.
June 1999	Treasury published <i>How to Account for PFI Transactions: Technical Note 1 (Revised)</i> (Treasury Taskforce, 1999a), a revised version of its September 1997 guidance.
2001-02	First year in which UK central government accounted on an accruals basis, therefore being the first year when the controversies between the ASB and Treasury over PPP accounting had operational impact.
March 2006	After years of widespread criticism about perceived inadequacies and inconsistencies in PPP accounting, the Treasury set up a PFI Working Group; this had membership from the Treasury, the Audit Commission, the National Audit Office and large professional firms.
February 2007	The Working Group reported in favour of withdrawing Technical Note 1 (Revised) and FRAB declared itself 'minded to recommend' withdrawal but did not make a recommendation to the Treasury so as to allow the Treasury more time in which to assess the budgetary implications.
21 March 2007	The Chancellor of the Exchequer announced in his Budget that the United Kingdom would move its government accounting from UK GAAP to IFRS, with effect from 2008-9. The practical effect of this announcement was that both FRS 5A and Technical Note 1 (Revised) would be irrelevant after 2007-8.
12 March 2008	The Chancellor of the Exchequer announced in his Budget that the switch to IFRS would be postponed until 2009-10. Members of FRAB giving evidence to the Treasury Committee (2008) of the House of Commons indicated that the original timetable had been too tight to accommodate the workload involved for certain departments (Defence and Health being mentioned in relation to PPPs) and in relation to the funding timetable for NHS bodies.
12 June 2009	The Treasury (2009) placed updated consolidated budgeting guidance on its website, informing departments and other entities that, whereas Parliamentary Estimates and Resource Accounts would be on the basis of IFRS treatment of PPP projects, budgeting would follow national accounts treatment.

Figure 1

Analysing Balance Sheet Treatment

On balance sheet of purchaser Off balance sheet of operator	On balance sheet of purchaser On balance sheet of operator	On balance sheet of purchaser
4	1	
		Off balance sheet of purchaser
Off balance sheet of purchaser Off balance sheet of operator	Off balance sheet of purchaser On balance sheet of operator	
3	2	
	Off balance sheet of operator	
	On balance sheet of operator	

of balance sheet treatment; intuitively one would expect that particular PPP schemes would fall into either the top-left (On:Off) or bottom-right (Off:On) quadrants. This means that both the On:On and Off:Off quadrants would be empty: the former entails double counting and the latter signifies 'orphan assets'.

In practice, however, on the basis of the evidence available to them, different judgements might be made by the finance directors and auditors on the client and operator sides, thus leading some marginal cases to fall into these otherwise empty quadrants. For example, the public sector client might believe that it had successfully transferred the majority of risks and rewards to the operator, which itself believed that this had not occurred. Unlike the national accounts, the financial reports of independent reporting entities do not articulate. Unfortunately, it is not practical to map the PPP schemes underlying Table 1 on to the quadrants in Figure 1. As discovered by the NAO when it did a sampling exercise, obtaining the accounts of Special Purpose Vehicles (SPVs) is very time-consuming. Moreover, both client and (particularly) operator accounting on particular PPP projects have changed through time.

Hodges and Mellett (2002 and 2005) examined how the ASB came to produce FRS 5A and how the Treasury subsequently revised the original Treasury Technical Note 1 (TTN1) (Treasury Taskforce, 1997). There were two main areas of dispute. The first related to the separability of the unitary payment under PPP contracts between a facility element and a service element. On this,

the ASB largely held its ground, though modifying its tests for separability (Hodges and Mellett, 2002, p. 145).

The second related to construction risks that ASB held to be irrelevant to the judgement of which party is bearing the majority of the risks and rewards of asset ownership. On this, ASB held its ground despite the attempt to re-open the issue that Treasury (1998) articulated in its comment letter on the Exposure Draft (ASB, 1997). Hodges and Mellett (2005, p. 172) also documented other forms of communication between the Treasury and the ASB during the promulgation of FRS 5A: ‘... regular meetings between the Treasury and the ASB and the fact that [the Treasury] already had a representative with observer status on the board made its submission rather different in purpose than other comment letters’.

There was no requirement for ASB to endorse TTN1R, yet there were extensive discussions between ASB and Treasury. According to the Treasury (1999) press release, TTN1R reflected extensive consultation between the Treasury, the ASB and contractors and ‘offers the clarity of approach that the industry has been waiting for’. Hodges and Mellett (2005, p. 174) quoted an interviewee who had been directly involved, representing the public sector interest:

Eventually we took the technical note through to the board, though in theory we didn’t have to. We could have just taken [it] through the FRAB. We wanted to have the assurance that what we were doing was in line with the application note. So it was at the end of March I got a letter from David Tweedie⁴ providing some wording to be put into the Treasury press release ...

While not endorsing TTN1R as not inconsistent with UK GAAP, the ASB had implicitly given the Treasury cover for TTN1R, the wording – to which ASB effectively assented – creating opportunities for arbitrage. Future PPP contracts could be written in a way that satisfied off-balance sheet treatment on TTN1R even if they would not have satisfied FRS 5A.

In retrospect, the pivotal differences between FRS 5A and TTN1R can easily be summarized. It is less clear how well the implications of these differences were understood in 1999. First, FRS 5A made it clear that when the majority of demand risk and residual value risk were allocated to the client, then the asset should be recognized on its balance sheet. This would hold for most UK PPPs. In contrast, TTN1R did not so prioritize demand risk and residual value risk, encouraging consideration of a wider range of risks (e.g., third-party revenues, design risk, penalties for under-performance, penalties for non-availability, potential changes in relevant costs and obsolescence risk). Second, supplementary guidance on how to apply the TTN1R was written for the Treasury by PricewaterhouseCoopers; known as the ‘Methods Statement’ (Treasury Taskforce, 1999b), it was never formally issued but was widely circulated among those preparing PPP projects and making balance sheet judgements. This provided guidance on how to make quantitative assessments,

relying in part on Monte Carlo simulations of risks and rewards. Heald (2003) demonstrated how the FRS 5A irrelevance of construction risk to balance sheet treatment might, for example, be circumvented by blurring the distinction between construction risk and design risk in the quantitative analysis promoted by TTN1R. Simultaneously, there could be a relegation of demand risk and residual value risk relative to other types of risk. The impact on client accounting of the Treasury's updating of its TTN1R was very modest in relation to the expectations attached to FRS 5A.⁵

Throughout this period, the Treasury denied the objective of keeping assets off the public sector balance sheet (e.g., Treasury, 2006). However, as both media coverage and academic commentary (Broadbent and Laughlin, 2002; Froud, 2003; and Rutherford, 2003) have observed, the credibility of this public position has been undermined by the widespread understanding that the PPP was often the 'only show in town' and that, otherwise, there would be no new assets. The then Comptroller and Auditor General criticized government departments for providing web guidance that on-balance sheet PPP would not be funded; such public statements might have been unwise but certainly reflected operational reality. In the critical period 1997 to 1999, the issue of PPP balance sheet treatment by the public sector mattered more to the Treasury than it did to the ASB. This was a period of very tight public expenditure control during which accounting treatment was portrayed as irrationally hindering much-needed public capital investment.

In central government, the NAO's insistence on FRS 5A brought many PPPs on balance sheet, notwithstanding that TTN1R had been devised for central government. Elsewhere, the public expenditure control framework set by the Treasury and implemented by government departments over entities within their functional remit led to TTN1R trumping FRS 5A. Hodges and Mellett (2002, p. 147) concluded that the ASB and the Treasury both prevailed on the dimensions most important to them: the ASB in terms of asserting its regulatory authority over the private sector; and the Treasury in facilitating the rapid expansion of capital expenditure via PPP schemes.

In March 2006, the Treasury established the PFI Technical Working Group at the request of FRAB to discuss the possible amendment or withdrawal of TTN1R. Three months later another step was taken: 'At the FRAB meeting on 29 June, 2006, the working group was asked to proceed on the basis that the FRAB will recommend to HM Treasury that the TN be withdrawn' (FRAB, 2007a, p. 2). The final report of the Working Group was presented to FRAB on 12 February, 2007, when 'FRAB concluded that it is minded at its next meeting to advise HM Treasury to withdraw its Technical Note, subject to a further presentation and package of proposals from HM Treasury' (FRAB, 2007b, para 18). The first year to be affected would have been 2008–9 but the prospective recommendation was overtaken by the March 2007 Budget announcement that IFRS would be adopted in 2008–9.

Operator Accounting under UK GAAP

Most of the literature on PPP accounting concentrates on accounting by the public sector client, with the result that less is known about the evolution through time of operator accounting. Knowledge about operator accounting mainly resides in the professional audit firms. Notwithstanding the launch of the UK Government's PPP programme in 1992, only a limited number of projects came through until the end of the 1990s. An important aspect of PPP is the use of an SPV to manage the project, with shareholdings in the SPV initially held by the construction company, the facilities management company and the financial backers of the project. During this period, the SPV would typically account for the project as tangible fixed assets on its balance sheet in accordance with FRS 15 (ASB, 1999b). This was seen as the appropriate treatment, and there were cases in which the public sector client made it clear that its case against fixed assets being on its own balance sheet would be assisted by keeping them on the balance sheet of the SPV; this would help the client to gain necessary permissions from higher tiers of government.

Once companies involved in the promotion and execution of PPP projects had gained substantial operating experience, public sector clients sought reductions in prospective unitary charges before new PPPs were signed (Austin, 2009). This pressure led to a change in operator accounting. Depreciation being a non-cash expense, an SPV using fixed asset accounting might accumulate losses during the early years of the concession period yet have substantial locked-in cash. This can happen when a PPP asset, with an economic life of 60 years, is depreciated on a straight-line basis over the concession period of 30 years, and/or when there is a slow build-up of capacity utilization. Under fixed asset accounting, an SPV might not become profitable until the final third of the 30-year concession period (Austin, 2009). The time profile of an SPV's profits is rear-loaded and, while throughout the concession period the participating shareholders would be generating profits from the supply of resources and/or services to the SPV, the SPV itself would not be able to pay dividends out of its cash holdings because of accumulated losses.

After a period from 1999, during which there was an upwards step-change in the scale of the PPP programme, a fundamental change to operator accounting took place in circa 2002–3. Contract debtor accounting replaced fixed asset accounting (Austin, 2009). Under this method of accounting, instead of recognizing a fixed asset, the operator recognizes a debtor. This re-profiled reported profitability so that the SPV is profitable throughout the 30-year life of the project.

In addition to the new-found capacity of the SPV to distribute profits, this accounting treatment also brought substantial tax advantages. An SPV using contract debtor accounting is likely to qualify for composite trade relief under which:

100% of the debtor is written off to revenue for tax purposes. This has considerable benefits to the [SPV] which tend to be shared with the purchaser through a reduced unitary charge (Steeds, 2006).

This coincided with a change in the contractual structure of new PPPs. Previously, irrespective of operator accounting treatment, the SPV had claimed capital allowances on the basis that it had a lease to occupy the land and that this land interest made capital allowances the appropriate tax regime. Instead of a lease the SPV acquired a non-exclusive licence to go on the land and develop a building for the client, meaning that it could not claim capital allowances on elements of its construction expenditure. As a concession, (what is now) Her Majesty's Revenue & Customs allowed composite trade relief: rather than constructing the building as the setting for the SPV's trade, the construction of the building is treated as being part of its trade and therefore fully deductible. This 100% deductibility under composite trade relief was much larger than the circa 30% available under the capital allowances system. Bringing forward in time nominal deductions against taxable profits increases their present value, markedly so, given the high expected rates of return on equity capital which characterize PPPs. Although not inherently linked, composite trade tax relief became identified with contract debtor accounting because they were adopted at the same time.

The resulting asymmetry of Off:Off (orphan assets) was not of concern to the SPV or its auditor because their sole focus was on their particular entity. The preceding discussion of the application of the risks and rewards approach answers research question 1: UK experience has demonstrated inconsistent treatment in financial statements. The asymmetry of PPP accounting (Off: Off) is therefore jointly attributable to the control framework faced by the public sector client and the advantages that contract debtor accounting offered to the SPVs.

ACCOUNTING FOR PPP ASSETS UNDER IFRS – UK ARENA

The decision of the UK Government in March 2007 to move the anchor of public sector accounting from UK GAAP to IFRS had far-reaching implications for client accounting. That announcement did not directly affect operator accounting, but the move of EU-listed companies to EU-adopted IFRS, for financial periods beginning on or after 1 January, 2005, did.

Client Accounting under IFRS – UK Arena

Accruals accounting in UK government (known as 'Resource Accounting') is anchored on best private sector practice, modified as necessary to suit the special circumstances of the public sector.⁶ The switch of EU-listed companies to IFRS from January 2005 changed what constituted private sector best practice; in time UK GAAP, the public sector's anchor since 2001–2, would either converge on

IFRS or wither away. Accordingly, the question became when, not whether, UK government accounting would switch to being IFRS-based. The Treasury and FRAB made extensive preparations in the form of developing a draft I-FReM, the IFRS counterpart to the UK GAAP-based Financial Reporting Manual. This conversion acquired a timeline with the Treasury's March 2007 announcement of IFRS conversion for 2008–9, later rescheduled to 2009–10. Issues relating to PPP accounting under IFRS were the decisive factor behind this delay, though there had also been an underestimate of the amount of work involved in the changeover.

The prospective switch to IFRS nullified the impending recommendation of FRAB that PPP accounting would be improved by the Treasury withdrawing TTN1R with effect from 2008–9, leaving the field to FRS 5A. The new problem was the absence of guidance in IFRS as to how PPP assets should be accounted for by the client. All that IFRS contained was IFRIC 12, an interpretation not a standard, and this was directed exclusively to the private sector operator of PPP contracts. The question arose as to whether IFRIC 12 could be 'stretched' to provide the necessary guidance.

Figure 2 shows the final version of the diagram developed by the Treasury to explain accounting treatment of PPP assets under what has become known as the 'mirror image of IFRIC 12'. For expositional convenience, the columns on the flow chart are labelled as Columns 1 to 3. For the mirror-image treatment under IFRIC 12 to apply, there must be 'Yes' answers to each of three questions:

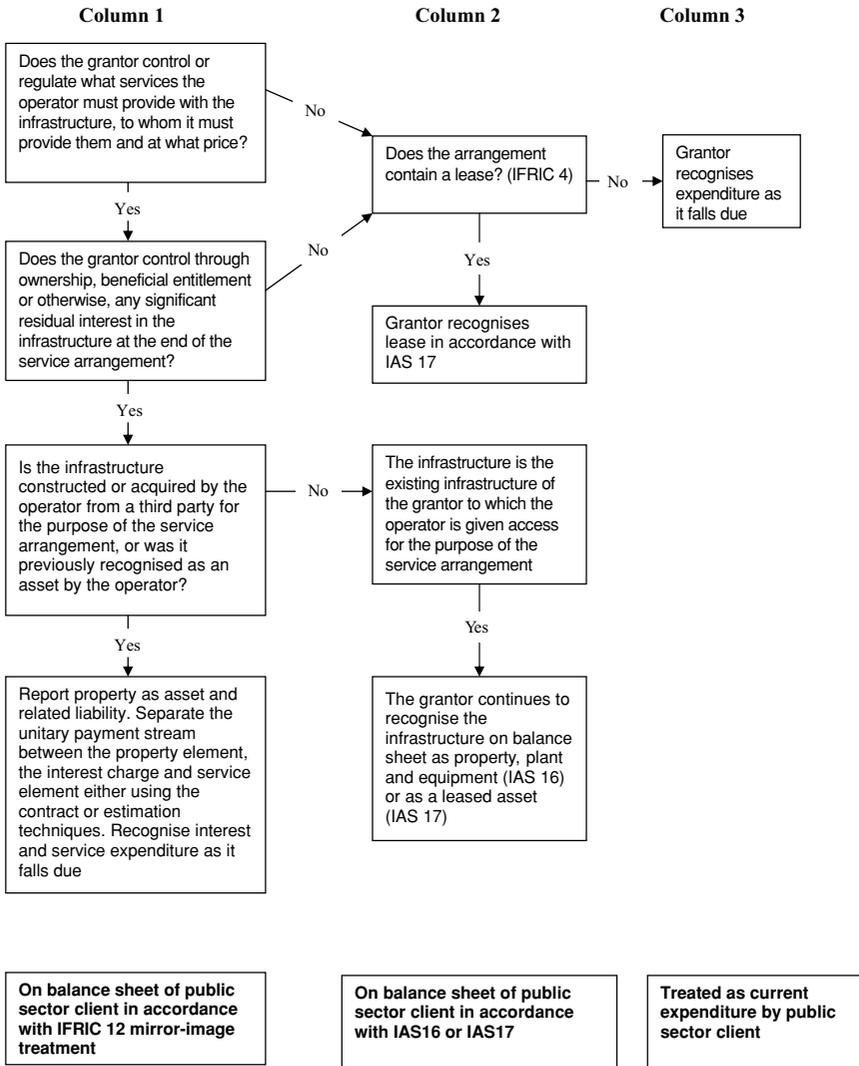
- The first question relates to control by the grantor (i.e., public sector client) over the use of the infrastructure and the pricing of the services it provides.
- The second question relates to the public sector client having control over the residual interest in the infrastructure after the end of the concession period.
- The third question relates to whether the infrastructure is acquired from a third-party or was previously recognized as an asset by the operator.

With affirmative answers to each, the accounting treatment is to separate the unitary charge between property, interest and service elements, and to report the property element as an asset and related liability and to recognize the interest and service expenditure as they fall due. Column 1 of Figure 2 details this mirror-image treatment. Under IFRIC 12, the private sector operator does not account for concession assets as property, plant and equipment on its balance sheet, whereas the public sector client does under the mirror image.

Column 2 deals with two cases. The first is where the arrangement contains a lease in accordance with IFRIC 4 (IASB, 2004), in which case the public sector client recognizes the lease on its balance sheet in accordance with IAS 17 (IASB, 2003b). The second is where the operator is given access by the grantor to owned or leased assets, in which case these stay on the latter's balance sheet.

Figure 2

UK Treasury Flow Chart for Public Sector PPP Client under IFRIC 12



Source: Adapted from Treasury (2008b).

Column 3 then covers the case when there is neither a concession (IFRIC 12 does not apply) nor a lease (IFRIC 4 does not apply); the grantor then recognizes expenditure as it falls due.

The practical issue faced by the Treasury was how to fill the gap in IFRS about client accounting for PPPs. This has been done by two kinds of ‘stretching’. First,

IFRIC 12, designed solely for the private sector operator, has been extended by creating the IFRIC 12 mirror-image treatment. The fact that the private sector operator will not generally account on-balance sheet for the property therefore indicates that the public sector should do so. Implementation might encounter difficulties, particularly in relation to PPPs that do not readily fit into the IFRIC 12 model.

Second, the term ‘infrastructure’ has been stretched far beyond the ‘underlying fabric’ of Diamond’s (1990, p. 77) definition as ‘the diverse collection of public assets that underpins the economy – however provided and managed’. A vast range of assets now falls within PPP schemes, for example prisons, schools, hospitals, student residences and administrative blocks. Roads fit into the traditional notion of infrastructure that stresses the network dimension. Infrastructure now seems to mean any asset that can be made the subject of a public-to-private service concession.

This extension of IFRIC 12 and the stretching of the term ‘infrastructure’ have provided a basis on which the important topic of PPP accounting has been dealt with by the UK public sector from IFRS implementation in 2009–10. However, certain aspects require attention. IFRIC 12 uses the criterion of ‘control’ rather than that of ‘bearing the majority of risks and rewards of ownership’ used by both FRS 5A and TTN1R. The ‘risks and rewards’ accounting criterion was aligned with the notion that risk transfer is the central driver through which the public sector will gain efficiency benefits from using PPPs. The switch to IFRS will create a decoupling. A difficult question to answer is to what extent the public sector client’s on-balance sheet decision would actually differ between ‘risks and rewards’ (FRS 5A version) and ‘control’ (mirror image of IFRIC 12). ‘Control’ in the private sector is more clear cut than ‘control’ in the public sector, the ambiguities of which have generated a huge literature in political science (e.g., Kaufmann et al., 1986).

A driving factor behind these developments was the search for symmetry in the accounting treatment of public sector client and private sector operator. Extensive Off:Off treatment throughout the 2000s was a manifestation of accounting regulation problems that could be communicated to a wider public, including Members of Parliament, the media and informed public opinion. While exceptional cases of Off:Off might have been legitimate, its extent became interpreted as evidence that accounting was being distorted, possibly manipulated. Full symmetry may in practice still not be achieved. For example, most PPPs in the United Kingdom are managed via unlisted SPVs. Whereas a listed company undertaking/consolidating PPP schemes is required to apply IFRIC 12 from January 2008, the SPVs might continue to account under UK GAAP, applying FRS 5A for as long as that option remains available.

Operator Accounting under IFRS – UK Arena

The position before UK adoption of IFRS was that operators were accounting under UK GAAP for their interest in PPP contracts as contract debtors,

not as tangible fixed assets. Because IFRS contained no explicit guidance on PPP accounting, this gap had to be filled given the growing international importance of PPP as a method of public procurement. IFRIC 12 (IASB, 2006) filled that gap, though the opposition of certain governments, particularly Spain, delayed its incorporation into EU-adopted IFRS until December 2008. However, early adoption of IFRIC 12 by reporting entities was permitted. The obligation of an EU-listed parent to adopt EU-adopted IFRS from January 2005 (though not IFRIC 12 before January 2008) did not prevent its SPVs from remaining on UK GAAP. Indeed, the complexity of PPP contractual and financing arrangements has led to the default option being that SPVs stay on UK GAAP.

As discussed above in relation to client accounting, IFRIC 12 uses the criterion of control, not that of risks and rewards. It would have been possible to stay with risks and rewards, starting from IAS 17 (IASB's leasing standard), but that was not done. This is explicable in terms of general dissatisfaction with leasing standards based on risks and rewards and the IASB's current move towards the 'right of use' approach to lease accounting.

Written exclusively for the private operator, IFRIC 12:

... applies to public-to-private service concession arrangements if:

- (a) the grantor controls or regulates what services the operator must provide with the infrastructure, to whom it must provide them, and at what price; and
- (b) the grantor controls – through ownership, beneficial entitlement or otherwise – any significant residual interest in the infrastructure at the end of the term of the arrangement (IASB, 2006, para 5).

If both these conditions are satisfied, the PPP operator will not account for the project as property, plant and equipment. It might seem that most PPPs would be so categorized. However, the above quotation contains a number of words whose precise meaning is contestable. Condition (a) uses the verb 'control' but also offers the alternative of 'regulate'. 'Control' is likely to be satisfied for a typical PPP project when the public sector client is the payer of a unitary charge. This may become less clear when the operator is reimbursed by direct user charges over which it exercises control. In the context of toll roads, the operator may have the freedom to set tolls, subject to a profit or revenue cap. In relation to government activity, 'regulate' is more expansive than 'control'. For example, would the regulation of services and price-cap regulation which governments apply to privatized public utilities such as electricity and water bring them within IFRIC 12? On the basis solely of condition (a), this might remove plant, property and equipment from the balance sheets of the privatized utilities, with the implication that these should instead be on the balance sheets of the governments that privatized them.

Condition (b) refers to 'significant residual interest'. Take a PPP project, whether a hospital or prison or school, that has an economic life of 60 years and is the subject of a 30-year concession: at the end of the concession, the operator must transfer, free of charge, the facility to the client in a condition appropriate for such an asset half-way through its economic life. The residual value risk clearly lies with the client. The residual value will depend, *inter alia*, on patterns of medical care delivery, sentencing policy and population demographics 30 years ahead. Experience of accounting under UK GAAP indicates that the attachment of monetary values to residual value risk involves discretionary judgements. This PPP would satisfy condition (b), in which the adjective 'significant' in 'significant residual interest' is important. Now modify the PPP arrangement so that the public sector client has the right to acquire the facility at some price specified in the contract: perhaps a contractually agreed cash price, or market value or adjusted market value. Would this arrangement satisfy condition (b)?

This question is important for two reasons. First, it has arisen in the context of what are known as NHS Local Improvement Finance Trust (LIFT) projects, a form of PPP extensively used for general (i.e., medical) practitioner premises, health centres and small community hospitals. The operator LIFTCO holds title to the land, which has sometimes been transferred from the client as part of the PPP arrangement. At the end of the concession the client has the right to buy at an adjusted market value, but could, in principle, walk away from the 30-year old facility. When there is not 'control of any significant residual interest', then IFRIC 12 does not apply and the operator should account under the leasing standard IAS 17 (IASB, 2003b). If a LIFT fails condition (b), then the mirror-image treatment of IFRIC 12 would require the client to assess whether there was a lease, or if not, the unitary charge can be expensed to the income statement. Second, there is a history of PPP arrangements being designed around accounting standards in order to achieve desired treatments. In the context of the UK PPP programme, LIFT projects represent very small amounts. However, they might have constituted a precedent which could later be used to take large mainstream PPPs out of the mirror-image treatment of IFRIC 12.⁷

Under IFRIC 12 (IASB, 2006), the concept of control determines whether or not the private operator records plant, property and equipment on its balance sheet. Under a service concession, the operator has access to the infrastructure in order to supply public services on behalf of the client but does not have control of the infrastructure. If the client has control, as defined by meeting both conditions (a) and (b), the type of asset to be recorded by the operator depends on the allocation of risks and rewards. There are three possible treatments:

- (i) the operator will recognize a financial asset to the extent that it has an unconditional contractual right to receive cash or another financial asset from or at the direction of the client (para 16);

- (ii) the operator will recognize an intangible asset to the extent that it receives a right/licence to charge users of the public service (para 17);
- (iii) if the operator is paid partly by a financial asset and partly by an intangible asset, the operator will then account separately for each component (para 18).

A likely example of financial asset treatment would be a hospital or prison, in which cases payment is solely by the client. A toll bridge, which does not receive public subsidy, would seem to fall into the category of intangible asset treatment. A leisure complex, funded in part by the local authority client paying a unitary charge and partly by user charges, would appear to require separation into a financial asset and an intangible asset.

However, there are two caveats that may qualify the apparent clarity. First, as an echo of the way in which distributable profit and taxation considerations shaped operator accounting under UK GAAP, the profit profile of the SPV is sensitive to the accounting choice. In the early years, the intangible asset model is less profitable than the financial asset model. This arises because of the impact of straight-line amortization. An attempt to alleviate this problem has been made by means of an amendment to IAS 38 (KPMG, 2008) which allows methods that result in accumulated amortization lower than under the straight-line method: for example, the 'units-of-production' method might be applied to a fixed-capacity facility characterized by lower demand in the early years of the concession.

Second, the transition from UK GAAP (which in this context means FRS 5A) to IFRS (meaning IFRIC 12) is complicated not only by the relationship between SPV and parent, but also by differences in implementation timetables. Whereas EU-listed companies were required to adopt IFRS for accounting periods beginning on or after 1 January, 2005, the adoption of IFRIC 12 was not required until accounting periods beginning on or after 1 January, 2008, though earlier voluntary adoption was permitted. Moreover, SPVs may continue to account under FRS 5A, something that may be attractive because of taxation, debt covenants and the complexity of PPP contracts. Those SPVs which have an EU-listed parent have to prepare unpublished parallel IFRS accounts for consolidation purposes. To the extent that particular PPPs have been structured in response to then prevailing accounting standards, they may be substantively affected by such changes in accounting standards. In turn, the accounting requirements of IFRIC 12 may influence the structuring of new PPP projects.

ACCOUNTING FOR PPP ASSETS UNDER IFRS AND IPSAS – GLOBAL ARENA

In the global arena, IFRS applies to the listed private sector whereas there are no enforceable standards for the public sector, the adoption of IPSAS by governments being voluntary. The main body of IFRS does not provide standards on how PPP projects should be accounted for. With regard to the private sector

operator, this gap has been filled by IFRIC 12. With regard to the public sector client, IPSASB is working towards establishing a standard. This has been adopting broadly the same approach – the mirror-image treatment of IFRIC 12 – that has been promulgated in the United Kingdom.

Client Accounting under IPSAS – Global Arena

When the UK Treasury and FRAB were developing the UK approach to PPP accounting under IFRS, it was known that IPSASB was engaging on a much larger project intended in due course to be promulgated as an IPSAS. This project led to a Consultation Paper in March 2008 (IPSASB, 2008) and to Exposure Draft 43 in February 2010 (IPSASB, 2010). The IPSASB (2008) consultation paper on public sector client accounting for service concession arrangements covered more issues than the Treasury (2008b) guidance, particularly with regard to the accounting when the PPP does not meet the proposed criteria for a service concession agreement. Some individuals who had been involved in the UK developments were also participants in these international discussions.

The IPSASB approached the matter from a similar direction to the Treasury, and proposed to extend IFRIC 12 to the public sector client by adopting the mirror-image treatment. Its approach was summarized in two flow charts. Flowchart 1 (IPSASB, 2008, p. 69) shows how to establish whether there is a service concession arrangement. This depends upon whether the contract meets two criteria:

1. The grantor controls or regulates what services the operator must provide with the underlying property, to whom it must provide them, and the price ranges or rates that can be charged for services; and
2. The grantor controls – through ownership, beneficial entitlement or otherwise – the residual interest in the property at the end of the arrangement (IPSASB, 2008, para 102).

When both control criteria are met, the grantor ‘Reports the property as an asset and reports a related liability reflecting any obligation to provide compensation (cash or non-cash) to the operator for the property’ (p. 69). Flowchart 2 (p. 70) provides for when only one of the two control criteria are met.

There are two important differences between the UK requirements and the then proposed IPSASB treatment. The first relates to the timing of recognition (IPSASB being earlier) owing to different assumptions about whether the grantor or the operator bears construction risk: the UK assumption is that PPPs transfer construction risk to the operator so that recognition takes place at commissioning date. However, the wording of Exposure Draft 43 has removed this difference by clarifying that the timing of recognition would depend on which party carries the construction risk (IPSASB, 2010, para AG20).

The second relates to the omission of the word ‘significant’ in criterion 2 above: ‘significant residual interest’ (IFRIC 12 and UK Treasury) had become ‘residual interest’. Dropping the adjective ‘significant’ would fundamentally change the meaning and application of criterion 2. During the consultation process, which ended on 31 August, 2008, this difference from IFRIC 12 wording was challenged by several of those submitting comment letters, including the one sent by the National Audit Office (2008). An important feature of Exposure Draft 43 is that, on this issue, it reverts to being an exact mirror image of IFRIC 12, with the qualifying adjective ‘significant’ restored (Heald and Georgiou, 2010).

Operator Accounting under IFRS – Global Arena

Operator accounting does not differ between the UK and global arenas, being governed by IFRIC 12 and unaffected by IPSASB pronouncements. The earlier analysis applies, without amendment, except that there may be different ‘legacy’ issues at the SPV level in national jurisdictions.

In relation to research question 2 (i.e., whether the switch to control changes balance sheet treatment), the expectation – in both the UK and global arenas – is that it will bring almost all PPPs on to the client’s balance sheet. In terms of the operator, though the rationale for off-balance sheet treatment has changed, the move off-balance sheet occurred – certainly in the United Kingdom – at a much earlier date with the switch from fixed asset accounting to contract debtor accounting.

NATIONAL ACCOUNTS TREATMENT OF PPP ASSETS

The detailed record-keeping that underpins financial reporting can sit uncomfortably with the statistical estimation that forms part of the derivation of national accounts (Jones, 2003). Financial reporting standard-setters and national accounts statisticians have different educational and work experience backgrounds and they have constituted distinct epistemic communities with limited overlap. Those professionally involved in national accounts are civil servants working in national statistical institutes or international agencies, in contrast to financial accountants working in reporting entities and professional firms with audit and advisory lines of business.

Another significant difference relates to the periodicity of standards revision. Financial reporting standards evolve through time on an unstructured basis, in part responding to medium-term agendas but also to particular crises (e.g., the introduction of cash flow statements in various countries in the late 1980s and early 1990s). In contrast, there are long periods between full revisions of the ‘rule books’ for national accounts. The System of National Accounts (SNA) has just been revised as SNA 2008 (United Nations Statistical Division, 2009), the previous full revision being in 1993 (United Nations Statistical Division, 1993). The European System of Accounts, derivative of SNA 1993, was produced as

ESA 95 (Eurostat, 1995). The previous ESA edition was in 1978 and the SNA 2008 derivative is expected to be published in 2011 and implemented in 2014 (Ravets, 2010). The approval process involves agreement by governments: there is not the same capacity to impose on reluctant preparers that is exercised by the IASB.

Eurostat, the statistical office of the European Communities, issued its own detailed guidance on recording PPPs in the national accounts (Eurostat, 2004): this is given force by the way the resulting data are used for purposes of fiscal monitoring under the EU Stability and Growth Pact. The possibilities of disguising government expenditure and commitments was one concern, as was the realization that there had developed a pattern of Off:Off accounting in financial reporting. Such a practice is fundamentally unacceptable in national accounts, because the accounts of sectors must articulate; On:On is also unacceptable but believed to be much less common.

These circumstances prompted the ONS to commit resources to investigating the treatment of individual PPP schemes by public sector client and private sector operator (Chesson and Maitland-Smith, 2006).⁸ Pressure from Eurostat was one factor in pushing this topic up the ONS' agenda. Kellaway (2008, p. 21) noted that, for practicality and resource reasons, the ONS had followed 'the accounting judgements taken by the public sector entities involved'. This approach therefore imports into national accounts data the effects of the accounting arbitrage. However, the ONS (2010a, p. 40) written evidence to the House of Lords Economics Affairs Committee in March 2010 demonstrated no recognition of the implications of this financial reporting arbitrage.

Although financial reporting and UK national accounts have thus far been moving in the direction of more recognition of PPP assets and their related liabilities on the public sector balance sheet, there are three important points to note. First, whereas both FRS 5A and Eurostat's rules adopt the risks and rewards approach, there will be a decoupling of financial reporting and national accounts' approaches under both UK and IPSASB versions of IFRS. The mirror-image treatment of IFRIC 12 substitutes control for risks and rewards.

Second, the Eurostat version of risks and rewards is more likely to allow off-balance sheet scoring than either FRS 5A or TTN1R. Only construction risk plus availability risk (understood to have quality as well as quantity dimensions) or demand risk must be transferred to the private operator for the PPP to be off-balance sheet to the public sector client. Eurostat (2004, p. 2, italics added) summarized this guidance:

The key issue is the classification of the assets involved in the partnership contract – either as government assets (therefore influencing government deficit and debt) or as the partner's assets. . . . As a result of the methodological approach followed, in national accounts, the assets involved in a public-private partnership can be considered as non-government assets *only if there is strong evidence that the partner is bearing most of the risk attached to the specific partnership.*

This Eurostat guidance prompted the IMF (2004, para 38) to comment:

... Eurostat has recently issued a decision which says that a private partner will be assumed to bear the balance of PPP risk if it bears most construction risk, and either most availability risk (which is also referred to as performance risk) or most demand risk ... While focusing on a few risk categories is understandable, the Eurostat decision is problematic. Since the private sector typically bears most construction risk and availability risk, the decision is likely to result in the majority of PPP assets being classified as private sector assets, even though the government will bear most demand risk ... A concern is that the decision could open the door to PPPs that are intended mainly to circumvent the [Stability and Growth Pact].

The Eurostat tests are very weak. Most PPPs, certainly in the United Kingdom, transfer construction risk to the operator. On most PPP projects, availability risk is likely to be low, often negligible in relation to demand risk. Therefore, the test reduces to the transfer of construction risk and of availability risk. The System of National Accounts 2008 (United Nations Statistical Division, 2009, Chapter 22) contains very limited discussion of PPP treatment in the national accounts, indicating a future gap in guidance for non-EU countries and the reliance that EU member states will have to place on Eurostat guidance.

Third, ONS indicated its view that extension of the control-based IFRIC 12 is not consistent with the Eurostat rules that feed into the United Kingdom's obligations under the Stability and Growth Pact (Kellaway, 2007). This raised the possibility that, from 2009–10, each public sector client would also be obliged to report to ONS whether their PPP would be off-balance sheet on the Eurostat basis. Indeed, the Treasury has, from 2009–10, imposed a requirement for entities to report where treatments would differ (Office for National Statistics 2010a, p. 40). The ONS itself is not resourced to examine each scheme, though it might be possible to take samples from different types of PPP and then specify customary treatment for each type.

Under UK GAAP, ONS treatment has not been consistent with Eurostat rules, either before or after 2006, though information about entity treatment indicates that the UK public sector balance sheet now records a larger amount 'On' than would have resulted from full compliance with the Eurostat rules. Strict compliance with the Eurostat rules would seem likely to remove most PPPs from the national accounts version of the public sector balance sheet, except for those where the entity itself is deemed to be under public sector control (Office for National Statistics, 2010b). In justifying its June 2009 decision (Treasury, 2009) that public expenditure planning, budgeting and control figures will exclude PPPs that meet the IFRS criteria but not the Eurostat criteria, the Treasury has argued that international obligations in relation to national accounts compel it to operate budgeting on this basis. This argument is not consistent with either the Treasury's long-established practice of setting its own control aggregate for public expenditure (Heald, 1995), nor with its 1995 decision (Treasury, 1995) to align budgeting with accounting – the accruals conversion project was deliberately named 'Resource Accounting and Budgeting'.

If the mirror-image treatment of IFRIC 12 did bring almost all PPP projects on to the balance sheets of public sector clients, there will be a wider gap between financial reporting and national accounts prepared on a Eurostat basis. Given the use of national accounts data for the UK's fiscal rules and for its EU Treaty obligations, there remain substantial uncertainties about the future relationship between PPP accounting under IFRS and for national accounts:

There remain significant uncertainties around the impact of the introduction of IFRS on public sector net debt. As 2009–10 will be the first year that IFRS will be applied, the implications of any new standard for individual deals will need to be worked through, and this will also take time. Also, it is the independent Office for National Statistics (ONS) that decides on what is inside the public sector boundary for public sector net debt. The ONS have said that the IFRS approach to PFI is not conceptually consistent with ESA95, which are the standards for the National Accounts used to calculate fiscal aggregates, introducing further uncertainty (Treasury, 2008c, pp. 4–5).

This issue gains added salience from the fact that EU Treaty obligations refer only to levels of general government gross debt and not to a net worth measure that incorporates the fixed assets that have been financed by additional government debt, whether incurred through borrowing or imputation.

CONCLUSION

This article has analysed the evolution of PPP accounting, providing evidence on three research questions:

- (1) To what extent does the adoption of a risks and rewards criterion lead to consistent decisions across financial reporting entities?
- (2) To what extent will the switch from risks and rewards to control alter balance sheet treatment in financial statements?
- (3) How does the treatment of PPP assets differ between financial statements and the national accounts?

With regard to the first research question, application of the risks and rewards approach has not led to comparable or consistent treatment of PPP projects in financial statements. The role of arbitrage between available standards has been highlighted, specifically between the ASB's FRS 5A and the Treasury's TTN1R. When there are powerful incentives, accounting practice will exploit arbitrage opportunities. Considerations concerning what a theoretically correct method of accounting for PPPs might be were overridden. Instead, on the public sector client side, asymmetry of accounting treatment has reflected the control framework exercised over PPP clients by higher governmental authority (no PPP unless Off) and audit arrangements. On the operator side, the considerations driving accounting treatment have been the ability of SPVs to pay dividends to their parents and to minimize their tax payments. Operator accounting for PPPs under risks and rewards responded to contractual arrangements and

government tax policy – two variables suggested by Watts and Zimmerman (1986) as explanatory of a company's accounting choices.

With regard to the second research question, the decisive move from risks and rewards to control is a landmark event, which owes much to difficulties with risks and rewards, particularly the vulnerability of quantified indicators to manipulative calculation. Although detailed analysis has not yet been done, almost all PPPs in UK central government financial statements came on balance sheet in 2009–10 (the first year of IFRS). Therefore, the second research question is answered in the affirmative, though the extent to which this is due directly to the change of criterion is open for debate.

There appears to be a belief that control is more objective than risks and rewards, and therefore less vulnerable to manipulation. However, this enhanced objectivity may in part be illusory, in that the determination of control requires control indicators. Either the control indicators might be chosen to favour particular treatments or – more likely – PPP schemes will be devised around the control indicators of IFRIC 12. The treatment of LIFT projects was important, not in terms of the financial value of this particular form of PPP, but in terms of whether this might become a precedent for a new wave of mainstream PPPs that are Off:Off. It is therefore not clear whether there has been resolution, in the form of IFRIC 12 for the operator and mirror-image treatment for the client, or whether difficulties will continue. The longstanding difficulty of accounting standard-setters in developing unambiguous control indicators in the area of consolidated statements is indicative of the problems that will be encountered in the application of IFRIC 12's indicators. There are likely to be fewer arbitrage opportunities within PPP financial reporting as a result of the convergence on IFRIC 12, where the issue might be the ambiguities inherent in 'control' and 'regulation'.

With regard to the third research question, the post-2006 alignment of national accounts with financial reporting treatment of PPP assets incorporated the effects of arbitrage. Insufficient attention was paid to how the risks and rewards approach had been implemented. The focus of arbitrage has now switched to the gap between the requirements of IFRIC 12 (based on control) and Eurostat guidelines (based on a weak version of risks and rewards). From 2009–10, UK government accounting (authorization, accounts and audit) will be on the basis of the mirror image of IFRIC 12, whereas planning and budgeting will follow Eurostat (Treasury, 2009). Given the sensitivity of levels of government debt, especially in the context where this is rising dramatically in a recession, there will again be voices advocating 'doing good by stealth'.

The approach of this article has been to treat accounting standards for PPPs as a technical matter, whereas they are also about conflicts between regulators and preparers and domains that are contested by different regulators. Rather than regulation being conducted primarily within the nation state, the globalization of accounting regulation has greatly complicated the picture. This regulatory

competition, and how it affected the evolution of PPP accounting, will be addressed in a future paper.

NOTES

- 1 Eurostat is the statistical institute of the European Communities which prescribes the *European System of Accounts* (latest edition, Eurostat, 1995), itself based on the *System of National Accounts* (United Nations Statistical Division, 1993). Eurostat monitors the work of national statistical institutes (Savage, 2005).
- 2 For logistical reasons, the local authority IFRS implementation date is 2010–11, though the PPP component operates from 2009–10.
- 3 Ernst & Young had withdrawn from public sector audits on the grounds that these were insufficiently profitable; however, it gave advice on accounting treatment to PPP developers and clients.
- 4 Sir David Tweedie was then the Chair of the UK Accounting Standards Board.
- 5 In the National Health Service, this change of guidance from Treasury Technical Note (TTN1) (Treasury Taskforce, 1997) to TTN1R (Treasury Taskforce, 1999a) affected a group of early PPP-funded hospitals, including the Edinburgh Royal Infirmary and seven hospitals in England. These were off-balance sheet but came on-balance sheet because the payment mechanism was not judged to transfer sufficient risk to the private sector under TTN1R. In public expenditure terms, the Treasury dealt with these cases by means of classification changes, increasing the allocations so that changes in accounting regulation did not penalize arrangements entered into in good faith.
- 6 The *Government Resources and Accounts Act 2000* contained the provision that, when exercising the power to issue directions ‘... the Treasury shall in particular – (a) have regard to any relevant guidance issued by the Accounting Standards Board Limited or any other body prescribed for the purposes of section 256 of the Companies Act 1985 (accounting standards)’. The *Companies Act (International Accounting Standards and Other Accounting Amendments) Regulations 2004* contains provisions that permit the transition of government accounts to IFRS.
- 7 On the basis of preliminary analysis of the 2009–10 IFRS implementation, it appears that the issue of LIFT projects, which had generated considerable debate, faded away and On-balance sheet treatment prevailed. This might not be unconnected with the Treasury’s (2009) June 2009 decision that public expenditure scoring and the budgeting system would operate from 2009–10 on a national accounts and not an IFRS basis.
- 8 ‘On 20 September, 2006, the public sector finances First Release included for the first time estimates of imputed finance lease liabilities. The majority of these are associated with those Private Finance Initiative (PPP) projects judged as being on the public sector balance sheet (not all contracts under PFI projects involve finance leases) ... The estimate of imputed finance lease liability at the end of March 2006 is £4.95 billion’ (Chesson and Maitland-Smith, 2006, p. 27). PPP liabilities are not separately identified, though there are plans to undertake analysis of whether PPP assets are on two balance sheets or neither (Office for National Statistics, 2010b, p.1). It should also be noted that: ‘In addition to the finance lease liabilities included within Public Sector Net Debt, [this] also includes liabilities relating to schemes where the Public-Private Partnership (PPP) partner ... has been deemed to be in the public sector due to public sector control. In such cases, the economic ownership of scheme assets is considered to be with the public sector’ (ONS, 2010b, p.1).

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