
24 A review of transport public–private partnerships in the UK

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Introduction

This chapter has two interrelated objectives: first, to review the experience of transport PPPs, including roads, bridges, rail and air traffic control, in the UK; and second, to present the financial evidence about the actual costs of different types of transport PPPs. Such a review and analysis would inform the international policy debate about the use of private finance and its broader implications for accountability. This is particularly important given the absence of *ex post facto* financial evaluation of the policy or scrutiny of the cost of current, renegotiated or terminated projects by the official watchdogs (Pollock and Price, 2008).

The focus is on transport because, while PPPs now encompass most sectors and services and all types of public bodies, national, local and non-departmental, the transport sector is by far the largest internationally. The UK, as one of the foremost exponents of the policy, illustrates the varied forms and outcomes of transport PPPs in developed countries. Since the engineering standards for transport projects are by and large universal at least in developed countries, unlike public services such as health and education, where the requirements are more likely to be tailored to local social and institutional needs and constraints, any assessment of the experience is likely to have more general applicability.

Transport projects in the UK have typically taken one of a number of forms. First, a contractual-type arrangement: the public sector pays for the use of the asset and its dependent services under terms set out in a contract, which may contain incentives for good and/or penalties for poor performance. Such contracts are usually designated as Private Finance Initiative (PFI) projects or design, build, finance, operate (DBFO) projects in the transport sector. Examples in the UK transport sector include the main trunk roads, where the public agency commissions the private sector to enhance, operate and maintain roads, paying for them on the basis of usage under a system known as shadow tolls. Second, a free-standing project or concession: the private sector designs, builds, finances and operates a road, but typically a bridge or a crossing, and charges the users directly (toll charge), as for example a number of estuarial crossings and

the M6 toll-road. Third, an alternative free-standing project or concession: there is both public and user funding for either the construction and/or the service element. One example is the Skye Bridge, originally a free-standing project, where the Scottish Office paid some of the construction costs and later the Scottish Executive subsidized the tolls before ultimately terminating the contract. Another is the London Underground PPP, a contractual arrangement, where the public authority, London Underground, pays the private sector partner, but receives a grant from central government, in effect a subsidy to the private sector, and charges passengers. Fourth, a joint venture (joint ownership) arrangement: the partnership may charge either the public sector as in health and education, or the users (National Air Traffic Services).

But partnership arrangements have become ever more complex and include a proliferating number of hybrids and pre-existing formats. For example, the UK government now calls the fragmented and privatized railways, various parts of which receive extensive capital grants, operating subsidies and debt guarantees, a public-private partnership (DfT, 2004). It should be noted that not only has there been a proliferation of partnership structures; the terminology is also used interchangeably – for example PFI is used to denote free-standing projects and PPP is used in the case of London Underground to denote a contractual arrangement. Furthermore, as well as the confusion over terminology, there is also confusion over the distinction between funding and financing: although the finance for the capital expenditure comes largely from the private sector, the funding to service the charges may come from either the public sector or users.

PPP projects require a revenue stream to pay the charges, which will be a function of the size of the initial investment (typically large), usage, operating costs (typically relatively low), the cost of finance and the period of the loan. That is, the revenue must enable the PPP to recover its full costs over the life of the project, including the cost of debt and equity, under conditions where the demand is rarely sufficient to recover costs. This is particularly the case in transport, where demand may be high on individual routes but inadequate over the network as a whole, as the railways illustrate. While high-volume routes can be repaid within a relatively short period, political realities may dictate low user charges or tolls spread over a longer period. Should, however, traffic flows be low or lower than predicted, then trains, roads and bridges will operate below capacity, making them difficult to fund, necessitating some combination of higher charges, capital grants and public subsidy. This is one of the reasons why the state provides most infrastructure and public services: they are simply too capital intensive and thus financially risky to be provided commercially on a universal and comprehensive basis.

But there is a further problem. It is more costly for the public sector to use the private sector as financial intermediaries, due to the higher cost of commercial over public debt, the cost of the profit margin of both the private partner and its extensive supply chain, and the not inconsiderable legal and financial advisers' fees to structure and negotiate the deal. In the case of the flagship London Underground PPPs, advisers' fees amounted to a staggering £500 million. Furthermore, private contractors will seek to recover the not inconsiderable cost of unsuccessful bids from future successful contracts, increasing the cost of subsequent PFI deals. The higher cost of capital under private finance is particularly important in the context of roads and bridges, where the capital as opposed to the operating cost is typically high. Nevertheless, as explained in an earlier chapter, the proponents of the policy justify the higher cost of private finance in terms of the value for money (VfM) to be derived from the greater efficiency and innovation of the private sector and the transfer of some of the risks to the private sector.

The international experience has reflected these realities. While the research literature relating to both developing and developed countries has generally been short on detailed financial evidence, it has shown that while many private road concessions and DBFO projects have been successful, where 'success' means commercial viability, a significant number have not. Some have had to be renegotiated on more favourable terms to the private sector or taken over by government when the concessionaires faced inadequate revenues due to users' dislike of tolls and/or higher than expected costs. The broad conclusion is that in order to make such schemes financially viable and attractive to the private sector and users alike, a high degree of political commitment is required. Such political commitment is reflected in various forms of financial support, not all of which are clearly visible to the public, and/or the elimination of competition from roads without charges (see, e.g., Farrell, 1997; Silva, 2000; Freeman, 2004; Ehrhardt and Irwin, 2004; Estache and Serebrisky, 2004; Bel and Fageda, 2005; Boardman et al., 2005). In the context of rail, the capital-intensive nature of the industry has meant that it has proved impossible to run a large network on a commercial basis, irrespective of ownership structure, and without subsidy, capital grants, loan guarantees or debt forgiveness.

The focus in this chapter is on the financial or distributional, as opposed to the broader transport, outcomes. This is because the PPP policy assumes first that the project itself is the best of all the available transport options; and second that the choice of public or private finance will be based upon a financial appraisal methodology that emphasizes risk transfer to the private sector and thus the least cost over the life of the project. That is, the choice is simply between different forms of finance, although clearly

the social and economic benefits of the project will differ in terms of consumer surplus to the users and environmental benefits/damages.

The chapter adopts a political-economy or stakeholder perspective and considers the financial costs and rewards to the various stakeholders involved. It uses financial evidence derived from the research literature, official and regulatory reports, statistical sources and the press, although the stakeholders will vary according to the type of arrangement (the taxpayers, users, providers of finance, contractors etc.). As such, therefore, financing transport is also about the politics of and accountability for such projects.

The chapter is organized in several sections. The first section considers the first eight DBFO road contracts paid for via a system of shadow tolls by the Highways Agency and the first and, thus far, only toll motorway concession. The second section examines first the national railways, reviewing the experience of the passenger rail franchises, which are largely but not entirely subsidized concessions with user charges via passenger fares, and second, a metro system, reviewing the experience of the three London Underground PPPs. The third section considers the sale in 2001 of a 51 per cent stake in National Air Traffic Services to the private sector, which the government has designated a PPP. The final section draws out the implications for accountability and choice of financing method.

Road transport

DBFO contracts

Shaoul et al. (2006) examined the first eight of the Highways Agency's 14 contracts to extend and maintain its roads. Their analysis is dependent upon the limited information provided by the private sector partners, not the Highways Agency or its auditors and the public watchdogs.

These eight contracts, operational since 1997, are paid for by the Highways Agency on the basis of traffic volumes or shadow tolls. The evidence relating to one of these roads, and there is no reason to believe that the results are substantially different for the others, suggests that in engineering terms, the road was constructed in accordance with the contractual requirements and its operation and maintenance are broadly satisfactory, although these are considered in isolation from the cost (Shaoul et al., 2007a). Certainly, the Highways Agency views them as a success, although it has published no financial evidence about the operation of the contracts to demonstrate whether they constitute VfM in practice.

The concessionaires are 'special purpose vehicles' (SPVs) or consortia, typically composed of a financial institution and construction and maintenance companies, which raise debt to finance the projects. As shell

companies with no employees, the SPVs typically subcontract the work to their sister companies. The Agency pays about £220 million a year for these eight DBFO contracts, indicating a total cost of about £6 billion over the 30-year life of the contracts. With traffic volumes rising, the SPVs are commercially successful companies. Payments in just three years for which information is publicly available were £618 million, more than the £590 million cost of construction.

The annual cost of finance, interest payable and post-tax profits was about two-thirds of the revenues received from the Highways Agency, although in some years this was even higher due to refinancing gains. It illustrates the importance of capital, as opposed to operating costs, in roads. The additional cost of private over public finance was estimated to be more than 20 per cent of revenues a year. This was, however, a conservative estimate, since the parent companies have additional, undisclosed sources of profit via subcontracting the construction, operation, maintenance and financing of the projects to related companies, as well as refinancing gains, making it impossible to establish the total cost of using the private sector as financial intermediaries.

The additional cost of private over public finance raises two issues: the cost of risk transfer and affordability. The higher cost of private finance is justified in terms of risk transfer. But since risk and risk transfer are *ex ante* concepts, it is impossible to quantify the risk *ex post facto* and thus determine whether or not it constitutes VfM. There are several indications that the risk transfer was minimal and/or generously priced.

First, the contracts involved not new roads but road improvements that had already been designed and had gone through all the planning stages, thereby reducing some of the main risks (NAO, 1998; Shaoul et al., 2007a). Second, most of the risk transfer is attributed to the construction phase. This was in some cases at least low since about 40 of the SPVs, across a range of sectors including two of these eight DBFO contracts, refinanced their deals after construction by taking out a larger loan over a longer period, repaying the original debt, leaving a surplus for their parent companies. These refinancing deals, however, create additional risk for the public sector (NAO, 2002a, 2005, 2006). Should the contract be terminated for any reason, the public sector could face higher costs. Furthermore, this increased exposure would occur when the private sector had received most of the benefits and be facing additional costs associated with long-term maintenance, thereby tempting the private sector in adverse circumstances to cut and run, as indeed has been the case with unprofitable rail franchises (see later).

Third, some of the companies took an alternative route, selling their equity in the PPP consortium at a considerable profit on their original stake and at several times the level of annual post-tax profits. This has

reflected the high profits from these contracts in the early stage of the projects when profits were not expected to be high and implies that their new owners envisage little risk, with continuing and attractive rates of return on their investment. Fourth, the main cost, as shown earlier, is in fact the cost of finance. Should the SPV be put into administration or terminate its contract with the commissioning agency due to low traffic volumes, then the public sector must continue to honour the financial obligations to the banks. There is therefore little direct risk to the parent companies (whose initial investment was in any event very small) and almost none to the banks, since the state *de facto* guarantees the debt.

The higher cost of private over public finance, equivalent to at least 20 per cent of the companies' receipts from Highways Agency every year, also raises questions about the impact of these schemes on the rest of the Agency's budget. According to a Highways Agency official, the commitments for all its DBFO projects are about £300 million a year, or 20 per cent of its budget, for 8 per cent of its network (Taylor, 2005). He said that the new contract for the M25 would add a further £300 million a year, meaning that 40 per cent of the budget will be committed for a very small proportion of the network. Thus, while these roads will be maintained, there may be little money left over for the rest of the network, which may not be the most rational way of prioritizing road maintenance.

Several interrelated conclusions flow from this analysis. The costs of the DBFO shadow toll road projects are in line with other UK DBFO road projects (Shaoul et al., 2008a) and hospitals (Shaoul et al., 2008b), and both toll and shadow toll roads in Spain (Acerete et al., 2009). The evidence suggests that the Highways Agency has paid a high price for risk transfer and challenges the notion that risk transfer delivers VfM. It also raises questions about affordability and suggests that these contracts must entail cuts elsewhere. This in turn means that, far from providing additionality, the new construction (and maintenance) comes at the expense of other Highways Agency projects.

M6 toll-road

In 1989, the then Conservative government proposed a privately funded and financed venture to build a new road to relieve congestion on the motorways around Birmingham. The concession for the M6 toll road would run for 53 years, expected to be three years of construction and 50 years of operation. After long planning delays, the road opened at the end of 2003, with a construction cost of about £700 million. With its charges unregulated, the road operator originally set its prices to minimize its future maintenance costs by pricing heavy goods vehicles off the road.

Shaoul et al., (2008a) found that, in 2006, revenues, including those

from the service station, were £51 million. This was widely acknowledged to be less than expected due to lower-than-forecast traffic volumes, although traffic was rising and had reached 50 000 on an average working day (company's website). Intended to relieve congestion, the new toll road still carries only 20 per cent of the traffic on the existing motorway, despite reducing its charges for heavy goods vehicles from £11 to £7, and has thus failed to achieve its stated *raison d'être*.

The company was financed by debt, which at £819 million was considerably more than the construction cost of the road (about £700 million). The interest payable to service the debt was £45 million, an effective interest rate of 5 per cent. While this is as yet low and only marginally more than the cost of public debt, it may increase, as typically the interest payments are deliberately set low in the early years when revenues may be low. After paying interest, the company made a post-tax loss of £21 million in 2006. Losses have continued and have risen to £28 million in 2008.

With construction complete and evidently having cost less than expected since the debt was larger than the cost of construction, the company refinanced its debt in June 2006, taking on a larger debt that would release about £350 million cash for investments elsewhere. This serves to increase the concessionaire's risk. It also increases the risk to the Highways Agency, which will have to assume responsibility for the road should the concessionaire go under.

Anxious to increase the low traffic volume, the concessionaire came to an agreement with the government to use £110 million of the proceeds to finance the construction of two new road developments that would feed into the M6 toll road, which would not themselves be tolled. This would increase revenues and reduce the burden of interest charges. Although the Highways Agency refused to release both the strategic case and the contract for the developments under a 'Freedom of Information' request for reasons of commercial confidentiality, it did confirm what was implicit in the announcement: the project had been agreed without advertisement or competition and the road had not yet received planning approval.

Irrespective of the fact that the road will be built without cost to the taxpayer as a means of sharing the refinancing gains and there may be no breach of the procurement rules, this means that the road has jumped the capital prioritization queue as a result of an unsolicited proposal. That is, instead of the Highways Agency using its share of the refinancing gain for other projects, it has enabled the construction of a new road to go ahead that may not have been justified on broader economic grounds in order to make the toll road viable, shielded from public visibility and scrutiny under the rubric of 'commercial sensitivity'. Moreover, the route in terms of traffic management makes little sense. In other words, further initiatives

have been taken to make a private road viable that may not have been justified on broader economic grounds. Or to put it another way, like the cuckoo, once in the nest, it chases the other birds out.

Rail

Passenger rail franchises

Since privatization in the mid-1990s, the railways have been part-funded by a system of operating subsidies to private sector train operating companies (TOCs), which have a franchise to run designated services for a specified period. The train operators use the subsidies to lease the trains from privately owned rolling-stock companies and access the track from Railtrack, the privately owned infrastructure company, as well as defray their other costs. Railtrack was later replaced by Network Rail, a private not-for-profit network infrastructure company, when Railtrack collapsed in 2001 under a mountain of debt. The costs of leasing the rolling stock, the broad outline of which was set at privatization, and of accessing the track, whose charges were set by the rail regulator to cover the cost of approved investment, maintenance and renewals, are essentially fixed costs for the franchise operators. While some fares are regulated and allowed to rise no more than 1 per cent above inflation, some are unregulated. These two fixed costs, the leasing and track-access charges, the expected level of demand, the fare levels and the cost of running train services determine the level of subsidies required.

The stated purpose of breaking up the integrated industry into numerous private companies linked by contracting relationships was to generate the efficiency and dynamism presumed to be lacking in the publicly owned operator, British Rail (BR) (Department of Transport, 1992). Competition for the franchises to run passenger services, if not competition on the tracks, would ensure efficiency and VfM. The leasing of rolling stock would enable companies to bid for the franchises and permit new entrants to the market. Together, the new structure would generate competition and efficiency bringing benefits to all.

In terms of PPPs, the railways therefore represent a mix of public and private finance *and* funding channelled largely through a system of concessions or franchises, whose service levels, frequencies and routes are set out in their contracts (not publicly available) and monitored by regulation, with inadequate performance against targets subject to penalties.

The first round of franchises, 1995–2004 The right to operate the train services was divided into 25 franchises for which competitive bids were invited between 1994 and 1997. Franchises were generally awarded to

the bidders requiring the lowest level of subsidy, with only one awarded without subsidy. Subsidies were more than double that given to BR in the 1980s and the early 1990s before the restructuring of the industry for privatization. Although the intention was that subsidies would decline to £0.9 billion by 2003, that had still not been achieved by 2009. The 25 franchises were awarded to just 11 companies, a number that has since halved as companies have merged, been taken over or left the industry.

The much-vaunted performance targets were no more demanding than those set for BR in the interim regime 1994–96. Thus no improvement was built into the franchise system, belying the government claim that services would improve. Performance indicators of punctuality and reliability are no longer published in a way that permits direct comparisons with standards of performance before privatization. Performance deteriorated, particularly in the period 2000 to 2005, after Railtrack's failure to maintain the track in a safe condition, and subsequent collapse. Although much improved, even in 2009 performance has still not attained BR's level. But even these results would not have been achieved if the train operators had not made extensive use of a loophole in the regulations that allows them to exclude from performance data days when they have serious problems and have to extend the scheduled time. The deterioration in levels of service is widely attributed to the de-manning that took place after privatization and the lack of capacity on parts of the network due to inadequate investment, leading to overcrowding and delays.

By 2006, the combined revenues of the 25 franchises had risen from £4.6 billion in 1997 to £6.2 billion, more than double BR's total revenues in the last year (1993–94) of the *ancien regime* (Shaoul, 2006). This was the result of several factors: fare increases on some routes that were higher than the rate of inflation; increased passenger numbers alongside a general increase in all modes of travel due to the expanding economy and traffic congestion on the roads; 'revenue protection' measures to ensure that passengers paid for their journeys; and the end of the sale of discounted fares on board the trains. But finally, and most importantly, revenues rose because subsidies were considerably higher than in the 1980s and early 1990s: they accounted for £2.1 billion, 71 per cent of total income in 1996, declining to £1.1 billion, 17 per cent in 2006. It should, however, be noted that it is extraordinarily difficult to get clear and consistent information about the payments of subsidies to the train operators (Shaoul, 2006).

However, the increase in revenues notwithstanding, the majority of the franchisees are totally dependent upon subsidies to recover their costs and deliver a profit. Only a handful of the TOCs made a profit. Without subsidies, aggregate losses in 2006 would have been £1.1 billion, a sum equivalent to their subsidies. The TOCs paid out £144 million in dividends

to their parent companies in 2006 and £1.5 billion since privatization, due to the extensive system of public subsidies, not superior performance.

Had the 'market' and the franchise agreements operated as intended, many of the TOCs would have gone out of business. While the original franchises were let 'competitively', that is, to the bidder requiring the lowest level of subsidy, the bids turned out to be hopelessly optimistic on the TOCs' part (Transport Select Committee, 2004). With the government refusing to countenance renationalization in any form, termination of the contracts and bringing passenger services back in house was not normally perceived to be an option. The regulator, the short-lived Strategic Rail Authority (SRA), was therefore obliged to step in to 'ensure continuity of train services' and amend the franchise agreements.

First, the SRA increased the subsidies (SRA, 2003). In one of the more egregious examples, Connex South East received £58 million in 2002 due to differences in its cost and revenue assumptions. 'They had got their numbers wrong', as the SRA chair explained to the Transport Select Committee (Transport Select Committee, 2004). In the event, shortly after increasing the subsidy, the SRA terminated the franchise due to the TOC's poor performance. In January 2003, the press reported that more than half the TOCs received emergency bailouts in the preceding two years amid claims that the SRA was imposing 'gagging clauses' on the TOCs to prevent them disclosing information about their bailouts. By way of contrast, the information became publicly available because the stock market requires the disclosure of information that affects corporate profitability.

Second, the SRA converted some of the franchises into management-only contracts, with payment on a 'cost-plus' basis and a higher subsidy for less risk, prior to retendering the franchises. In 2003, 'over one third of the franchises' (SRA, 2003, p. 47) were operated in this way, which the SRA admitted 'had become expensive' (*ibid.*, p. 39).

The second round of franchises While the SRA had renegotiated the first round of franchises at the taxpayers' expense, in 2004 it negotiated a second round that has proved no more successful. The routes were restructured to make them more commercially viable, and the only companies eligible to bid were those in the transport sector, thereby confirming the monopoly position of the existing concessionaires. A few of the lines, such as the East Coast Main Line (ECML), were believed to be sufficiently profitable to enable the franchisees to pay the government an annual premium, and were awarded on that basis. In an effort to ensure the profitability of the franchises and thereby avoid any future contract renegotiation, the government sought to limit the operators' risk by assuming some of its revenue risks, the key risk. New franchises included clauses that would

after four years reimburse the operators for 50 per cent of any shortfall in revenue below 98 per cent of the original forecast and 80 per cent of any shortfall in revenue below 96 per cent, and claw back 50 per cent of any increase in revenue above 102 per cent of the original forecast (Transport Select Committee, 2006).

In the event, GNER Ltd, which won a second seven-year contract for the ECML franchise in return for a £1.3 billion premium over the life of the contract, handed back the keys in 2006 when the franchise proved to be less profitable than its own overoptimistic forecasts had suggested. Indeed, simple projections of GNER's cash flow, based on its annual report and accounts, revealed that it could only have been viable if there had been a most unlikely 10 per cent growth in passenger revenue. GNER then ran the franchise for a further year on a management-only and risk-free basis. Yet its projections had evidently satisfied the Department for Transport's financial advisers, since the then Transport Minister brushed off the industry view at the time that GNER had overbid. He said, 'We crawled over the figures over the last few weeks because we wanted to make sure that the bid actually stood up'.¹ But within two years, it had collapsed.

In August 2007, the government awarded the ECML franchise to National Express in return for a more onerous £1.4 billion premium over seven years. But National Express has been no more successful. After paying the government £85 million in 2008, in April 2009 National Express demanded a renegotiation of its franchise. Not only did it demand to be let off the remaining charge, it also demanded that it be paid to keep running the railway on a management-only, risk-free basis. In response, the Department for Transport (DfT) insisted that it could renegotiate the contract and threatened to invoke a 'cross-default' clause that would strip National Express of its other two profitable franchises if it failed to keep up with payments on the ECML. Later, the government terminated the contract to deter other rail operators from seeking to renegotiate their contracts, increase the subsidies or reduce their premia, as passenger numbers, revenues and profits declined due to the global recession that has undermined the optimistic bids underpinning the recent franchise agreements. It has now re-awarded the franchise on a similar basis to yet another company. Its attempt to strip National Express of its other franchises, held by legally separate subsidiaries, looks set to spark a lengthy legal battle over compensation. Its attempt to strip National Express of its other franchises failed as they are held by legally separate subsidiaries, thereby rendering null and void cross-default clauses, while the transaction costs have proved costly for the government.

The passenger rail franchises have proved to be a failure in terms of both performance and cost to users and taxpayers alike, and this is

almost universally recognized – apart from the government, its advisers and the train operators, the beneficiaries of the regime. Such outcomes were entirely predictable. The fragmented and private ownership structure imposed on the industry ignores the basic realities of the industry. First, the essential problem of the railways the world over is that as a highly capital-intensive industry it is difficult if not impossible to recover the full cost of running the industry, including the cost of enhancing the infrastructure and rolling stock, from the fare box, which is why, in the postwar period at least, public ownership and investment were necessary. Privatization, which increases the claims of finance, only exacerbates the problem. Second, in the context of the UK, since the railways already had the lowest subsidies in Europe and the highest labour productivity, it was always going to be difficult to cut costs further to provide the necessary headroom for profits without either affecting service quality and safety or increasing subsidies and/or fares (Shaoul, 2004). Taken together, this means that for all the talk of transferring risk to the private sector, the risks that the government always retains are the demand, default, political and reputational risks – and these are the most important ones.

London Underground

The first phase of the London Underground (LU) PPPs, the Labour government's flagship PFI projects, constitutes a quarter of the capital value of all the £64 billion worth of deals signed by April 2009.² The government agreed to the deals despite overwhelming popular hostility to the PPP proposals for LU in the wake of the collapse of the privatized rail infrastructure company, Railtrack, and studies showing that it was neither affordable or value for money (Gaffney et al., 2000; Glaister et al., 2000; NAO, 2000; Shaoul, 2002). Under the PPPs, three private sector companies would maintain and refurbish LU's tracks, signals, stations and rolling stock for 30 years in return for an annual charge. LU would continue to operate passenger services, in effect leasing the track and rolling stock from its private sector partners.

The cost of the PPPs proved so expensive that, first, the investment had to be scaled back and the risk of some cost overruns excluded, and second, the government had to provide about £1 billion a year in subsidy to LU, more than five times the existing grant, despite the fact that the government had originally wanted to withdraw all subsidies. Third, Transport for London (TfL), LU's parent body, would guarantee 95 per cent of the contractors' approved debts in order to reduce the cost of borrowing and reassure their financiers, necessarily more expensive than public sector debt, without any corresponding reduction in debt servicing charges. Fourth, the government itself gave an open-ended commitment to the

City and big business. The Department for Transport (DfT) wrote to TfL, saying that should LU find itself in financial difficulties as a result of the PPPs, the Secretary of State for Transport ‘regards it as untenable that’ he would not consider further financial aid or that ‘he would stand by and do nothing in those circumstances’.³ As will be seen, the contractors and bankers saw this for what it was – a blank cheque – with the taxpayers footing the bill.

By 2006, the additional costs of the contract, financing and profit margins attributable to the companies’ subcontractors, costs that would not otherwise have been borne under public procurement, were 15–21 per cent of the annual payments (based on my conservative calculations on data from Metronet’s annual report and accounts).

Despite these subventions, within two years, Metronet, which had two of the three £17 billion contracts, was behind with its investment programme and over budget. In July 2007, it went into administration with debts of at least £2 billion after its owners, five international corporations, refused to put in another penny beyond their original commitment under the terms of the contract. Metronet’s bankruptcy was precipitated by the refusal of the Rail Arbiter to award more than a fraction of its appeal for increased payments from LU to fund its near £1 billion overspend and a further £1 billion projected overspend by 2010. In a statement the Rail Arbiter issued to the press on 16 July 2007, he said that if Metronet ‘had delivered in an efficient and economic way, its costs would have been lower’. It is yet another – very expensive – refutation of the myth, so assiduously promoted by big business, the civil service and the government, to justify privatization and PPPs: that the corporations are more efficient at delivering public services than the public sector. Many senior civil-service personnel are now recruited by, or are on secondment from, or are even paid by the financial services industry (Shaoul et al., 2007b).

With Metronet’s debts guaranteed by TfL – and ultimately the government – the taxpayers, workforce and travelling public will bear the cost. The Mayor of London announced that £750 million would be made available to the Administrator to ensure that the trains would keep running. Metronet would continue its work while in administration and its suppliers – Metronet’s sister companies – and the workforce would continue to be paid. TfL decided to retain the work in house, which the London Assembly transport committee believes has saved LU some £2 billion through ‘the availability of cheaper finance’.⁴ But it has had to defer some of the improvements, such as station refurbishment, expected under the PPP.

So, far from the private sector bearing the risk and cost when things go wrong – another fraudulent myth endlessly parroted by government

ministers to justify the higher cost of private over public finance – Metronet, like the franchise operator, GNER, simply handed back the keys and left it to the taxpayer to sort out the mess, a travesty of risk transfer. LU was only one of a number of PFI/PPP projects that collapsed and had to be bailed out. Others include the Channel Tunnel Rail Link, National Air Traffic Services, the Royal Armouries Museums, to name but a few. The information technology (IT) PFI projects have proved so disastrous that even the government has abandoned PFI for IT.

With respect to the remaining PPP with Tube Lines, it too became embroiled in a row with LU over the second 7.5-year period, set to run from 2010 to 2017. Tube Lines claimed that the investment, renewal and maintenance programme would cost £7.2 billion. But the independent Rail Arbiter priced the work at between £5.1 billion and £5.5 billion, leaving a gap of about £2 billion,⁵ although LU priced the contract at £4.1 billion, leaving an even bigger gap. The then chief executive of LU stated in April 2009 that he believed that it would cost less if the entire £30 billion PPP programme to renovate the tube network was carried out in house instead of being awarded to a PPP. He attributed the difference in cost to the additional cost of private finance. He warned that if the dispute with Tube Lines over the funding gap was not resolved, then that contract too might have to be abandoned. While subsequent negotiations narrowed the gap, in June 2010, the second 7.5-year contract was abandoned, with LU buying out Tube Lines at a cost of £310 million after the company fell seriously behind with its upgrade to the Jubilee Line.

Air traffic control

Britain's air traffic control operator, National Air Traffic Services (NATS), the third-largest air traffic controller (ATC) in the EU, provides take-off and landing services at 14 UK airports, some international services and, most importantly, *en route* air traffic control services for aircraft flying over the UK and its North East Atlantic airspace. About 80 per cent of NATS' revenues are derived from North Atlantic travel. Its services are vital if the airlines are to operate safely and efficiently. But with the UK's air lanes severely congested, the overarching safety requirement may lead to delays that create extra costs for its customers, the airlines, without careful management. Since the mid-1990s, with short-haul European flights set to rise, capacity in the UK and continental Europe has increasingly become a problem. It can only be increased by some combination of rationalization within the airline industry via mergers and takeovers to get better route structures, larger planes, better equipment, increased sectorization and fewer ATCs.

Reconstituted in 1996 by the then Conservative government as a corporation, NATS operated as a subsidiary of the publicly owned Civil Aviation Authority (CAA). In 1998, the incoming Labour government published plans for a partial sale of NATS to a private partner, under its flagship PPP policy, and introduced the necessary enabling legislation in 2000. In March 2001, the government agreed to transfer a 51 per cent stake in NATS to the Airline Group, a consortium of seven airlines, NATS' UK customers, for about £800 million. But in May, the Airline Group told the government that as a result of the decline in the transatlantic traffic and costs that it had overlooked, it could not afford its offer price and a reduction of £45 million was agreed. In July 2001, the government transferred a controlling stake in NATS to the Airline Group for £750 million, with the expectation that its new owners would invest in new equipment to the tune of £1 billion over ten years. The Airline Group financed the deal with £55 million of their own capital as equity and raised the rest as loans that would be repayable by NATS, with the intention of raising the £1 billion investment funding via additional loans, making a total of about £1.6 billion.

Thus NATS would be a PPP or joint venture between the private sector and the Civil Aviation Authority, NATS' former public sector parent. But within three months, in the aftermath of the terrorist bombing of the World Trade Center in September 2001, which halted transatlantic traffic for three days and the subsequent downturn in traffic volume, NATS' bankers became concerned about NATS' ability to service its debts, forcing NATS to ask for government help to stave off bankruptcy. Given the government's international treaty obligations to provide air traffic services and commitment to its flagship policy, it had no option but to provide financial support.

Although NATS and the government attributed the collapse to unforeseeable events, an analysis carried out before financial close (Shaoul, 2003) that had assumed a £350 million purchase price had shown that the project was unviable: it was never going to be affordable, even without the unprecedented downturn in travel after 9/11. The PPP worsened rather than resolved NATS' financial problems. But no risk assessment was carried out even though the government remained a part-owner and as signatory to international conventions guaranteed service delivery (NAO, 2002b). This was despite the fact that the PPP generated *additional* risks as a result of the high level of private sector loans.

Conclusion

This chapter has sought to provide evidence on the experience of some of the UK's transport PPPs and the financial costs of different types of PPPs

to inform the international policy debate about the use of private finance and its broader implications for accountability.

The first point is that there is a lack of clear, consistent and understandable reporting by both the public and private sectors, making it difficult to understand where public money is going, how it is being spent, and the extent of future commitments and liabilities. There have been some useful reports by the official watchdogs, which have far greater access to information into individual projects, typically on process-related issues such as *ex ante* VfM decision-making, contract management, tendering, benchmarking and renegotiation. However, there has been a failure to provide an independent *ex post facto* financial analysis of either the policy as a whole or individual PPP projects. In other words, most analyses have focused on the benefits and limitations of projects in isolation from the financing method and costs to the various stakeholders.

Second, while this study has focused on the financial outcomes of transport PPPs, it is quite clear that the rail projects have failed to deliver the physical outputs expected, despite receiving higher funding than was ever available under public ownership. In relation to road projects, there is no evidence to suggest that they are any better or worse than their conventionally procured counterparts. In so far as the roads are better maintained, and this remains to be demonstrated, then this comes at a high cost and at the expense of other roads.

Third, while this survey of transport PPPs is by no means complete, the financial evidence and analysis confirms the international experience outlined in general terms in the literature. The high capital cost of transport projects makes it difficult if not impossible for such projects to be financially viable and thus attractive to the private sector. This is why governments must ensure some combination of capital grants, subsidies, implicit or explicit underwriting of the private sector's debt or the public authority's payments, bundling together of projects to increase their size relative to transaction costs, project and service downsizing, higher charges for the public authority or the users and a reduction in workers' jobs, wages and conditions. Thus the method of financing that lies at the heart of the policy has broader social and economic implications.

Fourth, the evidence has shown that partnerships have entailed a higher cost of finance. This is a universal phenomenon and independent of partnership form, contractual or joint venture. Likewise, success, as reflected in commercial viability, is also independent of partnership form.

The higher cost of finance has several interrelated consequences. It is justified, *ex ante*, in terms of risk transfer to the private sector. It is however very difficult to assess, post-implementation, whether that risk was priced correctly and therefore the project constituted VfM. If the

project is successful, then the public agency pays considerably more than under conventional procurement. If, on the other hand, it is unsuccessful, then the risks and costs may be dispersed as the rail franchises, London Underground and NATS PPPs demonstrate. In effect, the risk transfer is not from the state to the private sector, but from the consortium to its sub-contractors and their workforce and to the public as taxpayers and users, a travesty of risk transfer. The beneficiaries are the banks and to a lesser extent the consortia and parent companies, who are shielded from public scrutiny. These distributional effects confirm the experience elsewhere and in other sectors such as IT (Edwards and Shaoul, 2003).

Although a project may fail to transfer risk and deliver VfM in the way that the public agency anticipated, the possibility of enforcing the arrangements and/or dissolving the partnership is in practice severely circumscribed for legal, operational and political reasons, with the result that the public authority may find itself locked into a partnership. The *de facto* lack of sanctions strengthens the contractor's already powerful financial and monopolistic position, forcing the public authority to (re)negotiate on the contractor's terms.

At best, partnerships have turned out to be very expensive, with the inevitable consequences for future service provision, taxes and user charges, not just today but for a long time to come. These projects may burden government with hidden subsidies, diversion of income streams and revenue guarantees whose impact on public finance may not become apparent for many years and may all be triggered at the same time, precipitating a major fiscal crisis.

The high failure rate of the rail franchises, together with the failed London Underground and NATS PPPs, raises questions about the public authorities' appraisals of PPP bids. One franchise has now been let three times on essentially the same terms, despite the fact that the previous two failed within a very short time. For all these projects, simple projections based upon the organizations' annual report and accounts and carried out before financial close, showed that these schemes were simply not viable. Nevertheless, the international firms of legal and financial advisers apparently found otherwise. How is this to be explained?

These same advisers have played a key role in devising the policy, the VfM methodology, the implementation process and promoting the policy internationally. They have a commercial interest in the policy as an important new market, acting as advisers to both the public and private sectors and in some contracts as partners or major subcontractors in their own right (Shaoul et al., 2007b). The case of the failed NATS PPP is particularly instructive. The Department of Transport paid its advisers, one of whose tasks it was to evaluate and manage the risks to NATS' business, some £44 million (£17

million more than expected) and 5.5 per cent of the proceeds, among the highest of all the trade sales examined by the National Audit Office (2002b). CSFB, the lead financial adviser, claimed that their prime motivation was to gain valuable experience of PPPs in order to win future contracts in this new and expanding market. Furthermore, under circumstances where the government is actively promoting the involvement of the private sector in running public services via PPPs by refusing to make funding available for capital investment, policy promotion comes into conflict with rigorous project appraisal. It is therefore perhaps not surprising that the advisers failed to evaluate the PPP correctly, and ignored evidence and advice that did not fit with the government and its own agenda: a signed deal.

In short, this analysis has demonstrated that the outcomes do not match the claims. This is because the government's claims about the value of private finance ignored the competing demands of the numerous stakeholders and the characteristic of transport projects: the highly capital-intensive nature of public goods that makes it impossible to make the return on capital that the stock market requires. In such circumstances, it was and is impossible to reconcile all the conflicting claims on the revenues and protect both the taxpayers and users. The government resolved the conflict in the interest of the banks and corporations and sought – via the mantra of risk transfer and VfM – to make the distributional issue invisible.

The lack of public accountability is therefore unsurprising. The inadequate financial reporting of and accountability for PPP projects hides what the government does not wish to reveal. It makes it difficult to draw any lessons from the experience. It also renders an informed public debate impossible, leading to the wrong policy choice. Even more importantly, public discourse itself becomes meaningless. The broader policy implications of these findings are that any rational government and policy-maker committed to the broader public interest would take note of the independent and impartial evidence, abandon the policy and use public finance for public infrastructure.

Notes

1. GNER referred to a statement by Alastair Darling, the then Secretary of State for Transport, in a comment to a debate in the House of Commons, 19 December 2006.
2. HM Treasury (2009), www.hm-treasury.gov.uk/d/pfi_signed_projects_list.xls, (accessed 29 September 2009).
3. Letter dated 30 December 2002, p. 4, from David Rowlands, the Director General of Railways and Aviation, at the Department of Transport, addressed to all the partners, main contractors and financiers of the London Underground PPP. For further information please contact the author.
4. *New Civil Engineer* (2009), 'London Assembly: Government should plug Tube cash shortfalls', www.nce.co.uk/home/transport/london-assembly-government-should-plug-tube-cash-shortfalls/1995470.article, 11 May 2009.

5. Transport for London (2008), 'Transport for London responds to PPP Arbitrator's Guidance on Tube Lines second period funding', www.tfl.gov.uk/corporate/media/news-centre/archive/9308.aspx#, 11 May 2009.

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