ALTERNATIVE MODELS FOR PROCUREMENT OF MAJOR INFRASTRUCTURE PROJECTS IN SCOTLAND

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In the last decade in Scotland, a significant number of infrastructure projects have been delivered through the PFI/PPP procurement model. Although procurement through this approach has evolved through time and substantially matured, there remain some concerns over private sector returns, procurement lead times and affordability issues for the public sector. In the last few years, a number of variants on the PFI/PPP delivery model have been introduced to make use of standardized legal documentation. These variants include the Hub, the Non-Profit Distribution (NPD) model, Hybrid structures, NHS Local Improvement Finance Trust (LIFT), Building Schools for the Future (BSF), etc. It is partly because of concerns about PFI/PPP and its variants that the Scottish Government launched the Scottish Futures Trust (SFT). The Scottish Futures Trust would involve government agencies such as Local authorities working together to raise finance from the private sector through issuing of municipal bonds. The Scottish government asserts that PFI/PPP procurement was a costly mistake that leaves the Scottish taxpayer with crippling costs of borrowing. This paper outlines key features of the Hub and the Non-Profit Distribution principles. The Scottish government's proposals for procurement of major infrastructure projects through the SFT are evaluated. Preliminary results of data collected through structured interviews on the attitudes towards the SFT model are analysed. It is concluded that the SFT model requires significant development before it gains the potential to delivery major infrastructure projects and services.

Keywords: non-profit distribution model, private finance, procurement, Scottish Futures Trust, value for money.

INTRODUCTION

In the last decade in Scotland, a significant proportion of infrastructure has been delivered through PFI/PPP with over 100 projects signed, having a combined capital value of over £5 billion. Although the PFI/PPP industry has significantly matured and evolved in that time, concerns remain over the level of private sector returns, procurement lead times and short and long term affordability issues for the public sector, (Scottish Government, 2008). In the last few years, a number of variants on the PFI/PPP delivery model have been introduced to the market in the UK to make use of standardized legal documentation. However, both the public and private sectors alike remain yet to be convinced whether these variant delivery structures alleviate the concerns raised by their stakeholders. It may be time to go back to the fundamentals of partnership, namely that partnership is about relationships between individuals and within teams, not contractual drafting, and build delivery models about these

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relationships. Bespoke delivery structures can be expensive and time consuming to develop. Therefore, there is a strong argument to adopt and improve on good elements of existing structures which are tried and tested in the market. In this paper, an outline of the successes of the PFI/PPP delivery model is given. Key features of variant delivery models including the Hub and Non-Profit Distribution (NPD) principles are given. Elements of the Scottish Futures Trust (SFT) are given. Preliminary analysis of data collected through structured interviews is given to evaluate perceptions of experts towards the SFT model.

SUCCESS AND LIMITATIONS OF THE PFI/PPP MODEL

There has been a major expansion in capital projects delivered in the past decade through the PFI/PPP procurement model. This has resulted in significant numbers of schools, hospitals, roads, bridges, airports and other key infrastructure assets being delivered. It is questionable whether these projects would have been delivered without private sector investment through PFI/PPP procurement. With the benefit of nearly two decades of experience in the public and private sectors, PFI/PPP procurement has evolved and improved. However, questions have been raised regarding value for money (VFM) on a number of early PFI/PPP contracts. A number of these early projects have been bought out or terminated due to poor contract structuring. On balance, reports prepared by the National Audit Office tend to indicate that the majority of PFI/PPP contracts in the UK deliver VFM solutions (National Audit Office, 2007).

The benefits of the PFI/PPP model include strong design and build standards. Another key benefit created by use of private finance is the identification of ongoing maintenance requirements for a capital asset, and the ring-fencing of funding to ensure that this maintenance is delivered over the concession period. This was not always the case with other procurement routes which focus on delivery of a capital asset, while neglecting the ongoing maintenance requirements. On the financing side, there has been a significant reduction in equity and debt financing costs particularly in established sectors such as education as the money markets developed a better understanding of the underlying risks inherent in such projects. Competition in the money markets also helped with banks and insurance companies having to compete with capital markets solutions. Furthermore, an active secondary equity market has developed allowing recycling of equity investments in PFI/PPP projects. As for primary equity investments, secondary returns have fallen in recent years as the market has matured, which must be considered as an indicator of improved market efficiency. The impact of the recent credit crunch on cost of borrowing for PFI/PPP projects is beyond the scope of this paper. Readers interested in this subject are advised to read the authors earlier paper on the subject (Wamuziri, 2008).

It is true that many of the early projects made significant gains for the private sector participants. However, that would be expected in a model which was just developing and where the market was imperfect. Many of the routes for delivering these gains have been closed off through redrafting of the contracts and also by tightening of the funding and bidding markets through the competitive process. It would be wrong to seek to squeeze all profit out of a PFI/PPP transaction as the private sector will then merely deploy its resources to opportunities where it can generate a commercial return. No matter the procurement route there are very few infrastructure projects which do not have a private sector element in the build and/or operate phase. Contractors and facilities management companies bid for PFI/PPP projects, not just for the profit margin, but also for the upside potential of returns from their equity investments. This upside potential compensates for the risks inherent in the procurement process where they could incur bid costs running into millions of pounds but have a small probability of success.

Despite its many successes, there are still opponents to the PFI/PPP procurement model. Stakeholders from the public and private sectors are frustrated by the time and costs incurred in bringing projects to market and concluding the legal and commercial aspects of projects to allow construction to start. There is natural suspicion of large scale private sector intervention in projects, a concern that financing costs are excessive and a public perception that the private sector continue to derive equity returns from social infrastructure. Insufficient spacing of projects, long procurement periods and spiralling bid costs have in some cases led private sector participants to become more selective about the projects that they bid for, resulting in loss of competitive tension and increased cost to the public sector. This observation should not be applied to the PFI/PPP infrastructure market as a whole. For example, the Building Schools for the Future (BSF) programme in England has generally been well managed with good project sizes and a steady deal flow being maintained to the market (Aritua *et al.*, 2008).

In the last few years, there have been a number of changes to the delivery of PFI/PPP projects in Scotland. These are probably more variations on the PFI/PPP theme, rather than alternative delivery vehicles. It is debatable whether these variants address the concerns associated with PFI/PPP infrastructure delivery outlined above. The developments in the Scottish market which are discussed in the sections that follow include: the Scottish Hub Initiative, the Not-for-Profit Distribution (NPD) Model and the Scottish Futures Trust (SFT).

SCOTTISH HUB INITIATIVE

The Hub initiative was set up by the Scottish Executive in 2006 following the success of the Building Schools for the Future (BSF) and the NHS Local Improvement Finance Trust (LIFT) programmes. The Hub initiative was developed in conjunction with Partnerships UK. The objectives of the initiative include:

- The provision of enhanced local services by increasing the scale of joint service delivery between community planning partners across Scotland.
- The delivery of a sustained programme of investment through the development of long-term strategic partnerships between local authorities.
- To establish more efficient and sustainable investment for the public sector.
- The ability to share learning between the public and private sectors to improve procurement strategy.

The delivery vehicle for this type of procurement is the local hub company and was designed to operate in much the same way as the Local Education Partnership (LEP) or LIFT company; forming partnerships between local authorities, Partnerships UK and private investors. Unlike the BSF and NHS LIFT initiatives in England, the proposed hub initiative was not intended to be specialized to deliver projects in a particular sector e.g. NHS or education. Instead, it was hoped that the hub model would be flexible to meet needs of the community, which would choose from a range of contracting routes dependent on the characteristics of the project in hand. These contract types include:

- Lease plus Agreements: these types of contracts leave the sole responsibility for design, construction, insurance, repair and maintenance of the asset in question to one landlord, to whom a rent is paid for services, leaving the user with a fully maintained hassle free facility. This type of agreement is somewhat similar to the Design, Build, Finance and Operate (DBFO) model.
- Conventional Design and Build Contracts: this type of contract may offer the most VFM in some projects e.g. refurbishment projects.

The idea that the hub initiative would be more flexible than the BSF or NHS LIFT programmes sounded good. However, the hub format removed one of the major factors of success of the BSF or NHS LIFT programmes. That is the degree of specialization in these ventures that enabled a greater breadth of knowledge and familiarity between the partners in the delivery of specific services, which resulted in greater efficiency and economies of scale. Without specialization like this, the hub initiative would just be another form of PFI/PPP procurement that would not necessarily offer any more of an effective delivery vehicle than existing PFI/PPP models. The hub initiative was never implemented. It is therefore difficult to tell what its strengths and weaknesses would have been in practice. Proposals for the Scottish Futures Trust (SFT) were put forward in the same year (2006) and became Scottish Government policy following election of an SNP administration in Scotland in 2007.

NOT FOR PROFIT DISTRIBUTION (NPD) MODEL

The NPD model was introduced with the objective of addressing political concerns over PFI/PPP procurement. One of the key features is the reinvestment of any surpluses back to the community, for example via charity. Instead of distributing dividends the Board of Directors of the Special Purpose Vehicle (SPV) donate any surpluses to the charity. The Board of the SPV is controlled by subordinated debt providers, and involves representation from the procuring authority, charity or a Community Interest Company. It also includes an “Independent Director” who has significant power vested in him to make key decisions on subjects such as refinancing of project debt.

NPD was designed to be a variant model which built on knowledge and experience in existing PFI/PPP structures and makes use of existing standardized documentation. The partnership required amongst equity players in the SPV is intended to improve stakeholder acceptability and participation. The NPD model has been applied on a few projects in the education and health sectors in Scotland (Cuthbert and Cuthbert, 2008).

Whilst there are completed deals, a number of existing PFI/PPP market participants have concerns which require to be addressed before taking part in NPD type projects. These include:

- The barring of profit distribution and limitation of equity upside to the private sector contractor reduces the incentive for the contractor to beat performance targets. There is clear evidence that some contractors are choosing not to bid for such contracts due to these limitations.
- The governance structure utilized in the NPD structure involves public sector representation on the Board of the SPV. The dilution of control is potentially problematic to private sector funders who may ultimately bear the financial risks created by the Board’s decisions.

- The NPD structure suggests a reluctance to allow the private sector to use refinancing as a method of extracting financial return. Refinancing arguably is a necessity within an efficient capital structure, and should be recognized as such by public sector project sponsors. The refinancing clauses already in place in standard documentation allow for any gain to be shared with the public sector.

It would appear that the NPD structure effectively caps the upside potential available to the contractor from operating efficiently. In addition, experience of NPD contracts to date is that they introduce a significantly increased level of complexity to infrastructure projects which is unlikely to aid their operation and is at odds with the wish to drive down procurement lead times and cost. The experience of the NPD model to date is that it is not fundamentally a better means of delivering capital projects than other existing structures. This is not to say that it may not develop to become a more efficient means of capital investment, however, at present there are a number of structural issues outlined above which require to be considered in greater detail before the private sector will accept this as a credible alternative future model for PFI/PPP project delivery.

THE SCOTTISH FUTURES TRUST (SFT)

In 2006, the Scottish National Party (SNP) published a policy paper titled "The Scottish Futures Trust – A better deal with Scottish Futures Bonds". In this paper, they dismissed the Private Finance Initiative as a 'quick fix', that has proved to be a costly mistake leaving the Scottish taxpayer with the burden of crippling costs of PFI borrowing. In addition to this, they lay claim that the utilization of PFI contracts in Scotland are costing the Scottish taxpayer in excess of £110 million per year, which will amount to £5 billion over the lifetime of these projects. They cited the Edinburgh Royal Infirmary project in their criticism of the PFI mechanism, claiming that the private consortium responsible for the project will receive in excess of £1.26 billion in payments over the lifetime of the project. This is seven times the £184 million it cost to build (Scottish Government, 2008). As a solution to problems like this, they proposed a move to a new public procurement system called the Scottish Futures Trust.

The SFT was developed as an alternative mechanism for channelling public and private capital into infrastructure investment programmes and projects in Scotland. The SFT is expected to be a private limited company that is representative of Scottish public interest, supporting delivery of national and local infrastructure plans. It is a company that will run on non-profit distributing (NPD) principles, obtaining its funding through bonds and other various commercial financing instruments (at a lower rate than the borrowing rate for PFI schemes). Much like the PFI/PPP schemes, the SFT plan on undertaking the following range of functions:

- Provision of assets and services to public authorities in Scotland.
- Provision of private finance to those who provide public services.
- The development of a centre of expertise for best practice, advice and support for public authorities – for the planning and delivery of these projects.
- Provision of a forum for public and private sector engagement.

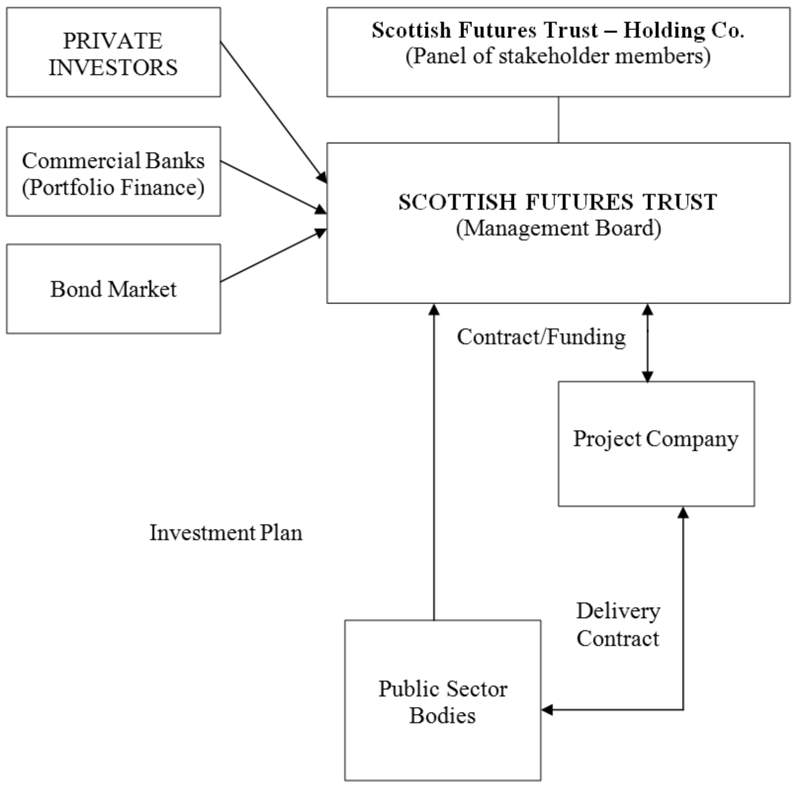

Figure 1: structure of the Scottish Futures Trust; Source: scottish Government (2008)

It is proposed that the SFT will operate as a private company working for the public sector. In addition to sourcing finance for SFT projects, it is proposed that the trust will work in an advisory capacity for the public sector, much like Partnerships UK, offering additional services such as procurement advice and asset management. Figure 1 shows the proposed structure of the Scottish Futures Trust.

Under the PFI/PPP scheme, funding for service and asset provision is sourced entirely by the private consortium managing the project. This is in most cases raised from banks syndicated lending, equity contributions, mezzanine finance, etc. Under the SFT initiative, it is proposed that finance for investment in the same projects, will be sourced from private investors, commercial banks and/or municipal bonds. To attract investors to purchase SFT bonds, it is proposed that they should be sold on a tax-exempt basis. This means that any interest earned by the investor purchasing the bond will be free from taxation. In theory, it gives the investors the opportunity to earn as much money on a relatively low risk/low yield investment as they would on a higher risk/higher yielding investment that would be taxed Kriz (2004). It is anticipated that this would benefit the public and the tax payer, as it provides the opportunity to borrow finance at a low rate. However, taxation is matter that is reserved for the UK government and not a devolved matter. Under current fiscal legislation in the UK, no governing body (devolved or otherwise) is legally permitted to issue bonds on a tax-exempt basis. It would therefore be necessary for the UK government to amend the law for this to be permissible.

In May 2008, the Scottish Government published a paper titled "Taking forward the Scottish Futures Trust". In this paper, it was proposed that the Scottish bonds issue could be resolved through the development of partnerships between different councils across the country to issue local authority bonds. Because local authorities have fewer constraints on their ability to borrow money, it may be possible to issue municipal bonds between them assuming favourable market conditions. A model for the delivery of municipal bonds on this basis is still under development, so the practicalities of how this would work are still unknown.

If implementation of the SFT runs smoothly, the Scottish public are expected to benefit from a number of improvements to the provision of public services and infrastructure. The suggested benefits include (Scottish Government, 2008):

- Substantial savings per annum (estimated to £100-£150 million) of tax payers money, which could be better invested in the country's capital infrastructure and services.
- The provision of a centre of expertise for advice and support to the public sector with regards to the delivery of projects.
- The provision of lower cost of funding for projects than the current PFI/PPP models.
- The provision of greater additionality for public service facilities in infrastructure through private investment
- Investment in infrastructure through the SFT to benefit future generations and not burden them. This is on the basis that all assets will be owned by the public sector and taxpayers and not just leased from a private consortium.

In theory, the SFT model sounds like a viable alternative to the PFI/PPP system that should ultimately benefit the Scottish people and achieve maximum VFM through its NPD principles. However, due to the infancy of these proposals and because it is not a concept that has not yet been put into practice, it is necessary to undertake further research to better understand the potential consequences of its implementation before any conclusions can be drawn.

RESEARCH AIMS AND METHOD

As the SFT concept is still in its infancy, commentary available in this area is still relatively limited. There is no existing literature that offers a truly objective, un-politically or financially motivated comparison of the SFT and other PFI/PPP delivery mechanisms. This is partly due to the fact that no projects have been procured through the SFT model and therefore evidence of its success or otherwise is lacking. In order to assess the effectiveness of SFT, there is need for research to address a number of questions including the following:

- Will private consortia be keen to bid for SFT projects and if not, is it possible to retain a competitive market for bidders under the NPD principles?
- What are the mechanisms for the issue of municipal bonds between local authorities?
- Will the allocation of risk between the project participants be altered under the SFT model and how will this influence tender price?
- Following changes to International Financial Reporting Standards (IFRS), how will the Scottish Futures Trust be able to offer a better solution to the "off the balance sheet" problem than the existing PFI/PPP system currently in place?

- Will the Scottish Futures Trust offer the same degree of specialization in public service provision as the NHS LIFT and BSF programmes in England?
- Will the Scottish Futures Trust as a private organization (with public sector control) be in direct competition with other existing private sector counterparts and if so does the new initiative have potential to jeopardize the continued business success of these companies?

To try and ascertain answers to some of the above questions, primary data was collected through semi-structured interviews. The key features, strengths and limitations of data collection using this approach are well documented in standard textbooks, for example, Cassell and Symon (2004). The interviews were carried out face to face with the subjects. The subjects were not constrained in their response to the questions posed. Interview questions were open-ended and designed to enable candidates to expand freely on their views. The selection of interviewees for this research was constrained by the fact that there is shortage of individuals knowledgeable in the field to answer the questions on an informed basis. In the end the six individuals consulted were as follows:

- Interviewee one: an associate in one of the UK's leading consultancy firms with a number of years consultancy experience on PFI/PPP projects UK wide.
- Interviewee two: the managing director of a PFI/PPP consulting firm with over 20 years' relevant project management experience in the industry.
- Interviewee three: a finance and business case advisor specializing in PFI/PPP contracts with an excess of 15 years experience in this particular field.
- Interviewee four: a PFI/PPP consultant specializing in tax advice and modelling support for private bidders.
- Interviewee five: a specialist PFI/PPP lawyer who is also a regular commentator in legal and business publications on the matter having worked on the earliest PFI project in Scotland.
- Interviewee six: a divisional director in PFI/PPP consultancy firm working on behalf of the public sector.

The selection of candidates from different professional capacities within the PFI/PPP sector was intended to enable development of a more holistic qualitative analysis. It was also ensured that all subjects had extensive experience of working on PFI/PPP projects in Scotland, thereby ensuring familiarity with delivery of major infrastructure projects in the Scottish context.

ANALYSIS AND DISCUSSION OF PRELIMINARY RESULTS

The interviewees were firstly asked to evaluate the effectiveness of the PFI/PPP procurement option. On the whole, there was general agreement that PFI/PPP procurement offered a more effective solution than traditional methods. The main advantage of the PFI/PPP mechanism cited was its ability to deliver a number of services and to ring-fence funding to areas which were previously neglected under traditional procurement. The mechanisms ability to transfer risk to those best equipped to deal with it was also highlighted as a significant benefit as it meant that unnecessary risks could be more easily avoided and/or rectified. As a result, the propensity to achieve VFM on these projects is greater.

There is the possibility of obtaining finance at a lower rate in SFT projects than in existing PFI/PPP mechanisms. This sounds attractive. After all finance theory suggests that the cost of debt is less than the cost of equity. However, if not well designed, the SFT model could evolve to be just another label for PFI but with more bureaucracy. The SFT model could bring about a great deal of co-operation and cross–agency work between the NHS and local authorities for example if the issuing of municipal bonds were successful. Having said that, there was general feeling of doubt that raising of funding through municipal bonds would work in practice. It is suggested that this is an area that requires further research.

All the experts took the view that adopting NPD principles in structuring privately financed infrastructure projects would have some impact. For example, contractors and investors bidding to participate in such projects would look for alternative ways of generating their profits from the same ventures through additional management fees, debt interest charged or higher tender prices. Larger contractors could channel their resources to other PFI/PPP opportunities outside Scotland or internationally. The continued presence of contractors and investors in Scotland would also very much depend on the pipeline of projects available.

Although the SFT model offers the potential to reduce the cost of borrowing for funding infrastructure projects, this represents only one element in the infrastructure provision debate. Allocation of risk between project participants is another major consideration. Rather than focussing on the delivery model as the end product, the starting point in improving private sector participation in infrastructure delivery to provide better VFM is to develop an efficient infrastructure market as the best means of driving down costs in the sector. An attractive market will encourage existing participants and new entrants regardless of the favoured delivery model. To this end, while demonstrating VFM remains at the forefront for the public sector, the wider range of drivers which should be considered for a successful market for infrastructure project delivery include:

- recognizing and balancing the risk/reward ratio;
- reducing the cost of borrowing for project finance;
- encouraging competition;
- seeking to reduce procurement lead times;
- reducing participants’ bid costs; and
- creating and maintaining a steady flow of projects.

Research is needed to develop guidelines on how the SFT model can be developed to incorporate these drivers to deliver major infrastructure projects in Scotland.

CONCLUSIONS

The PFI/PPP delivery model has been largely successful in delivering major infrastructure projects both in the UK and internationally. In Scotland, variants on PFI/PPP delivery have been developed including: the Scottish Hub, the No-Profit Distribution model and the Scottish Futures Trust. The NPD model has been employed on a few projects in Scotland. Its application potentially reduces the competitive tension in the procurement process. The Scottish Hub was never put in practice due to change in government in Scotland in 2007. If the SFT model is to replace PFI/PPP procurement, then it needs to demonstrate that it offers better VFM;

and provides better quality and quantity of services compared to the PFI/PPP model. Not even a single project has been procured to date using the SFT approach. In theory, the SFT offers the opportunity to reduce the cost of borrowing for major projects. However, the cost of borrowing is only one element in the infrastructure provision debate and differs from the cost of capital. Equally important is allocation and balance of risk between the project participants. It is not clear how the SFT model would work in practice. Research is therefore needed to assess or compare the efficacy of the SFT approach with other PFI/PPP delivery models.

REFERENCES

Aritua, B, Smith, N J and Athiyo, R (2008) Private finance for the delivery of school projects in England. *Proceedings of the Institution of Civil Engineers: Procurement and Law*, **161**(MP4), 141-146.

Casell, C and Symon G (2004) *Essential guide to qualitative methods in organizational research*, *London: Sage.*

Cuthbert, J and Cuthbert, M (2008) Inquiry into the methods of funding capital investment projects: analysis of the Financial Projections for the Two-Non Profit Distributing PFI Schemes and Implications. www.scottish.parliament.uk [Accessed 8 Dec 2009]

Hellowell, M and Pollock, A (2009). Non-profit distribution: the Scottish approach to private finance in public services. *Social Policy and Society*, **8**(3), 405-418.

Holmes, J, Capper, G and Hudson, G (2006) LIFT: 21st Century health care centres in the United Kingdom. *Journal of Facilities Management*, **4**(2), 99-109.

Ibrahim, A D, Price, A D F and Dainty A R J (2009) Evaluation of key practices under the Local Improvement Finance Trust (LIFT) initiative for UK healthcare facilities. *Engineering, Construction and Architectural Management*, **16**(5), 504-518.

Kriz, K A (2004) Risk aversion and the pricing of municipal bonds. *Public Budgeting and Finance*, **24**(2), 74-87.

National Audit Office (2007) Improving the PFI Tendering process. www.nao.org.uk [Accessed 9 Jan 2010]

Scottish Government (2008), Taking Forward the Scottish Futures Trust. www.scottish.parliament.uk [Accessed 28 Nov 2009].

Wamuziri, S C (2008) Editorial: PFI/PPP: past, present and future. *Proceedings of the Institution of Civil Engineers: Management, Procurement and Law*, **161**(MP4), 137-140.