

THE EFFECTS OF THE CREDIT CRUNCH: AN AUSTRALIAN PERSPECTIVE*

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1. INTRODUCTION

The financial landscape has shifted considerably in recent times, with far-reaching effects extending, not least, to the Australian privately financed public-private partnership (PPP) market. This, in turn, has important implications for the construction industry as the PPP model is a widely used method of major public infrastructure delivery in Australia. As the PPP model is a widely used method for the delivery of major public infrastructure in Australia, this has important implications for the construction industry. The "credit crunch", characterised by a sharp decrease in the availability of finance paired with a sharp increase in the cost of finance, has had a major impact on the traditional structure of the PPP model. With syndication and long-term debt no longer an option, parties are being forced to develop innovative solutions in order to enable projects to proceed and meet value for money outcomes.¹

This paper will first, by way of background, discuss the credit crunch and its interaction with PPPs. It will then proceed to explore potential solutions aimed at adapting the PPP model in order to mitigate the effects of the credit crunch. These solutions focus on the need to reduce the risk associated with investing in PPPs and consider alternative sources of finance.

2. PPPs IN AUSTRALIA

As a discrete policy stream, the advocacy of PPPs originally emerged out of the continued budgetary constraints faced by the various governments and

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¹ London's Olympic Village provides an excellent illustration of the potential impact of the credit crunch on PPPs. When it was envisaged in 2007, the private sector was expected to bear the entire cost of the project. However, the severity of the credit crunch has left the private sector unable to fund even a small part of the development. While the private sector still proposed a deal, the government considered that more public money would be saved in the long term if the project were fully publicly funded. Importantly, the funding situation is to remain flexible and the involvement of private funding will be reassessed closer to completion.

the exhaustion of opportunities for outright privatisation of major public infrastructure.² State and federal governments began to explore more subtle alternatives for accessing private sector resources in the delivery and operation of public facilities. Policy discourse turned away from emphasis on public sector restructuring and "trimming the fat", to a search for innovative financing solutions and more precise analysis of exactly how the government could most effectively meet infrastructure requirements. This broad change in policy focus is manifest in the current expression by various governments of a preference for the PPP form.

The "Build, Own, Operate and Transfer" (BOOT) structure, which has come to form the backbone of Australia's PPP experience, has been employed since the 1980s. Under BOOT, a private consortium undertakes to finance and construct an item of infrastructure required by government, which it then operates for a period under a concession or franchise awarded by the government, thereby deriving revenue. At the end of the concession period, which is of sufficient length to allow the builders and financiers to recover their outlays with a return, the consortium transfers ownership to the government.

Recent years have seen an *ad hoc* expansion and revision of BOOT schemes and other long-standing structures, particularly in the context of social infrastructure where the private sector sources its revenue from a government service payment, rather than directly from the users of the facility as with economic infrastructure. These developments have grown into a range of infrastructure strategies, making up the Australian PPP family.

In Australia the term "PPP" is used broadly and includes both privately financed partnerships, and other partnerships between the public and private sectors. However, the following discussion will predominantly focus on privately financed partnerships as these are the projects that will be most affected by the changing economic climate.

2.1 Benefits of PPPs

The primary advantage of PPP delivery is its ability to deliver value for money outcomes for government. Broadly speaking, this is achieved in two ways. The first is by fostering private sector confidence in the ability of government to facilitate and assess PPP proposals. The underlying objective is to encourage private sector investment so that there are enough players in the bidding process to create the competition required to deliver a value for money outcome. The second method is by government selecting a project delivery model and designing risk allocation that delivers the best value for money outcome. This includes encouraging the private sector to adopt a whole of life approach to the design and construction of the asset,

² T Skotnicki, "Double Act" (2001) 23 *Business Review Weekly* (16 March) 72.

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with a view to obtaining the optimal balance between the cost of building the facility and its ongoing operation and maintenance costs.

Aside from the ability to deliver value for money, PPP projects offer a number of other significant benefits to government purchasers, industry and taxpayers, many of which are directly related to the presence of private finance. In comparison to traditional procurement and delivery models, PPP projects are often:

- *Delivered earlier*—Private sector involvement, in particular, is able to overcome many funding constraints and interface difficulties with private contractors.
- *More efficient*—This is due to market competition during the procurement process, and room for innovation.
- *More customer-focused*—The profits of the private enterprise depend upon the continued use, by customers, of the services provided.
- *More broadly funded*—Governments are generally restricted to issuing guaranteed bonds which transfer project risks onto the taxpayer, whereas private consortia usually have access to broader sources of capital.
- *More maintainable*—The structure of a PPP includes multiple aspects of delivery (such as design, construction and operation), encouraging the private sector participants to protect their investment and ensure ongoing maintainability through a “whole of life” approach to project delivery.
- *Better equipped technologically*—Private organisations involved in infrastructure delivery generally have access to technology, arising from their experience of infrastructure delivery elsewhere, which can add significant value to a project and which the government could not otherwise access.
- *More economically sound*—PPPs are motivated by financial, not political concerns. Thus, the private sector generally conducts detailed studies prior to going ahead with a project in order to ensure that its investment will be economically worthwhile.
- *Better placed to protect the public interest*—The various government policies on PPP delivery all place importance on protecting the public interest by assessing PPP proposals against public interest criteria such as accountability, transparency, equity, public access, consumer rights, security, privacy, and the rights of affected individuals and communities.

2.2 Privately financed partnerships

Many PPPs in Australia are privately financed. Indeed, most state PPP policies focus only on privately financed projects. For example, NSW State Government's *Working with Government—Guidelines for Privately Financed Projects* applies only to privately financed PPPs. Others, such as Partnerships Victoria and the Queensland PPP policy, whilst more inclusive on their face,

are also primarily directed at privately financed PPPs, as evidenced by their encouragement of long-term, service-based payment structures.

One question which is frequently asked in relation to privately financed PPP projects is how it is possible for such projects to be delivered at a lower overall cost to government than publicly financed projects, given that government can borrow finance at a lower cost than the private sector.

The answer is that there are differences between privately financed and publicly financed projects which can enable a privately financed delivery model to provide a better value for money outcome than a publicly funded alternative. Typically, the value for money drivers for privately financed PPPs are identified as:

- *Risk transfer*—PPP allow government to transfer risks to the private sector which the private sector party is better able to manage at a lower cost than government, thereby reducing the overall cost of the project to government. Historically the private sector has managed delivery risks better than the public sector. This is not surprising (or indeed meant to be a criticism of the public sector) given the different drivers of the private and public sectors. The key driver for the private sector is the profit imperative, which essentially means controlling the costs of delivery by managing the risks appropriately. On the other hand, the key driver for the public sector is risk mitigation, which usually leads to more expensive cost outcomes on delivery.
- *Whole of life costing*—The long-term nature of PPPs often requires the private sector party to assume responsibility, not only for the design and construction of a facility, but also for its operation, maintenance and refurbishment. This provides a commercial incentive for the private sector to adopt design and construction methodologies which will minimise the overall cost of building, operating and maintaining the facility through life.
- *Innovation*—PPP projects focus on output specifications, thereby providing private sector bidders with the opportunity to develop innovative design and other solutions so as to meet government requirements at a lower cost. Further, the private sector is incentivised to create innovative solutions to unforeseen risks as they emerge.
- *Asset utilisation*—Some PPP projects provide opportunities for third party use of the facility, thereby generating revenues which, due to an absence of commercial motivation, would not be derived if the facility were built, owned and operated by government. These third party revenues can reduce the cost government would otherwise pay as sole user of the asset, or alternatively open up opportunities for upside revenue sharing.
- *On time delivery*—There is significant incentive for the contractor to deliver the project on time as any delay results in additional costs

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³ Michael Regan, *W*
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being incurred by the contractor, which will not generally be recoverable from the government unless the delay results from a risk borne by the government.

- *Availability of government funds*—The use of finance frees up public funds for use on other projects.
- *Performance-based contracting*—Payments are often linked to performance, providing the contractor with a greater incentive to meet the requirements of the contract.
- *Financier step-in*—Financiers generally have a right to step-in where the contractor fails to comply with the contract, providing additional comfort to the government.

3. PPPs AND CAPITAL MARKETS

Given their many benefits, in particular their ability to provide value for money, it is unsurprising that PPPs account for a significant proportion of capital spending across all states, territories and the Commonwealth. Most PPPs are highly leveraged and, as such, are highly reliant on capital markets. This dependence on capital markets can be seen at five distinct levels³:

- *Equity capital*—Institutional investors provide the largest source of PPP equity capital. Equity capital is also drawn from the Australian Securities Exchange, listed portfolio investors, banks, private equity and fund managers.
- *Debt capital*—PPPs are generally financed with bank debt, project finance or bonds.
- *Financial services*—PPPs rely on capital markets to spread financial risk through, for example, the use of AAA-rated monoline insurers who provide guarantee insurance for bond debt financial obligations.
- *Market drivers*—Financial service providers drive the PPP bid market through selective participation in bids.
- *Capital market innovation*—PPPs benefit from capital market innovations which improve value for money outcomes.

3.1 Current state of capital markets: the credit crunch

After a significant period of economic boom, the global economic system is now experiencing a credit crunch. A credit crunch is characterised by a sharp increase in the cost of finance or a sharp decrease in the availability of finance—both of which are currently affecting markets around the world.

The credit crunch has resulted from a lengthy period of unsustainable lending and flawed risk pricing which has led to the collapse of global

³ Michael Regan, *What Impact will Current Capital Market Conditions have on Public Private Partnerships?*, a Research Report prepared for the Infrastructure Association of Queensland, 12 November 2008.

financial markets. The first visible sign of this collapse was the US sub-prime mortgage crisis.

(a) The sub-prime mortgage crisis

The sub-prime collapse came about because of excessive lending to sub-prime borrowers. These high-risk loans were then off-loaded to investors and banks around the world by packaging them into sellable assets through the use of securitisation. By turning loans into securities, the buyer of the security gets regular payments as mortgages are repaid, while the mortgage lender is relieved of the risk. A crucial part of securitisation is the opinion of a credit-rating agency. Under the sub-prime mortgage market model, rating agencies were paid for their opinions by those entities selling securities, thereby creating an obvious conflict of interest. Unsurprisingly, securities made up of high-risk, sub-prime mortgage debt were invariably assigned good ratings in error, encouraging buyers to take them up.⁴

Rising house prices led lenders and investors to believe that the sub-prime market was safe, as default loans simply meant repossession of valuable property. This spurred on further lending and further securitisation.

In 2006, the Federal Reserve increased interest rates to curb inflation. This led a number of financially unstable borrowers to default on their loans. Banks began to foreclose on mortgage-defaulted homes causing an over-supply on the market, which resulted in a fall in real estate prices. This, in turn, caused the value of mortgage-backed securities to plummet. Unable to sell the high-risk assets, investors (largely investment banks) who had a low level of deposits quickly collapsed, sending a ripple effect through financial markets across the world. The collapse of Lehman Bros on 14 September 2008 is widely considered the catalyst for the subsequent volatility and ultimate collapse of global financial markets.

(b) Fundamental elements of the credit crunch

The credit crunch has been facilitated by a shift in the banks' lending model from a traditional "originate and hold" model, where loans are held to maturity, to an "originate and distribute" model,⁵ ironically intended to spread risk and increase lending capacity. The sub-prime mortgage crisis, outlined above, is illustrative of this originate and distribute lending model where loans are made by an original investor then sold on to other investors.

Banks have failed to price risk correctly by supplying cheap finance on overly favourable terms. Under an originate and distribute model, these

⁴ Adam B Ashcraft and Til Schuermann, *Understanding the Securitization of Subprime Mortgage Credit*, Federal Reserve Bank of New York Staff Report No 318, March 2008.

⁵ UK House of Commons Treasury Committee, *Financial Stability and Transparency*, report, February 2008.

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high-risk assets have been widely dispersed, resulting in a domino effect across financial markets as the original loans turn bad and must be written off. This has led to a fall in asset prices, large write-downs, a loss of confidence and uncertainty in the market.

Following more than a year of instability, the capital market is currently characterised by:

- *A sharp reduction in the availability of finance both locally and globally*—Capacity for new lending in the market is constrained as banks, concerned with the quality of their balance sheet and the cost of funds, seek to reduce their exposure by retreating from long-term and complex lending.
- *Withdrawal of foreign banks from the domestic market*—A number of overseas banks have been withdrawing from the Australian market in order to focus on local deals and clients, affecting the availability of credit, competition in the market and the syndication of loans. This has partly resulted from government bail-out packages which offer incentives for investing in domestic markets.
- *A sharp increase in the cost of finance*—Interest rate margins have increased as a result of the increase in the underlying cost of capital. Margins of up to 250 basis points are being quoted.
- *Adversely affected syndication of loans and a move to club loan arrangements*—Banks' confidence in one another has been severely eroded. As a result, underwriters are no longer confident of the depth of the market for syndication and so fewer deals have been syndicated. Syndication is also made difficult by banks' increased capital requirements and resultant inability to provide the entire amount of a loan. Instead, there has been a move to club loan arrangements where a group of banks come together to finance a project on a fully underwritten basis at the outset, where each bank is therefore only required to provide a discrete portion of the loan.
- *The monoline wrapped bond market is effectively closed*—The AAA-rating of monoline insurers, required in order to guarantee bonds, has been downgraded.
- *Banks not offering long-term debt*—Banks are presently only offering five to seven year terms.
- *Equity will not take refinancing risk*—Gain-sharing arrangements on refinancing (where government and equity share the benefit in varying proportions of decreased financing costs on a refinancing, and the burden of increased financings costs) are generally not acceptable to equity investors in the current market. However, the larger problem is that, in the current credit crunch, equity is unwilling to take refinancing risk at all, even on scheduled refinancing.

3.2 How has the credit crunch affected PPPs?

As the above discussion shows, PPPs are highly reliant on financial and capital markets. Thus clearly, a financial market constrained by a reduction in the availability of finance and lacking in confidence will have significant implications for PPPs.

First, the credit crunch has resulted in a sharp reduction in the volume of private finance available to fund PPPs as banks seek to limit their risk exposure by retaining higher levels of capital. This shortage of finance is exacerbated by the withdrawal of foreign banks from the local market. As a consequence, a number of PPP projects may be delayed or cancelled. In addition, this lack of available finance provides an incentive to devise alternative PPP models or funding mechanisms in order to overcome the shortfall in private finance, an issue which will be discussed in detail in section 4.

A corollary of the reduced availability of finance is the increased cost of private finance which, consequently, increases the total cost of PPP projects. More expensive finance will exacerbate the costs incurred by bidders throughout the contract negotiation phase, which are ultimately recovered by the successful bidder by incorporating them into the overall cost of the project. Ultimately, this will make it more difficult for privately financed PPPs to demonstrate value for money.

Economic infrastructure projects, where the private consortium recovers its costs directly from the end users of the project, are suffering from reduced patronage. The most commonly cited example of economic infrastructure is that of a toll road, which allows the private sector party to source revenue directly from motorists through tolling. In the past, private financing of major public infrastructure in this way has proved, in many cases, to be profitable for the private sector and cost-effective for the public sector. Today, however, reduced patronage may impact upon the ability of the private consortium to service its debt, thereby increasing the risk of investing in such infrastructure.

The current volatility and uncertainty in financial and capital markets has caused banks to become more risk adverse as they seek to reduce their exposure. As a result, banks are less likely to finance the more risky projects, such as highly leveraged economic infrastructure PPPs, which are facing potential patronage difficulties. Instead, there may be a move towards smaller and less risky social-infrastructure projects, such as public hospitals and schools, where the private sector sources its revenue from a government service payment rather than sourcing it directly from the users of the facility. This is exacerbated by the closure of the monoline unwrapped bond market which previously bolstered the investment grade rating of PPPs.

The conservative shift by banks can also be seen in the syndication market where banks are no longer prepared to syndicate loans and are instead trying to organise club loan arrangements before committing any

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⁶ Loren Greenspo Dellece LLP, *Bankin*

funds to borrowers. This has serious implications for bidders who are losing requisite timeliness in securing finance and, if able to secure finance, are being forced to accept unfavourable terms and increased costs.⁶ Furthermore, banks' unwillingness to offer long-term loans creates a refinancing risk, which equity holders are reluctant to bear.

The preceding discussion highlights some major challenges currently facing the PPP market. The cumulative effect of these challenges is essentially to halt progress on future PPPs due to an inability to source finance and alternatively, where finance is obtained, to increase the cost of PPP projects to the extent that they are unable to demonstrate value for money. Unless these challenges are mitigated and the PPP model adapted to current market conditions, key players in the PPP field may begin withdrawing from the Australian market.

4. ADAPTING THE PPP MODEL

In light of the many benefits offered by the PPP model, it is well worth considering whether the impacts of the credit crisis on PPP projects can be mitigated by adapting the current model to take account of current market conditions. Notably, the need to reduce the risk associated with investing in PPPs in order to increase the availability of finance and reduce its cost. This involves exploring opportunities for government to either provide credit support or enhancement for projects to increase their investment grade rating. It further involves considering alternative sources of finance to take up some of the financing shortfall, such as government, institutional investors or contractors. The following discussion assesses some possible solutions.

4.1 State support of syndication

In the past, a small number of banks would provide the debt for any given project then syndicate it out to other banks. Today, however, banks' lack of confidence in one another has resulted in an unwillingness to become part of a syndicate. Instead, large clubs of banks are being arranged so that each individual bank need only commit to a much smaller amount of debt from the outset. Such an arrangement takes a significantly greater amount of time and money to put together and provides less certainty due to fears that, if some banks drop out, the deal will collapse.

It follows that, in order to encourage the more efficient syndication finance model, banks' confidence must be restored by lowering or removing the risk involved in taking part in a debt syndicate. This may be achieved through government support of the syndication process.

⁶ Loren Greenspoon and Christopher Partridge, "It's a Lenders' Market Out There", Wildeboer Dellelce LLP, *Banking and Finance Update*, November 2008.

There are a number of ways, currently being discussed in the market, in which government could provide support. Government could issue a guarantee to cover the unsyndicated portion of debt, creating a government guarantee tranche. Alternatively, the government could agree to directly fund the unsyndicated portion. In order to be effective, this model requires a best endeavours obligation on the banks to syndicate fully and to refinance the government guaranteed or funded portion of debt as soon as practicable. In addition to lowering the risk involved in syndication, this model may help reduce problems of liquidity and the high cost of finance.

This finance model raises a number of possible concerns for government. First, does government have the same *pro-rata* voting rights as other syndicate members if it funds the unsyndicated portion of debt? Such inter-creditor issues within the syndicate would need to be resolved.

Secondly, what potential conflicts of interest arise where government is both project procurer and lender? Similarly, what conflict of interest problems arise in the closer relationship of government, as the debt provider or guarantor, with the banks in the syndicate? This concern over conflicts is broadly applicable to any model under which government is providing some form of credit support. It needs to be considered whether probity guidelines can overcome both actual conflicts and the perception of conflict.

Finally, is government prepared to take the risk that it might be a long-term funder or credit guarantor? The government's long-term involvement may become necessary if there is illiquidity in the market or as a result of poor management and operation of the project by the contractor.

4.2 Relinquishing the requirement for committed finance and underwritten bids

The impact of the high cost and reduced availability of finance is particularly visible during the contract negotiation phase. Standard bidding practices, requiring multiple bidders to accompany their bid with committed finance and a preferred bidder to obtain underwritten finance, are simply not practical in a market with fewer lenders lending lower amounts and at higher costs. Government needs to revisit this model and consider alternative approaches which relinquish the requirement for committed finance and underwritten bids.

Two options are suggested by Pearse Rutledge of Rutledge Infrastructure Advisory⁷: the requirement for committed and underwritten finance could be delayed until the preferred bidder stage under a "one tender, two stages" model, or a tender for finance could be run in parallel with the

⁷ Pearse Rutledge, "PPP Funding and Procurement Considerations", *Infrastructure Journal*, 13 January 2009.

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tender for technical and commercial bids under a "two parallel tenders" model. These options will be outlined in further detail below.

(a) One tender, two stages

Under this model, the government selects a preferred bidder based on technical and commercial bids only. Finance would then be sourced at the preferred bidder stage. A variation on this model is to obtain commitment from a small underwriter of debt at the bid stage in order to work up the financing terms and documentation for the deal. The balance of the finance would then be sought at the preferred bidder stage.

For effective operation of this model, government would need to fund or guarantee any uncommitted portion of finance, as discussed in section 4.1, above. Government may also want to ensure it has the option of funding the uncommitted portion of finance if, at the relevant time, it is unable to achieve value for money from the banking market.

Delaying finance until the preferred bidder stage raises several concerns for government. It is more difficult to evaluate bids based on technical and commercial elements only. For example, the finance procured by the best technical and commercial bid may make the bid unfavourable overall. However, to go to the next preferred bidder at this stage would significantly draw out the period to financial close, a period already protracted by the nature of this model. In addition, government is responsible for the risk of funding failure which, in the present market, is a substantial risk to hold.

(b) Two parallel tenders

Under this model, two tenders are run in parallel; one for the technical and commercial bids and one for debt finance. At the preferred bidder stage, the selected technical and commercial bidder and the selected funding club are introduced and a final solution is negotiated. Issues of sponsor credit standing and equity capacity are managed both through the parallel procurement process and by negotiation in a competitive environment. This model is particularly useful for generating competitive tension among banks, resulting in more competitive risk pricing.

While this option would be likely to be more time efficient than a one tender, two stages approach, it does carry with it certain disadvantages. Finding the expertise in government, or within the government project management pool of resources, for conducting the debt finance tender and managing two tenders in parallel may be, at least initially, a concern. In addition, the government's general tender costs will be increased.

There are also drawbacks associated with the concept of a club loan arrangement. It is necessary to undertake separate negotiations of commercial terms of funding with all potential club members, even though the financial tender would seek to achieve standard terms for all finance

bidders. It is also necessary to negotiate with each club member to achieve the standardised set of project terms and conditions, defaults, securing trust arrangement and financiers' tripartite deed. Inevitably the banks requiring the most onerous terms will prevail. This arrangement will also add significant expense, both in time and money, to the pre-financial close process. It therefore must be queried whether the costs saved by bidders justify the extra expense incurred by the government. The extent to which there are enough willing and able banks in the Australian market to facilitate this model should also be considered.

4.3 Government underwrites refinancing risk

PPPs are long-term projects which require long-term debt. The present market lacks the liquidity and the appetite for 25-year plus loans for PPP projects, instead offering "miniperm" structures of 5-7 years which force refinancing and therefore create refinancing risk. This begs the question: who should bear the refinancing risk?

In the past, PPPs with long-term debt have had the option of voluntary refinancing. Under this financing model, equity holders could choose to refinance after a certain period and government would share in any gains made by the refinance. In today's market the refinancing risk is greatly increased. Most equity holders will no longer be able to take this risk and, even if they can, banks may no longer allow equity holders to take this risk.

A solution would be for government to take on the refinancing risk by using government funding through government services payments to underwrite the refinancing. Government would bear any increased financing costs but would also take the entire benefit should there be any reduction in financing costs. In addition, the short term of the debt required for the project may serve as an attraction to banks.

Government's assumption of the refinancing risk is effectively an assumption of both the operator risk and the finance market risk. The operator risk places an onus on government to oversee carefully the operation of the project to ensure that the contractor's performance does not negatively impact the government's position by reducing finance markets, increasing finance pricing or lowering the market value of the project. By assuming the finance risk, government would be required to pay out the existing debt to the extent that it cannot be fully refinanced.

4.4 Government as lender

In contrast to the options outlined above, whereby government supports the debt financing of PPP projects by agreeing to either guarantee or fund any unfunded portions of debt, government could agree at the outset of a project to be the lender for all, or a tranche, of the senior debt required.

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This option forms the basis of the Credit Guarantee Finance Model (CGFM) and the Supported Debt Model (SDM) discussed below.

(a) Credit Guarantee Finance Model

The CGFM was developed in the United Kingdom in 2003 to combine the benefits of the private sector taking key risks together with securing funding at a lower cost from government through the use of public finances. Under the CGFM, government provides the senior debt and a credit-worthy financial institution takes security over project assets in return for providing a financial guarantee to government to guarantee the payment of senior debt. Essentially, the risk allocation remains the same as under the traditional PPP model, except that government takes the risk of the guarantor's ability to guarantee payment of the senior debt provided by government.

The CGFM has been used on the Leeds and Portsmouth hospital projects in 2004 and 2005 respectively. The role of guarantor was filled by the consortium's financiers on the Leeds project and a monoline insurer on the Portsmouth project. Both projects estimated interest costs savings to be in the order of 8–16% of total finance costs.

The CGFM has the potential to overcome the current liquidity problem, lower the cost of finance and improve value for money outcomes. It also, however, suffers from certain flaws, many of which have been raised in relation to other models outlined above, including the following:

- Conflict of interest issues arise where the government is both project procurer and lender.
- Inter-creditor issues with other debt providers such as, for example, who takes enforcement decisions.
- Government requires the resources and expertise to act effectively as a lending bank.
- Limited scope for private sector innovation in the financial arrangements.
- The additional risk taken on by government may impact upon traditional incentive mechanisms.
- There is a question mark over the appetite in the current financial market for giving the credit guarantee.

(b) Supported Debt Model

The SDM is a hybrid of the CGFM which has been employed by the Queensland State Government on the South East Queensland Schools Project.

Under the SDM, the Queensland Treasury Corporation (QTC) provides a level of supported debt through a refinancing arrangement with the

private sector, drawing down QTC funds after the completion of construction. Upon completion of construction, the project risk exposure reduces significantly and so too does the probability of senior debt being unpaid upon termination. To further safeguard senior debt, government guarantees a minimum termination payment aimed at the whole or a proportion of the supported debt. The supported debt is thus notionally risk-free and the project benefits from a risk-free borrowing rate.

The risk allocation, as with the CGFM, is similar to that under the traditional PPP model, except that government takes the risk that the minimum termination payment may exceed the value of the constructed assets.

The SDM shares many of the same advantages and disadvantages with the CGFM.

4.5 Other options for direct credit support or enhancement from government

There are various other opportunities for direct credit support or enhancement from government. The following options could be employed either on their own or in conjunction with the models discussed above:

- *Government grants*—Government could provide part of the finance through government grants.
- *Credit support of revenue shortfalls*—Government could provide credit support by way of a guarantee for the initial years of the operating term of the project. The guarantee aims to shore-up risk-sensitive aspects of the project, such as revenue shortfalls in an economic infrastructure project or the first years of operation of a technologically complex project, in order to lift the investment grading of the project. Alternatively, government could give credit support through a guarantee to providers of stand-by facilities, available to senior lenders, which may be drawn in circumstances such as revenue shortfalls. Government would be subrogated to the rights of the lenders to which it pays out on any such credit support guarantee.
- *The government takes market disruption risk*—Government could take on market disruption risk by agreeing to fund increased funding costs, both before and after financial close, through the service charge for periods where any committed lending banks cannot find funding in their inter-bank lending market as low as the Australian bank bill rate. This would seem to be a lower risk to government than many other suggested forms of government credit support if it is sufficient support to bring banks back into the project financing market. The market disruption clause would, however, need to give the banks not only rights to pass on increased costs for the period of the increase, but also rights to enforce repayment where their

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funding becomes impossible to sustain. Thus the market disruption clause would need to be carefully thought through and drafted with precision.

- *Rethinking the abatement regime*—Reducing the exposure of funders to abatement through, for example, providing a bank guarantee or bond to government that can be called upon rather than abating service payments, may increase the investment rating of the project. It has been suggested that this may reduce the cost of debt by up to 6%. Another option is to rework the abatement regimes to achieve levels of abatement that do not jeopardise debt repayments, except for the most dire of service failures.

4.6 Involvement of institutional investors

Moving away now from government focused models, a solution aimed at addressing the lack of liquidity in the market and the term of debt is to tap into the institutional investor market, with a focus on superannuation funds due to their suitability to long-term debt. In particular, infrastructure funds could be targeted as these funds now hold infrastructure investments and tend to perform better than retail funds. Additionally, PPP projects provide employment for many of the members of infrastructure funds, thus incentivising investment by such funds. The main challenge in appealing to infrastructure funds will be to reduce the risk associated with this form of investment

One option for attracting finance from infrastructure funds is to source this investment, as an alternative to fixed interest investment, once the project is successfully completed and in the less risky operational phase. This may require credit support or enhancement by government to further reduce risk. It may also be necessary to alter regulatory requirements in order to facilitate investment. For example, APRA currently prohibits borrowing by superannuation funds, which raises an issue as to the categorisation of an unfunded commitment to lend in the future and whether APRA will allow superannuation funds to make such binding commitments.

An alternative option is to acquire funding through the construction phase, in addition to the operation phase, through the issue of unwrapped bonds to infrastructure funds. There is unlikely to be an appetite for this form of investment unless the PPP project has an AAA investment grade rating, thus emphasis must be placed on enhancing this rating in the riskier construction phase. This could be achieved by providing a credit guarantee to bondholders until the completion of construction in order to reallocate completion risk away from bondholders. The credit guarantor could be a third party financier, though, given that there is currently little market appetite for taking on this risk, it would more likely be government.

By acting as credit guarantor, government may be in a more advantageous position than in alternative models as it is only required to provide credit support, rather than outlaying funds. However, if completion does not occur by the specified date and the credit guarantee is called on by the bondholders, government would be obliged to pay out the bondholders, complete the project and then either refinance the project or keep the project in public ownership. This represents a significant additional risk for government in a PPP. In addition, this model is better suited to social infrastructure as the presence of a government income stream results in a better investment grade rating for the project.

This model is by no means new, but had fallen out of favour as it was more expensive and less flexible than a debt finance model. However, as debt finance has, itself, become more expensive and less flexible, the model may become more attractive.

4.7 Contractors to finance construction costs until completion

Contractors offer another alternative source of finance. These companies are not interested in being long-term holders of infrastructure, but may be prepared to finance a part (or perhaps for small projects, the whole) of the construction costs until completion, then exit the project by entering into put and call options with parties that would be interested in taking a long-term equity position. Such parties may include superannuation funds, sovereign wealth funds or other institutional investors.

In this way the contractor would take the whole of the construction risk. That is, the contractor would not be entitled to put or call its shares in the project until the performance criteria in the concession deed, for revenue to be generated by the project, had been achieved. However, once this stage is reached, the contractor would put the shares to the long-term equity holder who would then pay the contractor.

The contractor would not necessarily have to fund the whole of the project costs. Presumably the debt market would still be able to provide some financing. For example, it might be possible to have the project funded to 50% of the costs of construction. This finance could be paid to the contractor progressively pursuant to a standard design and construct contract. The contractor would then bear the balance of the costs of construction, which it would recover when its shares in the project are put to the long-term equity holder.

The incentive to the contractor is the availability of two profit streams:

- the usual construction profits, being a percentage on construction costs; and
- developer profits, being an amount calculated by the net present value of the cashflow which will flow to an equity investor in the project.

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One difficulty with this model is that the contractor would have to be able to secure substantial debt funding to support the construction operation. Enquiries should be made of the market to determine whether a contractor would be able to borrow such money. It may well be that funds are not available. If that is so, then perhaps the Commonwealth Government should consider creating an infrastructure bank whose business would be to loan money to contractors, on usual commercial terms, for the delivery of these major projects. Loans made from this bank would be turned over relatively quickly, with the term of the loan being the period of construction.

The Commonwealth Government could also give consideration to providing tax breaks in respect of those who contribute to the delivery of a "Nationally Significant Project". The Government would designate particular infrastructure projects such as, for example, the Sydney Metro Project, as projects of national significance. The contractor who was prepared to take the construction risk and finance part of the construction, would obtain preferential tax treatment. This incentive could similarly be made available to institutional investors under the model discussed in section 4.6, above.

5. LOOKING FORWARD

The Australian PPP industry is certainly facing new challenges ahead; however, it is not all bad news.

The PPP market will benefit from increased government expenditure on infrastructure. The Federal Government has recently introduced a \$42 billion economic stimulus package aimed at combating the recession. This package includes \$14.7 billion of spending on school building projects, \$6.6 billion on public housing and a significant increase in spending on local infrastructure projects including local roads.

More importantly, PPP delivery remains attractive with many of its benefits still relevant, even in a fraught market. In order to retain these benefits, parties must carefully consider alternative financing models and assess which will best achieve value for money outcomes on a project by project basis.