

Public Private Partnerships

Emerging global trends and the implications for future infrastructure development in Australia

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Contents

“Developing countries need new infrastructure, developed countries need rebuilt infrastructure and almost every country is struggling to finance the infrastructure it needs. It should be easier to get big new road, rail, port and dam infrastructure off the ground – and we can do that through attracting more private capital through sensible pricing policies and better regulatory practices.”

PM Tony Abbott

Address to the World Economic Forum,
Davos, Switzerland, 23 January 2014

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Bridging the gap and Public Private Partnerships

Driven by population growth, historic underspend on infrastructure maintenance and a decade of fiscal constraint, Australia faces a significant infrastructure deficit. Considerable reform and innovation is required now to meet the existing – let alone future – infrastructure demand and prevent the deficit from widening over the coming decades.

The recently released *Australian Infrastructure Audit* outlines some key statistical projections that necessitate action:

- Australia's population is projected to grow from 22.3 million in 2011 to 30.5 million in 2031. The majority of that growth is forecast to take place in our cities, with our four largest cities (Sydney, Melbourne, Brisbane and Perth) expected to grow by approximately 45 percent by 2031.
- Direct economic contribution of infrastructure services to GDP in 2011 was \$187 billion; this is projected to reach \$377 billion in 2031. Without appropriate strategic planning and integration of transport and land use, congestion costs from road delays in our largest cities threatens to reach \$53 billion by 2031.

In the face of unprecedented population growth forecasts, establishing reliable and sustainable infrastructure will be critical to growing the economy, raising national productivity and enhancing quality of life. This will require a national change of approach: Australia's infrastructure performance compares poorly with a number of other comparable countries such as Canada, and the World Economic Forum recently ranked Australia's infrastructure 20th of 144 countries.¹

Greater total funding – derived from both private and public sector sources – is required for infrastructure, if the future needs of Australians are to be met. Within a constrained fiscal environment, private sector investment in infrastructure is critical, placing increasing importance on flexible financing structures that accommodate alternate funding sources.

Public Private Partnerships (PPPs) have enjoyed significant success within the Australian market and are a proven vehicle for the provision of private sector investment in infrastructure. They also provide a means to facilitate alternate funding arrangements, particularly with regard to transportation projects through user-pays arrangements.

It is within this context, that we have reviewed the global PPP market to identify trends and potential innovations to augment our existing model. The knowledge and ideas derived from a scan of current market trends will place Australian PPPs in the best position to deliver efficient and cost effective infrastructure, which is vital to Australia's ongoing productivity, economic prosperity and quality of life.

A review of international PPP practises has identified four key trends to be considered within the Australian context.

Snapshot of global PPP trends

1 The state of the global PPP market is changing

Pipeline remains the key concern for global PPP players. Australia needs to remain relevant and attractive.

- Social infrastructure PPPs have plateaued globally with transport PPPs on the rise, led by an emerging US market.
- Deal flow in the mature markets (Canada being the exception) has stagnated, particularly the UK where the private finance initiative (PFI) pipeline is marginal.
- North America is fast becoming the PPP powerhouse with continuing strong Canadian and emerging US markets.
- Emerging economies, such as Brazil and India, are making a significantly greater contribution.
- Asian markets are experiencing growth but attracting business remains challenging.

The PPP market is becoming increasingly global and the pipeline remains the key concern for Global PPP players. Current focus is on the attractive North American market, while positioning for the significant opportunity anticipated in emerging markets. Australia needs to remain relevant and attractive.

2 The traditional PPP model is evolving

Opportunity exists for greater national take-up and uniformity, including increased facilitation of private investment in infrastructure.

- Traditional PPP models have given way to a suite of procurement options and a variety of financing structures.
- Social infrastructure projects push service privatisation further and expect improved social outcomes, with social impact investment on the rise.
- Transport projects once again look to user-pays opportunities to fund the growing fiscal gap for projects required to ensure continuing economic prosperity.
- Megaprojects incorporating an array of additional procurement models, have emerged globally.
- A backlog in civil infrastructure maintenance is being addressed via huge multi-asset PPPs covering broad geographic regions.

The Global PPP model continues to evolve. Opportunity exists for greater national take-up and uniformity across jurisdictions, including increased facilitation of private investment in infrastructure. Ultimately any proposed new structure must continue to deliver value for money.

3 Fiscal funding constraints together with the post GFC gap between public and private financing costs are forcing innovation

- The financial crisis has resulted in higher pricing of risk within financial markets.
- Governments are looking to innovate to balance value maximisation and PPP model integrity, with reduced total financing costs.
- Australia has looked to capital contribution models, while the US has adopted an array of federal support initiatives to reduce costs and incentivise PPP investment.
- The Non Profit Distribution model in the UK enhances stakeholder engagement and returns profits to the public sector.
- Funding shortfalls are motivating alternate funding mechanisms, including user-pays and general value capture.

Significant opportunity exists to attract greater private funding contribution to the widening infrastructure gap. There is a need to stimulate long-term investment. Alternate funding mechanisms that incorporate value capture and user-pays arrangements, can help increase the volume of infrastructure delivered and release funding for maintenance of existing assets, increasing overall productivity and standards of living.

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4 Opportunities exist to enhance outcomes by reviewing operational phase performance

- Empirical data assessing the performance of PPPs is not readily available.
- Analysis suggests significant savings may be realised through operational and efficiency reviews.
- It is anticipated that availability and quality of appropriate skilled contract management personnel will be key.

Given the maturity of the Australian PPP market, opportunity exists for national post completion reviews to result in improved origination of future projects, as well as identify savings and efficiency improvements within existing operating arrangements.

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What is needed?

We believe there are a range of key factors and structural reforms required to ensure that the PPP model and market are ready to respond to the immense challenge outlined by the *Australian Infrastructure Audit*.



Political stability and sponsorship of long-term infrastructure plans, providing confidence to market participants and allowing efficient delivery of projects.



Development of new asset classes suitable for PPP delivery, including the packaging of large-scale civil infrastructure maintenance works, to address the significant infrastructure maintenance backlog.



A stronger and more reliable pipeline providing greater visibility of the investment opportunity to allow the market to respond with appropriate capacity and capability, improving overall value for money.



Return of long-term project financing, facilitated by the re-emergence of debt capital markets to increase appropriate alternate financing sources.



Attraction of alternate funding sources to offset the immense funding requirement, particularly in relation to user-pays and transport related value capture opportunities.



Greater facilitation of payment by results and social impact investing, linking performance and payment to improved social outcomes.



Better information and operational performance data to facilitate continuing enhancement of newly originated infrastructure, as well as the identification of potential savings and modifications of existing service arrangements.

Australian states will continue to evolve PPP structures as private sector markets and risk appetites change. However, if private capital is to ever bridge the infrastructure funding gap that will exist over the next 15 years and beyond, greater consistency of approach is needed.

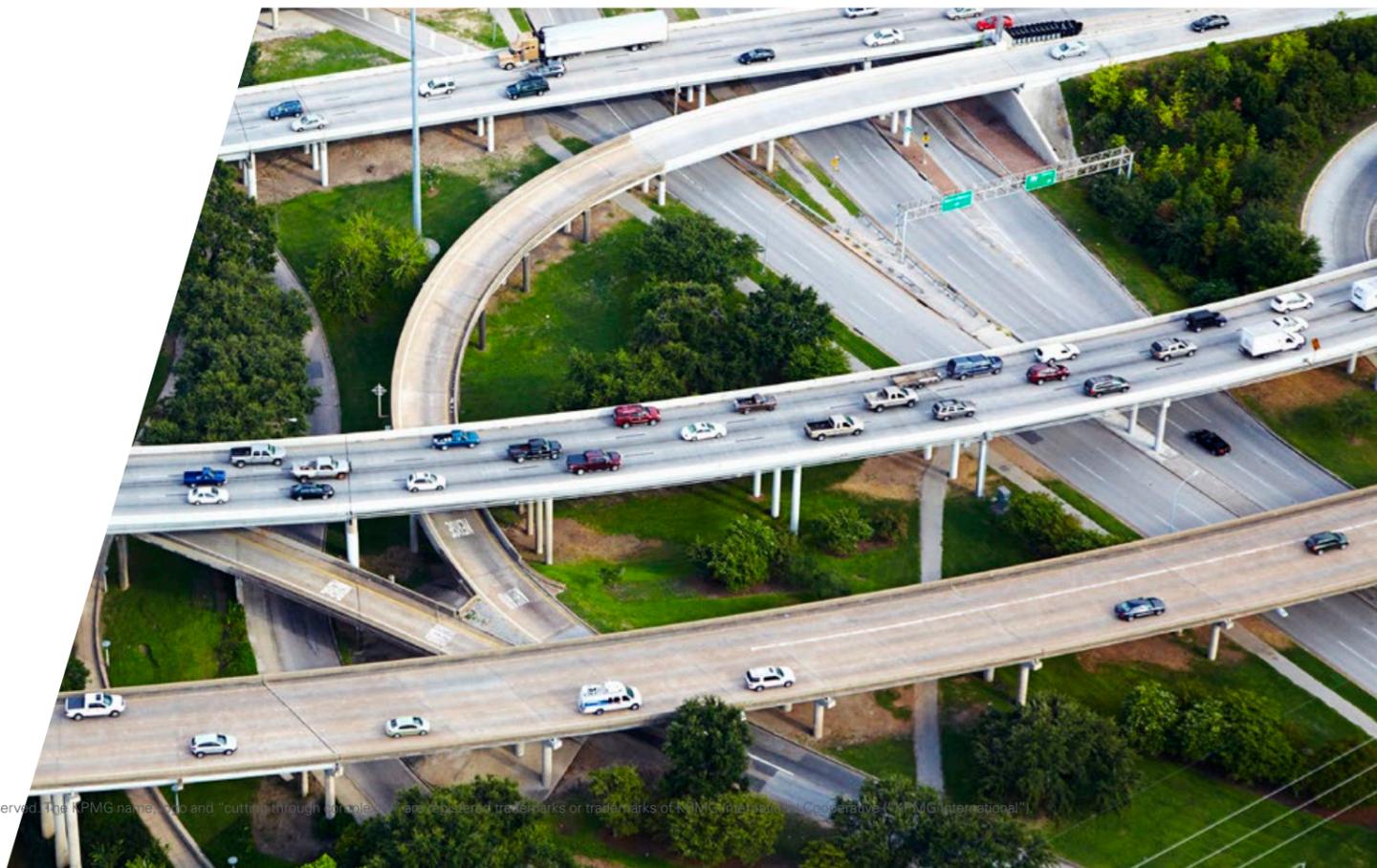
Improved uniformity requires national leadership. Whilst the private sector, through organisations such as Infrastructure Partnerships Australia, can debate these issues and identify potential policy solutions, the Australian Government needs to take up the leadership challenge in order to drive national consistency and reform.

While the recently completed *Australian Infrastructure Audit* highlights the challenges Australia faces in meeting forecast infrastructure demand, work needs to commence immediately if Australia is to meet the necessary policy reform agenda and stop the funding gap from widening further. If Infrastructure Australia is to meet this challenge, additional highly skilled and experienced resources will be required.

The challenge Australia faces is not just problem identification and solution definition; it is the challenge of implementing the solution and driving the outcomes required. PPPs provide a proven vehicle to ably assist, however the traditional PPP model should be viewed in a different light. Governments need to embrace balanced risk allocation and new funding and financing structures – attracting a broad range of investors to a broader range of asset classes – to respond to the changing needs of today’s global market and Australia’s requirements.

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The global infrastructure market

The most attractive markets for infrastructure investment combine strong growth potential and high levels of investment, with stable business environments, supported by strong political commitment.

Countries around the world are facing a substantial infrastructure deficit. Recent estimates indicate US\$57 trillion in global infrastructure investment will be required over the next 15 years for transport, power, water and telecommunications, simply to keep up with projected global GDP growth.² PPPs continue to play a key role in the delivery of critical infrastructure the world over, however the status of global markets is changing.

The most attractive markets for infrastructure investment combine strong growth potential and high levels of investment, with stable business environments, supported by strong political commitment. Canada is seen as the standard-bearer for good practice in this regard, with dedicated provincial infrastructure units and a strong project pipeline. Its immediate neighbour, the US, now appears to be capitalising on this expertise and capacity, emerging as the next major global PPP player. Collectively, North America is increasingly becoming one of the most attractive PPP markets, globally.

By comparison, Europe's infrastructure project pipeline – and PPPs in particular – may have peaked following a decade of strong investment. Despite a pressing need for maintenance and new infrastructure builds, weak economic growth and falling productivity restrict development. With fewer near-term greenfield projects, the stable Eurozone economies should offer a number of brownfield options. There are small signs of recovery in some of the more stressed markets such as Spain, Italy and Ireland.

In the UK, negative press reports and strong anti-private finance opinions in the former Coalition Government, have substantially eliminated enthusiasm for private finance – thus removing any certainty of pipeline. However, innovative and adaptive PPP models in Scotland and Wales, combined with recent announcements regarding a renewed focus on infrastructure investment, will hopefully result in improvement in the current UK market conditions over time.

Opportunities from Australia, by contrast, have been more cyclical in recent years, but are currently on the rise with anticipation of funding availability from the proceeds of planned asset sales in some jurisdictions. Following a decade of significant investment in social infrastructure, primary focus has now turned to economic development. However, unprecedented population projections will no doubt require another substantive round of social infrastructure investment, within the near future.

As opportunities in mature markets decline, seasoned investors are also looking to emerging markets, including Latin America and Asia, where there has been some growth despite associated risks. A number of developing nations are actively seeking to improve the business environment and attract foreign investment. The Philippines, for instance, is actively pursuing an anti-corruption agenda and has established a dedicated PPP unit to engage private finance models to fast-track national infrastructure development. It has now reached close on several transactions. China has a particularly dynamic domestic market – population growth accompanied by increases in urbanisation and the rise of the middle class, should result in significant opportunity for private investors – however, concerns around government transparency and attitudes to foreign investment, hamper progress to some extent.

Emerging markets have historically been the domain of developers willing to take on the high risk/return profile. Recently more seasoned investors, including superannuation funds, sovereign wealth funds, large insurance companies and investment management companies, are becoming confident enough to enter these markets. Significant growth is expected as the market develops a better understanding of these emerging opportunities.

“The UK based PPP funds have continued to establish global business platforms albeit mainly focused on Australia and Canada. The priority now, is how to take advantage of the growing US market. The longer term challenge is how to position for the rapidly growing ‘developing markets’ of South East Asia, Latin America and Africa.”

Darryl Murphy,
UK Corporate Finance Infrastructure,
KPMG



Classification of PPP markets

North America
Current focus of PPP players globally, with Canada providing the most active mature market in the world and the US representing a potentially significant new opportunity, given emerging political commitment.

Canada
The Canadian market continues to deliver an impressive and transparent pipeline of greenfield opportunities within a strongly supported political environment. It also contains an active secondary market.

United States
The US provides one of the largest infrastructure markets globally, with a substantial requirement for private investment. Almost all jurisdictions have now introduced specific legislation to enable PPP investment, with a primary focus on the transport sector.

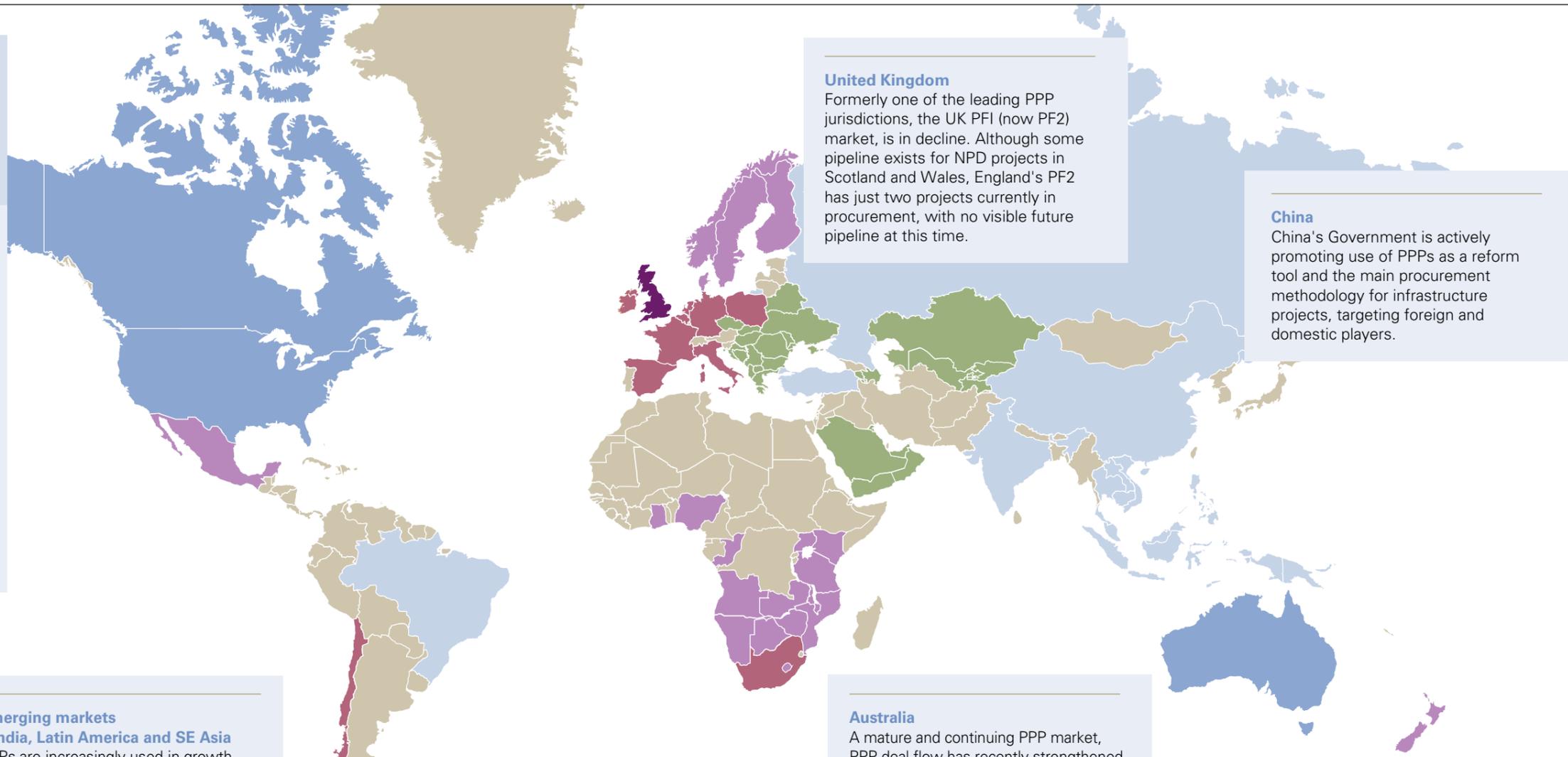
United Kingdom
Formerly one of the leading PPP jurisdictions, the UK PFI (now PF2) market, is in decline. Although some pipeline exists for NPD projects in Scotland and Wales, England's PF2 has just two projects currently in procurement, with no visible future pipeline at this time.

China
China's Government is actively promoting use of PPPs as a reform tool and the main procurement methodology for infrastructure projects, targeting foreign and domestic players.

- Mature stagnant market
- Mature growth markets
- High growth markets
- Low growth markets
- Mature steady markets
- Small developing markets
- No information available

Emerging markets
– **India, Latin America and SE Asia**
PPPs are increasingly used in growth markets such as India, Brazil and SE Asia. Developing nations are introducing PPP procurement regimes and policies to attract foreign investment. Although private sector investment remains challenging, these markets are constantly being reviewed for investment readiness and actively pursued.

Australia
A mature and continuing PPP market, PPP deal flow has recently strengthened after a slight contraction in the wake of the financial crisis. The need for significant private investment in the nation's infrastructure (highlighted in the recent *Australian Infrastructure Audit*) is anticipated to result in the emergence of a variety of innovative funding and financing models.





Emerging trends in global infrastructure

Given global population forecasts and current trends towards urbanisation, there is an increasing focus on the flow of goods and people in and around cities, to promote economic productivity and inclusion.

More countries are developing national infrastructure plans aimed at reducing the risk of political interference in infrastructure decision making.

Political stability is critical – more countries are developing national infrastructure plans aimed at reducing the risk of political interference in infrastructure decision-making. If successful, this will allow the market to make informed decisions with regard to skill and capability investment, as well as take a view on likely success rates and ability to amortise bid costs. Shorter term governments have proved particularly challenging in the recent Australian context, with one term governments resulting in wide swings in policy environments and cancellation of large scale projects. Long-term vision and effective planning becomes critical within this context, with reputational risk a key influence in maintaining competitive advantage and ensuring efficient delivery of infrastructure projects.

Service delivery reform – governments nationally and globally are looking for better and more efficient ways of delivering services. The concepts of contestability, services integration, payment by outcomes and social impact bonds are now part of the international language of public sector reform. A number of levers influence service delivery solutions including market attractiveness, demand certainty, provider maturity and political acceptability.

Cities focusing on enhanced mobility – given population forecasts and the current trend towards urbanisation, there is an increasing global focus on the flow of goods and people, in and around cities to promote economic productivity and inclusion. It is anticipated that more projects facilitating these objectives will be announced in almost every market. Urban mobility is critical as not only does it allow for freer flow of goods, capital and people within cities, it also provides social inclusion for the disadvantaged by increasing access to jobs, social services and education. These types of projects are typically very large and very complex.

Deteriorating asset condition and maintenance deficit – many OECD countries are experiencing a significant infrastructure maintenance deficit, particularly in relation to the provision of roads, bridges, ports and less visible essential civil works infrastructure, such as water, sewers, drainage and power. In many instances, these assets have been subject to deferred maintenance due to a lack of prioritisation over many years, compounded by global fiscal constraints. There is now a recognised need for significant investment, to not only ensure continuing economic productivity, but maintain expected standards of living.

Improved asset performance and privatisations – increasingly, governments are expecting higher utilisation of their existing assets and looking for innovative solutions to maximise productivity. Further, they are keen to release capital from large scale infrastructure investments that are largely de-risked with a proven demand profile. Given global fiscal constraints and general appetite for increased productivity, asset sales are expected to increase. However, a key challenge will be overcoming public concerns with regard to actual and perceived loss of control of essential services.

Impact of non-local contractors and investors – increasingly, PPP and infrastructure investment markets are becoming global, with key international players operating in many countries around the globe. Initially attracted by large transport projects, many of the large contractors such as the Spanish and French, are now looking to regularly participate in the Australian market. Domestic contractors and investors have historically been dominant in the Australian market, with sponsorship led by investment banks. This is a key difference with global markets, where contractors (both construction and key operators) as well as institutional funds, manage projects. With greater degrees of globalisation, this is now changing domestically. An open market is a sign of maturity, with diversified ownership that includes insurance companies, sovereign wealth funds, pension funds, private equity and infrastructure fund managers, competing for similar assets. This will also facilitate the creation of a robust secondary market and good opportunities to recycle capital.

Increasingly, governments are expecting higher utilisation of their existing assets and looking for innovative solutions to maximise productivity.



Snapshot of global markets

- Singapore, Qatar and United Arab Emirates are amongst the most attractive markets in the world for investment in infrastructure as a result of improved economic outlooks, increasing investment and rates of household consumption.
- Recent indicators show Asian markets, such as the Philippines, Indonesia and Thailand are amongst the most improved countries for infrastructure investment, although these regions do attract higher business risk.
- European markets are becoming less attractive due to low growth profiles and limited investment potential, although the economic picture is improving in the UK.³

Why use the PPP model?

PPP attributes remain, and will continue to remain, desirable for the provision of critically required infrastructure the world over. Governments must be armed with the facts to understand, make decisions regarding, and educate the public on, the benefits and disadvantages of using PPPs.

Over time, different international jurisdictions have been motivated by different drivers, including the use of the model to provide an alternate funding and/or financing source, where infrastructure capital is scarce. However, within mature markets, particularly Australia, the primary objective of the PPP model has been its ability to achieve:

- value for money
- significant design and/or operational innovation
- appropriate risk transfer
- superior whole-of-life outcomes.

Much of this has been achieved by harnessing the expertise of the private sector, in particular the discipline of financiers and the competitiveness of project sponsors, to achieve considerable innovation and value add, in return for the right to deliver lucrative contracts. Initially focusing on economic infrastructure and full private sector provision of public services in the 1990's, for the past decade or so, the Australian model had predominantly narrowed its focus to the provision of social infrastructure assets (and associated non-core services), with public sector retaining the delivery of core services. Interestingly, the model has now come full swing, with the adoption of many variant models, including an increasing prevalence of private sector core service delivery.

Regardless, the attributes outlined above remain, and will continue to remain, desirable for the provision of critically required infrastructure projects around the world. Governments must be armed with the facts to understand, make decisions regarding, and educate the public on, the benefits and disadvantages of using PPPs. An understanding of the current and future trends that continue to shape the local and global procurement environs, will help facilitate appropriate decision making and the continuing transformation of the PPP model, to ensure value for money delivery of critical infrastructure. Our global review has identified four key trends:

1. an increasingly global market and changing state of play
2. continuing evolution of the traditional PPP model
3. emergence of innovative new funding and financing models
4. an increased focus on operational performance and efficiency.

“Senior leaders in the Canadian Government now acknowledge that one of the greatest benefits of PPPs has been the increased sophistication and comprehensiveness of Advanced Planning for major capital projects – particularly in risk assessment, transfer and mitigation; in budgeting and contingency planning; and in whole-of-life asset management.”

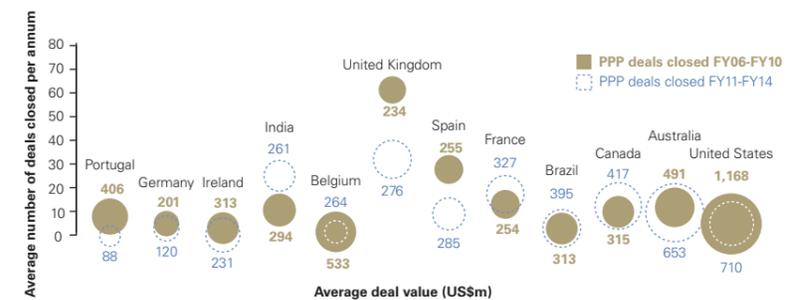
Larry Blain
KPMG Canada
Previous Head of Partnerships BC

Global PPP deal flow

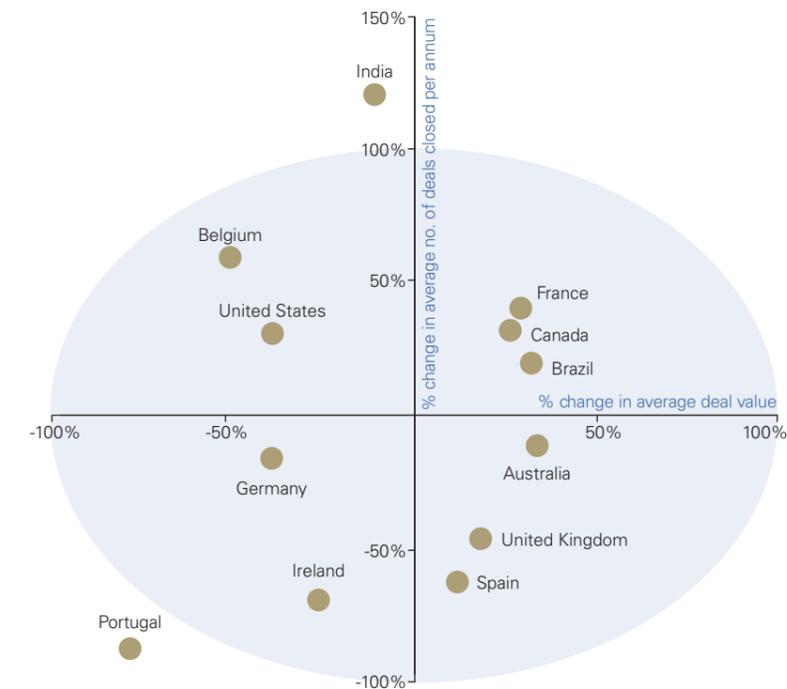
Over the past 5 years, global PPP transactions have continued to decline in the wake of the financial crisis. This has been particularly evident in Spain, Ireland and Portugal as well as the UK, where in spite of a strong infrastructure pipeline, PPP deal flow from 2011 through to 2014 is roughly half that of the preceding 5 years (2006 to 2010). France and Canada have both demonstrated continuing strong performance, delivering a consistent pipeline of projects with an increase in both the number and value of transactions between the two periods. Of particular interest, is the growth in average deal volume in emerging economic powerhouses, Brazil and India.⁴

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Change in average number and size of PPP transactions from FY06-FY10 to FY11-FY14



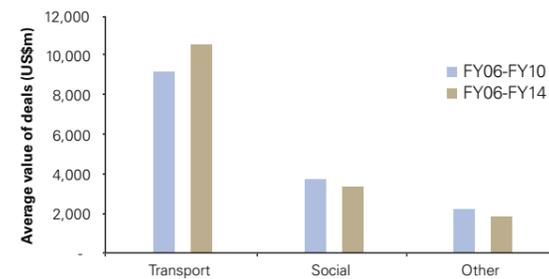
Source: IJ Online data (accessed 15 May 2015) and KPMG analysis



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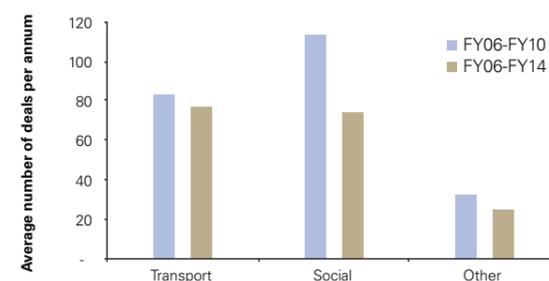
In contrast to the diminishing number of PPP transactions evident in many mature markets, the average value of overall PPP transactions is trending positively across the board. This development is reflective of the recent shift from social infrastructure development to large-scale economic/transportation PPP projects, driven by historic underinvestment in economic infrastructure such as roads, bridges, rail, ports, airports and power.

Average value of PPP deals closed



Source: IJ Online data (accessed 15 May 2015) and KPMG analysis

Average number of PPP deals closed per annum



Source: IJ Online data (accessed 15 May 2015) and KPMG analysis

The social infrastructure sector has experienced a reduction in both the average value (slight) and volume (significant) of transactions. By comparison, the average value of transport infrastructure has increased, with a slight decline in the number of transactions.⁵

UK's PFI to PF2 and constrained deal flow

Following concerns over the value for money delivered by the UK's PFI program and a yearlong review into its success, the former British Government issued a number of reforms to its PPP delivery approach, rebranding it PF2 in December 2012. Some key changes include:

- creation of a centralised government unit to invest in projects as a minority shareholder
- competition to identify equity co-investors in a PF2 project, after the appointment of a preferred bidder
- greater transparency within the commercial structure, particularly in relation to equity returns
- streamlined procurement processes, including the restriction of competitive tendering process timeframes to no longer than 18 months
- greater standardisation of documentation, beyond the Project Agreement
- removal of soft services from the deal, with a view to increasing flexibility
- take back of some risk by government (i.e. change in law, contamination, utilities and insurance provisions).

In contrast to the diminishing number of PPP transactions evident in many mature markets, the average value of overall PPP transactions is trending positively across the board, reflecting the recent shift from social infrastructure development to large-scale economic/transportation PPP projects.

Although this alternate approach has resulted in some significant changes, mainly in relation to equity provision, the key issue for the UK PPP market is the lack of deal flow since the initial election of the Cameron Government and release of the rebranded program. PF2 currently plays little part within the National Infrastructure Plan and the number of transactions released to market means that the new concepts introduced in PF2 are yet to be fully tested. There are currently only two transactions being procured under PF2, with limited visibility as to likely future opportunity. As a result, UK based investor funds are actively pursuing opportunities offshore, with strong participation in the Canadian and Australian markets to date, and a current focus on the US investment strategy. Consideration of potential longer term opportunities emerging in Latin America, South East Asia and Africa is also evident. A number of the established UK funds have recently evolved in terms of ownership structure, with numerous sales and initial public offerings, including partnering with and investment from, other global players. One such example includes the US based Hunt Companies' recent investment in Amber Infrastructure fund, facilitating increased access to PPP type opportunities within the US.

Strong North American pipeline

It is estimated that US\$3.6 trillion in infrastructure spend is required in the US by 2020,⁶ and increased demand for infrastructure and low borrowing costs in the US gives rise to an optimistic outlook, particularly in relation to ports, freight and roads projects and large scale civil infrastructure works projects. Governments continue to be attracted to the whole-of-life outcomes delivered through PPPs, as an attractive option that offers value for money, from a whole of lifecycle perspective. The scale of the required investment in infrastructure in the US requires government to look to the private sector to play an increasingly important role in delivering its critical projects. Built in the 1960s and 70s, many of the roads and bridges across the US are in need of significant maintenance. In 2010, US\$17.1 billion was spent on improvements to the nation's bridges (including repair, rehabilitation and replacement). The Federal Highway Administration estimates that approximately US\$20 billion per annum is required, to alleviate the backlog deficit and increase the nation's bridge sufficiency rating to an acceptable level by 2030.⁷ The *Build America Investment Initiative* seeks to encourage a uniform approach to private investment and expand the use of PPPs by state governments. In addition, a number of publically funded investment incentives are available, such as the provision of credit assistance under the *Transportation Infrastructure Finance and Innovation Act* (TIFIA) program and access to tax exempt Private Activity Bonds (PABs).

Although the credit crisis led to a rapid decline in deal flow across most mature markets, debt finance in the Canadian market has remained relatively liquid over the past 10 years, supported by strong performance in Canada's banking sector. Canada also has one of the most developed PPP bond markets in the world and has not relied on the monoline bond insurance market that both the UK and Australia employed, typically structuring its projects to achieve an underlying investment grade credit rating. As such, the bond market in Canada (and the US to some extent), has continued to fund PPPs, even with the decline of the monoline insurers following the GFC. In addition, the Canadian market benefits from a strong institutional appetite. Australia and Canada have average superannuation/pension fund allocations to investment in infrastructure, which is five times higher than the global average.⁸ The Canadian pipeline continues to deliver an impressive flow of PPPs, with 32 PPP projects currently planned for development.⁹

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“These are exciting times for China’s PPP market and whilst many challenges remain, China’s Government appears determined to press on with market reform measures. Most recently, China’s National Development and Reform Commission announced the creation of a publically accessible PPP projects library (or potential pipeline) with over 1,000 projects listed and a combined value of close to CNY2 trillion.”

Stephen Ip,
Partner, Government & Infrastructure
KPMG China

Barriers to investment in emerging PPP markets

A particular challenge in developing markets, such as Asia and the Middle East, is uncertainty around the ease of business and the transparency of governance arrangements. Legal and policy frameworks play a significant role in the development and shaping of PPP structures and market appetite, with differing approaches appropriate for different circumstances, in particular those for mature markets Vs. developing economies.

Improvements to the stability and certainty of long-term infrastructure investment opportunities are required to attract infrastructure funds, with investors such as sovereign wealth funds and pension funds favouring stability and predictability of returns. Emerging markets are aware of this dynamic, and many are taking steps to address it. For instance, the Philippines have established a PPP Centre to provide technical assistance to national government agencies and other organisations, including the private sector, to support the development of a national market. China’s State Council has also recently released guidelines on managing local government debt, referencing the PPP model as a pillar of debt management strategy. Further policy guidelines have been released to the provinces, providing jurisdictional specific direction for PPP implementation frameworks within China’s regions. To date, China has been considered a challenging market for global infrastructure players. Relationships with local officials are crucial and foreign companies have experienced some difficulty in establishing a competitive edge over locally based State Owned Enterprises. However, structural reforms and recent emphasis on transparency, gives cause for cautious optimism in relation to longer term opportunities in this market.

Other efforts are also being made by emerging economies to attract foreign investment. Brazil is trying to create better conditions for overseas capital interested in infrastructure PPPs with a number of tax concessions. Singapore and the Middle East have utilised Special Economic Zones (SEZs) to catalyse national economies and drive social change. These designated areas possess special economic regulations that are conducive to foreign direct investment, such as favourable corporate tax treatment and lower tariff obligations. Although SEZs are likely to be less applicable for mature markets, there are a range of levers that could be considered including streamlined regulatory processes and taxation incentives (such as those employed in the US), to attract investment in infrastructure.

Although the US presents an attractive opportunity, with its strong geopolitical stability when compared with emerging economies, it also faces some barriers to investment, exhibiting some weakness. Despite enabling legislation in 36 states, there is an almost complete absence of cross-sector, delivery institutions. Further, when compared with Canada, capital markets for long-term, inexpensive debt are relatively undeveloped. Notwithstanding the recent emerging political commitment – demonstrated across various national initiatives including the *Report of the Special Congressional Committee on Transportation and Infrastructure* and the President’s *Build America Investment Initiative* – there have been instances of projects cancelled in the procurement stage following recent elections, impacting the confidence of market participants.

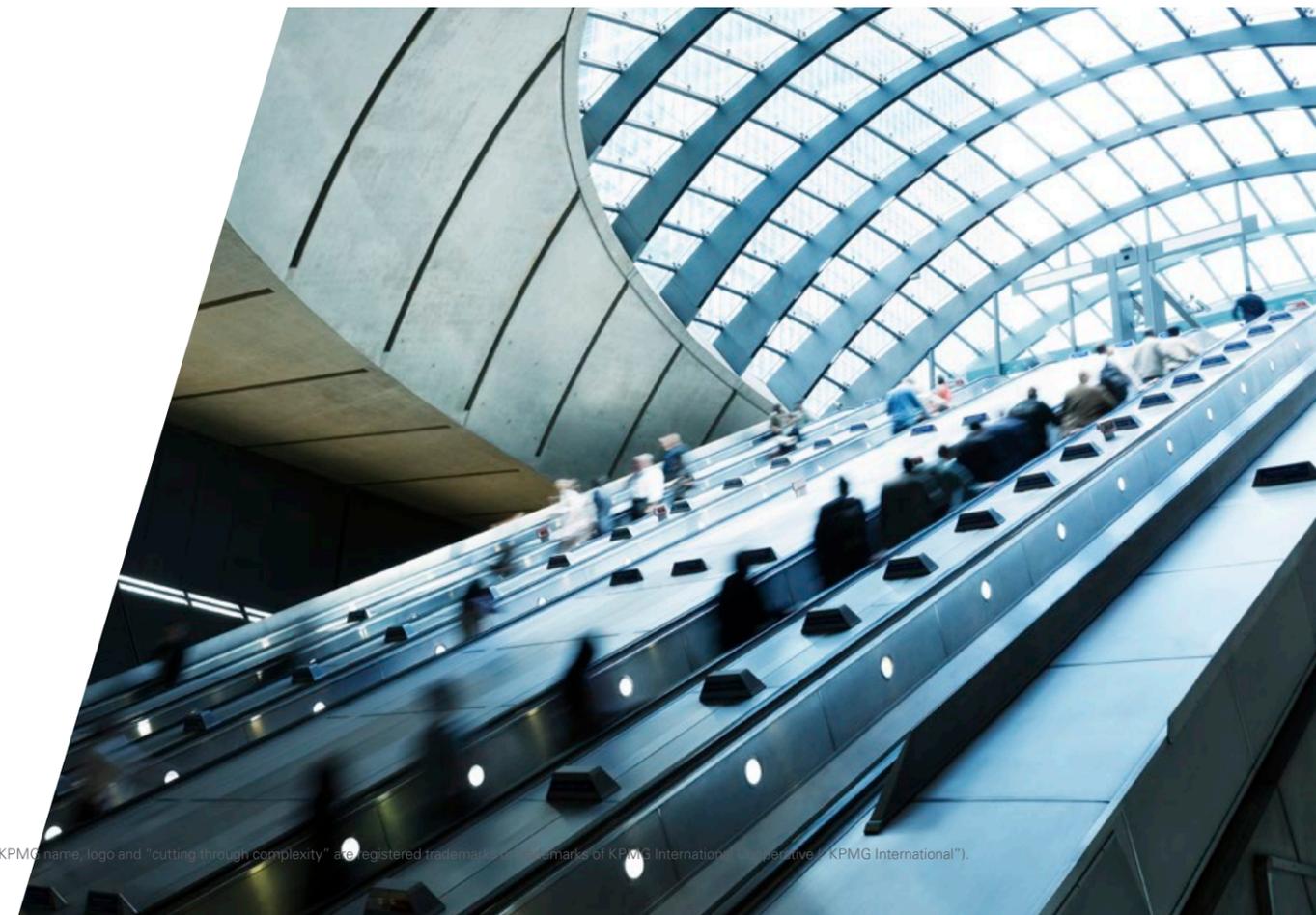


Relevance for the Australian market

In recent years, Australia has lost ground within the global PPP market. It is no longer considered the purveyor of PPP best practice, nor the ‘go to’ jurisdiction for strategic direction and policy implementation. The PPP market is becoming increasingly global, creating the following.

- Risk that new entrants will not be attracted to the Australian market and that existing global players will prioritise alternate jurisdictions deemed more attractive for investment, resulting in a less efficient and well contested domestic market.
- Opportunity to leverage current best practice in market leading jurisdictions, particularly North America, as well as consider innovations from emerging markets. Such an approach could replicate the success of Victoria and NSW in the early 1990s, then building from the UK’s experience and lessons, to emerge as a global leader that other jurisdictions looked to emulate at that time, including Canada.

A strong and transparent pipeline remains key to the success of the domestic market, ensuring continuing availability of appropriate resource capacity and capability. The PPP model remains a critical constituent within the suite of procurement models available to deliver Australia’s growing infrastructure task, particularly for those complex and high risk projects that require the delivery of innovation, value and alternative funding and complex financing requirements. In a capacity constrained global market, Australia needs to once again emerge as a global leader.



Traditional PPP model is changing

“In Australia and elsewhere, the answer to ‘what is a PPP?’ keeps changing. The expansion of service scope, use of capital contributions and changing risk allocations, has blurred the lines. The critical issue is not defining a standard model, but creating a range of models that adapt to meet the changing needs.”

Adrian Box,
Infrastructure & Projects Group,
KPMG Australia

As the global markets mature, the range of PPP models has expanded. Sometimes, as in the case of the PF2 model in England or the Non Profit Distributing (NPD) model in Scotland, this is influenced by a range of factors, including political ideology. In other cases, value for money and changes in risk appetite, drive the structural change – especially in the wake of the financial crisis, which has required governments to become more flexible.

Although every country in the world has its own approach to developing and funding infrastructure, until recently the PPP model has been narrowly defined – particularly within mature markets. Countries such as the UK, Canada and Australia have benefitted from a wide variety of private investment opportunities in infrastructure and developed rigorous PPP procurement and governance frameworks over time. In broad terms, the PPP approach has traditionally referred to either the availability style model (with core service retention for social infrastructure) or the concessionaire model including demand risk (prior to the recent lack of market appetite for demand risk).

Now, many different models are considered applicable. In the UK, a range of alternate structures have been considered for new assets. The NPD model of Scotland (and now Wales) is one example. Unlike the traditional PFI model, the NPD model does not strictly involve private equity investment; instead providing subordinated debt. As a result, while shareholders may receive a return on capital invested, under the NPD model returns are essentially fixed at the time of contract execution. Surpluses may reduce the service payment, with any surplus remaining at the end of the contract, distributed to the public sector authority (rather than as dividends to private investors). This model was applied recently in the Dumfries and Galloway Acute Services Redevelopment Project, which will result in the development of a new district general hospital for Dumfries and Galloway in Scotland.

Demand in the US has also led to the development of various innovative, large-scale transport projects. This includes the *Ohio River Bridges Project*, which involves collaboration between Ohio and Indiana state authorities and two different funding mechanisms (a PPP and a Public Activity Bond offering). The proceeds from the tolls are split equally between the states. Australia’s recent transactions have also included a range of models. In relation to economic infrastructure and toll roads, the use of an availability style model has enabled the continuing provision of critical infrastructure, during a period of low investor appetite for demand risk. This model is now being further augmented to address planned future recycling of capital, following establishment of proven demand (refer WestConnex Case Study). In addition, governments nationally are encouraging market led proposals, which to date have predominantly targeted major civil works projects, across the transport and freight portfolio.



Case Study: WestConnex Project, NSW, Australia

A 33km integrated road project to complete and expand the M4 and M5 corridors in Sydney, Australia improving links to the airport and port precincts. The project is planned to be delivered in three stages over 10 years. A NSW Government-owned company is funding the initial Stage 1 works currently under construction, which consist of the M4 widening and extension from Parramatta eastwards to Haberfield. Stage 2 will increase capacity on the M5 and skirts the Sydney Airport and Port Botany in Sydney’s south-east, with construction due to start soon. Once demand has been established, the state-owned company will look to raise capital via the securitisation of tolls following the proofing of traffic demand forecasts for the initial stage – including by issuing bonds to superannuation funds – to fund the construction of subsequent stages. The proposed model is similar to San Francisco’s Bay Area Toll Authority, which operates eight tolled bridges in the city and has raised private capital for new projects by issuing bonds.

In respect of social infrastructure projects, recent transactions have ranged from full privatisation of services, through to a blend of availability and performance by results models (such as the recently transacted *Ravenhall Prison Project* in Victoria). The trend towards service-led PPPs is expected to increase in NSW, with its preparedness to consider full outsourcing of services, demonstrated by the *Northern Beaches Hospital Project*. In addition, a range of service contestability engagements (arrangements involving the purchase of complex services from the non-government sector) are drawing on the key principles of PPPs. In particular, in relation to clear definition of service requirements, payment mechanisms that are linked to performance and clear allocation of key risks.

In relation to social infrastructure, governments around the globe are increasingly looking to new models of partnership between the public and private sectors to provide more efficient and effective social service delivery, that contributes to the public benefit. The past decade has seen the evolution of social impact investment (SII), which provides finance to organisations addressing social needs with the explicit expectation of a measurable social, as well as financial, return. The UK has played a leading role in this initiative, establishing a Social Impact Investment Taskforce during its G8 presidency in 2013, which seeks to raise awareness amongst potential social ventures, intermediaries and investors. Other OECD countries, including Australia, Canada and France have also played a role in developing the SII market.

Governments around the globe are increasingly looking to new models of partnership between the public and private sectors, to provide more efficient and effective social service delivery, that contributes to the public benefit.



The take-up and appetite for differing models and structures varies between local jurisdictions. Opportunity exists for greater adoption nationally.

Previously most social investment was in the form of grants, however 'payment by results' instruments such as Social Impact Bonds (SIBs), are gaining significant traction. An SIB could be described as a type of PPP that embeds a pay-for-success scheme measured by societal improvement, assessed against predefined and measurable social outcomes with investors' returns predicated on the achievement of those outcomes. Contracts range from 3 to 10 years (typically 5 to 7) in length and require various levels of investment (typically ranging between US\$7m – \$35m per project) depending on various factors including social issue, location and market sophistication.¹⁰ The successful proponent for the UK's HM Peterborough mixed prison included a pilot SIB designed to reduce recidivism by 7.5 percent (the first SIB launched in the UK), within its financing structure.¹¹ Due to the success of this initiative, the UK has now updated its policy to make post-release support available to all prisoners. Although the initial review of the HM Peterborough SIB program found an improvement in re-conviction rates (precipitating the provision of post release services to all prisoners), the SIB pilot has necessarily been cancelled, due to a lack of comparison group, by which to measure the ongoing success of the initiative. A number of other recent justice sector initiatives have included payment by results concepts, including recidivism and reintegration targets within the Ravenhall and Wiri prison PPPs, in Australia and New Zealand. NSW has also considered the use of Social Benefits Bonds (equivalent to an SIB), targeting improved criminal justice outcomes.

Emergence of mega projects

Nationally and globally there has been a continuing trend towards the 'mega project', consisting of large scale complex projects, frequently in relation to proposed solutions to address transport challenges created by urban mobility requirements. Given the size of the funding requirement for many of these projects, affordability is a key issue, further exacerbated by constrained fiscal environments. The complexity of these projects and differing characteristics may result in the application of a range of procurement models within the one project, requiring adaptive and innovative PPP arrangements. By way of example, models that are capable of appropriately interfacing across large civil works packages procured under alternate arrangements, as well as an ability to interface with other existing operational arrangements (such as potential franchisees), are increasingly required. In addition, given the sheer magnitude of funding required, the ability to attract alternate funding to reduce the reliance on direct government contributions (derived from traditional taxes and fees) will be critical to facilitate the continuing procurement of these mega projects. Innovative project-specific funding sources may incorporate a mixture of user-pays arrangements (potentially following demand proofing periods) as well as other appropriate value capture mechanisms, including special assessment direct benefit taxation, developer contributions and transit oriented development revenue receipts.

Bundling of large numbers of smaller scale projects

At the other end of the spectrum, there are a number of recent examples of smaller-scale, geographically dispersed projects being bundled together under the banner of a single large scale multi-asset PPP. Although the bundling of a few facilities (i.e. numerous schools projects) has been implemented across a number of jurisdictions nationally and internationally, new projects of a significantly larger scale (both in terms of deal value and geographic disparity) are now being considered. The recent *Pennsylvania Bridges Project* bundles 558 geographically-dispersed bridges into one large project with a 42 month delivery deadline and a 28-year contract term.



Case Study: Pennsylvania Rapid Bridge Replacement PPP

The *Pennsylvania Rapid Bridge Replacement Project* is a new initiative that seeks to address the state's structurally deficient bridges (numbering approximately 4,500). The bridges largely consist of crossings on smaller highways in rural areas, and are geographically dispersed across the state. The project aims to replace 558 bridges in 3 years, with construction complete by the end of 2017 and adopts a 28-year contract term. The project will be financed using up to US\$1.2 billion in PABs issued by the US Department of Transportation, which will be tax-exempt and account for the majority of the total project capital costs. The project will be led by Plenary Walsh Keystone Partners, with 11 key subcontractors, forming a consortium of financing and engineering firms.¹²

In the UK, the £2.4 billion *Priority School Building Programme* involves building 261 schools, with 46 schools to be financed in five distinct batches using the PF2 model (which allows government to hold competitions for third party equity, as well as hold up to a 20 percent equity stake). Three batches closed in March, with the remaining batches expected to close in July 2015. Using different sponsors, the five batches have a pooled debt commitment that will disperse funding through an authorised government agent to each of the 46 schools. Funds are to be distributed using a centralised funding vehicle, developed by the Education Funding Agency, referred to as the 'aggregator' fund. The fund is intended to warehouse short and long-term loans and aggregate the total financing requirements of multiple investors. It is anticipated that the schools will cost around £700 million.¹³ Advantages of this approach include standardised due diligence and documentation processes and improved chances of attracting institutional investors to projects otherwise too small to be considered attractive.



Relevance for the Australian market

Australia's PPP market, like its global peers, continues to evolve. However, the take-up and appetite for differing models and structures varies between local jurisdictions. Opportunity exists for greater adoption nationally. In addition, many of the infrastructure challenges emerging globally are consistent with national issues, creating opportunity to draw from global innovations.

- The development of a broader definition of PPP models, thus increasing the pool of projects to apply strong and consistent procurement methodologies.
- Greater focus on social impact investment within social infrastructure PPPs, particularly those sectors with strong existing national and international market presence, in the private provision of social services.
- Bundling of large scale civil infrastructure upgrade and maintenance works (particularly roads, bridges, water, sewer and drainage infrastructure) to address the significant backlog in maintenance, identified in the *Australian Infrastructure Audit*. Appropriate due diligence and provision of relevant information to market participants, will be key to ensuring the success of such models.

With the variability of government policies across Australia, there is a risk that inconsistencies in approach may arise. There is a significant need for national leadership to create greater national consistency, which can better enable achievement of social and economic objectives. When developing or selecting a model, clarity of project objectives is critical – the procurement model should support the objectives, but should not be an objective in itself. Ultimately, any proposed new structure must deliver value for money on a whole-of-life basis.

Funding and financing trends

As governments look to maximise value and reduce costs associated with private sector finance – innovative models catalysed by the financial crisis – are likely to result in permanent structural changes within the sector.

A number of different approaches to the funding and financing of PPP/PFI projects have emerged since the financial crisis in 2008. As governments look to maximise value and reduce costs associated with private sector finance – innovative models catalysed by the financial crisis – are likely to result in permanent structural changes within the sector. A number of the more interesting arrangements from various international jurisdictions are discussed below.

Australia

Capital contribution model

Numerous projects throughout Australia (and internationally) have now been executed using the capital contribution model, as governments seek to solve affordability issues and improve Value for Money (VfM). There are a range of issues to be considered, including the quantum, timing and certainty of the senior debt repayment. A number of variances have been adopted nationally, particularly with respect to the timing of the contribution including:

- pro-rata contribution during construction (i.e. contributed as a proportion of private sector finance drawn down by PPP Co)
- delayed drawdown during construction (i.e. as D&C phase contributions after significant contribution of private sector debt and equity)
- upon completion of construction (i.e. upon the successful achievement of Commercial Acceptance)
- repayment at a specified point during the Operating Term (for example once a 'steady state' of operations has been reached, referred to as a 'Satisfactory Operations Date').

The optimal timing of the Government Contribution (GC) needs to be considered from both VfM and risk transfer perspectives. An earlier GC may result in, prima facie, better quantitative VfM because the total capital funding requirement is reduced, including lower capitalised interest, fees and costs. However, Government may be perceived to 'take back' some risk that would otherwise have been transferred to PPP Co.

Unsolicited/Market Led Proposals and Inverted Bid Model

Private investors within the market are initiating a number of alternate funding structures, including the provision of unsolicited proposals and the institutional investors' inverted bid model. Governments nationally have introduced frameworks by which to assess unsolicited or market-led proposals. Although this approach encourages significant private sector innovation and investment in public infrastructure, one of the key challenges for the market and government alike, is the demonstration of unique attributes and justification of negotiating with a single party for significant opportunities (often heavily subsidised or requiring significant government intervention). The private sector must carefully balance the degree of work undertaken and investment required to demonstrate uniqueness, given the proposal may not be acceptable to government, or the opportunity offered to market.

The 'inverted bid model' is a proposed new procurement process championed by Australian superannuation funds to facilitate greater institutional investment in Australian infrastructure. Under the current procurement model, Australia's major infrastructure investors, rarely, if ever, participate in greenfield PPP projects either as bid sponsors or primary equity investors. Yet, combined, they control the majority of infrastructure investment in Australia. This is largely due to a lack of appetite to invest significant at risk capital (in bid costs) for the scale of investment associated with most PPP transactions, compared with alternate investment opportunities.

Under the proposed 'inverted bid model' the traditional bidding process is reversed by fixing the terms of project financing through a funding competition, prior to the tendering of construction, operation and maintenance (including raising any additional debt following determination of the proposed solution).

This approach seeks to level the playing field for long-term equity investors seeking reasonable returns over the economic life of the asset Vs. fees generated during the initial bidding, structuring and delivery of the asset. Although this model may be successful in attracting greater institutional investment, challenges would likely present, particularly in relation to the pricing of equity and debt in the absence of a fully developed understanding of the technical solution and associated risks.

United Kingdom

Non Profit Distribution (NPD)

Following concerns regarding excess profits generated from early PFI projects in the UK, the Scottish Government announced that PPP projects could also be procured using the NPD model. As the title suggests, the model does not allow for profit distributions to equity investors; private capital is contributed as subordinated and senior debt with pre-agreed margins. Any additional returns result in an offset to the service payment (reduced payment) or a payment from PPP Co to the procuring authority at the end of term. In general terms, the model is underpinned by the following key principles:

- enhanced stakeholder involvement in management of projects – a Public Interest Director and non-voting observer sit on the PPP Co board
- no dividend bearing equity – the project financing vehicle only contains subordinated and senior debt
- capped private sector returns, with surplus profits being returned to the public sector entity by way of an offset to the availability payment.

Several transactions have now closed, with the most recent being the NHS Dumfries and Galloway Acute Services Hospital Redevelopment. The model seems to have been readily accepted by the debt, sponsor and contractor market, probably helped by the very liquid and aggressive equity market in the UK.

Snapshot of recent trends and innovations in PPP funding and financing

> Availability-style economic infrastructure PPPs, with future securitisation of user pay revenues

Civil projects, typically road PPPs, that had recently used availability style payments to address concerns regarding demand risk, are now beginning to incorporate future provision of tolling securitisation following an appropriate demand proofing period, providing funds for future stages and other infrastructure.

- Recent examples:**
- US 36 Managed Lanes (US)
 - WestConnex Project (Aus)

> Value capture

A broad assortment of fees or taxes levied on defined groups of beneficiaries expected to benefit from the provision of a particular project, typically transportation oriented development, ranging from sales of air rights to increased land values and improved productivity resulting in a larger tax base.

- Recent examples:**
- Crossrail 2 (UK)
 - Hudson Yards New York (US)

> Congestion pricing/market based pricing

The introduction of variable tolls, including dynamic tolling arrangements for roads projects to help manage congestion allowing motorists to self-select travel times based on perceived time value.

- Recent examples:**
- Washington Interstate Route 95 Express Lanes Project (US)
 - M6 Toll (UK)

> Government syndication guarantees

Governments guarantee the syndication, becoming the lender of last resort in the event the transaction is not fully syndicated.

- Recent examples:**
- Victorian Desalination Project (Aus)

> Non Profit Distribution (NPD) model

The model does not allow for profit distributions to equity – the project vehicle only contains subordinated and senior debt. Private sector returns are capped with surplus profits return to the public sector by way of an offset to the availability payment.

- Recent examples:**
- City of Glasgow College (UK – Scotland)
 - NHS Dumfries and Galloway: Acute Services Hospital Redevelopment (UK – Scotland)

> Debt competition

Government selects a preferred bidder based on assurance of a financeable bid, and that preferred bidder, in consultation with government, with the single preferred then procuring debt using a debt competition.

- Recent examples:**
- M25 PPP (UK) – Bristol Southmeade Hospital (UK)

> Capital contribution model

A partial state contribution paid during construction (either as milestone payments, proportionately alongside private finance, or as the last contribution) or post completion, following an operational proofing period. The timing and quantum of capital contributions vary widely from project to project (recently in Australia, between 30–70%), however in most instances a majority of private financing remains at risk.

- Recent examples:**
- Sunshine Coast University Hospital (Aus)
 - Bendigo Hospital Project (Aus)
 - Sydney Convention Centre (Aus)

> Tax Increment Financing (TIF)

TIF is created by the generation of additional tax revenues based on an increase in the tax base, not an increase in the tax rate or a new tax. TIF is collected within the area directly affected by the new infrastructure that catalyses the increased tax base.

- Recent examples:**
- Greater Paris and the Grand Paris Expressway (France)
 - Crossrail 2 (UK)
 - Detroit Red Wings Hockey Stadium (US)

> Government senior debt ('wide equity') model

Originally developed in Canada, under this approach government provides all debt and the private sector provides a greater proportion of equity (e.g. 80% debt/20% equity).

- Recent examples:**
- Fort St John Hospital (Canada)
 - BC Cancer Agency Centre (Canada)

> Inverted bid model

The traditional bidding process is reversed by fixing the terms of project financing through a funding competition prior to the construction, operation and maintenance tender and raising of any additional debt.

- Recent examples:**
- Untested (Aus)

> Private Activity Bonds (PABS)

Application of tax exempt debt instruments for private investment in highway or surface freight transfer facilities, resulting in access to the lower cost of capital from the US tax exempt bond market.

- Recent examples:**
- Pennsylvania Bridges (US)
 - Capital Beltway Hot Lanes PPP (US)

> Bond market

The financial crisis saw the widespread collapse of monoline insurers and project finance bond markets (for instance in UK, Aus). Recent innovations in bond financing structures (such as delayed drawdowns and forward purchase bonds), have seen a slow re-emergence of bonds (outside North America) as a potential source of project finance in PPPs, typically in the secondary markets.

- Recent examples:**
- San Francisco Bay Area Toll Authority (US)
 - Victorian Desalination Plant Refinancing (Aus)
 - WestConnex Project (Aus) – Proposed

> TIFIA (US) credit assistance program

A US federal credit programme for eligible surface transportation projects of national or regional significance. Under this programme, the US Department of Transportation is authorised to provide three types of credit assistance – direct secured loans (most commonly used), loan guarantees and standby lines of credit, to attract greater private sector investment.

- Recent examples:**
- Ohio River Bridges East End Crossing (US)

> UK guarantees scheme

Provides credit support (leveraging off the UK's sovereign credit rating) to stimulate continuing investment in infrastructure. In relation to PPPs specifically, co-lending has been considered alongside other funders on a pari passu basis, providing procuring authorities with an alternative to the capital contribution model.

- Recent examples:**
- Mersey Gateway Bridge (UK)

Securitisation of future revenue generated from increased taxes as a result of consequential property value uplift, may be applied to the augmentation of public infrastructure.

UK guarantees scheme

Another recent development is the UK Guarantee Scheme (UKGS) introduced in 2012, to respond to the then acute shortage of long-term infrastructure financing. The UKGS, managed by the Infrastructure UK finance team, provides credit support (leveraging off the UK's sovereign credit rating) to stimulate continuing investment in infrastructure. Government support is provided in various forms, including debt guarantees, performance and revenue guarantees and support during the construction period. In relation to PPPs specifically, co-lending has been considered alongside other funders on a *pari passu* basis. This has provided procuring authorities with an alternative to the capital contribution model.

As at 27 March 2015, 27 UK projects were prequalified for UKGS and in the process of seeking finance, none of which are to be procured using PFI.¹⁴

The National Audit Office has recently called on the Treasury to be rigorous and objective in assessing whether government guarantees for new UK infrastructure projects are genuinely needed and the projects are likely to bring significant public value. The Scheme, which can support up to £40 billion in finance, is due to close in December 2016.¹⁵

TIF and alternative value capture regimes

Outside of creating new revenue streams, many states and localities are pursuing ways to capture value from existing assets. TIF involves the securitisation of future revenue, generated from increased taxes as a result of property value uplift associated with access to improved public infrastructure. These funds can then be applied to the augmentation of that same public infrastructure. For instance, TIF may be applied to projects that incorporate new and upgraded stations and improve access to public transport, resulting in an appreciation of surrounding real estate values. The model has been used extensively for a wide range of infrastructure projects internationally. Scotland is currently running a pilot scheme to test the applicability of TIF to Scottish circumstances. In Denver, this model is being used for the Eagle Commuter Rail PPP, to support redevelopment along a new transportation corridor. Increased access to public transport is expected to drive land values upwards and increase the local tax base.

The UK's Incremental Business Rates Income (IBRI) mechanism, provides another example of value capture as an alternate funding source. By way of example £4.1 billion of the £15.9 billion required to fund London's Crossrail 2 Project, has been raised via a supplemental property tax on London business properties with a rateable value in excess of £50,000.¹⁶ Other funding schemes have considered taxing those properties within the vicinity of stations by harnessing the uplift in value created around stations (and hence the increase in property taxes). The mechanism results in some of the cost of projects being borne directly by the beneficiaries of the scheme, as per the Canary Wharf Group contribution to the cost of the Isle of Dogs station in London.

North America

As highlighted earlier in this report, the US has embarked on a comparatively comprehensive regime of public funding incentives targeted at encouraging private sector investment in public infrastructure projects, with a particular focus on the transport sector. At the federal level, these initiatives include the tax-free treatment of municipal bonds (PABS), TIFIA and 2012 highway/transit legislation, such as the 2012 *Moving Ahead for Progress in the 21st Century Act* (MAP-21). State governments across the US have also enacted jurisdictional specific legislation enabling the use of PPP approaches for transportation infrastructure.

TIFIA credit scheme

The TIFIA credit scheme seeks to leverage federal resources to stimulate private capital investment in transportation infrastructure by providing credit assistance in the form of direct loans, loan guarantees, and standby lines of credit (rather than grants) to projects of national or regional significance.

Under the TIFIA scheme, the U.S. Department of Transportation (US DOT) offers three forms of credit assistance to transportation projects that have a dedicated revenue stream:

1. secured (direct) loans to project sponsors
2. loan guarantees to institutional investors
3. stand-by lines of credit (a secondary source of funding that may be drawn upon to supplement project revenues, if needed, during the first 10 years of a project's operation).

The US has embarked on a comparatively comprehensive regime of public funding incentives targeted at encouraging private sector investment in public infrastructure projects, with a particular focus on the transport sector.



Case Study: Capital Beltway HOT Lanes PPP

The *Capital Beltway High Occupancy Toll Lanes Project* involves upgrades and expansion to the Capital Beltway for a length of 14 miles. A PPP was established between the Virginia Department of Transport and a Fluor-Transurban JV (Capital Beltway Express) in 2008 and the project reached substantial completion in November 2012 at a cost of approximately US\$2.1 billion. The project adopted a number of financing mechanisms. Using the TIFIA scheme, the project obtained \$US589 million subordinated debt (at a low fixed interest rate of 4.45 percent for 40 years). This was also the first PPP to use funding from PABs (valued at US\$589 million), and the first project to combine TIFIA funding and PABs within the one project structure.¹⁷

Private Activity Bonds (PABs)

PABs are debt instruments issued by state or local governments whose proceeds are used to construct projects with significant private involvement. With approval from the U.S. Department of Transportation to issue PABs, the state or local government issues tax-exempt debt on behalf of the private entity undertaking the project. The private entity finances and delivers the project and is responsible for debt service on the PABs. As of June 2014, over 73 percent of the authorised \$15 billion in PAB allocations had been approved by DOT for twenty projects.¹⁸



Relevance for the Australian market

In the short-term, Commonwealth support and asset sales will be critical to the continuing provision of Australia's acute infrastructure requirements. In the longer-term, a range of alternate and innovative funding sources will be required. Potential international innovations that could be investigated domestically include:

- increased focus on user-pays mechanisms, including the recycling of investment capital through future securitisation of revenue following appropriate proofing periods
- the use of variable tariffs and dynamic pricing models, to address real time demand volumes
- greater emphasis on maximising Value Capture opportunities, including capital contributions from local government and developers and tax incremental financing mechanisms, in particular in relation to transit oriented development and property value uplift created by improved transport access and increased amenity
- increased funding contributions from high wealth and institutional investors, wishing to contribute a portion of their investment allocation to improved social outcomes.

Since the financial crisis Australia has sought to reduce the total financing burden of PPPs via the incorporation of the capital contribution model. Alternate mechanisms that warrant further consideration include:

- private investment incentives to direct additional investment towards infrastructure, including tax exempt financing. Any such approach would need to consider burden cost shifting as between the states and commonwealth, as well as the substitution of taxation revenues toward infrastructure
- various credit enhancements and contributions, similar to approaches taken in the US and UK, leveraging sovereign credit rating and security of payment, to facilitate more liquid infrastructure markets with lower credit margins.

In adopting models that seek to leverage governments' credit ratings and lower cost of borrowing, it is important that the incentives and integrity of the PPP model be retained – any approach should be cognisant of potential risk take back by government, while continuing to pay a premium within the PPP structure – overall value for money must be preserved.

Opportunity also exists to investigate the potential re-establishment of the Australian infrastructure bond market in the absence of monoline insurers, looking to better understand the characteristics and potential interventions required to catalyse the re-emergence of capital markets to create increased debt pricing contestability, including the potential issuance of infrastructure bonds into the capital markets.

In adopting models that seek to leverage governments' credit ratings and lower cost of borrowing, it is important that the incentives and integrity of the PPP model be retained – any approach should be cognisant of potential risk take back by government, while continuing to pay a premium within the PPP structure – overall value for money must be preserved.



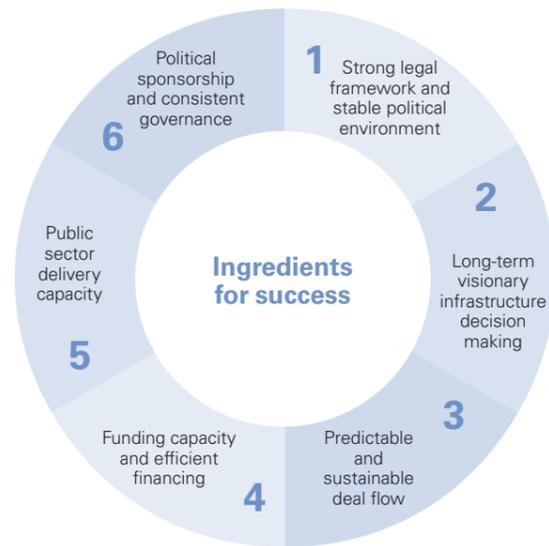
Ensuring PPP performance and value

“The success factors in Canada are many, but there is general agreement that the critical factors are: political commitment, enabling policy frameworks and ongoing pipelines; focused and capable delivery institutions; deep and flexible long-term capital markets; stimulating federal government policy and funding programs such as Build Canada; and collaborative, transparent and efficient procurement processes.”

Larry Blain,
KPMG Canada
Previous Head of Partnerships BC

Investors and the public alike, have increasingly high expectations around transparency, reporting and operational optimisation of PPP projects, both during and after, project construction.

Although Australia is now one of the most mature PPP markets globally, little has been done to confirm PPP performance during the operational phase. At both the state and national level, few projects have been subjected to significant abatement, with anecdotal evidence suggesting that strong relationships between the private and public sector, are at times resulting in some leniency in some aspects of service delivery traded against over delivery in other aspects. Although positive, as relationships and a practical approach are strongly supported, an issue that may emerge is the potential for precedents to undermine government’s contractual rights. The inclusion of appropriate KPIs and calibration of the abatement regime that ensures any deductions are enforceable (and not deemed penal) and incentivise the desired behaviours, are key to ensuring that projects perform as intended and that the incentives within the contracts are conducive to ongoing improvement and the achievement of continuing value for money.



Experience globally consistently demonstrates that standardised contracts, clear performance standards, robust contractor management and better communication are a few things that are needed to achieve consistent and successful outcomes from PPPs. A productive PPP market relies on a careful balance of key ingredients spanning the public, private, economic and political landscape. This requires skilled professionals in both the public and private sector armed with the knowledge, resources and flexibility to lead project procurement and implementation. The next key focus area is to ensure that projects are delivering operationally as intended.

The UK and Canada are leading the way in undertaking operational reviews and improving the contract management of PPP projects to drive operational savings and ensure continuing delivery of value.

Canada

Efficiency reviews are a key tool in assessing the relative ‘success’ of a project and determining whether the ongoing benefits of the project validate the contracted long term public investment. In respect of the procurement phase, Canada has historically demonstrated greater efficiency in relation to both procurement timeframes and overall transaction costs (which are inexorably linked). An international review of PPP practitioners conducted by KPMG for Infrastructure Australia in 2010,¹⁹ highlighted a number of key factors contributing to competition and efficiency in PPP procurement, including:

- a transparent and stable PPP pipeline, supported by early announcement of potential PPP projects, consistent application of policy guidelines and frameworks and clear political support
- recruitment, development and retention of high quality public sector project team members
- consistent application of governance structures that facilitate effective decision-making and avoid unnecessarily protracted and uncertain timeframes
- standardised contracts as appropriate for generic aspects of projects, enhanced by sharing of skills and knowledge between procurement and delivery teams.

Interestingly, a recent white paper released by Service Works Global in collaboration with The Canadian Council for Public-Private Partnerships, highlighted the link between the reduction in available private finance since the financial crisis and various barriers to institutional investment across global PPP markets. The report states that key barriers have consisted of a lack of expertise, lack of transparency about infrastructure plans and pipelines and lack of data on performance of infrastructure projects, most of which have been absent from the Canadian market, given its comparatively superior recent performance.



However, in its 2014 annual report, the Office of Auditor General of Ontario highlighted a lack of comprehensive operational data in relation to the performance of infrastructure PPPs in Ontario (which has a highly developed PPP infrastructure market at a municipal level) and recommended in the annual report that provincial government bodies gather data on actual cost experience from recent public sector infrastructure procurements and alternative financing and procurements.

Project-specific performance reviews are now being commissioned on operational PPPs throughout Canada. Early findings indicate that operational efficiencies are best achieved when a united and common understanding of the ongoing obligations, in relation to both the construction and operational performance requirements, are clearly understood by all parties. Those projects with appropriate KPIs around operational efficiency and effectiveness – and ensuring those key indicators are tracked on a regular basis – best demonstrated the achievement of value for money.

Practitioners within the Canadian market have also cited additional key success factors as including:

- comprehensive Advanced Planning
- clear specification of project objectives (in particular an understanding of the competing priorities between objectives and trade-offs that result in the least compromise)
- the alignment of the evaluation criteria, performance specifications and payment mechanism, to the project objectives.

United Kingdom

The UK has also undertaken significant reviews into the operational performance of its PPPs since 2011, when the government committed to reduce the future expenditure on operational projects by at least £1.5 billion through the centrally co-ordinated *Operational PPP Efficiency Programme*. Leading the initiative, HM Treasury and Infrastructure UK have developed a voluntary Code of Conduct to assist public sector bodies and PPP partners enhance long-term relationships, while supporting the delivery of more immediate PPP and PFI contract savings and efficiencies.

Most recently, Treasury was able to confirm that public sector organisations (PSOs) from across local and central government had reported returns of approximately £2.1 billion (in nominal terms) of savings, since the inception of the Programme. These savings predominantly consist of future cost reductions, to be realised over the remaining years of the relevant contract, by changing the parameters of services or finding better use of the assets (as agreed between the relevant PSO and Treasury). Approximately 700 PPP contracts have been subject to the review to date, covering local authority schemes including schools, and larger infrastructure projects including hospitals, roads and waste management projects. Preliminary findings from the review indicate an average of 5 percent savings may be achievable across the market. Treasury is currently exploring further potential for £2 billion in savings, through changes to the scope of contracts and more efficient use of facilities and technologies.²⁰



Relevance for the Australian market

Notwithstanding the maturity of the Australian PPP market, very little has been done to confirm PPP performance during the operational phase. Australia's peer markets, in particular the UK and Canada, have commenced PPP operational and efficiency reviews. Domestically, opportunity exists to:

- review the performance of Australia's operational PPPs, confirming that those projects are performing as intended and in doing so, identify the key factors and lessons learnt that have led to the success or otherwise, of those projects
- seek to identify operational savings and greater efficiency measures that could be incorporated within currently contracted PPPs (potentially rationalising or increasing services scope).

It is anticipated that in addition to optimised KPIs and clear and transparent reporting, the availability and quality of appropriately skilled contract management resources, will be key to ensuring ongoing performance and value. Anecdotally, evidence suggests that many of the best and brightest move from the origination phase of one transaction to another, in pursuit of the next deal. A key challenge for the domestic PPP market will be the attraction and retention of the best resources well into operations, ensuring reciprocal knowledge transfer between project phases and continuing availability of a highly talented pool of contract administrators, to manage the significant value of operational service payments per annum.

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Conclusions

Ultimately, any proposed new structure must deliver value for money on a whole-of-life basis.

Given the criticality of Australia's infrastructure need, there is an opportunity to take the PPP model to the next stage of development and sophistication. Several key findings have been identified as crucial to the ongoing success of the PPP model and ensuring that Australia remains a relevant and attractive global PPP player.

- **Political stability and sponsorship, including a long-term view of infrastructure** investment requirements within a stable policy environment, are required to provide confidence to market participants, to ensure a well contested market and to enable efficient delivery of projects.
- **A strong and transparent pipeline continues to be key** – it provides visibility of upcoming opportunities, allowing markets to respond with appropriate capacity and capability and facilitates greater standardisation (where appropriate) to increase general efficiency – thus lowering transaction costs of both private and public sector participants, resulting in improved overall value for money.

In addition, there are a range of emerging global trends and innovations that could be considered for adoption (with adjustment for local characteristics as appropriate):

- **attraction of alternate funding sources** to help offset the huge infrastructure funding requirement for megaprojects, particularly in relation to user-pays and transport value capture opportunities
- **development of new asset classes suitable for PPP delivery**, including packaging of large-scale civil infrastructure upgrade and maintenance works by region, to address the significant maintenance backlog as identified in the recently released *Australian Infrastructure Audit*, and
- **increased contestability arrangements that improve service efficiency and greater facilitation of social impact investing** within social infrastructure PPPs.

When developing or selecting a model, clarity of project objectives is critical – the procurement model should support the objectives, but should not be an objective in itself. Ultimately, any proposed new structure must deliver value for money on a whole-of-life basis.

In relation to financing specifically, there is a range of models in addition to the capital contribution model currently favoured by Australian Governments, that could help reduce the average cost of capital within PPP structures, including various credit enhancements and investment incentives. Such adjustments require caution to ensure preservation of value for money and appropriate risk transfer. Policy makers need to be cognisant of any potential risk take back by government, while continuing to pay a risk premium within the PPP structure. Opportunity also exists to investigate further the ability to re-establish the Australian infrastructure bond market, to create increased debt pricing contestability. In the absence of monoline insurers, a greater understanding of the characteristics and potential interventions required to catalyse the re-emergence of long-term capital market solutions, is required.

Finally, a key aspect long overdue within the Australian market, is an extensive review of the operational performance of contracted PPP projects. It is particularly important to understand whether projects are performing as intended and to identify key lessons learnt. Such an understanding will facilitate the enhancement of standard approaches, ensuring continuing value for money in the origination of new infrastructure arrangements. As part of this process, opportunity also exists to leverage from the UK and Canadian experience in operational efficiency reviews, to identify potential savings and modifications to existing service arrangements. It is critical to the continuing success and political acceptance of the PPP model, that demonstrable value for money is achieved across the project lifecycle.

Opportunity also exists to investigate further the ability to re-establish the Australian infrastructure bond market, to create increased debt pricing contestability.

A key aspect long overdue within the Australian market, is an extensive review of the operational performance of contracted PPP projects.

1. Infrastructure Australia, *Australian Infrastructure Audit: Our Infrastructure Challenges* (April 2015). World Economic Forum, *The Global Competitiveness Report 2014-15* (September 2014).
2. McKinsey Global Institute, *How to save \$1 trillion a year* (January 2013).
3. Arcadis, *Second Global Infrastructure Investment Index: Competing for private finance* (2014).
4. IJ Online data (accessed 15 May 2015) and KPMG analysis.
5. IJ Online data (May 2015) and KPMG analysis. Analysis examines data in relation to all PPP transactions listed on IJ Online as at 15 May 2015.
6. *American Society of Civil Engineers, 2013 Report Card for America's Infrastructure*, accessible at www.infrastructurereportcard.org.
7. Federal Highway Administration, *2013 Status of the Nation's Highways Bridges and Transit: Conditions and Performance*, Part 1, Chapter 2.
8. The Canadian Council for Public-Private Partnerships, *Public-Private Partnerships: What the World can Learn from Canada* (February 2015).
9. The Canadian Council for Public Private Partnerships, Canadian PPP Project Database. Figure includes PPPs that are classified as pre-tender to preferred as at 9 June 2015.
10. Instiglio web site (accessed 12 May 2015) and KPMG analysis.
11. OECD, *Social Impact Investment: Building the Evidence Base* (2015).
12. PWKP consortium website (accessed May 2015).
13. Education Funding Agency website (accessed 11 July 2004).
14. For a full list, see www.gov.uk/government/publications/uk-guarantees-scheme-prequalified-projects/uk-guarantees-scheme-table-of-prequalified-projects.
15. National Audit Office, Press Release (28 January 2015) www.nao.org.uk/press-releases/uk-guarantees-scheme-infrastructure.
16. Crossrail Project website, see www.crossrail.co.uk/news/articles/crossrail-business-rates-supplement-initial-prospectus-published-gla-release.
17. Federal Highway Administration, US DOT, Capital Beltway HOT Lanes Project Profile (May 2015), see www.fhwa.dot.gov/ipd/project_profiles/va_capital_beltway.aspx.
18. US Department of Transportation website (accessed 13 May 2015) see www.fhwa.dot.gov/ipd/fact_sheets/pabs.aspx.
19. KPMG, *PPP Procurement: Review of Barriers to Competition and Efficiency in the Procurement of PPP Projects* (May 2010).
20. National Audit Office, *Savings from operations PFI contracts* (28 November 2013). HM Treasury, *Operational PFI/PPP Savings*, Press Release (accessed on 1 May 2015) www.gov.uk/government/uploads/system/uploads/attachment_data/file/273847/Operational_PPP-PFI_Savings_flyer.pdf.



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