
The case for change

Privatisation of Western Australia's electricity networks





Context

Governments around Australia have embraced privatisation over the past two decades. Both the Commonwealth and other State Governments have leased or sold government-owned businesses and assets, and used the capital raised to either pay down accumulated debt or recycled the proceeds into new public infrastructure assets.

It has been estimated that privatising Western Power and Horizon Power transmission and distribution networks will raise somewhere between \$12 and \$16 billion for the state if fully privatised. As a centrepiece of the Treasurer's 2016/17 State Budget speech, he stated the Government would seek to make a decision on the sale of Western Power and Horizon Power following the March 2017 election. Given this announcement and the jobs and economic activity that would be created through a recycled assets fund, this is expected to be a key consideration in the upcoming State election. Notably, the unions have opposed the privatisation of the 'poles and wires' businesses. As has been the case with other asset ownership decisions, this issue has now become highly politicised resulting in a flood of information and misinformation about the pros and cons.

There have also been questions as to whether privatisation is actually necessary and what the implications will be, with some predicting price increases and poorer service performance from networks in private hands. But is the Western Australian public right to be worried?

We have developed this short paper to provide some perspective on privatisation and to dispel some myths so that the community can have a more informed debate.

Throughout this paper we have used the term 'privatisation'. This could be an outright sale of the networks as has been the case for certain Government non-network divestments; an initial public offer (IPO); a long term lease as in the case of New South Wales (NSW) networks; or indeed greater use of outsourcing of operations, maintenance and management to the private sector. Regardless of the method adopted – the intent is the same, to seek upfront funds from the private sector (who value the future cash earned) but with the aim of improving productivity – on the basis that the private sector can provide public services at a lower cost/better service than the Government can do themselves.

Making the public case for electricity network privatisation

The weight of evidence demonstrating the benefits from privatisations for energy consumers is compelling and wider studies have substantiated this view.

The Productivity Commission in 2013 found that ‘state-owned network businesses appear to be less efficient than their private sector peers’. The Productivity Commission assessed a number of factors in this analysis including price, operation expenditure (opex) per kilometre, customers per employee and safety measures including fire starts. The overall conclusion was: ‘The rationale for government ownership of network businesses no longer holds. State-owned status is ill-suited to the current incentive regulatory regime’. The commission recommended that state and territory governments privatise their government-owned network businesses.

The case was further strengthened by the release of Infrastructure Australia’s Australian Infrastructure Plan in February 2016. The Plan noted that “domestic and international evidence shows that cost-minimising, profit-maximising ownership structures [which incidentally were the original objectives of the National Competition Policy and the National Electricity Market reforms] are the best means to deliver efficient and customer responsive infrastructure. Private owners have the best incentives to respond to these drivers when compared to public ownership, but the integrity of the model relies on governments retaining an active role of market maker and sophisticated regulator”. Infrastructure Australia concluded at recommendation 6.4 that “All Governments should transfer their remaining publicly-owned electricity network business to private ownership”.

Since the 1980s, the Chamber of Commerce and Industry (CCI) has consistently made the case for energy market reform which includes the privatisation of state-owned energy assets. This includes the completion of reforms outlined in the 1993 Energy Board of Review report *The Energy Challenges for the 21st Century*, more commonly known as the Carnegie report. Privatising Western Australia’s (WA) electricity networks is part of the unfinished Carnegie agenda which will improve the productivity of the sector.

PwC modelling for the Australian Infrastructure Plan estimated a 15 per cent direct impact from operating cost savings could be achieved in the electricity supply sector noting that it is not the change in ownership per se that results in benefits, but the change in incentives and practices that the private sector applies to businesses that enable more efficient allocation of resources.

The pace of change and disruption in the energy sector is significant – increased distributed generation (for example residential solar panels), battery storage, and electric vehicles will all influence the use of the grid going forward. Electricity networks retained in government ownership face many more constraints in this evolution exposing the government to potential lower returns and greater risk, which would influence future network value.

In WA this will be further influenced by the proposed State energy reform encouraging more transparent prices, including changes to the capacity mechanism for generators and introduction of full retail contestability. Networks will need to learn how best to play in this competitive market and provide ‘behind the meter’ value-added services, for example, energy demand management to consumers.

Timing for privatisation therefore appears optimal with the ability for private sector capital targeted at innovation to address these technological and consumer challenges, and better enabling productivity improvements.



Regulatory review and lessons from gas infrastructure privatisation

Most critical to privatising electricity assets is that full monopoly power does not transfer to the private sector.

Electricity networks are heavily regulated by an independent entity – whereby the regulator not the network owner sets prices – with the regulator seeking to set tariffs which provide a return for an ‘efficient cost’ business.

Similarly there are performance hurdles that are set for ensuring reliability of service, and safety requirements set by EnergySafety (in the case of WA).

What is often forgotten in the debates about ‘poles and wires’ ownership is that almost every state and territory, including WA, has privatised gas distribution and transmission assets. This is a comparable example of a highly regulated industry where consumers are protected and prices are set by an independent economic regulator.

There is no evidence to suggest that consumers are worse off with gas assets in private hands. While some commentators will blame recent gas price rises on privatisation, this is disingenuous given these increases are almost entirely attributable to gas exports and would have occurred regardless of who owned the gas network businesses.

An assessment of electricity network performance: private vs public

Victoria and South Australia Governments privatised their electricity networks in the 1990s. NSW is currently in the process of privatising its transmission and distribution businesses.

By the end of the next financial year, almost 70 per cent of Australia's electricity customers will be serviced by network utilities that are at least partly privatised.¹ This landscape provides a body of evidence to compare electricity network performance across a number of metrics between publicly and privately owned networks.

Australian network ownership landscape

	Transmission	Distribution
NSW	Private	Ongoing privatisation process
NT	Public	Public
QLD	Public	Public
SA	Private	Private
TAS	Public	Public
VIC	Private	Private
WA	Public	Public

Consumers are typically concerned about four attributes of their electricity utility service provision:

- price – risk of increased prices through private sector 'profiteering'
- reliability and security of supply – available when needed, minimal lost time and minimal maintenance outages
- safety – public and worker safety
- customer service.

Price

Of these attributes, affordability and the cost of network services is the most commented upon.

Non contestable residential customers within the South West Interconnected System buy electricity from retailers, being Synergy in WA, with Alinta Energy and Perth Energy also selling to business customers. Retail tariffs

are regulated by the WA Government. In the east coast states, governments have largely phased out energy retail price regulation as effective competition develops. Commencing with Victoria in 2009, and most recently South East Queensland effective July 2016, retail price regulation for electricity has been removed, following the finding by the Australian Energy Market Commission (AEMC) that effective competition existed. In removing price regulation, governments require retailers to publish unregulated standing offer prices. It is unlikely regulated tariffs will be removed in WA until the existence of full retail contestability, when residential consumers can select from a range of power providers.

Tariffs paid by WA consumers are intended to cover the cost of generation from either Synergy's owned power stations or third-party electricity generators, the cost of delivery via the networks, and the cost to serve customers (eg billing systems, call centres, corporate costs) plus a profit margin. The full cost is currently partly subsidised by the WA Government.

Comparing relative retail prices across states is challenging as overall electricity prices are influenced by various factors including wholesale generation costs, retail margins, and consumption and energy mix (ie electricity vs gas use) which varies considerably by state – as well as network costs.

Network pricing for Western Power is fully controlled by the Economic Regulation Authority (ERA) at present,² an independent regulatory authority and a market structure that controls costs and manages prices for consumers. These checks and balances apply whether businesses are in private or public hands – critically, private and public sector asset owners have no control over pricing.

The network charges typically represent 38–60 per cent³ of the overall electricity cost, which on the east coast are regulated by the Australian Energy Regulator (AER).

¹Customers as at June 2014 (December 2014 for Victorian businesses) ²From 1 July 2018 subject to approval, the regulation of pricing for Western Australia's electricity networks may transfer to the Australian Energy Regulator, which regulates pricing for the electricity networks of all other Australian states and territories except NT. ³AER, *State of the Energy Market* 2015.

Separate analysis carried out by the Productivity Commission and the AER both indicate that the privatised networks in Victoria and South Australia have been more efficient than the remaining state-owned assets. This view is also supported by evidence from other countries, such as the UK, where the benefits of electricity network privatisation have been well established.⁴

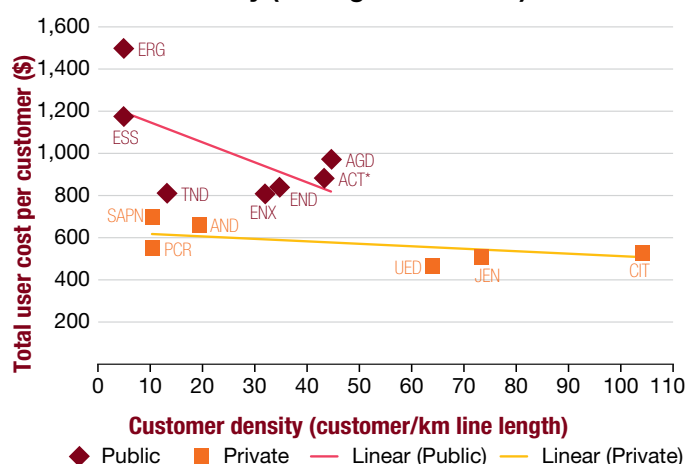
Despite the difficulties in comparing data across states and territories, what is not in dispute, as documented by several commentators,⁵ is that since privatisation electricity bills have increased less in the privatised states of Victoria and South Australia than over the same period in the non-privatised states of NSW and Queensland.

This relative price increase of public vs privately owned networks is perhaps best explained by the underlying cost efficiency of the networks. Following 2012 amendments to the National Electricity Rules, the AER is required to publish an annual benchmarking report. The first of these annual reports was published in November 2014, in which the AER set out to describe the relative efficiency of distribution network service providers in the National Electricity Market (NEM), which at present excludes WA.

The benchmarking data was largely collected from regulatory information notices collected from each of the distributors as part of their annual regulatory reporting requirements. Despite the reservations of some network service providers who have argued the data is not necessarily comparable and could be skewed by factors such as accounting practices and different interpretations, the AER has stated: 'whilst no dataset will likely ever be perfect, this data is the most consistent and thoroughly examined dataset of the distributors yet assembled in Australia'. For the purposes of this paper we view the data as being valid for cost comparison purposes.

The AER benchmarked networks by measuring the productivity of distributors in their use of inputs to produce outputs and concluded that it: 'indicates that the distributors including CitiPower, United Energy, Jemena and SA Power Networks [all of which are privately owned] are the most productive; and ActewAGL, Ausgrid, Ergon Energy, Essential Energy and TasNetworks [all of which are partially or fully government-owned] appear to be the least productive distributors'. The following chart demonstrates that on a cost-per-customer basis, private owners operate their assets at least 15 per cent and as much as 33 per cent cheaper than publicly owned assets.

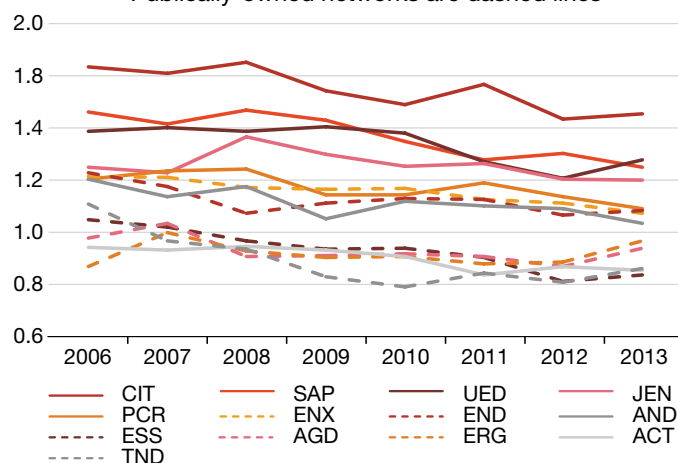
Total cost per customer compared to customer density (average 2009–2013)



*ACT power networks are owned through a public/private joint venture
Source: Figure 14, Australian Energy Regulator, Electricity distribution network service providers (Annual benchmark report: November 2014)

Multilateral total factor productivity for each distributor

Publicly-owned networks are dashed lines

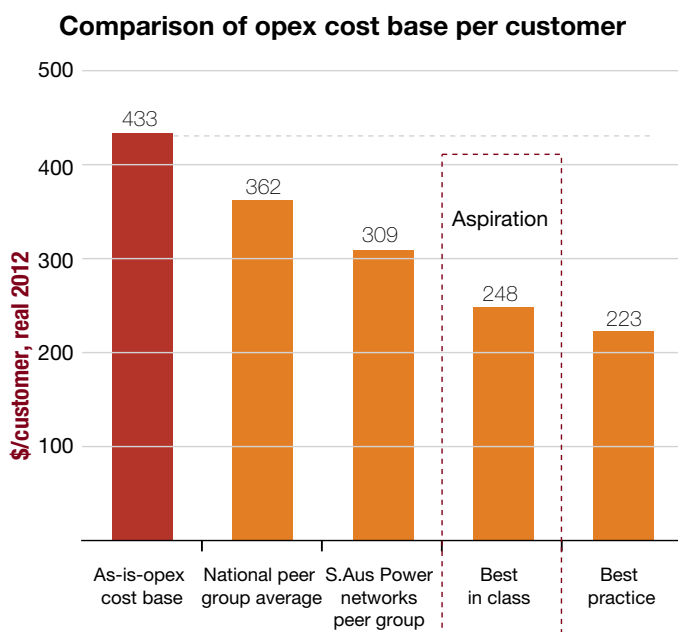


*ACT power networks are owned through a public/private joint venture
Source: Figure 16, Australian Energy Regulator, Electricity distribution network service providers (Annual benchmark report: November 2014)

In a simplistic sense, network regulators set tariffs to provide network owners with a return on invested capital and ongoing operational expenditure. In its most recent price determination, and as a consequence of the benchmarking findings, the AER implemented tariffs for the government-owned networks on the east coast, bringing down the revenue allowance to recover costs and capital expenditure, bringing them more in line with those incurred by their private sector peers. At the same time, the AER has also reduced revenues for the privately owned network owners. This highlights the power of the economic regulation model and the drive it provides to reduce the costs of service provision to Australian electricity consumers.

⁴PwC, *The role and impact of specialist investors in UK infrastructure*, October 2015. ⁵<http://www.abc.net.au/news/2015-03-25/fact-check-does-privatisation-increase-electricity-prices/6329316>

The benchmarking is particularly important for Western Power as a proposal to transition regulatory responsibility from the Western Australian ERA to the AER is in progress. At that point in time, it would be expected that Western Power would be included in the benchmarks, and consequently exposed to possible tariff reductions to the extent it underperforms peers. We understand that in order to become a top quartile player, Western Power must pursue a significant cost reduction agenda of 20–30 per cent. Theoretically, this would equate to lower electricity costs for WA consumers of almost \$200 per annum.



Source: *Final decision on proposed revisions to the access arrangement*, ERA, p.15, 5 September 2012; *Further final decision on proposed revisions to access arrangements*, ERA, 20 November 2012

Without doubt, the business is actively pursuing this target, as are other state-owned networks. Indeed, the former Western Power chief executive recently announced that Western Power hopes to save \$1.5–2 billion over the next five years as a result of its efforts to make the company more efficient (ie up to \$400 million a year against its current spend of \$1.5 billion a year, excluding interest).

Some of these cost savings and efficiencies may therefore occur irrespective of any privatisation. Such cost reductions are a natural reaction to expected tariff reductions in the next regulatory reset period, and the need to operate an efficient network.

However, the ability to drive out these costs and execute the plan is critical, and implementing major cost savings is a complex undertaking and tends to take a number of years to fully embed within an organisation. Many network utilities in Government hands are undertaking cost reduction and transformation programs, and most are setting targets at the upper end of the performance curve.

The key question is whether or not the extent of the changes needed are more easily effected in private hands. Many would argue, and the Productivity Commission 2013 findings support the view that significant cost reduction is possible to a large degree in Government hands but some matters are likely to be more easily managed in private hands without the political overlay of a Government shareholder. The analysis suggests that the private sector is very adept at reducing costs and running the business efficiently, and may strive for greater cost savings than under public ownership.

Reliability and security of supply

The regulator also sets reliability standards to minimise any disruptions to the power supply for consumers. It is important to acknowledge that some level of outage is inevitable on a complex electricity network.

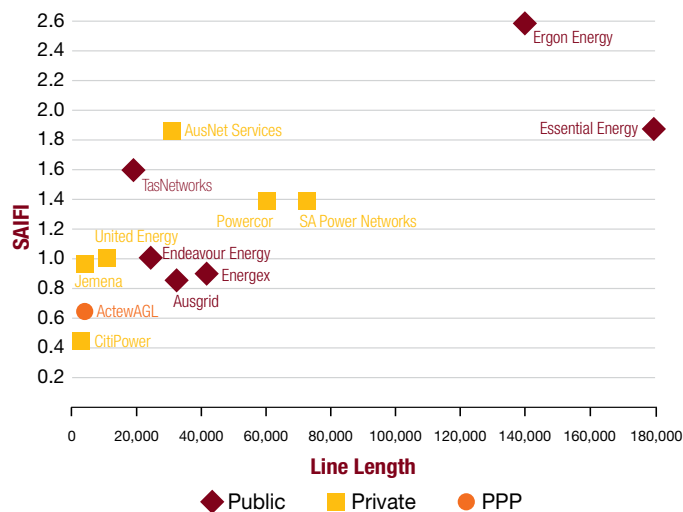
Reliability and security of supply are benchmarked by the AER and the AEMC annually and provide a good comparison of reliability measures for each distributor in the NEM. Western Power also reports reliability using the same measures. These are the System Average Interruption Duration Index (SAIDI), which measures the duration of interruptions, and the System Average Interruption Frequency Index (SAIFI), which measures the frequency of interruptions.

In distribution there is a strong correlation between reliability and line length (see figure on page 9). For example, distributors with longer average line length and lower customer density due to having a larger proportion of rural areas within their network (such as Ergon Energy, Essential Energy, SA Power Networks and Powercor) perform at a relative lower level on SAIDI and SAIFI compared to more urban distributors (such as CitiPower, Jemena, United Energy and Ausgrid). We expect Western Power to perform in a similar way to that of SA Power Networks over time.

It is also clear from this analysis that there is no correlation between reliability and ownership, with privately owned distributors performing similarly or at times better than publicly owned distributors.

SAIFI by line length for electricity distributors

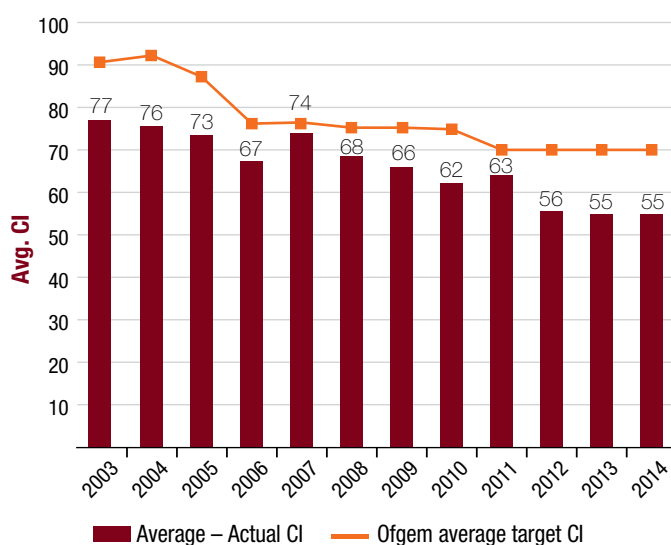
Average length of line and SAIFI outages/customer
EBT data 2010-2014



Source: EBT DNSP PPI 2010-14 data

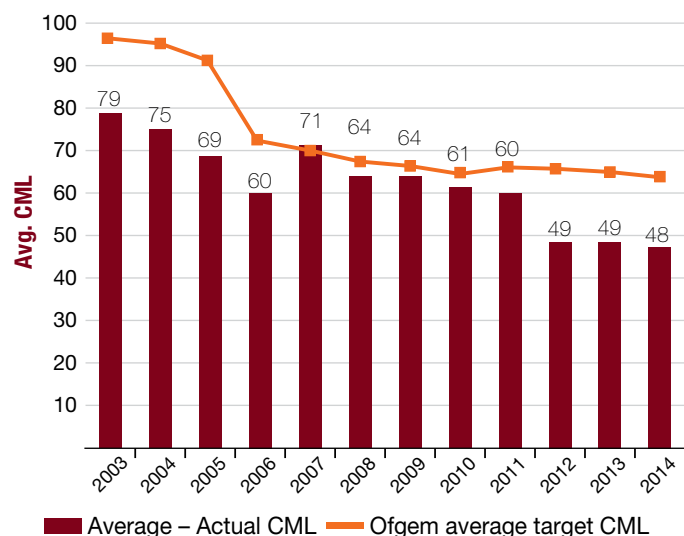
The UK regulator Ofgem, measures the reliability of UK privately owned distributors using 'customer minutes lost' (equivalent to SAIDI) and 'average customer interruptions' (equivalent to SAIFI x 100). In the period since privatisation, between 2003 and 2014, UK electricity distribution operators have reduced the numbers of interruptions to customer supplies by 29 per cent and the length of the outage period by 39 per cent. This again highlights that private asset owners (many of which have also invested in Australian electricity networks) are adept at improving network performance over time.

Average customer interruptions



Source: Ofgem

Average customer minutes lost



Source: Ofgem

Safety

Safety underpins the operations of network electricity companies across the globe. Vision statements typically include references to 'safety first' or 'zero-harm', which is strongly enforced as part of the operating culture. This industry-wide cultural trait is something that PwC see inside every utility client they work with – relating to both public safety and workforce safety. Put simply if safety is not the primary consideration of every executive, employee or contractor then there is a real risk that poor safety outcomes will occur resulting in injury or worse.

Opponents of privatisation have spuriously tried to link the type of ownership with public safety suggesting it would diminish under private ownership. Presumably the concern simplistically sees the private sector looking to trade safety for profit – this could not be further from the truth. PwC has the privilege of working with every major energy network company in Australia and across the globe and we see that the focus on safety is universal and that it is front of mind in every business.

Some argue that governments are more concerned about reputational risk than the private sector. Again we see this as a furphy. We consider the critically important business priority of 'maintaining a social license to operate' is as equally applicable to parliamentarians and their appointed Boards as it is to private sector shareholders and their Boards – we see no evidence to suggest this focus is diminished in private hands.

As we have discussed throughout this paper the energy network sector is highly regulated and there are many prescribed standards and rules to follow. These service levels and asset management requirements impact both public and workforce safety, and are imposed on companies regardless of ownership.

In the safety arena there are minimum safety standards prescribed in each state and territory and all are monitored carefully by an independent safety regulator. In WA this is the Office of EnergySafety. The monitoring of network performance against safety standards by the independent regulators occurs regardless of network ownership and importantly network owners have no ability to control these regulatory reviews.

It is important to recognise that on occasion poor safety outcomes do arise in and around energy networks. In recent years there have been State Inquiries into major safety events such as pole top fires and bushfires amongst others.

It is difficult to compare safety performance across states and territories as there is not a uniform reporting approach, data is often not publicly disclosed, nor is it simple to compare private sector company performance with the government. What is clear though is that there is an active regime of standard setting, review of performance and recommendation of future improvements active in every state and territory in regards to energy network safety. This is important as keeping an energy network completely safe at all times is one of the most difficult and challenging tasks in business.

Customer service

The AER recently introduced a service target performance incentive scheme to encourage distribution businesses to maintain or improve network performance. It focuses on supply reliability and customer service, including the timely connection of services and call centre performance. The incentive scheme provides financial bonuses and penalties for network businesses that meet (or fail to meet) performance targets by measuring deviations from them. In 2013–14, all NEM businesses within the scheme (noting it did not apply to NSW and ACT in that year) exceeded their customer service benchmark. So while there is currently not a large body of evidence, there is equally nothing to suggest that privately owned networks fail to meet customer objectives, and indeed all networks are rewarded for meeting targets.

Safety is a universal focus and is front of mind in every business.



Drawing on global examples

The benefits to consumers of utility privatisations have also played out globally.

The UK privatised its electricity networks in the 1990s. ‘The role of specialist investors in UK infrastructure’, a paper produced by PwC UK, clearly demonstrates the advantages that the sale or lease of government assets to specialist owners can provide to the consumer. In particular, it notes that when a customer-centric and asset lifecycle approach is consistently applied by private sector owners it leads to an increase in customer satisfaction.

Improved asset performance has delivered tangible benefits to UK consumers, for example, significant reductions to the frequency and length of outages, as well as increased reinvestment of profits by electricity distribution companies via capital and maintenance expenditure. Between 2004 and 2014, capex has increased on average by 112 per cent per customer, with electricity distribution network operators reinvesting more per customer than has been generated in profit.

The State's fiscal position and requirement for budgetary reform strengthens the privatisation case

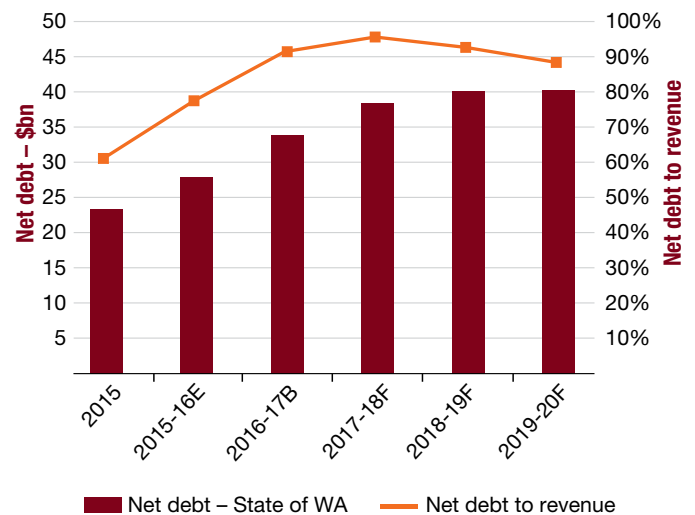
Plummeting commodity prices has left WA particularly exposed to a worsening funding position, with falling royalties from the mining, oil and gas sectors and a reduced share of the GST.

In the recently announced 2016–17 budget, the government estimated a deficit of \$2 billion for 2015–16, and is expecting this to almost double to \$3.9 billion in 2016–17. This presents some stark challenges for the state. With an estimated \$23 billion of asset investment required over the next four years, net debt is forecast to top \$40 billion (up from the current c. \$28 billion) by 2020 in the absence of any new injections of funds.

Credit ratings agency Moodys downgraded Western Australia's credit rating in September 2013, and again in February 2016, meaning the higher projected debt burden will become increasingly costly to service.

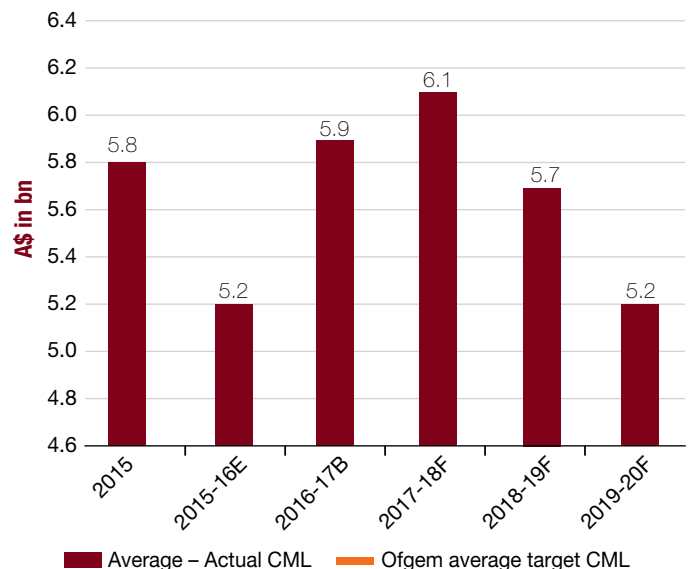
In our view, whilst the productivity arguments alone justify privatisation, Western Australia does not have a sustainable debt position and must do what other states have done over the last 20 years when met with a dramatic financial challenge – privatise assets and recycle capital. This is a particularly sensible financial management strategy where assets are subject to extremely high levels of regulation to protect consumers and the general public from significant price increases or concerns in relation to safety or service quality.

WA State Net Debt



Source: 2016-17 Budget, Economic and Fiscal Outlook, Budget Paper No. 3

Forecast asset investment program spending



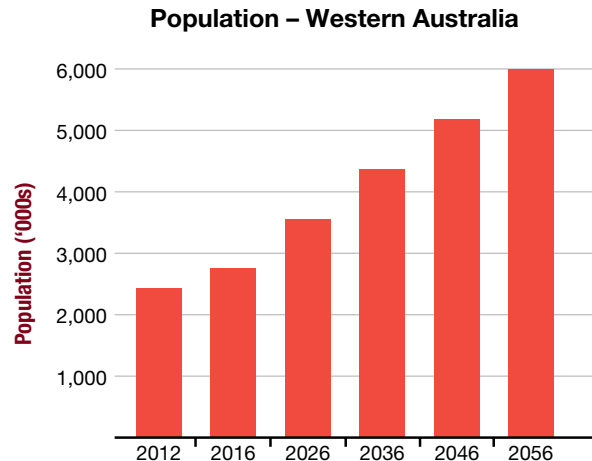
Source: 2016-17 Budget, Economic and Fiscal Outlook, Budget Paper No. 3

Recycling capital from the electricity networks can benefit WA's economy

With the current fiscal position, the government has indicated that a proportion of privatisation proceeds may be used to make debt repayments in order to keep net debt at manageable levels.

However, there remains a need to continue to fund new projects. There is \$23 billion of projected asset investment through to 2020 in the latest WA state budget. This includes \$9.2 billion of transport projects such as the Forrestfield–Airport Link, the Perth Freight Link and the NorthLink WA, as well as \$1.4 billion on education and \$1.6 billion on health.

These investment projects should be considered in the context of significant projected population growth. The Australian Bureau of Statistics estimates that the WA population will grow from 2.7 million in 2016 to just under 6 million by 2056. Such growth places demand on cities and the volume of required services, and necessitates improved and new infrastructure, despite government budget constraints.



Source: ABS Australian Demographic Statistics, December Quarter 2015 - 3101.0
Projected residential population (a) – States and Territories, Series B

By privatising the electricity networks, the WA Government will be able to undertake new investments without incurring additional interest costs. This of itself would provide a benefit to the WA fiscal situation. However, the true economic benefit to the State could be dramatically different pending on how the proceeds are used.

The population growth will increase the demand for 'social' infrastructure which benefits the broader economy, eg schools, hospitals and improvements in public transport. Put another way, a growing population requires a greater volume of services, and need for appropriate investment to stimulate further growth.

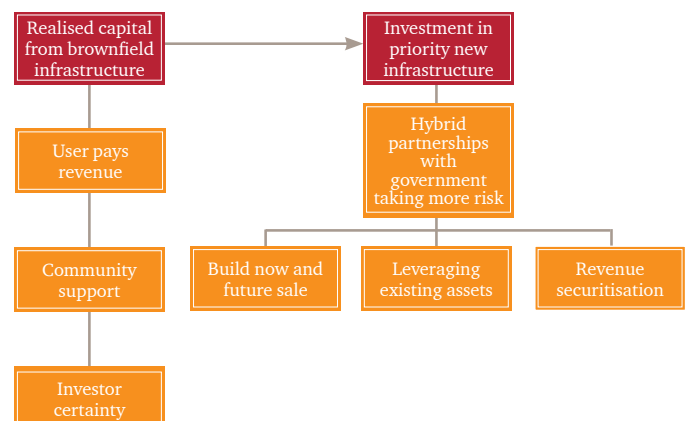
While each investment proposal must be assessed on its own merits, we are of the view that investment in appropriate infrastructure (ie recycling the capital released) can result in significant improvements to GDP and gross state product (GSP), job growth and productivity. In particular, the projected transport spend includes \$4.5 billion on the aforementioned three projects. Each of these projects aims to promote economic growth and productivity in the state, and provide an alternative source of employment as the economy further diversifies and transitions away from energy and resource construction to production phase.

PwC has discussed the benefits of capital recycling in its publication *Funding Australia's infrastructure – Is it as simple as 'ABCD'?* The publication explains the potential for unlocking capital from brownfield infrastructure to invest in greenfield projects, and the critical success factors for how funds can be recycled.

There are two stages to capital recycling. The first involves freeing up capital from existing infrastructure assets, and the second involves clever and effective use of those funds to invest in critical new projects. In order to successfully free up capital there needs to be community support, third-party 'user pays' revenues (which exist in the case of the electricity networks) and certainty for investors (which the electricity regulatory regime provides).

In addition to debt repayment, the capital released from the privatisation of the WA electricity networks could also be used to fund critical new greenfield projects (likely alongside the private sector). The community is much more likely to view privatisation favourably when the proceeds are linked directly to new infrastructure builds, particularly if this involves constructing economic infrastructure that provides a net economic gain, thereby assisting in the ongoing financing of social infrastructure.

Two-stage model of capital recycling



Why the public should support privatisation

As shown by privatisations in other states, public support is fundamental to the success of a transaction, and WA is not expected to be any different.

The 2013 Productivity Commission findings alone suggest that government is not the natural owner of such assets, and consumers would be better served via a private sector owner. However, the benefits to the WA public could go much further than purely a better performing and more reliable electricity network. A possible added benefit is the recycling of the privatisation proceeds for the construction of new infrastructure that otherwise may not be developed, or would not be developed in a timely fashion due to a lack of funds.

While some level of community resistance to asset privatisations is to be expected, a well-communicated approach to privatisation and capital recycling, which articulates the public benefits – not only the improved performance of electricity networks, but also the provision of funds for investment in new infrastructure that will create jobs for Western Australians – can help to garner public support.

We also recognise that an IPO is an alternative divestment mechanism. Such an approach is potentially more politically acceptable since it can be argued that the network business is maintained under public ownership – particularly if there is a preferred share allocation for WA resident investors. However, this approach needs to be balanced against other objectives, noting that scoping studies from other state privatisations suggest the potential privatisation proceeds may be greater under a competitive divestment process.

WA should consider the approach taken in NSW when it made the case to the public. A key element was visibly linking the recycling of funds to tangible outcomes. Proceeds from the sale of the Port of Newcastle were partially used to fund projects in that area, and the balance was directed into a dedicated infrastructure fund, Restart NSW, together with the proceeds from Port Kembla and Port Botany. Furthermore, the independent body Infrastructure NSW, makes recommendations on how funds are spent to ensure they are directed to projects with proven strategic and economic merit through cost-benefit analysis

and objective assessment. Thirty per cent of Restart NSW funds are committed to projects in regional NSW (ie outside Newcastle, Sydney and Wollongong). Proceeds from the ongoing NSW ‘poles and wires’ transactions will also be deposited into the fund and are subject to the same rigorous and independent assessment processes.

As part of the WA budget announcements, the Treasurer has flagged \$5 billion for an infrastructure fund for new developments. We assume that the NSW approach to privatisations is under consideration with some of the network sale proceeds being diverted to this fund for future infrastructure investment. Important for the public will be the communication of which projects will be developed.

We also believe that the argument around benefits to productivity and jobs needs to be clearly articulated. As WA moves away from a reliance on natural resources, the state will need to reform funding choices to enable investment in new infrastructure to deliver the necessary efficiencies and increase in productivity. This case, and the choices underlying it, should be clearly communicated to the people of WA as part of the upcoming election campaign.

A well communicated approach to privatisation and capital recycling is fundamental to gaining public support

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