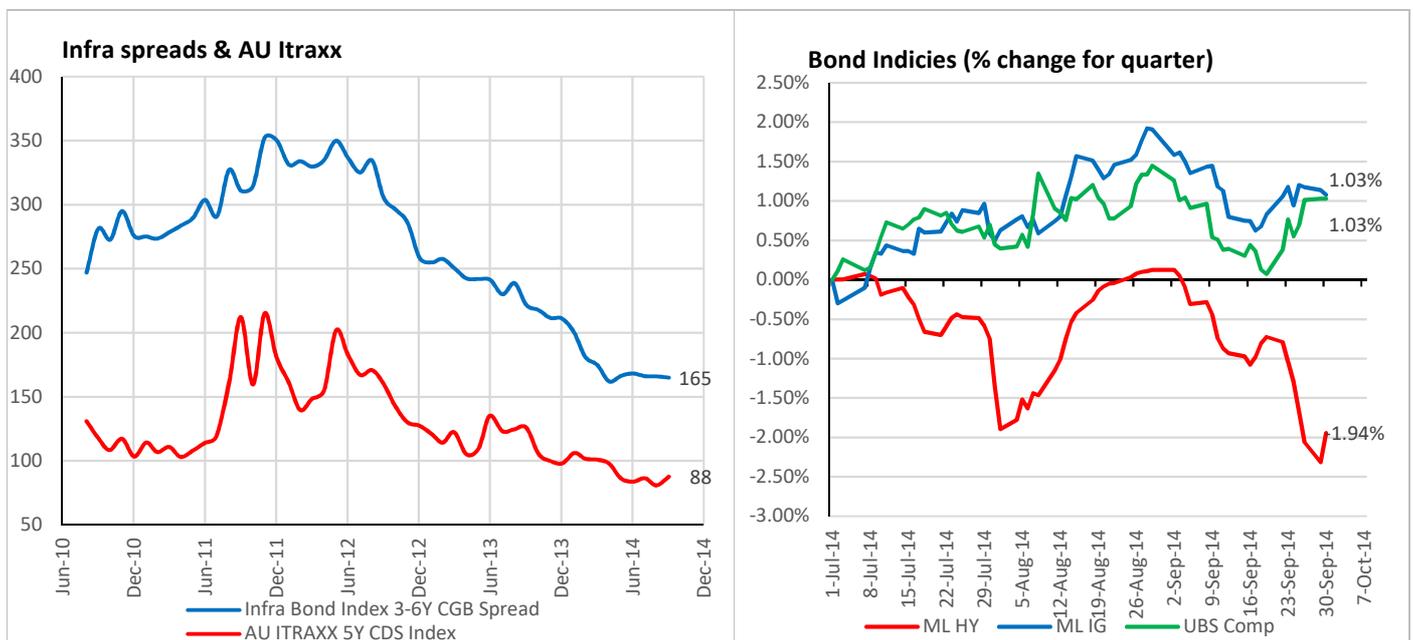


## Introduction

Welcome, with a number of State Governments having announced their plans for post-election asset sales, next year is shaping up to be a big year for Australian infrastructure. In addition to our usual market commentary, in this quarter's newsletter our first article looks at the relative risk/return profile of infrastructure debt versus equity. This article was also recently published in Cuffelinks and follows on from Gerald Stack's piece on listed versus unlisted infrastructure equity. Our second article on the electricity markets is from Cameron O'Reilly, CEO of the Energy Retailers Association and member of the Infradebt Advisory Board – Cameron has extensive energy sector experience and in this article he shares his longer-term, strategic insights into this often controversial asset class.

## Markets update

Spread compression has ceased and with margins trending sideways over the quarter. The hunt for yield in a low rate environment appears to be reversing with the recent selloff in high yield bonds and equities.



## New issuance and refinancing

The table below provides a list of publicly available deals.

Issue Date	Security	Issuer	Volume	Tenor (years)	Issue swap spread (bps)
Jun-14	Bond	Flinders Ports	US\$57/225	10/12	160
Jun-14	Loan	Electranet	AU\$300	3	110
Jul-14	Loan	SA School PPP	AU\$185	5	n/a
Jul-14	Loan	Brookfield WA Rail	AU\$100	3	n/a
Jul-14	Loan	Aurizon	AU\$500/1,200 /1,300	2/3/5	140/140/175



Jul-14	Loan	Perth Stadium	AU\$500	6	n/a
Jul-14	Bond	Transpower NZ	AU\$150	7	85
Aug-14	Loan	Westlink M7	AU\$520/525/ 225	3/5/7	125/150/1 70
Sep-14	Bond	DBNGP	AU\$100	6	160
Sep-14	Bond	Powercor	US\$125/175	10/12	n/a
Sep-14	Bond	Aurizon	EU\$500	10	68
Sep-14	Loan	North West Rapid Transit	AU\$1,547	8	250
Sep-14	Bond	Transurban	EUR 600	10	82

### Equity and other news

- The Newman government, conditional on winning the election, plans to privatise the **Queensland poles and wires** via long term leases rather than through issuing hybrid securities. The privatisation pipeline also includes Gladstone and Townsville ports and the Mt Isa Rail Line.
- **APA Group** has sold its 33% **Envestra** stake into the **CKI** offer of \$1.32 amounting to \$784M in gross proceeds. Investors that sold into the offer also received the 3.5c dividend per share paid on 25 July 2014.
- **APA Group** has agreed with AngloGold to build a new 292km natural gas pipeline that will connect the Sunrise Dame & Tropicana mines with the Goldfields Gas Pipeline near Kalgoorlie. Expected capex is A\$140m and completion by January 2016.
- **Ausnet** has agreed to a A\$378.9M settlement for the Kilmore East bushfire class action. The settlement is without admission of liability. Ausnet has also estimated remediation costs of faulty smart meters to be A\$175M (105% higher approved by the AER).
- One of the 8 shareholders/shippers of **Wiggins Island Coal Export Terminal (WICET)**, Bandanna Energy (15% of capacity), has gone into voluntary administration. Under the take or pay contracts the remaining shippers “socialise” the defaulting shippers costs related to their contracted capacity. Before Bandanna went into administration the estimated cost of shipping was \$13/tonne (2-3x higher than the RG Tanna Coal Terminal at Gladstone). If more shippers default the economics for the remaining shippers deteriorate.

## Infrastructure equity versus infrastructure debt

This article follows on from Gerald Stack’s excellent article comparing listed and unlisted infrastructure (see <http://cuffelinks.com.au/listed-versus-unlisted-infrastructure/>) . Just as investors have a choice between investing in listed or unlisted infrastructure equity, there is also a choice between investing in the equity or debt part of the capital structure.

Investors in infrastructure are generally seeking:

- returns driven by the underlying long term cash flows (i.e. yield focussed rather than growth focused returns);
- capital stability – particularly compared to equities; and
- some degree of inflation protection or inflation linkage. Typically underlying revenues of infrastructure assets are linked to inflation and, hence, infrastructure assets offer the prospect of inflation protection.



By definition, equity and debt sum to the value of the asset (or equivalently, the value of equity is the value of the asset minus the value of debt). This means that the characteristics of underlying infrastructure businesses feed through to the characteristics of infrastructure debt and equity investments.

Infrastructure equity:

- receives a disproportionate share of the upside in performance of the underlying infrastructure business;
- is more impacted by adverse developments through the impact of leverage.
- for infrastructure equity investments a key risk is the cost and/or availability of debt finance. During the GFC many of the sharp falls in infrastructure shares prices were driven by this factor, rather than by declines in the operating cash flows of their underlying businesses; and
- benefits from control and directly/indirectly is responsible for the management of the asset.

Infrastructure debt:

- has lower returns (on average) and doesn't participate in the upside of underlying infrastructure asset;
- is much less risky (see below);
- is a shorter term investment – with terms to maturity typically 3-7 years. In contrast, infrastructure equity is a very long term investment (assets are usually valued based on cash flow models that go for more than 30 years); and
- doesn't necessarily benefit from the same inflation protection as the underlying asset – particularly in the case of fixed rate bonds. However, many projects issue floating rate debt (where interest payments move with bank bill rates – and a rise in inflation would be expected to flow through to higher bank bill rates) or inflation linked bonds (where interest and principal payments are directly linked to CPI).

There are lots of different ways to think about risk. But one way of comparing the risk of infrastructure debt and equity is to look at the performance of listed infrastructure stocks that had floating rate bonds on issue through the GFC. While this is a small sample, only four assets, it does allow the comparison of risk outcomes between debt and equity in the same underlying asset.

Entity	Equity Risk	Debt Risk	Debt Basket
 Sydney Airport	30.5% SD -55.8% min 12m	3.1% SD -8.3% min 12m	Nov 2014 FRN Nov 2015 FRN
 DUET GROUP	22.6% SD -49.5% min 12m	3.1% SD -6.8% min 12m	Apr 2017 DBNGP FRN Apr 2018 DBNGP FRN Oct 2014 UE FRN
 transurban	20.2% SD -45.4% min 12m	4.7% SD -6.5% min 12m	Nov 2015 FRN Nov 2017 FRN
 spark infrastructure	25.1% SD -42% min 12m	2.4% SD -3.6% min 12m	Feb 2013 Citi Pwr FRN Jul 2015 ETSA FRB

Source. Monthly returns July 2007 to August 2014. SD is annual standard deviation. Min 12m is the worst 12 month rolling return in the sample window.

Depending on whether you focus on standard deviation or worst 12 month return – this analysis argues that senior floating rate debt is 4 to 10 times less risky than equity in the same asset.

Just as infrastructure equity has listed and unlisted forms of investment – with proponents of unlisted investing claiming a illiquidity premium – different types of infrastructure debt (loans versus publicly traded bonds) have differing levels of liquidity and, hence, illiquidity premia.

Which is the better investment? Ultimately that depends on relative pricing (and in particular, risk adjusted returns) as well as the time horizon/risk appetite of investors. However, many investors tend to think purely of infrastructure equity when considering infrastructure investments and it may be worth thinking more broadly.

## A deep dive for electricity

For years now decision making in the electricity sector has been paralysed by climate change policy, nowhere more so than in Australia. Policy has been transfixed on how to change the generation supply mix in favour of lower emissions technology, generally through pricing carbon, establishing renewable energy targets, or both. For all of this time and attention, the world is still using the same generation technologies that it had fifty years ago.

Where the big change in electricity has been is on the demand side. The presumption of constantly growing demand in developed world countries has been abandoned. Even through a period of continuous economic growth, Australia's final electricity demand has fallen nearly 10% since 2009 (AEMO).

Contributing factors to this decline have been well documented and include a loss of energy intensive industry, a massive, subsidy driven expansion in rooftop solar generation and a consumer response to electricity price rises. These trends are not unique to Australia. The question for the sector is whether they are long term?

With the white knight of electric vehicles seemingly a long way off, majority opinion seems to favour the yes case. Indeed with affordable household energy storage technology being seen as a realistic medium term possibility, the pessimists are wondering how low can demand go? The implications for existing energy assets are significant.

In the thermal generation space we have already seen evidence of the impact of declining demand in a lack of bidding and price tension for assets being sold by State Governments. An oversupplied generation market where new investment has almost exclusively been in renewables, has meant that wholesale energy prices have been flat for some time.

Now attention has turned to what this demand scenario may mean for electricity networks, especially if storage and a continuing drop in panel prices keep the solar option attractive as subsidies are withdrawn.

What isn't in doubt is that the networks will have to restructure their tariffs and change the balance between fixed and usage based charging. Others argue that the time has also come for a write down in the asset values of networks built to support demand assumptions that are no longer valid. Other industries they say wear the consequences of overinvestment and so should electricity networks.

This debate will not be resolved quickly. Nor should one just accept the pessimistic scenario. Few, if any, foresaw the market developments of recent times so there is no reason to assume we'll be any better at forecasting the future.

While optimists are hard to find in the generation sector, one should remember that base load demand is industry and commercially driven, and as some plants reach the end of their life the economics of the remainder will improve.

Moreover in the network sector, low grid demand will have differing implications for transmission, which is built to support large generation plants, and distribution, which could prosper in a disaggregated market.

Many, including myself, believe mass withdrawal of customers from the grid is unlikely and that a smarter distribution network supporting large numbers of so called "pro-sumers" (producers and consumers) will be a safety net most of us will want to draw upon. Such a network is increasingly being enabled by new information and communications technology. Under this scenario an electricity network becomes as valuable as a telecommunications network.



Whatever one chooses to believe, what is not in doubt is that change remains a constant in the electricity sector. What we have learned in recent times is that consumers do have a say in the industry's future and the system can change even if how we generate electricity does not. In any industry it's important to watch both supply and demand. Too much attention has been put on the supply side but the key to the future may well lie in how we respond to the demand side.

Cameron O'Reilly is CEO of the Energy Retailers Association and is a Member of the Infradebt Advisory Board.

## Contact Us

We're always happy to chat (and learn new things!) if you want to know more, contribute more on a particular topic, or wish to discuss any of the above topics in greater detail feel free to drop us a line. Also, please don't hesitate to send us ideas for future articles.