

Introduction

It has been a busy end to the financial year for Team Infradebt. Since launching the Infradebt Ethical Fund in late 2017 we have been busy structuring and completing due diligence on a number of transactions for the fund as well as coinvestment clients.

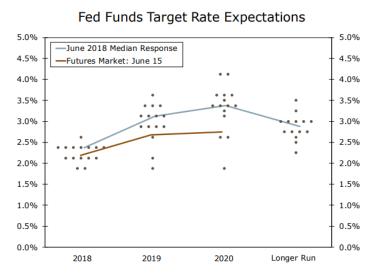
2017-18 has been another strong year for Australian investors — with high single digit/low double digit returns for balanced funds. Growth assets have performed strongly. The Australian dollar has depreciated boosting the returns of unhedged offshore assets. Traditional defensive assets have posted low returns, with the cash rate stuck at 1.5% and bond yields starting to creep up, crimping the returns on long-duration fixed income. Infrastructure assets have, in general, performed strongly with unlisted asset valuations remaining elevated. Listed infrastructure has had a tougher finish to the financial year — with returns hit by rising bond yields.

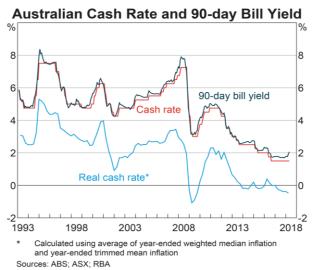
Markets update

In global markets, the process of ending QE and normalising interest rates (whatever that means) is now on in earnest. Of the major economies, the US is at the forefront of this process, with the unemployment rate at multidecade lows and the US CPI ticking up to 2.5%. In response, the Fed has raised the target federal funds range 25 bps to 1.75-2.00% and is projecting a fourth rate hike this year. At the June meeting, the Fed dot plot projects rates to be at 3.1% by the end of 2019 and 3.4% by 2020 – higher than market expectations.

By contrast, in Australia the housing market is showing signs of weakness with small falls in national house price measures. Financial conditions are also possibly being impacted by fall out of the Hayne Royal Commission. This leaves the RBA sitting on its hands, with no change in interest rates for almost two years and little expectation of changes well into next year.

Australia is in a relatively unusual position – certainly in the context of the last 20 years or so - of having lower short and long-term interest rates than the US. This has had impacts on the Australian dollar as well as funding markets (see special article below).





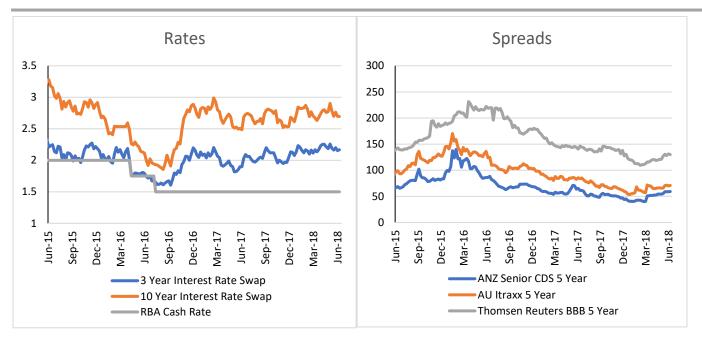
In Australian credit markets rate have remained relatively steady. The spread between 10 year and 3 year interest rates has been slowly compressing over the year. Corporate bond spreads and senior bank CDS are trending upwards.











New issuance and refinancing

The table below provides a list of publicly available deals.

Date	Borrower	Instrument	Size (m)	Term (Yrs)	Curr.	Pricing/Notes
April	Chinchilla Solar Farm	Loan	12	5	AUD	Merchant solar farm
April	Infigen	Loan	160/365	5	AUD	Portfolio of contracted wind farms. Amortising and bullet.
April	Iona	Loan	425/530	5/7 years	AUD	Refinance
April	GRSF Finance Co	Loan	70	5	AUD	
April	Ausgrid	Bond	650	7	EUR	Refinance
April	Ausgrid	Bond	500/500	5/10 years	USD	Refinance
April	Brisbane Airport	Bond	260	7	AUD	Refinance
May	Ichthys CC Power Plant	Loan	350/800	5/7 years	AUD	Refinance
May	Crowland Wind Farm	Loan	81	5	AUD	Pacific Hydro









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May	Albany Wind Farm	Loan	30		AUD	Refinance
May	Crudine Ridge Wind Farm	Loan	113	6	AUD	Construction
May	Stockyard Hill Wind Farm Transmission line	Loan	140		AUD	Construction
May	APA Group	Loan	500/500	5	AUD	Refinance
May	Airport Motorway	Loan	226	4	AUD	Construction
May	DBNGP	Bond	350	7	AUD	Refinance
May	Plenary	Bond	62	6	AUD	Holdco debt
June	Transgrid	Loan	1500/635/900/490/ 635	3/4/5/6/ 7	AUD	Refinance
June	Macarthur Wind Farm	Loan	502	7	AUD	Refinance
June	Millmerran Power	Loan	230/220/166	3/5/7 years	AUD	Refinance
June	Lal Lal Wind Farms	Loan	225		AUD	Construction
June	NAB Low Carbon Portfolio	Bond	200	10	AUD	Sell down

Equity and other news

- Cheong Kong Infrastructure Holdings (CKI) which has lobbed a \$13 billion takeover offer for pipeline owner APA. The bid is at \$11 per stapled security and is a 33% premium to the pre-announcement price. APA is allowing CKI to undertake due diligence on a non-exclusive basis. Any deal would require FIRB approval.
- The South Australian Government has awarded grants ranging from \$500,000 to \$4.7 million to conduct feasibility studies for pumped hydro power plants near Whyalla, Port Augusta and Port Germein.
- Genex Power, which is building a pumped hydro, solar and possibly a wind project at its green hub at Kidston in North Queensland, has signed a term sheet for a \$516m 20-year subordinate loan from the Northern Australia Infrastructure Facility (NAIF) conditional on raising senior debt.
- Macquarie has sold 80% of its ownership in the 220MW Lal Lal wind farm in Victoria to InfraRed Capital Partners (40%) and Canadian private investment company Northleaf (40%). Macquarie acquired the wind farm from German based WestWind Energy in 2017.
- New Energy Solar has acquired the 46.7MW Manildra solar farm in New South Wales from Canadian group First Solar for \$113m.
- The University of Queensland intends to build a 64MW solar farm near Warwick in the southern downs region
 of the state. The wind farm is intended to supply the entire power needs of the university.





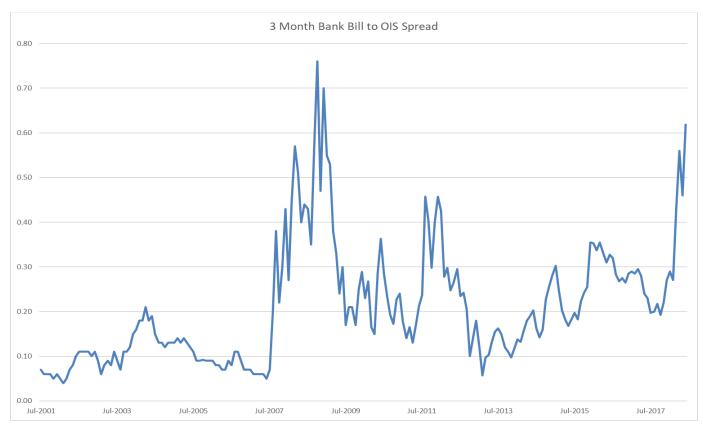




Funding squeeze

One interesting phenomena in the arcane plumbing of financial markets at the moment is the sharp increase in short term funding costs.

The chart below shows the spread between the yield on bank bills (that is, the interest rates paid by banks to borrow in the interbank funding market) compared to the interest on overnight indexed swaps (OIS rates). Overnight indexed swaps are a financial instrument linked to the official overnight cash rate. Effectively OIS are truly risk free, while the bank bill rate (BBSW) contains a credit/liquidity spread for the credit risk of the interbank market.



Usually this spread is very low – typically around 20 basis points. However, it does shoot up in times of financial crisis. For example, on a month end basis the BBSW-OIS spread hit 0.76% during the GFC (it actually hit a peak of around 100bp during the absolute peak of the crisis).

The BBSW-OIS spread is a similar concept to the TED spread, which is a measure of financial system stress in the US.

Interestingly, Australian funding markets have seen a surge in BBSW-OIS spreads with current spreads around 60 basis points (that is three times normal). Hardly an outcome you would associate with the recent 10 year high in equity markets!

Why is this the case? The simple answer is we don't fully know.

Tax reforms in the US have significantly impacted global debt funding markets. The changes in US tax law mean that it now makes sense for large US corporates to repatriate profits that were previously held offshore (and available for short term funding in global debt markets). This has resulted in a funding squeeze - and it is worth noting that the equivalent spreads in offshore markets have also increased (but not by quite the same amount as in Australia). Australia is potentially more affected than other markets due to our banking systems reliance on offshore wholesale funding, and because, somewhat unusually, Australian short and long-term rates are falling below those in the US. Part of Australia's usual appeal to offshore investors is our higher interest rates.









Under this benign interpretation you would expect this spread differential to moderate as global funding markets digest the implications of different cash management practices of US corporates.

However, it is worth watching this space closely, if these elevated spreads are maintained, or increase, this is defacto to almost two rate rises (given BBSW underpins the vast majority of floating rate borrowing in Australia). Not necessarily what the RBA might have had in mind in an environment of softening house prices.

National Energy Guarantee Deux

NEG Update

A quick article to follow-up on the more detailed discussion of the National Electricity Guarantee (NEG) in last quarter's newsletter. Since then, the proposed design of the NEG has become clearer (although there are many details that remain to be resolved) and it also seems likely, in our view, to garner sufficient support to pass through the COAG process.

The NEG has been framed as a solution to three problems:

- 1. <u>to drive down wholesale electricity prices</u> which rose sharply following the closure of Hazelwood power station (although there were a number of other factors in play as well);
- 2. <u>to promote reliability within the electricity system</u> and, in particular, to provide a framework for ensuring sufficient 'dispatchable' generation; and
- 3. <u>to provide certainty to investors regarding the path for carbon abatement requirements</u> for the period 2020 to 2030. That is, for the period from the target date for the Renewable Energy Target 2020 to the target date for Australia's Paris commitments.

In reality the NEG is a political solution – designed by a team of technocrats – to the political problem of the climate wars that have consumed Australian politics.

In private conversations with market players, my experience has been that the NEG has limited support. However, there is a feeling of exhaustion, and much of the focus of the past six months seems to have been on trying to fix the most objectionable or unworkable components of the initial NEG proposal, rather than to fundamentally oppose it. This has seen material changes, for example, as discussed in detail in last quarter's newsletter article on the operation of the reliability guarantee (which has been substantially diluted). However, it is very much a debate that has focused on how to limit the potential harm from the NEG rather than to fundamentally reshape it.

In our view, the NEG does little for the three problems it is supposed to solve.

- 1. <u>It won't reduce prices</u>. It is new low cost capacity (in physical cost, operating cost and cost of capital terms) that will drive down prices. Any moderation in wholesale prices over the next couple of years can be entirely sheeted home to the new supply encouraged by the RET (much of which will come on line in the next two years). This fall in prices has nothing to do with the NEG.
- 2. <u>It doesn't provide a clear plan for the replacement of aging coal plants</u> (see chart below). Rather, we will now have a complicated eight step process that would only be triggered relatively close to the retirement of these plants (leaving us highly exposed if retirements were unexpectedly brought forward). These plants represent a massive share of total NEM output (more than 78 TWH of production or around a third of the NEM). In our view, it is a very risky strategy to contemplate replacing all this capacity in a five to six year window in the early 2030s. The NEG has missed an enormous opportunity to put a plan in place to replace this capacity in a staged and orderly manner over the 2020s and 2030s which is likely to be a much lower risk and lower cost approach.

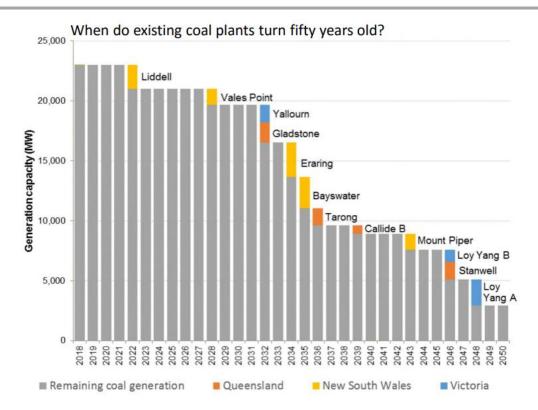












Locks in a target for emissions reductions for electricity that is inconsistent with the lowest cost approach to 3. meeting Australia's Paris climate goals. Electricity represents around a third of total emissions in Australia with the next two largest sectors being road transport and agriculture. There is broad agreement that the electricity sector offers lower cost, and higher speed, reductions in emissions than transport (where a transition to electric or other low emission cars will take decades) or agriculture. Thus, by only having a pro rata reduction in emissions for electricity it forces these other sectors to also achieve an equal reduction over the same time period. In my view there is no sign that the road transport or agriculture sectors have signed up to emissions reductions of anything like this magnitude and the political will to push through such changes is completely absent in any political party. Thus, the NEG "consensus" on emissions abatement path is fundamentally just a shifting of the position of disagreement (i.e. rather than within electricity sector, it is now in other sectors). From an investors' perspective we still have the same fundamental dissonance between the bipartisan 26-28% reduction targets of the Paris climate goals and the policy settings at an individual sector level. This dissonance will be resolved either by failing to meet the goals (and the reality is that we probably need to do more, not less) or by yet another change in policy settings. Hardly a foundation for investor certainty.

As investors, we take a pragmatic view, with a focus on "will" and "could" rather than being locked on "should". With this in mind, we think it is quite likely that the NEG will get up, but it is not the bi partisan panacea that will resolve the future challenges of the electricity sector.

Having got that off my chest – you ask – but what would you do instead?

If I was in Minister Frydenberg's position, I would change the focus to an explicit plan for the orderly replacement of the energy and dispatchability currently provided by the aging coal fleet (and an important acknowledgement on this, this isn't my idea, others have suggested this over the past six months). This could be achieved through a sequence of reverse auctions implemented over the next 20 years. These auctions could be staged, with relatively small amounts in the near term (which allows the potential testing of different generation technologies) and larger amounts as we get closer to the expected shutdown dates.





The advantages of this approach are:

- It delivers a clear plan for ensuring reliability through the replacement of the aging coal fleet;
- It promotes competition and low-cost solutions through an auction process. These auctions could be structured to allow a broad range of technologies to compete.
- It spreads the construction activity of replacing a large portion of the NEM generation capacity over a longer period. In our view, this is very important. One of the lessons from the development of the various LNG trains in Australia, is that building multiple very large similar infrastructure projects at the same time, results in intense competition for resources and workers. This drives cost blowouts that permanently inflate the cost of those infrastructure assets. If the LNG train development had been staged - I would claim that the cost of each would have been 20% plus lower (and, possibly we would have also figured out that we didn't need as many as we ended up building).
- It has the by-product of bringing a range of new generation capacity into the market that is not controlled by the big-3 vertically integrated "gentailers". Restoring the separation between generation and retailing markets is likely to be a positive for competition and consumers

However, this approach is not without its own downsides:

- It inherently involves bringing forward the replacement of the coal fired plants and, hence, effectively creating subsidised excess capacity prior to the closure of the coal plants.
- It risks government misestimating the ultimate amount of capacity required and the construction of more capacity than required. Electricity demand may end up lower than we think - for example, due to the takeup of embedded generation. This is a genuine issue – the history and incentives for regulators (such as AEMO) is that they overestimate demand (mainly because the political consequences of a shortfall (and, hence, high prices and maybe even blackouts) are much worse than the alternative (excess supply).

Performance paradox

Performance Paradox

As avid readers will know, Infradebt held the first close of its ethical fund (IEF) in September last year, and with that disclosure I promise the rest of this article doesn't include any gratuitous self-promotion!

In the lead up to launching our fund, we did a lot of research into the ethical investment space. This included looking at the different ethical funds offered by fund managers as well as the range of ethically or sustainability screen investment choices that large superannuation funds are offering to members.

Out of this research, a paradox emerged.

- 1. Specialist Australian ethical managers are showing strong long-term relative performance. For example the RIAA Performance Benchmarking Report (2017) shows 10 year performance of Australian responsible investment funds of 6.3% per annum over 10 years compared to the benchmark of 4.4% or a Morningstar index of mainstream funds of 3.8%. This is almost 2% of additional performance over a decade.
- 2. SRI/Ethical options of large not for profit superannuation funds often underperformed their Balanced/MySuper equivalent within the same fund. For example, Infradebt looked at the performance 14 large funds that have SRI/Ethical options. For those funds with 5 year performance records for both the SRI/Ethical option and the mainstream balanced option, 9 out of 10 funds had the SRI/Ethical option underperform their internal peer. Looking at the longest dataset across all funds, in 70% of cases the SRI/Ethical option underperformed.











I would admit that our sample isn't particularly scientific (there are probably more than 14 funds out there), but it is a reasonably large sample and over quite a significant time period. Furthermore, it doesn't make sense that the balanced SRI/Ethical options should underperform, when these strategies would seem to be outperforming within the largest underlying asset class (Australian equities).

This raises the question of why?

It may be a quirk of timing - SRI/Ethical strategies often involve significantly different sector allocation to the index (for example, lower exposure to resource stocks) and this can drive big divergences in performance. However, it might equally point to a more systemic issue. If so, what are potential explanations. Here are my thoughts (hypotheses if you will, as I have no underlying analysis to back them up):

- Fees. Many SRI/Ethical options have higher fees than the balanced/default option in the same fund. This is a reflection of scale (these options will have smaller mandates than the main portion of the fund) as well as potentially a reduced use of indexed management.
- Reduced allocations to private market assets (Property, Infrastructure, Alternatives). SRI/Ethical options often have less exposure to these asset classes. This can be driven partly by genuine underlying SRI/ethical issues – for example, many infrastructure asset classes – such as fossil fuel fired electricity generation – involve very high emissions. But it also can arise from the nature of pooled management structures, which can make it difficult for the SRI/Ethical option to get exposure to the "good" assets within a funds broader infrastructure/alternatives portfolio (i.e. simplistically the "good" and "bad" assets are mixed together). This might see SRI/Ethical options having lower private markets asset exposure, and in the same way retail funds have shown persistent underperformance compared to industry funds, this could adversely impact relative performance.
- Fixed income. With my first sentence disclaimer at the front of your mind, one of the other potential issues is that fixed income portfolios for SRI/Ethical options might end up with a greater allocation to government bonds and very highly rated corporates (as the issuers of Green Bonds are disproportionately from the very low risk end of the credit spectrum) and a lower exposure to credit (which offers higher returns).
- Implementation/Leakage. The final possible explanation is that traditional balanced options get a benefit from being much larger than the typical SRI/Ethical option. It could be that it is the little things - rebalancing, cash flow management, transaction cost and tax optimisation, persistently add up to the benefit of the larger multiasset investment choices (although this issue would presumably apply equally to other non-default choices like conservative and high growth options).

It is difficult, without a lot of underlying performance data, to get to the bottom of this issue – and it is also important to remember that the drivers of performance will be different for different funds. However, from Infradebt's perspective it should be possible to deliver superannuation member investment choices that are ethical and sustainable and don't involve a sacrifice in investment performance.

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.











