

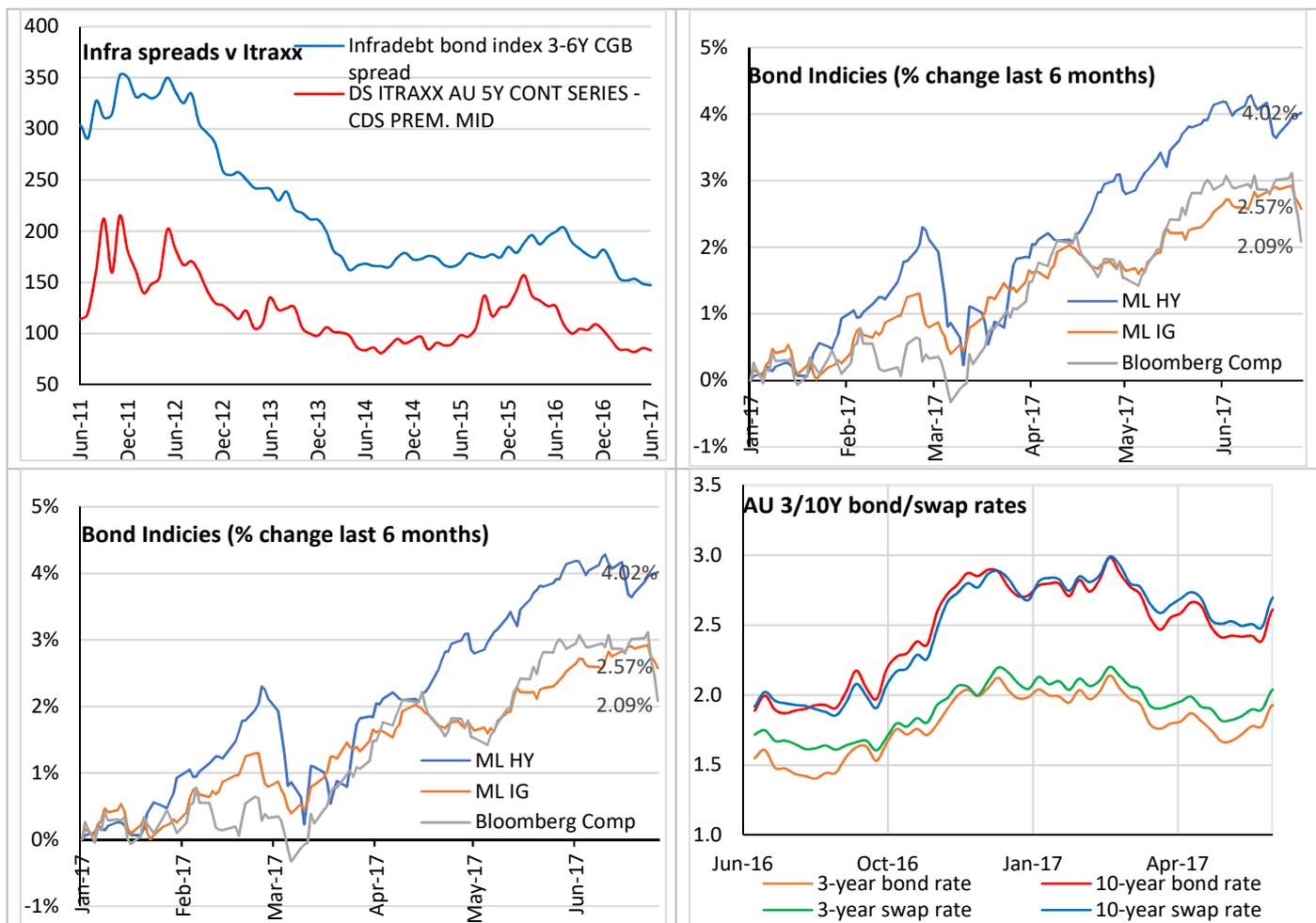
Introduction

The end of another financial year has come and gone and, without having seen the final league tables, it appears Australian superannuation funds have delivered strong returns for members. The global economy continued to expand with more and more analysts stating that most developed economies appear to be in the late stages of the business cycle. Technology stocks continued to rally over the quarter with international equities being large contributors to fund performance for the year. As we go to press, markets are pricing in a more hawkish Fed – with bond rates rising by more than 20 bps over the past week or so.

In this quarter’s newsletter, we:

- comment on the Commonwealth Government’s bank tax announced as part of the budget;
- reflect on the opportunities for impact investing through a fixed income lens; and
- take an in-depth look at PPP financing through the cycle.

Markets update



New issuance and refinancing

The table below provides a list of publicly available deals.



Date	Borrower	Instrument	Size (m)	Term (Yrs)	Curr.	Pricing
April	Oakey Solar Farm	Loan	38	5	AUD	
April	Ross River Solar Farm	Loan	170	5	AUD	
April	Long Reach Solar Farm	Loan	27	5	AUD	
April	Bungala Solar Farm	Loan	182	5	AUD	
April	Sydney Airport	Loan	1,400	3/4/5	AUD	
April	New Gullen Range Wind Farm	Loan	10	3	AUD	
April	Westlink M7	Bond	435/100	10/10.5	AUD	
May	Mugga Lane Solar Park	Loan	35	3	AUD	
May	Pacific Hydro	Loan	546	3	AUD/USD	
May	Asciano	Bond	350	10	AUD	Swap + 260
June	Aurizon	Bond	425	7	AUD	Swap + 191
June	NSW Land Regsity	Loan	1,700	3/5	AUD	Swap + 130/160
June	New Grafton Correctional Centre	Loan	750	5	AUD	
June	Endeavor Energy	Loan	5,927	2/3/5	AUD	Swap + 90/115
June	ETSA	Loan	250	4	AUD	
June	Jemena	Bond	500	10	USD	UST + 132

Equity and other news

- Macquarie and AMP Capital were winning bidders in the 50.4% privatisation of Endeavour Energy at \$7.6b. \$6b of acquisition finance is being provided by banks.
- AGL has announced it would invest \$295m to develop a 210MW reciprocating engine power station alongside the company's Torrens Island Power Station site near Adelaide. Construction is expected to begin in Q3 of the 2017 calendar year with full operation in Q1 of the 2019 calendar year. Part of the existing Torrens Island will be decommissioned once the new generator is operational.
- AGL/PARF has been granted development approval for Coopers Gap Wind Farm with 460 MW of capacity.
- Jemena has acquired the Darling Downs Pipeline Network for \$392m on a 13x EBITDA multiple.



- Origin has agreed to sell its Stockyard Hill wind farm to Goldwind, China's biggest wind-turbine maker, for \$110m. The company has also signed a long-term power purchase agreement to buy 530 megawatts from Stockyard from the start of operations in 2019 to 2030. As part of the transaction, Origin has entered into a long-term offtake PPA at a rumoured bundled price of "well below \$60/MWH" which sets a new benchmark for PPA pricing.
- Sydney Airport has advised it will not develop or operate the Western Sydney airport, stating the terms offered by the government did not meet their investment criteria. The company said the decision was in the best interests of holders, describing the risks associated with the development and operation of the city's second hub as considerable.
- APA Group has agreed to buy the Darling Downs Solar Farm from Origin and will fund the acquisition and development costs of ~\$200m with currently available cash and operating cash flows in addition to a \$20m renewables grant. Origin has agreed to buy the output as part of its efforts to meet its share of the renewable energy target.
- TPG is moving into mobile. TPG Telecom has won a government spectrum auction and plans to build a mobile network in Australia over three years starting in 2018 that aims to cover ~80% of Australia's population. The company bid ~\$1.4b in the auction and says it will spend another \$600m building a network.
- Hastings and First State Super were the winning bidders to lease the NSW land titles registry for \$2.6b under a 35 year concession. A \$1.6b loan from 11 banks has been lined up to fund the bid.

Bank tax – A bad idea but good for direct lenders!

The bank tax was a surprise item in this year's federal budget that blindsided market participants. The new tax only applies to the big four commercial banks and Macquarie. It is effectively a 6 basis point levy on bank liabilities including, corporate bonds, commercial paper, certificates of deposit, hybrids and sub-debt. It includes Tier 2 capital, but excludes Tier 1 capital. Bank deposits under \$250,000 are excluded from the tax (which is important because then the Government can claim that they are not taxing the interest earnings of ordinary Australians).

The justification from the Government for the tax is that the banks should pay for their implicit 'too big to fail' guarantee from the Government. There is good evidence that the perceived guarantee materially reduces major bank borrowing costs. The ratings agencies include an 'uplift' to bank ratings to reflect this perceived Government support.

The South Australian Government in their budget have replicated the Commonwealth's bank tax. This is an additional 6 basis points on top of the 6 basis point federal bank tax and will be assessed on South Australia's relative share of GDP. There are constitutionality issues being asked in respect of the imposition of the South Australian bank tax, and it is also being opposed by the SA opposition. Should the SA tax become law, and survives the inevitable high court challenge, it will be interesting to see if other states follow suit.

Ultimately, the advent of this new tax, with limited prior consultation, gives rise to uncertainty. With the question being asked "what stops future governments from increasing the rate of the tax in the future?" This uncertainty can flow through to the cost of funding for banks and onto higher bank loan margins for borrowers. Further, the perceived political uncertainty has implications for the willingness of banks to commit to pricing over longer tenors.

Whilst the tax is not necessarily a net positive for the country as a whole, there is some advantage that will flow through to superannuation funds and other non-bank institutional investors who engage in direct lending. These lenders are not subject to the tax and, hence, have an immediate advantage compared to the major banks. This is particularly telling for longer term loans.



Would you like some impact with that?

Impact investing refers to investments made into companies, organisations or funds with the intention to generate a measurable social or environmental impact alongside a financial return.

With the increased focus on environmental, social and governance issues, impact investing has attracted increased attention amongst Australian superannuation funds. For example, in 2016 Richard Brandweiner stepped down as CIO of First State Super, to join the global impact investment firm Leapfrog.

Traditionally impact investing has focused on equity style investing – for example, Leapfrog’s focus is on private equity investments in Asia and Africa. They aim to identify investee companies that both benefit local communities and have the potential to deliver extremely strong growth and financial returns. Many companies are in the healthcare and insurance sectors– where business models suitable for emerging markets have the potential to be scaled up, and can deliver substantial social and financial benefits.

Without wanting to take anything away from Leapfrog and others tremendous work (and track record of success), we would encourage investors to think more broadly about the potential for impact investing beyond equities. In particular, we believe there is strong impact potential in the fixed income space.

Investors can use their capacity to lend to projects that have positive social and environmental impacts to drive change. Examples include:

- National Disability Insurance Scheme specialist disability accommodation (see last quarters newsletter for more details);
- social housing; or
- support for renewable energy or energy storage projects.

One advantage of impact investing via debt, is that it is often possible to support projects that are new or innovative and, hence, would actually be quite risky equity investments. However, by making a debt investment, when correctly structured, it is possible to manage exposures to some of these uncertainties. This allows a balance between supporting impact and innovation while at the same time maintain an appropriate investment risk profile.

Not all DSCRs are created equal

Investors and rating agencies commonly refer to the debt service coverage ratio (DSCR) of a project when assessing its credit risk. The DSCR ratio is usually defined as:

$$\text{DSCR} = \text{Cashflow available for debt service} / (\text{Interest} + \text{principal})$$

Depending on the vintage of the PPP transaction, projects have been sized at a variety of DSCRs. In the pre-GFC era – DSCRs as low as 1.1x were not uncommon. In the post GFC world, coverage is higher with DSCRs typically 1.2-1.25x but creeping somewhat lower than 1.2x over the past 12-18 months.

On face value, it may appear that the DSCR on its own would be a very good indicator of credit risk as it represents the equity buffer afforded debt in meeting its current debt service payments. This is due to the fixed nature of the revenue stream in a PPP.

This is true where the debt financing of the PPP is term-matched, that is the debt maturity is equal to the concession length of the PPP. However, following the GFC it has not been possible for most PPPs to secure term-matched finance. In fact, most PPPs, with concession lengths of 20-25 years, are typically financed with 5 year bank debt – which needs to be refinanced 4 or 5 times over the life of the transaction.

Chart 1 and Chart 2 are the same PPP project (they have the same service payment cashflows from Government) but are sized with different levels of base interest rates.



Somewhat obviously – if base rates are higher – for a given revenue stream you will have lower levels of debt. Conversely, if base rates are lower, debt will be higher (as less of the payment stream needs to be used to repay interest, more can be dedicated to repaying principal).

This means that projects with the same DSCR can actually have quite different debt balances (and, hence, implicit equity buffers) depending on the interest rate environment when the deal was struck.

Chart 1: PPP Project - 1.18x DSCR, 4.5% interest rate

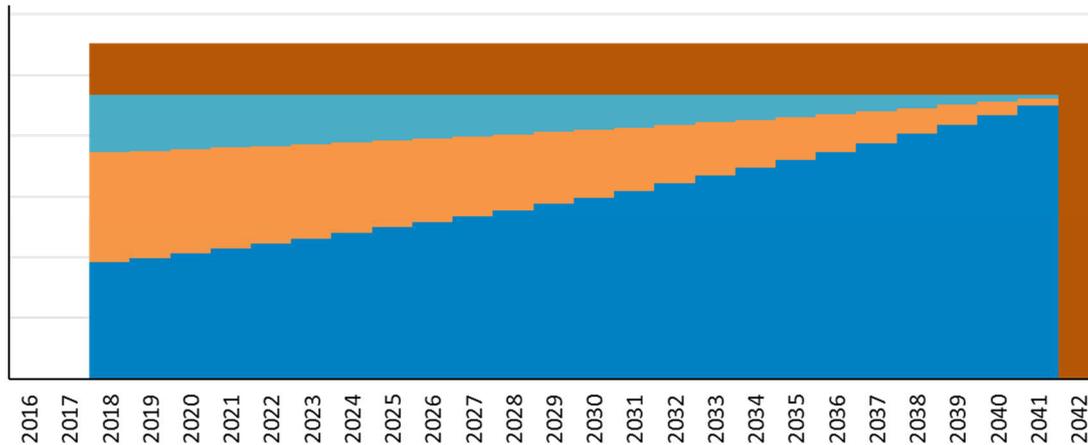
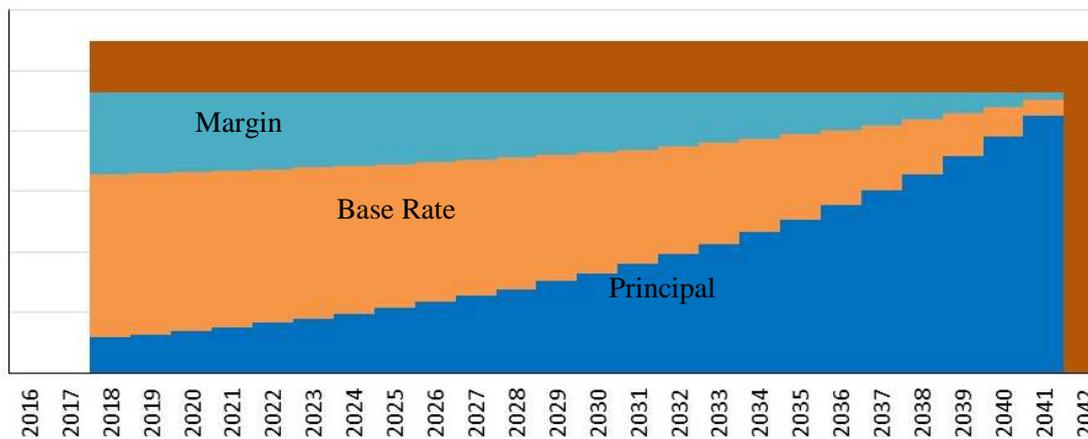


Chart 2: PPP Project - 1.18x DSCR, 9.0% interest rate



When does Equity walk?

For most transactions, base rates are locked in for the full life of the transaction using a long-term interest rate swap (or in some cases, via an agreement with the State).

However, at each refinancing, the credit margin will potentially change. The biggest determinant of refinancing credit margins will be the macro environment at the time.

If credit spreads are higher – then equity will need to make an equity injection to de-lever (assuming target DSCRs are constant over time). The actual injection may be larger as DSCRs are counter-cyclical. That is, the market usually requires higher DSCRs at times with higher credit spreads.

The key question is whether equity will fund this equity injection or walk. Equity will walk when prospective IRR on injection is too low (or negative).



Worked example

The following table provides sensitivities for a PPP with an initial bid equity IRR of 9%, bid DSCR of 1.18x, bid margin of 1.3% and base rate of 2.5% (3.8% all in). We then modelled a debt refinance at year 5 of operations and scenario tested different refinance margins. Assuming a 10% prospective IRR on injection is the threshold for equity, then the refinance will be highly stressed, and equity likely to walk, if margins reach around 3.0%.

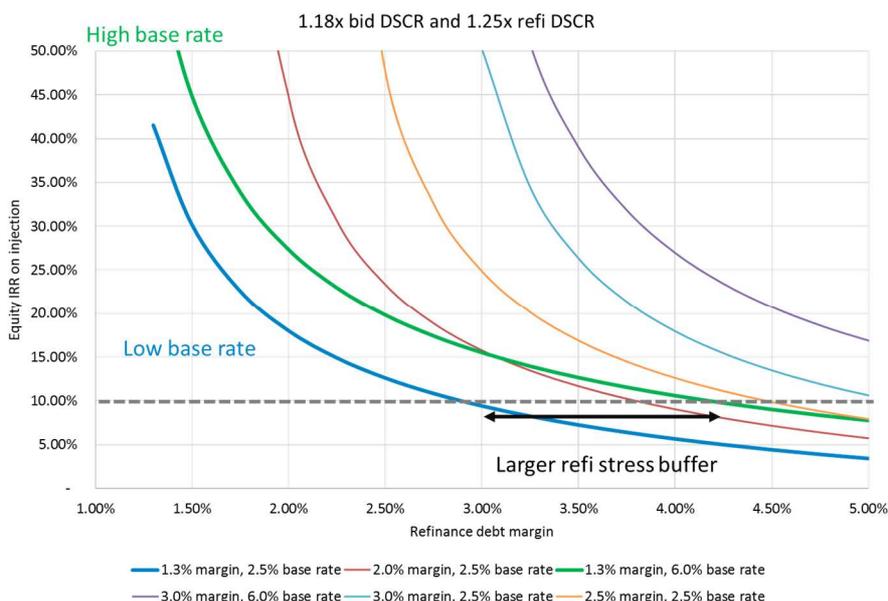
Table 1: Walk away equity IRR sensitivities

	Case	IRR from start	Walk away IRR	Equity injection at refi	Refi margin
1	Base case, 1.18x DSCR	9.00%	-	-	1.30%
2	Refi margin = 1.3%	8.24%	41.53%	3.46	1.30%
3	Refi margin = 1.5%	7.60%	30.21%	4.75	1.50%
4	Refi margin = 1.75%	6.87%	22.62%	6.33	1.75%
5	Refi margin = 2%	6.20%	18.07%	7.86	2.00%
6	Refi margin = 2.25%	5.58%	14.98%	9.34	2.25%
7	Refi margin = 2.5%	5.01%	12.72%	10.78	2.50%
8	Refi margin = 2.75%	4.48%	10.97%	12.17	2.75%
9	Refi margin = 3%	4.00%	9.56%	13.52	3.00%
10	Refi margin = 3.25%	3.55%	8.39%	14.83	3.25%
11	Refi margin = 3.5%	3.14%	7.41%	16.10	3.50%
12	Refi margin = 3.75%	2.75%	6.57%	17.34	3.75%
13	Refi margin = 4%	2.40%	5.83%	18.54	4.00%

Other starting points

We then undertook similar analysis for a range of different starting debt size assumptions. The blue line below is the base case scenario mentioned above with a base rate of 2.5%. We then looked at the scenario where the bid financial close base rate is 6% (3.5% higher) – under this scenario a stressed refinance would occur when refinance margins are greater than 4% (the green line in chart 3). There is a much lower probability of equity walking.

Chart 3: Equity IRR at other starting debt assumptions



Conclusion

There is more to the credit risk profile of a PPP than looking at the straight coverage and leverage metrics. Investors should consider the debt environment that PPP debt is being issued in. PPP debt issued in a low margin, low base rate environment will have higher levels of refinance risk compared to their peers when debt was issued in a higher interest rate environment. Where there is risk, there is also opportunity, and we view this risk as being often mispriced in this sector.

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.

