

## Introduction

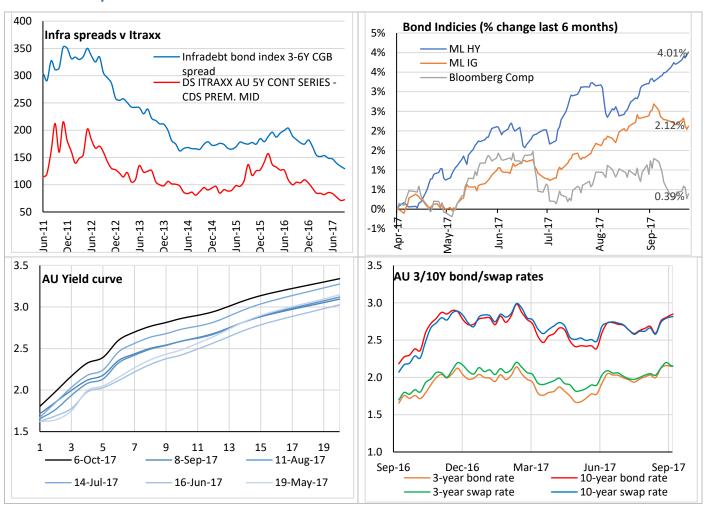
Market conditions remain relatively steady. Australia had 0.8% of economic growth in the last quarter and 2% year on year. The Fed has announced that it will begin balance sheet reduction, aka "quantitative tightening" from October consistent with its previous statements. Base rates have remained relatively flat over the quarter however spreads have continued to tighten. The Australian Itraxx CDS Index is at a 5-year low of circa 72 bps. The divergence between the Bloomberg Composite (largely Government bonds) and IG/HY indices has been largely due to tightening spreads.

It was a big quarter for Infradebt – with the first close of the Infradebt Ethical Fund (IEF). IEF will focus on direct lending to renewable energy and social infrastructure (PPP) projects. It offers a significant return pickup over traditional fixed income investments while supporting Australian projects that deliver a positive environmental and/or social impact. The fund has been designed to fit within the fixed income allocations of funds with a strong sustainability focus as well as an asset class building block for the SRI member investment choices of larger funds.

Energy continues to be a vexed political issue this quarter with the debate shifting to gas due to the forecast shortage of gas supply in 2018 and 2019. The Turnbull Government has signed an agreement with gas exporters to offer enough gas to meet the expected shortfalls - the agreement is not specific on price except that it be on "reasonable terms".

The first article in this quarters newsletter dives into the hot issue of Aussie gas prices. The second article provides commentary on the emerging sector of social housing – we take a look at government initiatives and opportunities for investors. Our final article compares where we are today to the period just before the GFC – i.e where we were exactly 10 years ago.

# Markets update









## New issuance and refinancing – public information

Date	Borrower	Instrument	Size (m)	Term (Yrs)	Curr.	Pricing/Notes
September	NCIG	Bond	\$500	10	USD	UST + 215
September	SGSPAA	Bond	\$250	7	AUD	Swap + 120
September	Transurban	Bond	\$500	10	EUR	Swap + 95
September	Port of Darwin	Loan	\$80	3	AUD	
September	Eco Energy World	Loan	\$26	1	AUD	
September	Lilyvale Solar	Loan	\$180	5	AUD	Ergon offtake
September	Aquasure	Loan	400		AUD	
September	Reliance Rail	Loan	179/179	0.25/12	AUD	
August	ETSA	Bond	\$175/375	5/7	AUD	Swap + 102/117
August	Victoria Power Networks	Bond	\$150	10		4.0225% fixed
August	Adani Abbot Point Terminal	Loan	500	5	AUD	
August	Coopers Gap Windfarm	Loan	575	5	AUD	Swap + 165, AGL offtake/PARF
August	United Energy	Loan	280	5	AUD	
August	RWH	Loan	48/91	7/15	AUD	145/195
August	Willogolche Wind Farm	Loan	197	15	AUD	Engie offtake
August	Ausgrid	USPP	770/430/43 0	10/12/1 5	USD	UST + 125/135/150
August	Ausgrid	USPP	29/103/88	10/12/1 5	AUD	Swap + 130/140/155
August	Ausgrid	USPP	100	15	AUD	MS + 180
August	NextDC	Loan	\$300	3	AUD	
August	SA Land Titles	Loan	400/400	3/5	AUD	Swap + 120/150
August	QUBE	Loan	150	7	AUD	
July	Transurban	Loan	\$1,100	3/4/5	AUD	
July	Adelaide Airport	Bond	\$200	7	AUD	Swap + 145
July	Bungala Solar Farm	Loan	155	5	AUD	Swap + 185, Origin offtake





Quarterly Newsletter: Q3 2017



July	Melbourne Metro Tunnel PPP	Loan	4,000		AUD	
July	Transgrid	USPP	390/134/20 3	10/12/1 5	USD	UST + 130/140/155
July	Transgrid	USPP	25	17	AUD	5.2% fixed

#### Equity and other news

- Engie Group has received final bids from Chinese-owned Alinta Energy Ltd and private Australian firm Delta Electricity for the Loy Yang B coal-fired power plant in Australia. A final decision on the sale estimated to be US\$1b is expected by before the end of this year.
- Metrics Credit Partners has raised \$500m in subscription for its listed retail fund. The fund targets direct lending to mid-market corporates with a credit profile of BB+ to BBB-.
- Reliance Rail is in negotiations to refinance \$2b in maturing debt. The project company has \$1.9b in senior and junior bonds as well as a \$357m 12-year loan from banks. The senior bonds are guaranteed by insurers Financial Guaranty Insurance and Syncora Guarantee. A successful refinancing may pave the way for the NSW state government to exercise its right to buy the project for \$175m.
- Glencore has appointed advisers to sell Rolleston mine the largest customer of WICET. The mine has an obligation to assume Glencore's take or pay contracts. Distressed debt funds have been acquiring the loans at 79-82% of par.
- Australia Pacific LNG has passed the final completion test in relation to the US\$8.5b project financing for both
  processing trains at its Queensland LNG facility. The project has a US\$2.875b 16-year commercial bank loan
  from 15 lenders and 17-year direct loans from export credit agencies. APLNG has been operating both trains
  since October 2016 for customers Sinopec and Kansai Electric under long-term sale agreements. Origin Energy
  has taken over \$1b in impairments on the Project due to falls in global gas prices.
- Macquarie Infrastructure and Real Assets and Canada's Public Sector Pension Investment Board [PSP Investments] have won a 40-year concession to manage the South Australia Land Registry.
- IFM is looking to sell the Ecogen Energy portfolio of gas fired power stations in Victoria. Both plants are contracted to EnergyAustralia with contracts nearing expiry.
- Melbourne Metro PPP The consortium comprising Lendlease, John Holland, Bouygues Construction and Capella Capital was named preferred bidder this week. The Project is the state's largest public transport project - construction includes a 9km tunnel and five underground stations.
- Royal Woman's Hospital has refinanced its bullet bonds into amortising term matched bank debt over the remainder of its concession. Moody's has increased the credit rating on the RWH IAB from Baa2 to A2.

### East Coast Gas Market

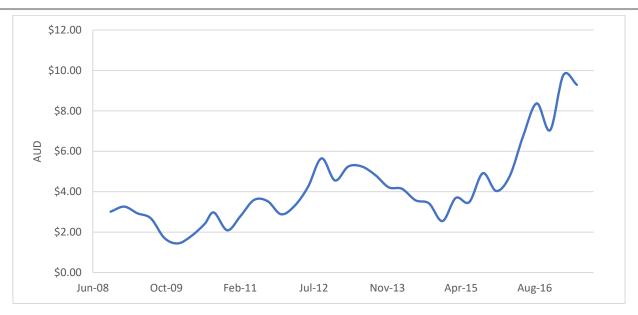
As you're no doubt aware from recent press coverage, East coast gas markets are facing a gas shortage. Many market analysts have been predicting this scenario for a number of years, but now the impact is being felt through pricing:











Source: AER, 2017

Whilst Australia has abundant reserves of gas – the issue is one of near-term supply relative to demand, and the longer-term incentives in place to bring new supply to market. The ACCC/AEMO see this shortage being a continuing problem over the short to medium term:

Table 1 Gas supply adequacy assessment (PJ)

	2018		2019	
Aggregate gas production	1,891		1,886	
Aggregate LNG export gas demand	1,303		1,336	
Gas supply available to domestic market	588		550	
	Expected	Uncertainty	Expected	Uncertainty
Residential, commercial, and industrial	466	492	463	495
GPG	176	203	135	157
Total domestic gas demand	642	695	598	652
Surplus / Deficit	-54	-107	-48	-102

For decades, Australia has enjoyed an abundant and ready supply of cheap gas. The present shortage has been caused by a convergence of a range of issues:

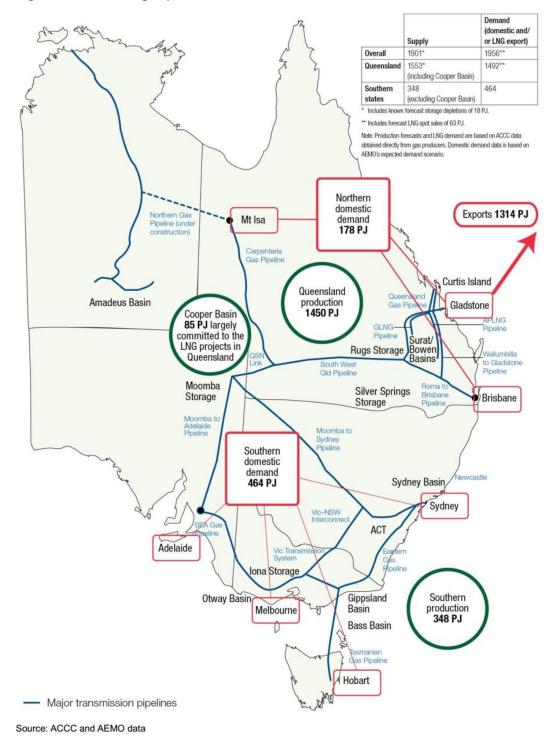
- Queensland LNG export facilities have progressively come online. Previously there were no export facilities on the east coast of Australia. Australia is now the second largest exporter of gas globally (Qatar is the largest) at 12% of total supply. Presently ~68% of Australian gas is exported. Much of the LNG is exported under long-term contracts. Traditionally the international gas price has been much higher than the Australian domestic price. With the development of the LNG export facilities, consistent with simple economics, the Australian east coast gas price has floated up towards the international price.
- 30% of gas consumed domestically is for the purpose of electricity generation. With the influx of renewables and the closure Hazelwood, gas powered generation is now the marginal price setter for electricity due to its input cost, gas typically is only competitive at higher spot electricity prices. The closure of Hazelwood and SA's coal fired generators has increased the prevalence of gas generators. The price signal means that several previously mothballed generators are coming back online (e.g. Pelican Point in SA) and thus competing for more domestic gas supply.
- The international gas price is heavily influenced by crude oil prices. The recent fall in crude oil prices has reduced the incentives for gas developers to bring new supply online. Thus, development of greenfield sites has slowed in Australia (with large impairments booked by Australian suppliers). Australia has no shortage of available gas in the ground it is mainly a question of the economics of extraction.





The ACCC shows the gas supply dynamic for the east coast as follows

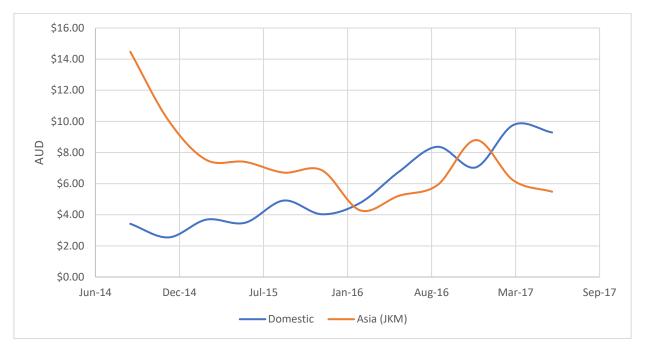
Figure 1.1: Forecast gas production and demand in the East Coast Gas Market in 2018







The following chart shows the domestic and international (Asia) pricing dynamic through time:



Source: AER/Thompson Reuters Eikon.

When contrasting the domestic market to international markets it's important to note the differences in market structure. Australia has three large suppliers, whereas offshore there are many large suppliers.

In response to the current situation, the Australian Government is considering implementing export restrictions under Customs Regulations. These restrictions may help at the margin, but the nature of gas distribution networks means that it is not necessarily efficient to redirect the flow of gas (especially in relatively small quantities) south. At any rate, nowhere is it mentioned (nor likely) that this sequestered gas will be cheaper for domestic users (compared to export prices).

Bringing new supply online would address shortfall issues in the medium term, but as the ACCC clearly states this will not have any meaningful impact in 2018/19. At any rate, a key issue remains the price incentive to bring new supply online. The spectre of sovereign risk – where gas suppliers may be forced to reserve gas for domestic users (potentially at below market pricing) – will discourage rather encourage new investment.

Accelerating the penetration of renewables (wind and solar are cheaper than any other form of generation), together with altering the incentive structure within the electricity markets (demand management, storage etc), will lower electricity costs. Reducing the reliance on gas for electricity will free up supply for other parts of the domestic economy.

For the last few decades, Australians have enjoyed cheap gas. The current situation is not simple to fix, nor is there any one cause that gave rise to it. However, the policy environment of the last 10 years has certainly not helped and discouraged long-term investment (gas development, renewables, network investments). Electricity prices across this summer (when much of Australia experiences peak demand) will be high – reflecting the cost of gas powered generation. For those readers with investments in renewables generation plant, that have a merchant component, this summer could well turn out to be a remarkable period of above target returns.

# 10 Years on from the GFC

It is roughly 10 years since the start of the Global Financial Crisis, and with US equity markets again setting new all-time highs over the last quarter, it is worth taking stock. The chart below shows the S&P500 (blue) and ASX 200









(orange) over the past 20 years. While US markets have clearly surpassed their previous peaks, Australia's ASX200 index still lags well below its all-time highs. There are a few reasons for this including:

- Australian stocks potentially benefiting less from central bank quantitative easing (QE) as the RBA has not chosen to go down the QE route;
- Sector differences with the Australian market having much lower exposure to technology sectors (which
  have been the strongest performers post GFC) and higher exposure to banks (which have failed to regain
  pre-GFC peaks on the global basis); and
- Australian companies pay out higher dividends (that include franking credits) and so even if Australian and
  US stocks had the same returns, price growth would tend to be higher for US companies.



Source: Thompson Reuters, 2017

The following table summarises a range of valuation and return measures – both for the 10 years to 30/9/2007 and for the ten years to today.

		30/09/2007	30/09/2017
S&P 500	Index Level	1,526.8	2,519.4
	10 Year Return	6.5%	7.5%
	PE	17.5	22.9
ASX 200	Index Level	6,567.8	5,681.6
	10 Year Return	13.6%	3.1%
	PE	15.82	16.14
US 10 YEAR BOND RATE		4.6%	2.3%





Quarterly Newsletter: Q3 2017



AUSTRALIAN 10 YEAR BOND RATE		6.2%	2.8%
ML AUSTRALIAN BBB SPREAD		1.2%	1.5%
	1011		6.404
BLOOMBERG COMPOSITE BOND INDEX	10 Year Return	5.7%	6.1%
CPI	Annualised	2.9%	2.3%
SUPER RATINGS	10 Years to 30/6	8.47%	4.64%

#### The key points from the table are:

- US equity valuations (that is PEs) are quite high with a significant portion of the strong performance by equities attributable to higher multiplies (supported by low interest rates) rather than strong underlying economic or earnings growth.
- Interest rates have collapsed compared to 2007 levels, with both Australian and US bond rates at less than half of their pre-GFC levels.
- This collapse in bond rates has underpinned a continuation of the 30 year bull market for bonds. While equities might get the headlines - one of the shocking outcomes of the past 20 years is how close the performance of bonds has been to equities – with massively lower volatility (so far).

While credit spreads have tightened since the GFC, they remain wider than pre-GFC levels (see below for more detail). One of the outcomes of the changes in bank and financial markets regulations over the past decade is that the banking system is significantly less levered, liquidity is more expensive and a consequence of this is that credit margins are higher than in the pre-GFC period.

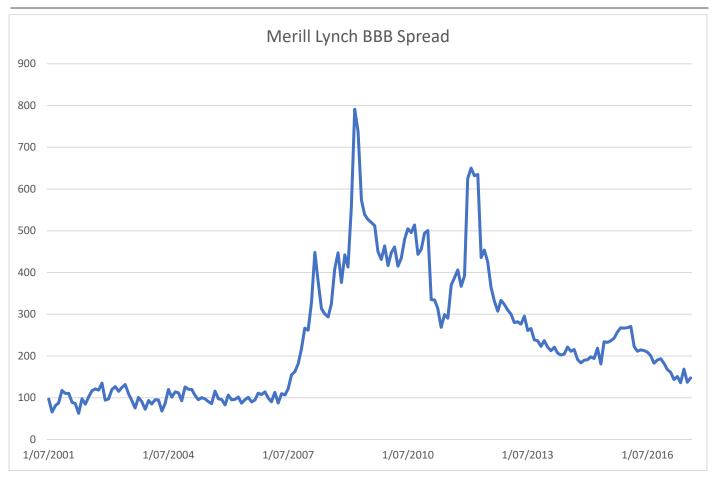






Quarterly Newsletter: Q3 2017





Source: Thompson Reuters, 2017

In conclusion – the recovery from the GFC has been reasonably unusual compared to other financial crises. A strong equity rebound is typical – but post the GFC this has been driven by lower interest rates, higher multiples rather than a particularly strong rebound in earnings. Credit spreads are a lot tighter than at the peak of GFC but are still well wide of pre-GFC tights. The biggest challenge for investors over the next 10 years will be investing in such a low interest rate/high valuation world. It is important to remember that much of the rebound has been a repricing/bring forward of future returns and, hence, achieving 3%+ post tax, fees and inflation that most Australian funds target is a real challenge.

# Creation of a bond aggregator for social housing – some scale benefits but no panacea for low residential yields

This month the Commonwealth Treasury have launched a consultation process regarding the potential structure of a bond aggregator for social and affordable housing. A bond aggregator is a government owned intermediatory that acts as a collective borrowing agent for community housing providers (CHPs) allowing them to access capital markets. A bond aggregator is intended to allow CHPs to access longer tenor and cheaper funding than they could otherwise access through banks. The purpose of this funding would be both increase and improve Australia's social housing stock.

Social housing is often mooted as a broader opportunity within the social infrastructure asset class. 'Social Housing is rental housing provided by not-for-profit, nongovernment and government to assist people who are unable to access suitable accommodation in the private rental market' (NSW Government, 2017). To date it has struggled to attract capital in scale, principally due to opportunity (investable deals). There are approximately 430,000 social hosing dwellings in Australia – 75% of which fall under the control of State and Territory governments. Additional properties



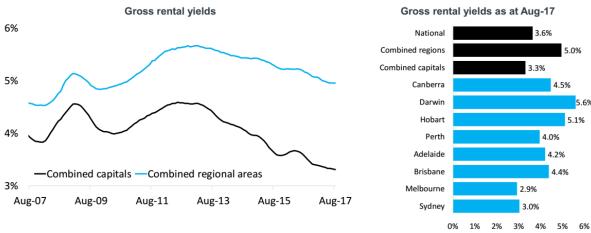




are leased or owned CHPs – there are 285 registered CHPs providers in Australia – the largest being Compass which manages 3,245 properties.

In Infradebt's view, a bond aggregator is likely to deliver CHPs a modest saving in borrowing costs (particularly if the aggregator benefits from a government guarantee) but is likely only to have a modest effect on the capacity for the social housing sector to expand. In our view, the more significant barrier to the growth in the sector is the low level of net residential property returns – particularly for investors who don't share in the tax benefits available to individual private investors (ie negative gearing and discount capital gains).

The chart below shows CoreLogic's estimate of gross yields – both over time and by city. Importantly these are before expenses – rates, land tax, agents' commissions, repairs and maintenance. Net yields will be significantly lower – probably at least 1% lower – simply not enough return to compensate for the risk, in absence of tax benefits (or particularly strong view of long-term rental growth). It is this low yield challenge that underpins the lack of institutional build to rent residential accommodation in Australia (and is different to other markets, such as the US, where yields are much higher).



Source: CoreLogic, 2017

A flow-on effect of this is that it is difficulty to raise capital to fund social housing. Social housing has all the return issues of build to rent residential property, with additional challenges through lower rents (to extent rent is subsidised below market), higher expenses (unique challenges and costs of service provision to low income and disadvantaged groups).

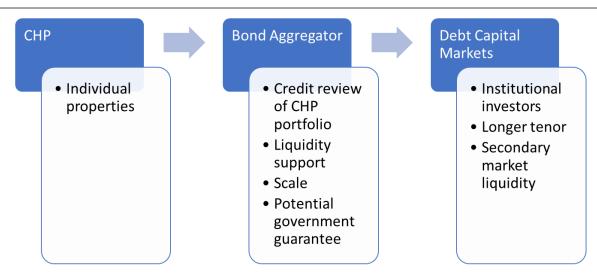
#### What is a bond aggregator?

A bond aggregator is a government owned intermediatory that acts as a collective borrowing agent for community housing providers (CHPs) allowing them to access capital markets. Under a bond aggregator structure a government owned entity would issue bonds in capital markets and on-lend the proceeds to CHPs. By aggregating the borrowing requirements of multiple CHPs, the bond aggregator would be able to issue bonds at meaningful size for bond markets which would assist with secondary liquidity (although likely to be very much at the small end of Australia's bond market). A key role of the bond aggregator would be to develop standardised due diligence and credit criteria for participants in the program.









A bond aggregator delivers funding costs savings via economies of scale and, if provided, through the risk reduction of the government guarantee. EY has estimated the potential benefits to be of the order of 0.9-1.4% reduction in effective borrowing costs. The extent of the saving is quite sensitive to pricing of the bond aggregator's issued bonds - which will depend on the nature of the government guarantee (if any) as well as the scale of the offering (which will be a big driver of secondary liquidity).

Effectively a bond aggregator currently replaces the role provided by banks for CHPs. Banks currently provide individually negotiated loans to CHPs and then finance these loans via their broader funding activities. While a government owned provider - particularly one with access to a government guarantee - will no doubt be able to do this more cheaply – it is important to note that debt financiers play a role beyond providing capital – they often help transactions be commercially structured with sensible risk allocation, provide due diligence and transaction structuring advice. It is not clear if the bond aggregator will be able to provide these functions.

#### **Conclusion**

A Bond aggregator is not a panacea to the need for increased social and affordable housing in Australia – substantial increase in social housing will require either substantial government capital investment (which is unlikely given fiscal position of governments) or a revival NRAS style schemes where additional revenue is available – above and beyond market rents. For this reason, Infradebt's

# 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.



