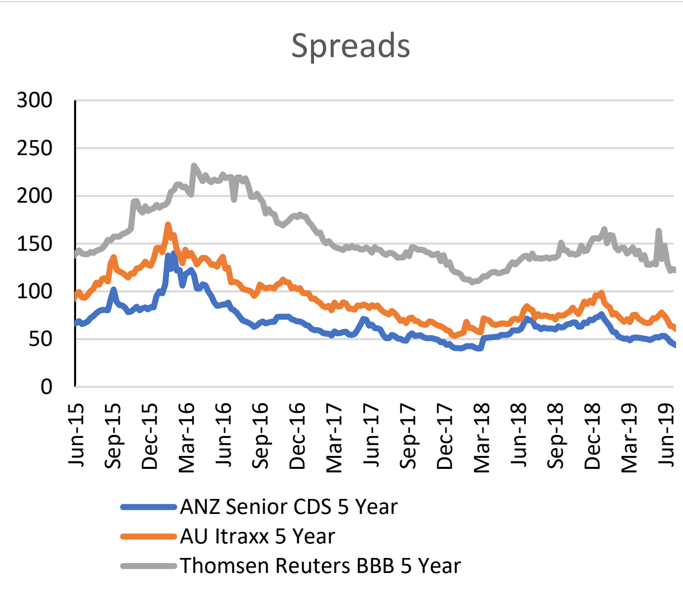
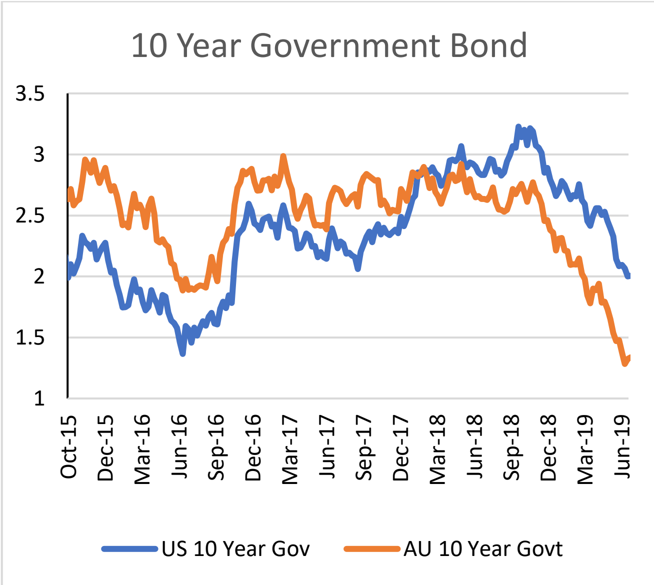
# Introduction

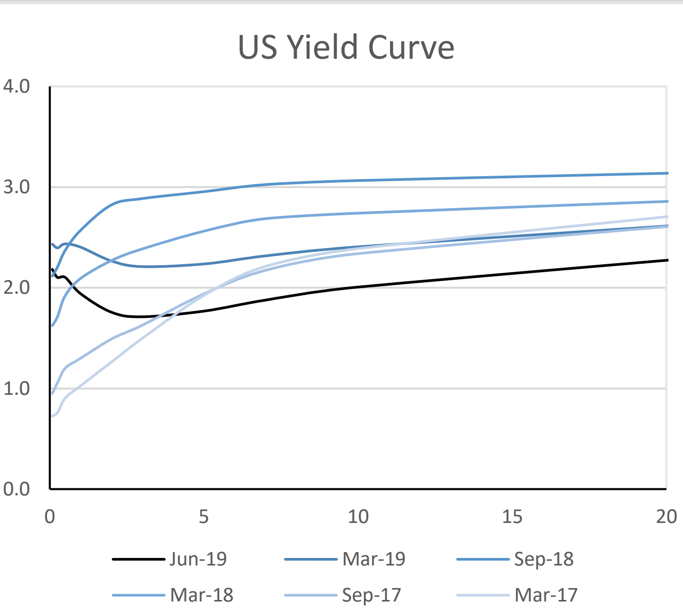
Wow it's hard to think that one year ago the Australian 10 year was at 3%, today it's trading at ~1.3%. Of course, those with a little grey hair will remember such lofty times as when the 10 year had a 5 handle (this day 10 years ago it traded at 5.3%) and even higher. This quarter Australian interest rates continued to fall at all points on the yield curve. Much of this was in response to a number of dovish speeches from RBA officials over the quarter. The RBA appears to have lowered what it perceives to be the natural rate of full employment in the economy to the range of 4.5-5.0%. The latest employment numbers have the rate at 5.2%. This quarter the RBA also canvassed the option of quantitative easing as a policy tool. All this dovish talk was followed up with action with the RBA cutting rates in June and early July. The cash rate now stands at an astonishing 1.0%. The question now is how low can rates go?Of course, all of this also needs to be seen in a global context which makes the path forward all the more uncertain.

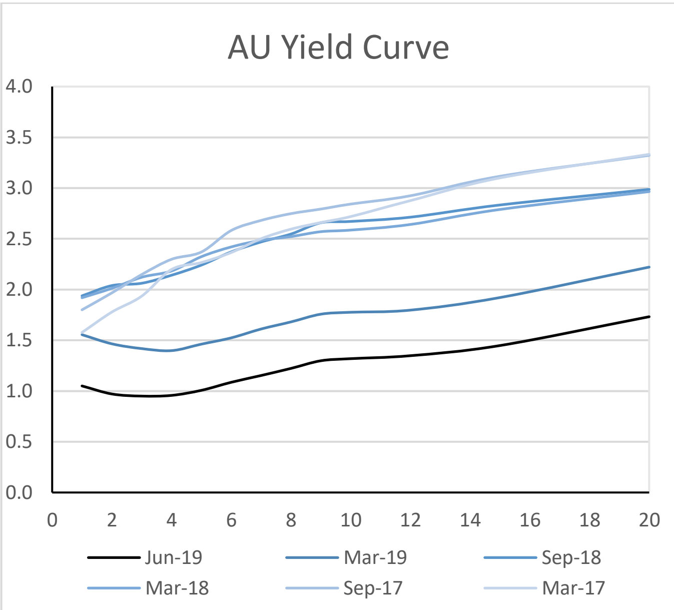
Two of the articles this week assess the impact of lower interest rates for infrastructure investors and the investment landscape more broadly. The third article review the latest numbers from Sydney airport and the sector more broadly.

# Markets update



## New issuance and refinancing

| Date | Borrower | Instrument | Size (m) | Term (Yrs) | Curr. | Pricing/Notes |
|---|---|---|---|---|---|---|
| April | SA Land Registry | Loan | 780 | 3-10 | AUD | Refinance |
| April | Cross River Rail | Loan | 2,300 | | AUD | Construction, 200 bps |
| April | Evolve Housing | Loan | 70 | 10 | AUD | Refinance, concessional finance. |
| April | Hallett 1 Wind Farm | Loan | 160 | 13 | AUD | Refinance |
| April | Waterloo Wind Farm | Loan | 145 | 10 | AUD | Refinance |
| May | Multinet Gas | Loan | 25 | 1-2 | AUD | Working capital |
| May | Port of Melbourne | Loan | 1,700 | 2-4 | AUD | Refinance, 80-100 bps |
| May | Melbourne Airport | Loan | 500 | 7-10 | AUD | Refinance |
| May | Northern Beaches Hospital PPP | Loan | 236 | 5 | AUD | Refinance |
| May | DBNGP | Loan | 300 | 5-7 | AUD | Refinance, 120-140 bps |
| May | Berrybank Wind Farm | Loan | 195 | | USD | Construction |
| May | Sydney Airport | Loan | 1,400 | 3-5 | AUD | Refinance, sustainability loan |
| May | South Australia Schools PPP | Loan | 172 | 5 | AUD | Refinance, 100 bps |
| May | Healthscope Hospitals | Loan | 2,150 | 5 | AUD | LBO acquisition, 400-425 bps |
| May | Sunshine Coast Hospital | Loan | 480 | 5 | AUD | Refinance |
| May | Darlington Point Solar Farm | Loan | 220 | 4 | AUD | Construction |
| June | Collector Wind Farm | Loan | 180 | | AUD | Construction |
| June | SA Power Networks | Loan | 200 | 6 | AUD | Refinance |
| June | Windlab | Loan | 10 | 3 | AUD | Refinance |

| Date | Borrower | Instrument | Size (m) | Term (Yrs) | Curr. | Pricing/Notes |
|---|---|---|---|---|---|---|
| June | DBNGP | Loan | 25 | 2 | AUD | Working capital |
| June | Ausgrid | Loan | 1.650 | 7-10 | AUD | Refinance, 130 bps |
| June | NT Airports | Loan | 550 | 5-7 | AUD | Refinance |

### Equity and other news

- Transurban has increased its stake in the M5 via acquisition of minority stakes. This increases its holding from 58% to 65% buying out small positions from Sunsuper, REST and AMP.
- Sydney airport has issued its first sustainability loan. The $1.4 billion loan is linked to independently assessed ESG outcomes.
- REST has purchased the remaining 60% portion of the Collgar wind farm from UBS making it the largest owner of renewable energy assets in Western Australia.
- In April the British Labour Party announced plans to nationalise the GBP 90 billion water utility industry should it win Government. British water infrastructure was privatised 30 years ago. The shadow Chancellor suggested that Labour could buy back the regional British water companies for one third of the estimated market equity value. Separately the regulator has imposed a GBP 126 million fine on Southern Water for failings in wastewater management and misreporting its performance. This newsletter is focused on Australian infrastructure, but such action would be a precedent – especially when seen in the context of the relentless focus on energy prices in Australia and the network component of the household electricity bill.

## Low Interest Rates – the Future Eaters for Long-term Savers

Modern monetary policy (not to be confused with modern monetary theory) has evolved to a point where central banks actively manage interest rates with the goal of maintaining price stability/low inflation and full employment. While this has delivered reasonable GDP outcomes over the past 40 years or so, from the perspective of a long-term savers/investors, this approach is becoming increasingly challenging and unsustainable. While mortgage holders might cheer the RBA's most recent interest rate cut (and the futures market predictions sub 1% over the next year), this won't be echoed by Australia's savers and superannuation fund CIOs.

Over the last 40 years monetary policy in developed economies has typically evolved to an inflation/full employment targeting regime. That is, in the face of a slowing economy, central banks cut interest rates. Lower interest rates encourage higher consumption (less saving) and more investment. This pulls spending forward from the future and supports current activity/employment. This pull forward of spending is manifest in high debt levels – as debt, directly or indirectly, funds the higher consumption/investment during the downturn.

While this is fine in theory – the reality has been that the post-recession equilibrium has involved lower interest rates and higher debt levels than pre-recession. That is, while interest rates rise post recession, they haven't risen back to pre-recession levels.

The world seems to be trapped in a cycle of:

- Lower and lower interest rates
- Higher and higher debt levels
- Weaker growth
- Higher asset valuations.
- The following charts illustrate this phenomena for the US (which amongst the developed world has the highest interest rates).

**Chart 1: Lower and Lower Interest Rates**

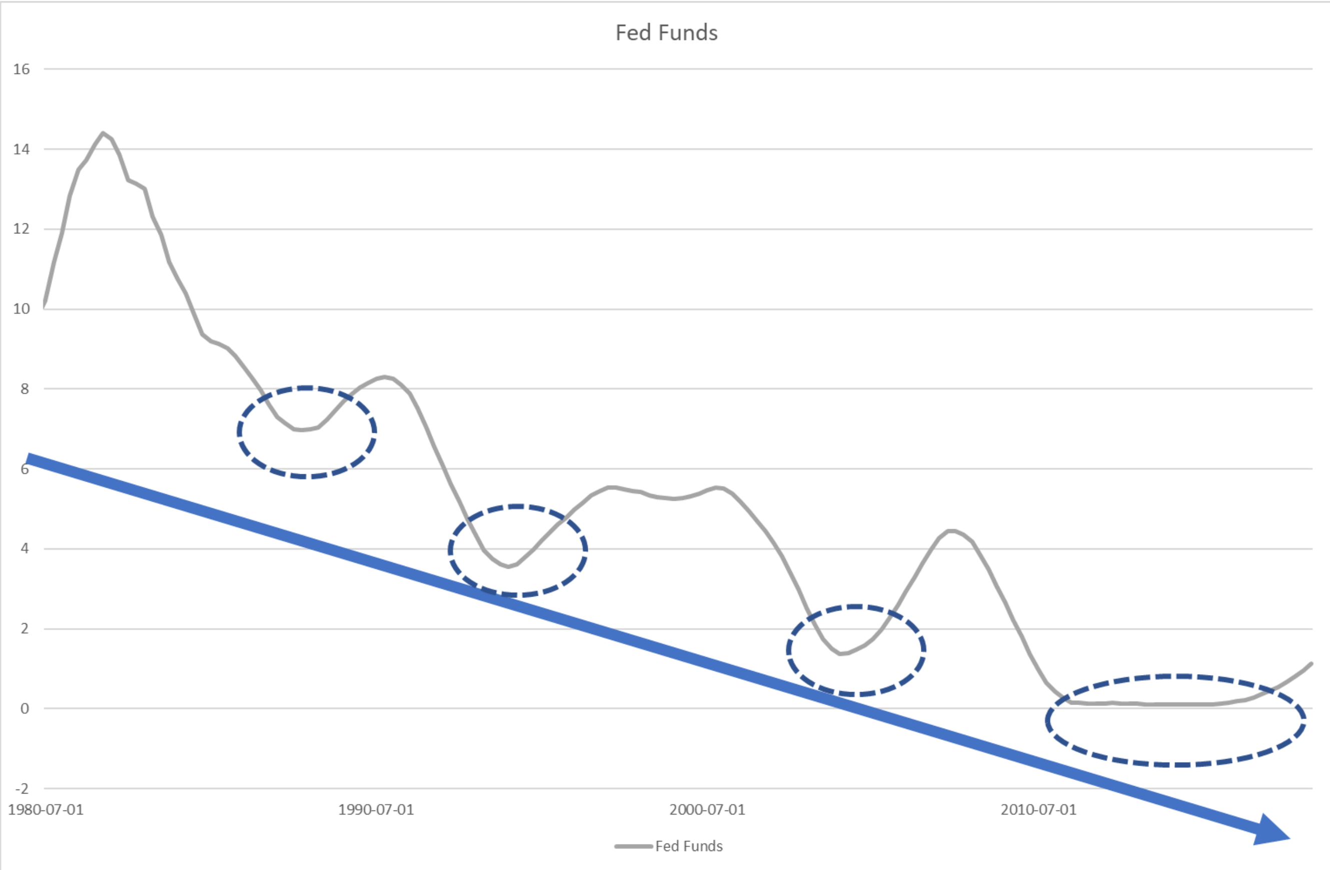



**Chart 2: Higher and Higher Debt**

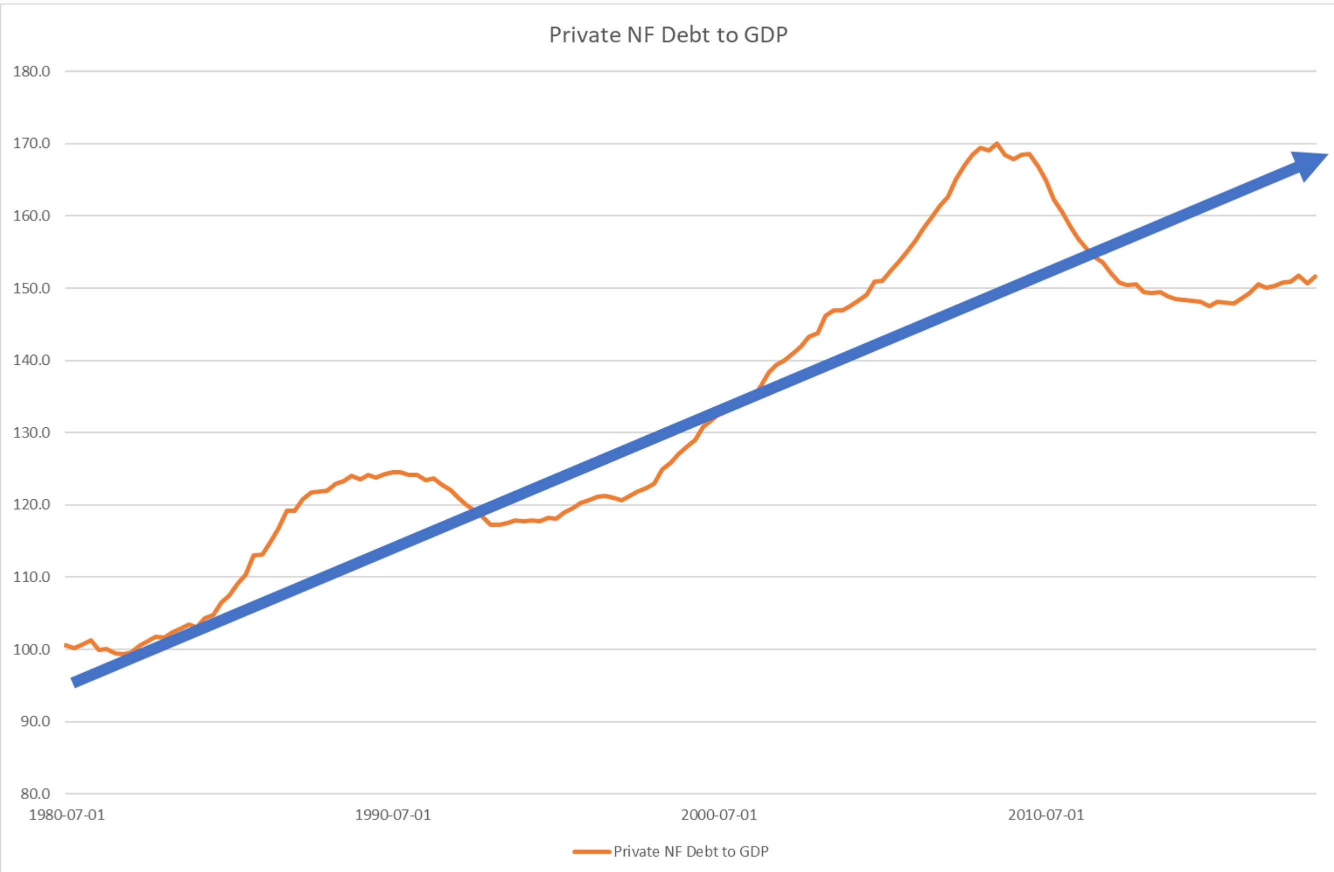


**Chart 3: Weaker Growth**

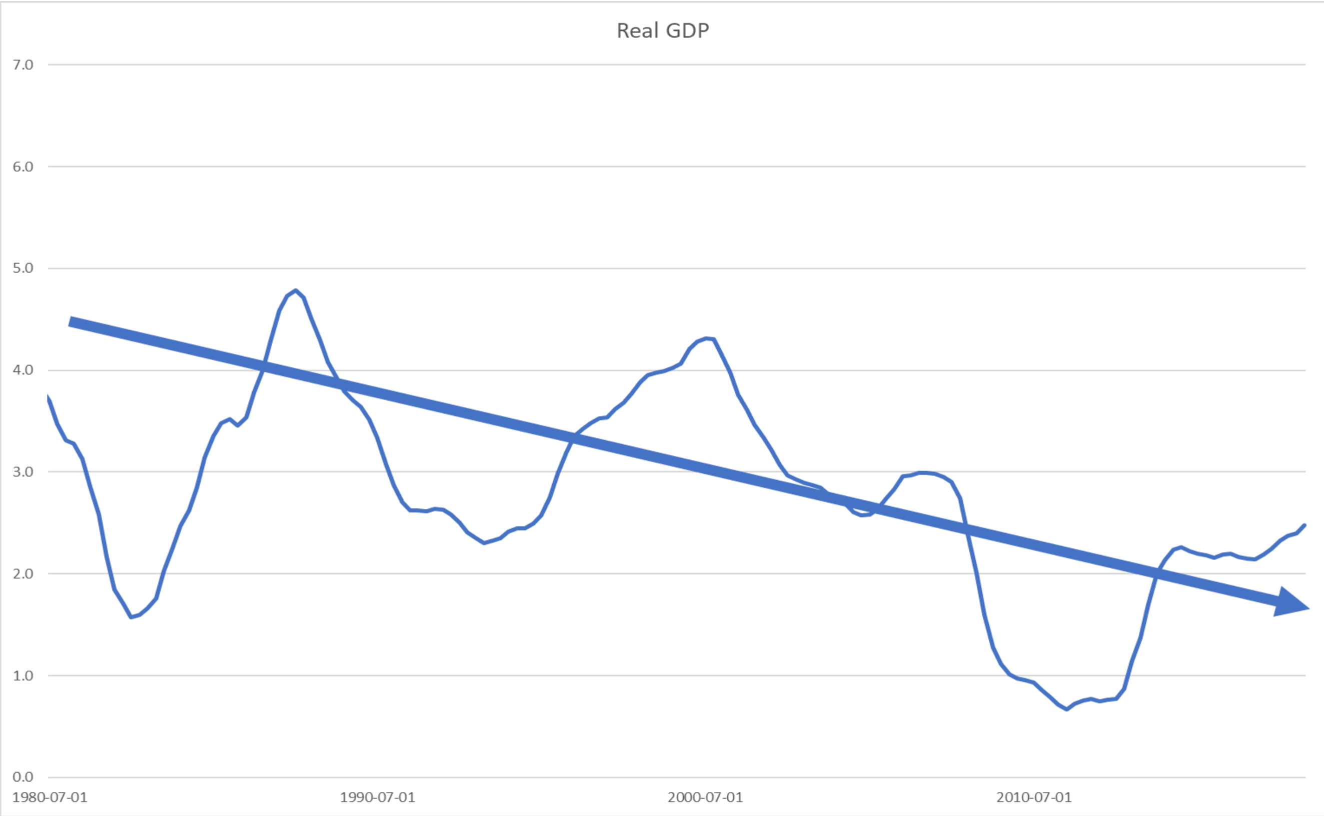
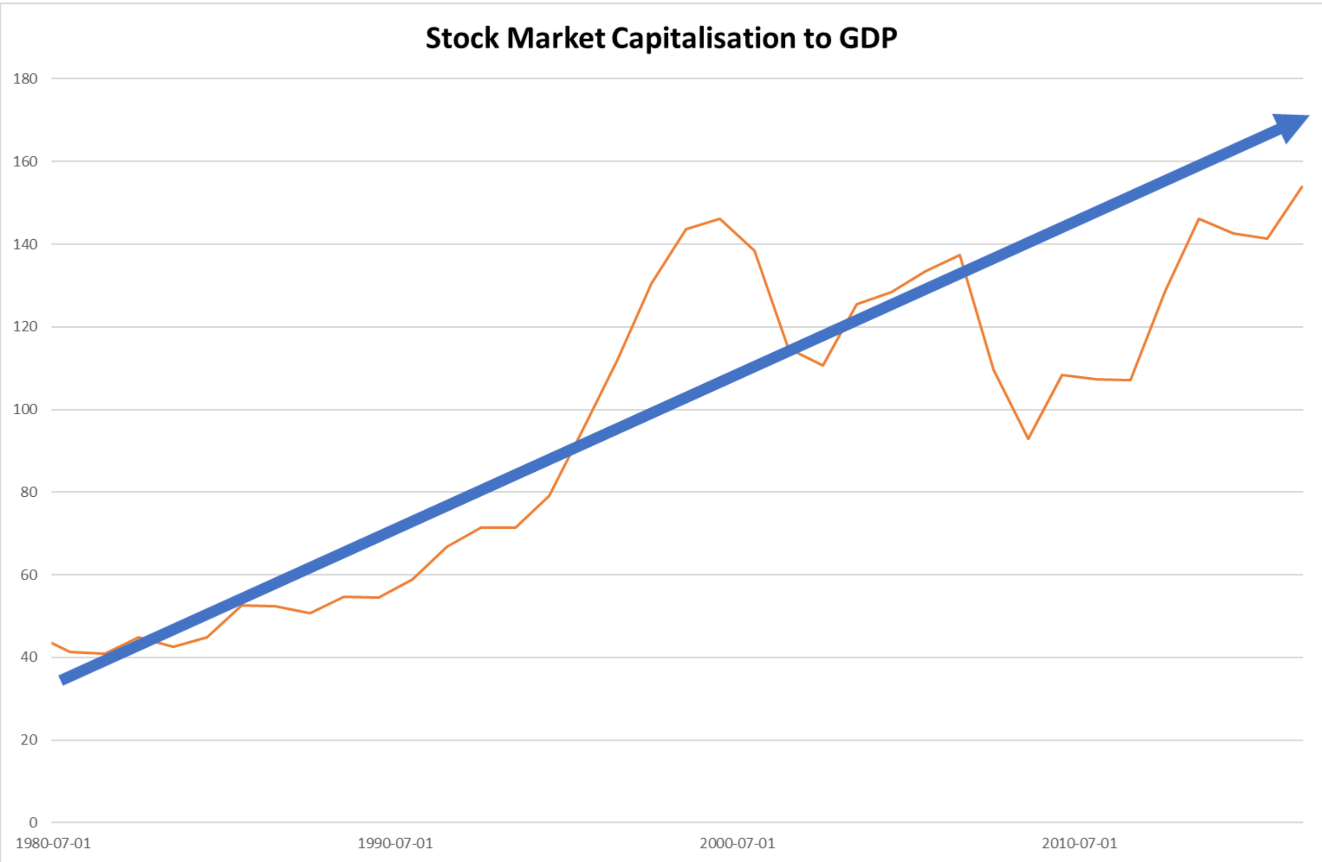



**Chart 4: More Expensive Asset Valuations**



All of this is a massive challenge for an investor trying to deliver a 3-4% real post tax yield to investors. When I first started in the industry you could get 4% real on an inflation linked Commonwealth government bond. Today Australian government inflation linked bonds trade at negative yields (yes that's correct – as I go to print the Australian 10 year CIB is trading at a real yield of -0.015%).

The first point I would make about this environment, is that the past is a poor reflection of the future. In the rear view mirror -the trends of falling interest rates and rising asset values have boosted asset returns (and reduced the size of drawdowns). Looking through the windscreen - these low rates and high starting valuations are a fundamental headwind for investors. Returns will be lower in the future – it is a mathematical certainty of our starting point.

This environment creates a systemic challenge for the Australian superannuation sector (and pension and long-tail insurance investors across the world). From a portfolio strategy perspective there aren't any easy solutions to this. – The optimum response is going to depend critically on whether the trend of the last 40 years can be sustained or whether instead the global financial system has to go through a global debt reset. Neither of which are particularly optimistic scenarios – but the first step of managing any problem is to first identify what the actual problem is!

## Lower base rates - which infrastructure sector wins most?

While the previous article focused on the long-term impact of lower interest rates from an investors' perspective – it is worth looking into the impact of lower base rates on infrastructure asset valuations. This is particularly timely given the 30 June valuation season is upon us – with many unlisted infrastructure assets revalued for year end.

In simple terms, all infrastructure assets will benefit from lower rates. 10 year bond rates have fallen by around 1% since 30 June 2018. This would be expected to flow through into a 1% lower equity discount rate in a typical DCF valuation and, given the long-duration nature of infrastructure cash flows, around a 10-15% uplift in value (assuming no change in cash flows).

However, across infrastructure, all is not necessarily equal. Infradebt divides the infrastructure asset class into four sub-sectors:

- **Contracted Assets** – for example PPPs;
- **Patronage Assets** – such as airports, toll roads and sea ports;
- **Regulated Assets** – such as electricity transmission and distribution networks; and
- **Electricity Generation Assets** – such as solar farms/wind farms.

**Contracted** assets such as PPPs are likely to be the biggest winners from lower base rates. For a PPP the project cash flows are effectively locked in by the concession agreement (assuming no operator defaults/abatements). This means the full benefit of lower discount rates is likely to feed through to valuations. The main exception to this is inflation – some PPPs have CPI linked payments – and inflation is likely to disappoint relative to the 2.5% adopted by many infrastructure investors.

**Patronage assets** also have the potential to do very well (and often can have higher duration – that is interest rate sensitivity -than contracted assets). The main risk to this is economic growth. Long-term growth in patronage is often linked to economic growth (particularly for seaports). This raises a critical question – is the fall in base rates a harbinger of a forthcoming recession/economic downturn? If so, the lower DCF discount rates need to be matched by lower patronage/throughput levels and, hence, lower cash flows. In this context, there is a potential disconnect between the theoretical construct of year end valuations (where the discount rate effect is likely to be fully captured, but the lower growth rates not so much) and the real world.

**Regulated** assets get a much smaller benefit from lower base rates. For most regulated assets, the allowable revenues set by the regulator are calculated on the basis of a regulated rate of the return (the regulatory WACC). Lower base rates will lower this return and, hence, the future cash flows received by investors. If the valuer and the regulator used the exact same assumptions this would mean that lower base rates actually have no impact of asset values.

However, in reality the regulator tends to use WACC assumptions with lower gearing, a higher cost of debt, and a higher equity risk premia than investors. This results in a modest valuation benefit from lower base rates. However, this effect is quite mild, and so probably wont be the key driver of returns this year – more relevant factors are likely to be how optimistic/realistic investors have been relative to regulatory decisions.

**Electricity generation** assets fall somewhere between contracted and patronage assets depending on the project and its contracting status. However, it is worth noting that electricity generation assets are typically valued on much lower EV/EBITDA ratios (7-15 times compared to the 20-30 times that seems ubiquitous for large core infrastructure assets in Australia). A lower valuation multiple implies a lower base rate sensitivity. For these assets lower base rates will boost valuations but electricity prices will be equally important revaluation drivers.

On this basis – across the sectors – we have declared contracted assets the winner from the recent collapse in base rates. As has been the case over most years this decade, we expect that many funds will reveal significant write-ups of their infrastructure portfolios in their 30 June results. We also expect them to also say "Don't expect this again next year". Eventually they (and we) will be right!

## Weak passenger growth trends for airports

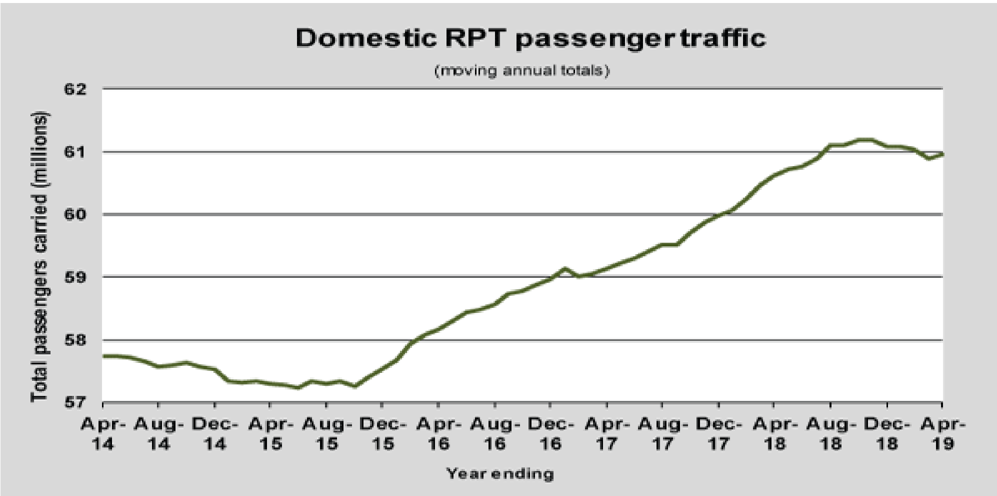
Sydney airport is Australia's largest airport and releases monthly data on passenger and aircraft movements. This provides a near real time window into the health of the Australian airports sector more generally. Sydney Airport's year to May 2019 numbers show a small fall in total passenger numbers. Domestic passengers are the key driver, with numbers down 1.4% on year to date basis, which compares to the 10 year trend of 2%.

Table 1: Sydney airport passenger data – May 2019

| PAX[1] | Monthly Performance | | | Year-to-Date Performance | | |
|---|---|---|---|---|---|---|
| ('000s) | May-19 | May-18 | Growth (%) | YTD-19 | YTD-18 | Growth (%) |
| Domestic | 2,217 | 2,210 | 0.3% | 11,204 | 11,367 | -1.4% |
| International[2] | 1,293 | 1,217 | 6.3% | 6,996 | 6,855 | 2.1% |
| Total | 3,510 | 3,427 | 2.4% | 18,200 | 18,221 | -0.1% |

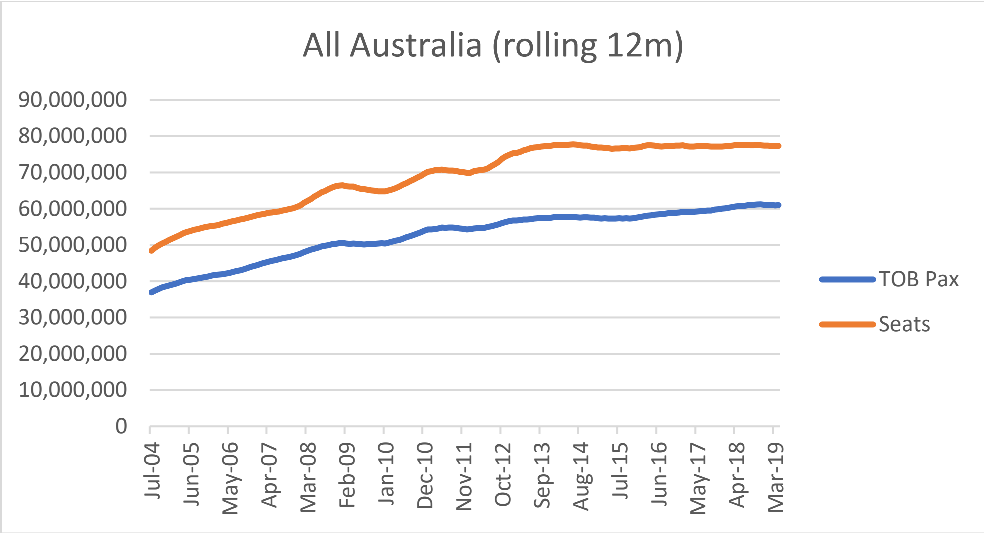
Domestic passenger numbers in Australia peaked in August 2018 and have dipped ever since. The last time domestic passenger numbers fell was in 2014 to 2015 when there were global fears of a slowdown in the Chinese economy (which have resurfaced again with ongoing trade tension).

Chart 1: Domestic passengers - Australia




Looking at Australia more broadly, domestic seat capacity has flatlined since 2013 when Qantas and Virgin ended their capacity and price war. Available seats have been stagnant since 2013 with load factors increasing over the period.

Chart 3: Domestic passengers – Australia rolling 12 months




Domestic airfares have trended upwards over the period. Flexible economy fares – typically preferred by business travellers - spiked in late 2017 (Chart 4). The cheapest economy fares have been tracking upwards with a seasonal peak during the summer holidays and a lull in winter (Chart 5).

Chart 4: Domestic airfares – Flexible tickets

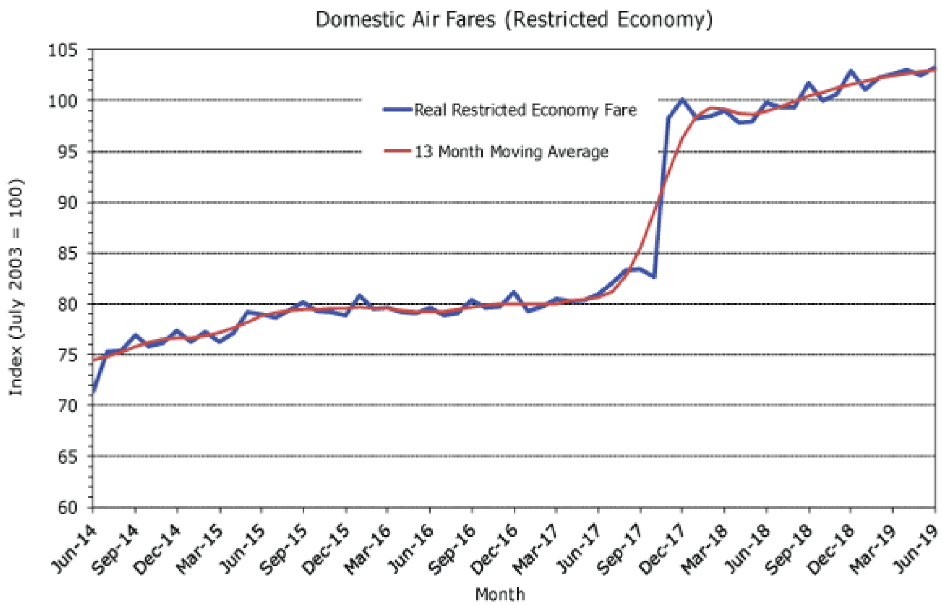
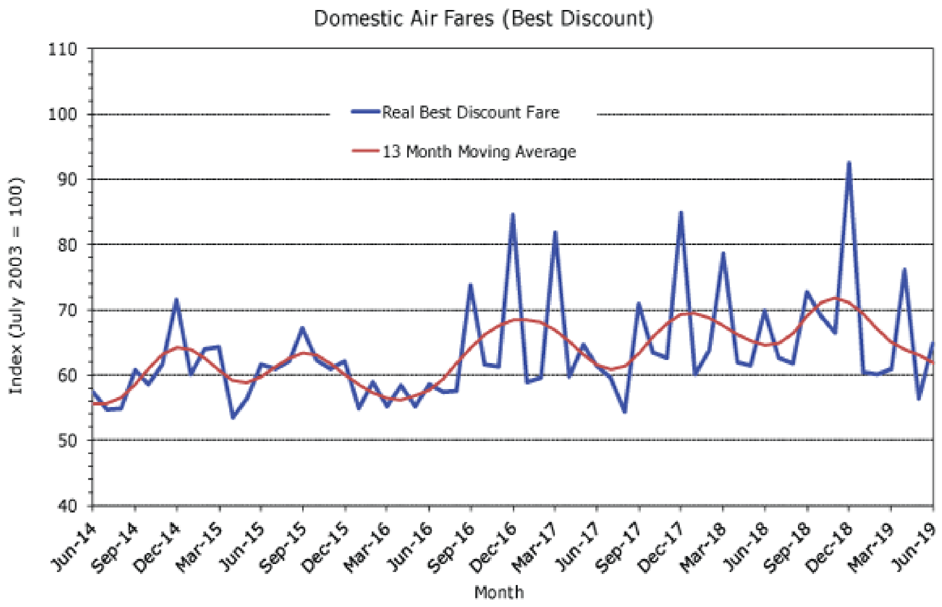
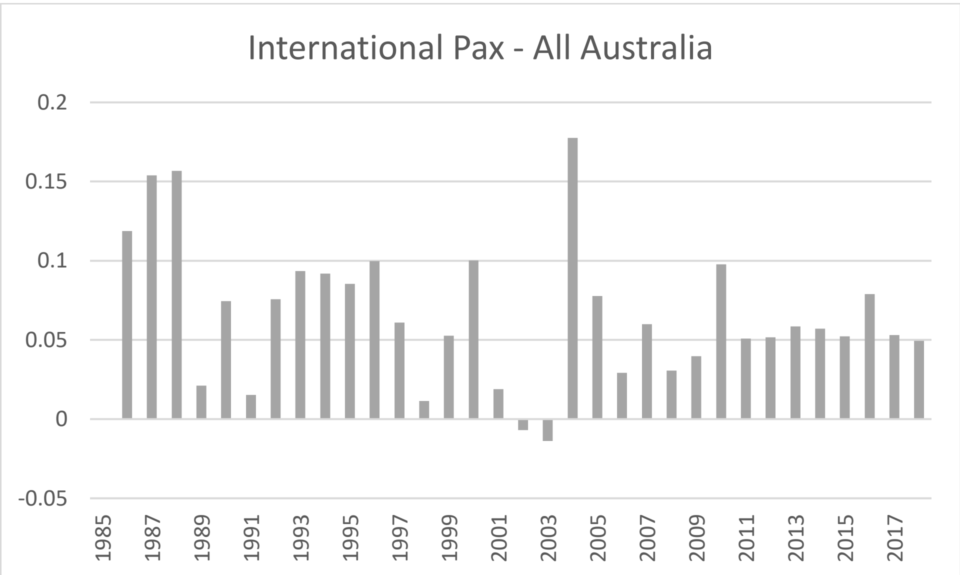


Chart 5: Domestic airfares – lowest cost ticket




On the international passenger side, the 10 year passenger average growth rate is circa 5%. Sydney airport is reporting 2% year to date passenger growth for May 2019 which suggests there has been a slowdown in international passengers this year. From an outbound passenger perspective – this reflects the low Australian dollar as well as weaker consumption spending patterns in Australia (which are in turn linked to house prices). From an inbound perspective, the weakness may reflect the impact of trade tensions (and tighter restrictions on foreign currency purchases for Chinese travellers) but it hard to get definitive data on this at the moment.

Chart 6: Annual international passenger growth – Australia




Airports have proven to be resilient infrastructure assets over the long-term. Passenger volume growth rates move with the economic/competition cycle. While periods of below trend growth do occur (… roughly half the time) history provides confidence that these periods are reasonably short-lived and number/growth rates return to the long-term trend over time.