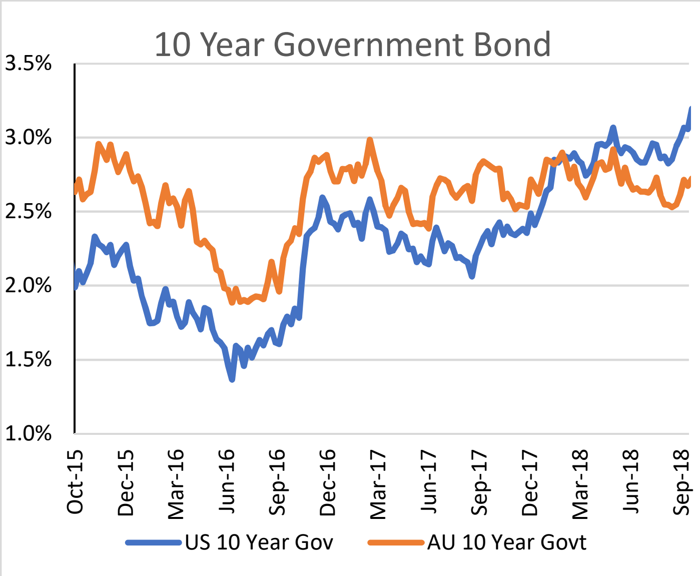
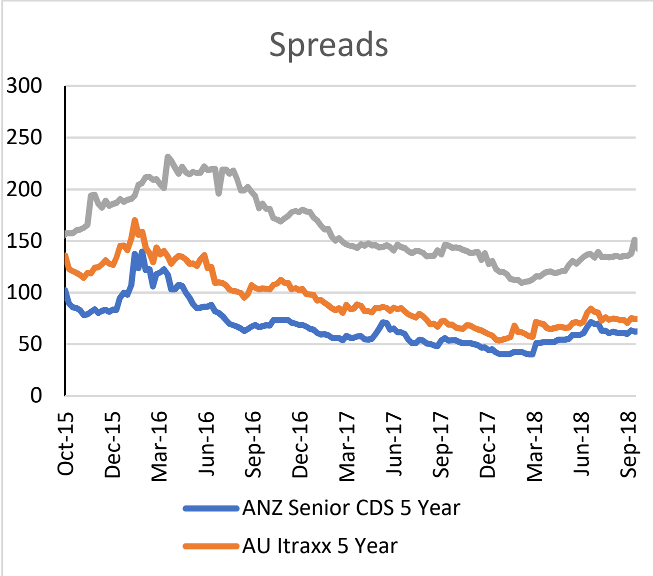
Introduction

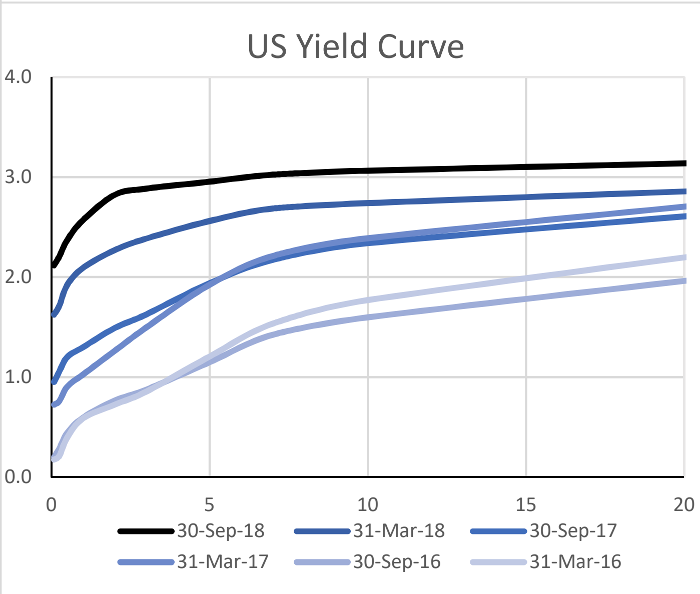
This quarter’s newsletter is a little later than usual, but it has allowed a few more days to pass on what has been a very interesting period (relative to the last few years) for markets.

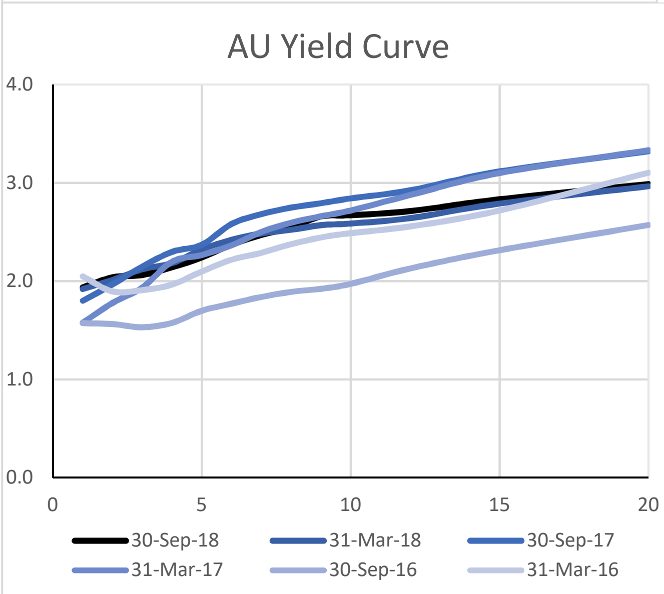
Markets update

Since the beginning of the year the Trump administration has announced an increasing number of trade tariffs that are causing palpitations in markets. The resulting higher US interest rates have triggered a protracted emerging market sell off over the period (most notably in Argentina). The Fed has officially removed “accommodative” from its monetary policy statements and interest rates in the US continue to grind higher. The 10 year spread differential between the Australian 10 year and the US 10 year is now close to minus 50 bps. The charts below show a dramatic movement in the yield curve for the US whilst little has changed in the Australia yield curve. The USD continues to rise with the AUD/USD cross rate falling from circa 0.75 to 0.70..









New issuance and refinancing

The table below provides a list of publicly available deals.

Date	Borrower	Instrument	Size (m)	Term (Yrs)	Curr.	Pricing/Notes
September	Endeavour Energy	Loan	800/100	7/12	AUD	Refinance
September	Royal North Shore Hospital	Loan	1,044	?	AUD	Refinance
August	Ausnet	Loan	300/100/300	5/6/7	AUD	Refinance
August	Transurban	Loan	1,000	Bridge	AUD	Bridge
August	Victorian Land Registry	Loan	1,600			
August	Collgar Wind Farm	Loan	475			
August	Port of Brisbane	Loan	100/200/150	3/5/7	AUD	Refinance
August	Newcastle Coal Infrastructure Group	Loan	200	7	AUD	Refinance
July	Numurkah Solar Farm	Loan	112	16	AUD	60% contracted. BBSY+160
July	Port of Newcastle	Loan	1,000	3/5	AUD	Refinance. BBSY+170
July	White Rock Wind Farm	Loan	280	5	AUD	BBSY+160
July	Crookwell II Wind Farm	Loan	200		AUD	
July	Granville Harbour Wind Farm	Loan	113	5	AUD	BBSY+160

Equity and other news

- The Transurban consortium were the winning bidders for 51% ownership of Wextconnex. The consortium includes Transurban (50%), AustralianSuper (20.5%), Canada Pension Plan Investment Board (20.5%) and Tawreed Investments (9%). Transurban is raising the bulk of the purchase consideration through equity – A$4.2bn via a 10-for-57 accelerated pro rata renounceable entitlement offer plus A$600m through a placement to AustralianSuper and Tawreed. It is the largest transport project in the city since the Sydney Harbour Bridge, which was completed in 1932.
- First State Super are the winning bidders for the 40-year Victorian Land Titles concession for $2.86 billion. The concessions allows First State Super to levy fees on property ownership registrations in Victoria (currently

Australia's fastest growing State). The state government will keep control of essential services, such as land subdivisions applications and estate registrar services.

Funding squeeze

Operating toll road assets are an attractive low volatility sector for infrastructure investors. They benefit from high operating margins and long concession lives which leads to high quality forecastable cash flows. History has demonstrated that revenue volatility of existing toll roads is very low. Qualities that lead to their low risk profile are:

- Monopoly type characteristics with long term concessions from Government,
- Low demand elasticity and resilience to economic fluctuations,
- Predictable mechanisms for tariff increases to sustain revenues over the long term, and
- Typically well-established competitive dynamics with other methods of transportation.

New build toll roads have been a high risk proposition in recently history. Over the past 20 years there have been a significant number of greenfield toll road bankruptcies in Australia and around the globe due to over optimistic traffic forecasts. Every patronage troll road opened since 2005 has underperformed the base case traffic forecast. The average under performance is 50%.

Toll Facility	*Opening Volume (Daily Forecast)*	*Opening Volume (Daily Actual)*	*Ratio (Actual/Forecast)*
Cross City Tunnel, Sydney	85,000	27,000	0.32
Lane Cove Tunnel, Sydney	104,786	44,420	0.42
Clem7, Brisbane	60,000	26,711	0.45
Airport Link, Brisbane	135,000	47,000	0.35
Eastern Distributor, Sydney	33,000	27,000	0.82
M2 (Hills), Sydney	72,000	40,000	0.56
M7 (Westlink), Sydney	196,500	94,808	0.48
EastLink, Melbourne	259,000	149,000	0.58

Source: Black (2014).

Over the last decade the market has lost appetite for patronage risk on new build toll roads. The Governments response was to move to availability payment structures such as on Peninsula Link in Victoria and Transmission Gully in New Zealand. For Westconnex the New South Wales Government has built a portion of Stage 1 (M4 West) before selling the rest of the concession. The procurement of Westconnex seems to be a partial movement back to the private sector adopting a level of patronage risk.

Transurban have majority ownership of all other existing Sydney toll roads - Lane Cove, Cross City tunnel, M2, M7 (50%), M5 (50%) and the M1 Eastern Distributor (75%). Given their ownership of the existing toll road network they would have the best visibility on potential patronage over all other bidders. They are also the only bidder with potential synergies with an existing network (both in terms of operating costs as well as from a cost of capital perspective). The traffic history of the M4 West and M5 West and East available to Transurban, which significantly reduces patronage forecast risk.

In terms of the deal, the Transurban consortium will acquired 51% of WestConnex for $9.3 billion with the remainder staying in ownership of the NSW Government. Total enterprise value is $18.2 billion. The Project is predominately a greenfield project and widening of the existing M4 and M5 motorway as well as linking the two motorways together around the Sydney CBD, Sydney Airport and Port Botany. The Project has a concession to the end of 2060 and is for

388 km of lane highway (or 33 km of motorway). The first full year of operations is expected to be in 2028. Toll escalation under the concession is a greater of CPI or 4% until 2040 and the greater of CPI or 0% after.

The major components of the concession are broken into 3 stages,

1. Stage 1: M4 concession
   a. M4 west (widening) – completed July 2017
   b. M4 east (new) - expected completion late FY 2019
2. Stage 2: M5 concession
   a. M5 east (new) – expected mid FY 2021
   b. M5 west (existing) - concession to be included in Westconnex from 2026. Currently owned by Interlink Roads (which includes Transurban and other Superfunds)
3. Stage 3: M4-M5 link concession and Rozelle Interchange
   a. M4-M5 link (new) - expected late FY 2023
   b. Rozelle interchange (new) – expected FY 2025

Transurban has given guidance that they expect the Westconnex concession to almost double the amount of revenue from their existing Sydney toll roads. The level of forecast EBITDA has not been disclosed but guidance has been provided that it is somewhere in line with their past acquisitions. The Cross City Tunnel was acquired in March 2014 at 18x EBITDA and Airportlink M7 was acquired in November 2015 at 28x. Presumably the acquisition multiple is somewhere around 28x – although exactly how to calculate an EBITDA multiple on a project that doesn't reach full operations for almost a decade is slightly tricky.

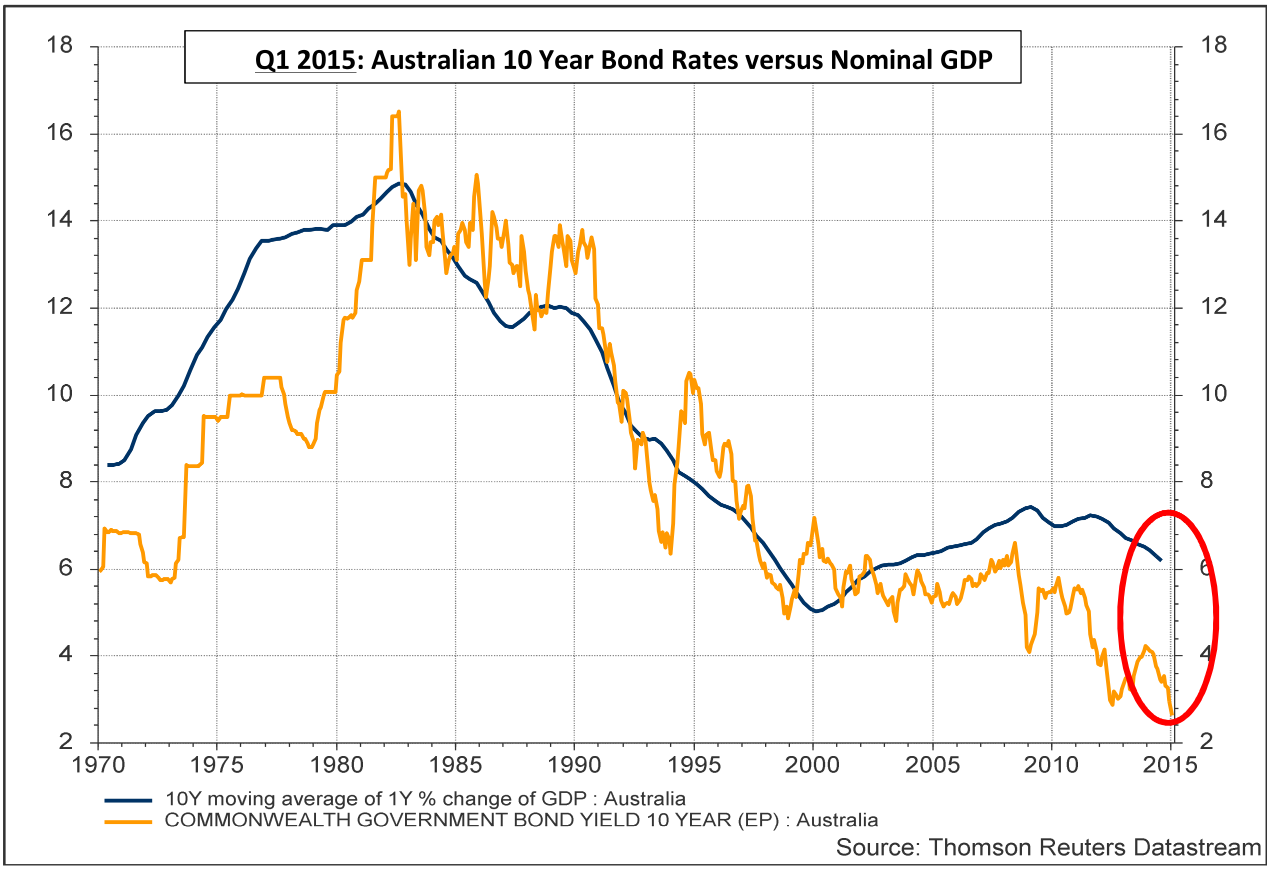
Transurban claim that 6% of forecast revenue is entirely greenfield with the remainder an overlap of existing brownfield sites or well developed travel patterns. The greenfield site is contained within stage 3 where there seems to be significant demand given the connections to Port Botany and Sydney Airport. In theory Transurban should have all the data available to it given it runs the existing brownfield network.

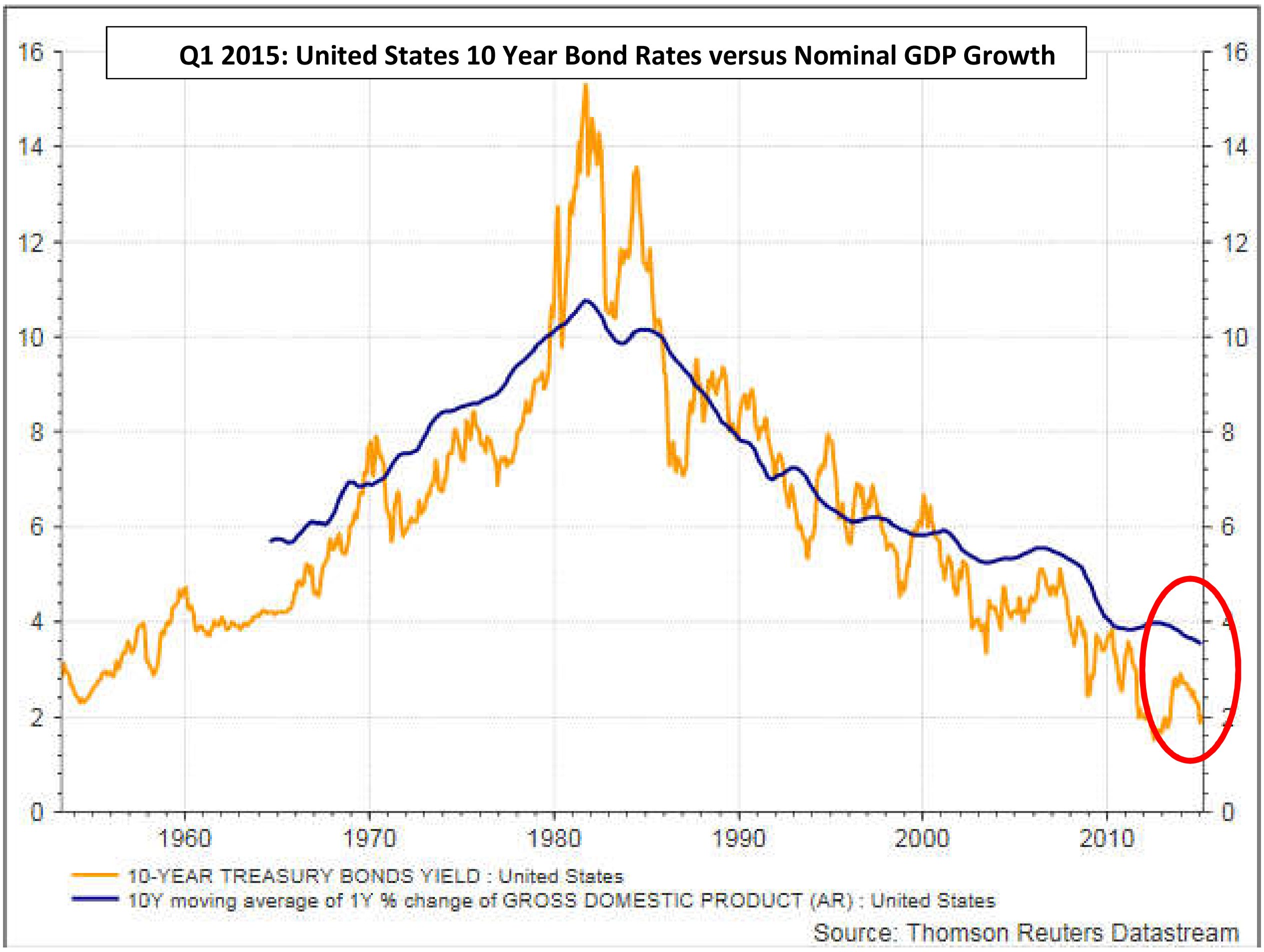
It will be fascinating to watch how this plays out over the years. Infradebt's view is that 28x is a very high multiple to pay particularly into the headwind of rising base rates (a headwind for all infrastructure in general), but against this there are several compelling features in relation to the transaction structure, and certainly whilst high this comparable to other core infrastructure transactions completed of late.

Long term interest rates vs nominal GDP growth redux

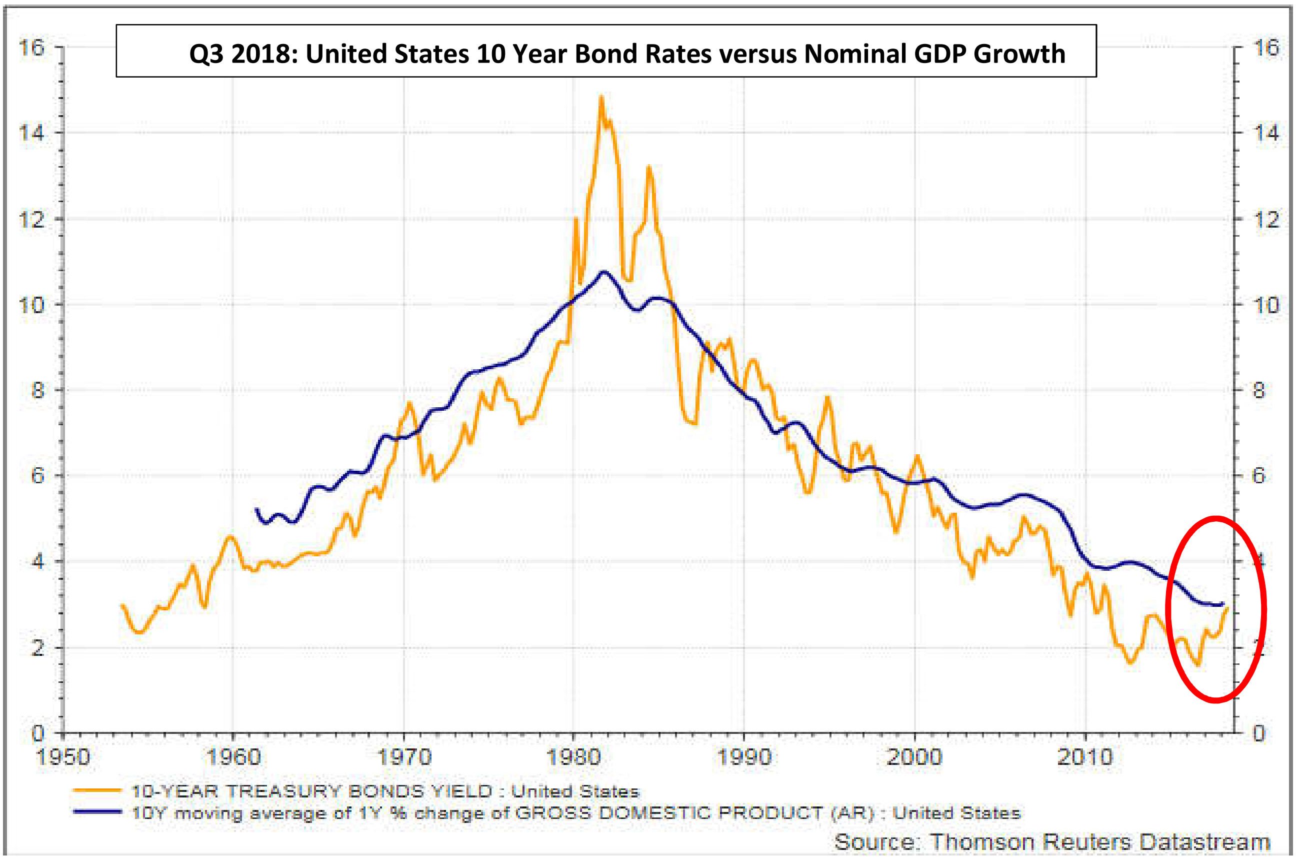
Back in Q1 2015 we published an article looking at the long-term relationships between 10 year bond rates and nominal GDP. Economic theory suggests on average risk free interest rates (proxied by the 10 year bond rate) should match the long-term nominal growth rate in the economy (proxied by nominal GDP).

In our 2015 article we provided two graphs of this relationship since the 1970s – one for the US and the other for Australia. These charts showed the relationship had held pretty well over time – but over the last few years a big gap had opened up – with 10 year bond rates well below nominal GDP. See below for the charts from our 2015 article.



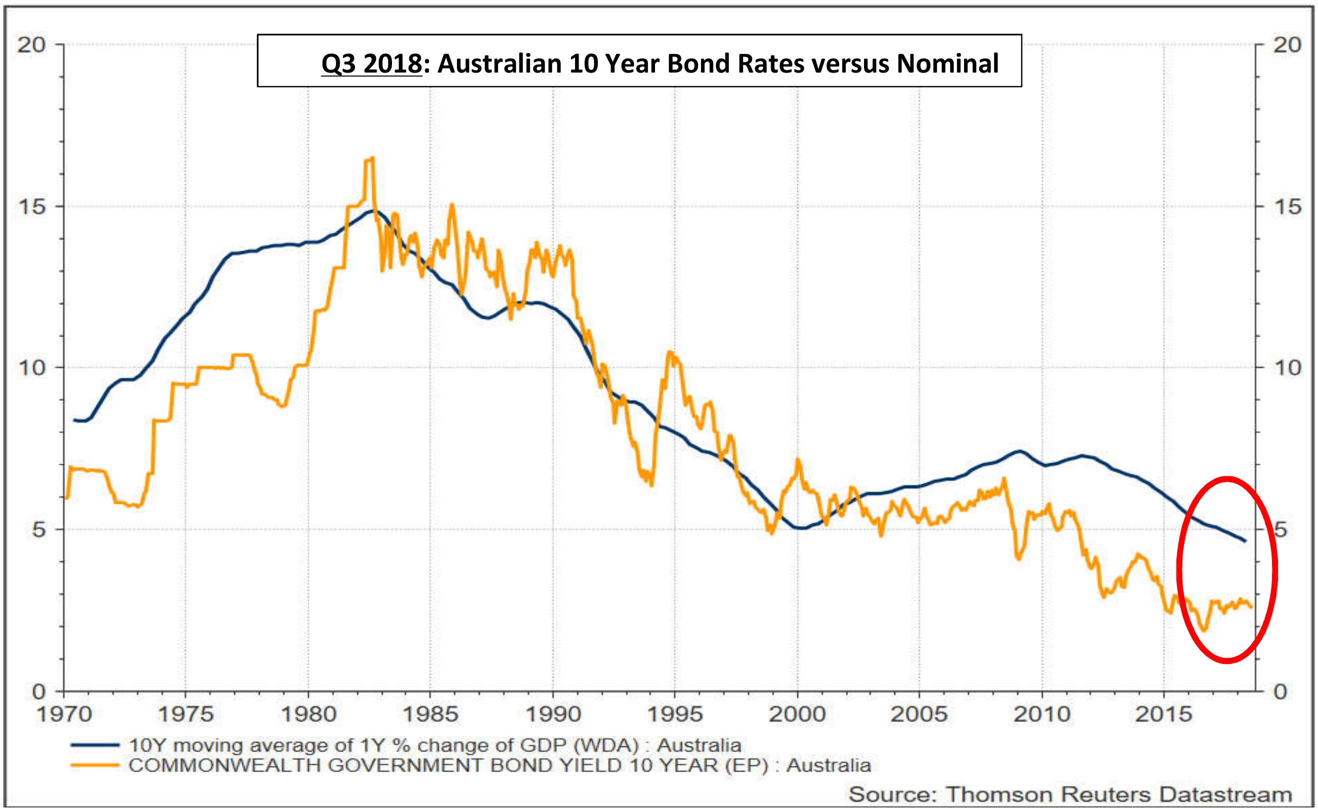


In the 3½ years since, rates have remained low. However, US rates have moved up decisively over the past 6 months and now have closed the gap with nominal GDP – see the chart below. Score 1 for economic theory!



However, the theory doesn't seem to apply in Australia. While Australian 10 year bond rates have moved up modestly compared to their all-time lows, they are still well below the levels implied by trends in nominal GDP growth.

The interesting question is will this gap close, and if so, will it be due to higher bond rates, lower GDP growth or lower inflation. These are important questions for infrastructure investors.



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.

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