

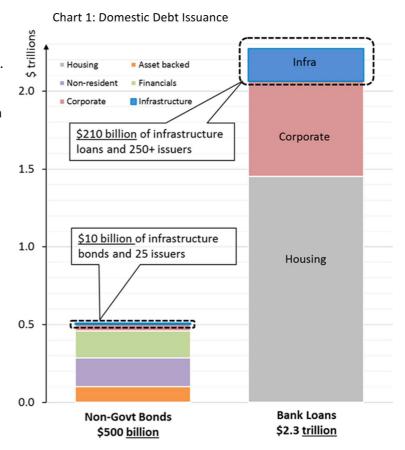
Term anomaly

We've touched on this topic in the past – the extra compensation for providing medium to long dated finance in Australian dollars to Australian borrowers.

Excluding sovereign and semi-governments, Australia's debt market is approximately \$2.8 trillion - but as can be seen from Chart 1- this market is dominated by bank lending.

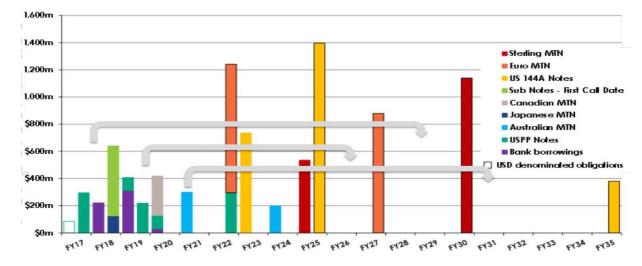
Bank regulation encourages banks to match loans with the tenor of wholesale funding. Loans that are longer than the underlying funding are penalised with higher capital requirements. This encourages loans to be 3-5 years. Banks can lend longer – for example, for PPPs with long construction phases – but generally don't.

Compared to the bank loan market – the Australian bond market is tiny - particularly for infrastructure borrowers (\$10 billion vs \$200+). The bond market is only practical for issuers with a rating and able to issue in large individual maturities. This limits the bond market, as a practical source of funding for all but the larger Australian infrastructure projects



(think Sydney Airport and Transurban). Even then, the limited liquidity of the Australian market – and consequent higher margins – limits the appeal of the local market.

Whilst infrastructure projects have high operating margins (~70%+), many have relatively fixed cashflows. The GFC highlights that a 30 year project with 3-5 year debt can be very severely impacted by a credit shock, thus depending on their leverage, projects seek to reduce refinancing risk through diversifying their debt stack by maturity and market (economic infrastructure) or seeking finance that matches the length of cashflows (availability projects). APA provides a good example:



So, aside from the domestic bond market (which caps out at 7-10 years), where can borrowers go to get this longer tenor? Simplistically, there are two markets: offshore public markets (e.g. US 144A) or the US Private Placement





market. Offshore public market bond issues typically have a minimum issue size of \$250-500 million. This means they are really only for the very largest Australian infrastructure issuers (e.g. APA, Transurban or Sydney Airport).

The vast majority of infrastructure projects (EV < \$2 billion) can't access these markets efficiently. The USPP market is relatively efficient, whilst the last 12 months seems somewhat slower than previous years, there continues to be a steady stream of Australian projects seeking multi-tranche loans (typically 10-15 years, with a few 20 year loans). The majority of USPP lending is in USD, with occasional small AUD denominated tranches. For example, Brisbane airport recently issued USD 300m in 10,12,15 year tranches and a AUD 50m 20 year tranche.

As you would expect longer dated lending receives a term premium, but in addition, borrowers in offshore currencies require hedging. Swap lines are disproportionately provided by Australian banks, resulting in some crowding effects (domestic lending and ability to access long-dated swaps). They also incur costs. Typically swap costs are 40-60 bps pa – this includes the credit/execution margin and the cross-currency basis.

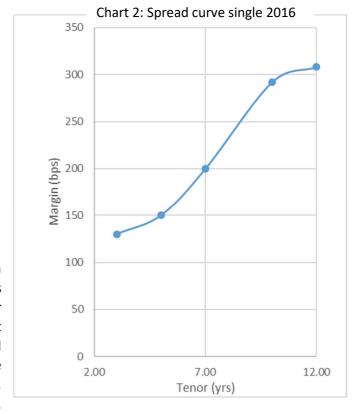
Thus for investors, in addition to obtaining additional margin for term, lending in AUD also receives an additional

boost through avoided swap costs.

To illustrate we have selected one domestic economic infrastructure project who issued debt in 2016. Chart 2 shows the spread curve over the term provided across all tranches (3 – 12 years – 5 tranches in total).

You can see a significant step up in margin for providing tenor. This margin reflects the full cost to the borrower (ie margin plus swap costs) – all issuance took place on the same day and was a combination of bank debt and USPP issuance swapped back to AUD.

We've used a single project to highlight the term premium, we've also chosen a period when spreads are relatively tight (as evidenced by the 3 year margin). The project, whilst not rated, would meet the characteristics of investment grade, and importantly, relative to its sector peers and the broader infrastructure sector, it has low leverage. Each tranche takes the same exposure to the project,



and ranks equally. The key differences are liquidity (earlier maturity) and repricing (short term lenders effectively get to reprice their margin).

Banks are arbitrage lenders. That is they are focused on maximising the return from the difference between the rate they lend and the rate they borrow. Short-term lending lowers the risk of this arbitrage as they are able to match the term of the loan with their underlying funding.

Super funds are fundamentally different investors. Their objective is to maximise the long-term returns of members capital within risk/liquidity constraints. Super funds don't have the option of returning members funds if spreads have decreased. This means shorter dated lending – while more liquidity – inherently involves significant reinvestment risk.

Importantly, at today's swap rate, the longer dated pieces deliver an all in return 5.5% -6.0% or a real post tax return of 2.5-3%. Given where most fund's overall return targets are set – this is a pretty attractive long-term return. This highlights the opportunity for super funds who can accept lower liquidity and are to lend to quality Australian infrastructure projects.