How tight can semi-spreads go post QE?

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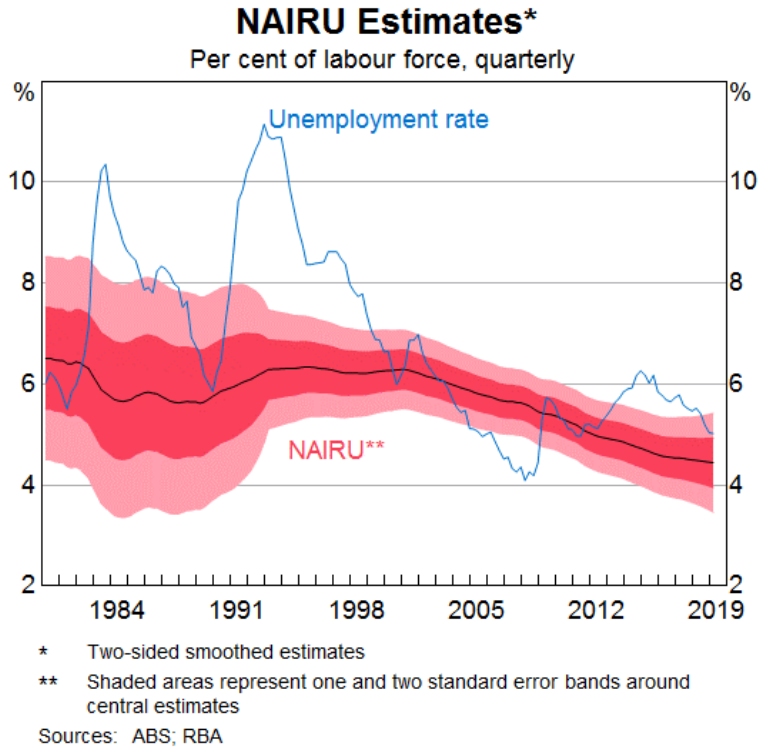
This brief note seeks to provide some evidence on how tight state government (semi) bond spreads in Australia could go in an environment in which the RBA is seeking to drive the jobless rate back to its full-employment (NAIRU) level. Pre-covid-19 estimates of the NAIRU published by the RBA were around 4% to 4.5% (see Ellis (2019)) while Treasury has recently parameterised the NAIRU at 4.75% to 5.0%. The chart below shows the RBA's 2019 estimates.



Coolabah's Chief Macro Credit Strategist, Keiran Davies, published a research report in October on the likely contours of the RBA's next monetary policy stimulus program, which you can read here. Kieran also provides a sensitivity table that summarises the amount of QE required by the RBA in order to get the jobless rate down to different NAIRU estimates. He writes:

> *Given that a key input into this [QE] calculation is the NAIRU, we explored the impact of alternative scenarios on the estimate of QE. Assuming that the NAIRU is unchanged from the RBA's pre-virus estimate of 4.5% – or, more plausibly, it may have been lower than the RBA's figure – the RBA would have to do about twice as much QE as we have estimated and/or call on additional government support. Alternatively, if the NAIRU is closer to 5.5%, the analysis suggests that the RBA can broadly rely on existing policy settings, including a full drawdown of the Term Funding Facility, to eventually achieve full employment.*

Figure 3: The impact of alternative scenarios for the NAIRU for QE

	Assumed NAIRU:			
		RBA pre-virus estimate	CCI assumption	
	4.0%	4.5%	5.0%	5.5%
Estimated QE $bn	404	272	140	8

Source: Coolabah Capital

One can see that at the RBA's pre-COVID-19 estimated range for the NAIRU, the implied QE requirement is very large at between $272bn to $404bn. Note, however, that Kieran's forecast range is lower at $115bn to $180bn given he has adopted a higher 5% point estimate for the NAIRU.

Evidence on Spreads and the Impact of QE

The section below provides an historical comparison between spreads on bonds issued by KFW, a German state-owned development bank, and the yield on German (government) bunds. We also examine the spreads on NSW Treasury Corporation (NSWTC) bonds relative to (1) Australian Commonwealth government bond (ACGB) yields (known as the "G-spread") and (2) the swap rate on a matched maturity basis for 5 year and 10 year maturities (called the "I-spread").

What is evident from the data is that the ECB's QE initiative via the public sector purchase programme (PSPP) in March 2015 initially drove the 5- and 10-year KFW-Bund spread into negative territory.

There is a significant risk that further QE from the RBA, in addition to continued demand from bank balance sheets fuelled by increases in the size of the RBA's Term Funding Facility, the winding down of APRA's $223bn Committed Liquidity Facility, and excess ES (cash) balances held at the RBA could accelerate the compression of the 5- to 10-year semi vs ACGB spread towards zero.

In fact, it's possible semis could trade on negative G-spreads given I-spreads (or spreads above swap) remain at historically very attractive levels for bank balance-sheet buyers and the fact that the supply of semis is going to be relatively constrained compared to the supply of Commonwealth government bonds.

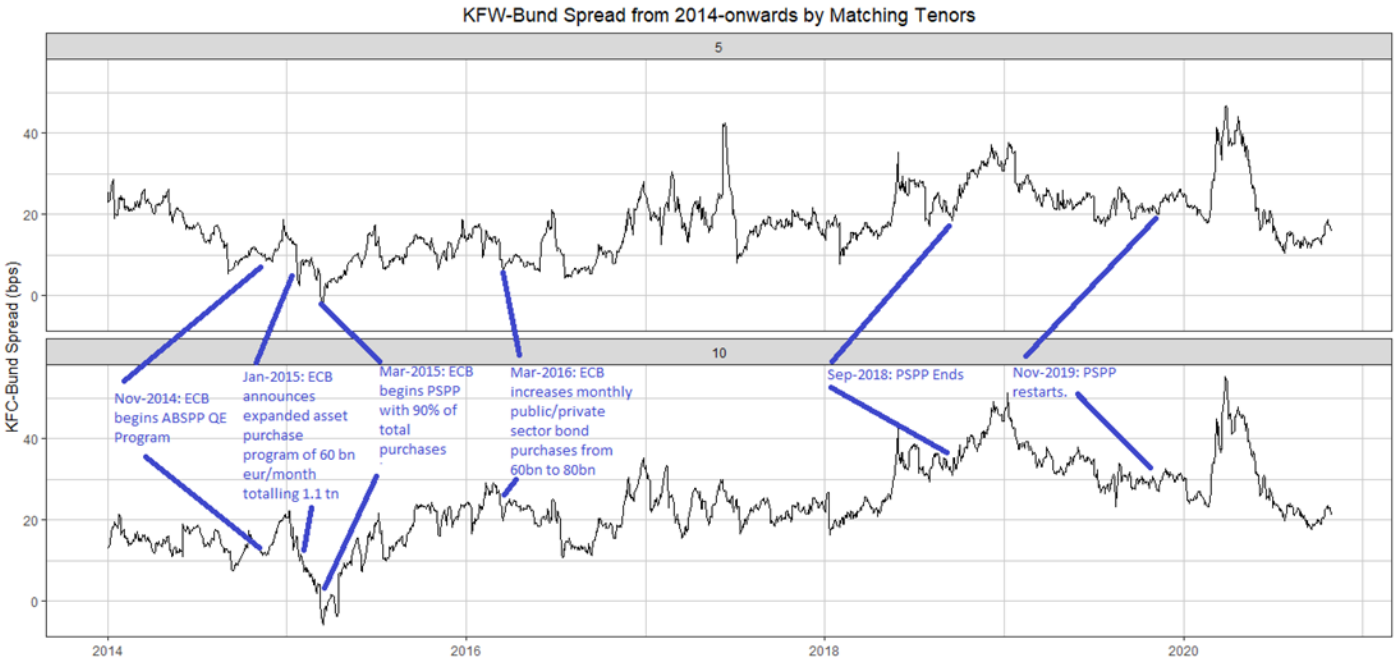
KFW-Bund Spreads (From 2014 – now)

The introduction of the ECB's PSPP in March 2015 removed the free float of KFW bonds from the market driving the 5- and 10-year KFW-Bund yield spread into negative territory. Enclosed below is the data for 5- and 10-year constant maturity KFW-Bund spreads. Base data is sourced from Bloomberg.

The QE-driven tights for KFW-Bund spreads are negative at the 5- and 10-year tenors with the 5th percentile spreads sitting between 1bps and 11bps respectively.

KFW-Bund Spreads (From 2014 – now)					
Summary of Tights/Levels in bps (2014 – now)					
Tenor (yrs)	**Min**	**5th Percentile**	**10th Percentile**	**25th Percentile**	**Median**
5	-7.1	1.1	5.2	12.5	19.9
10	-6.2	10.8	14.2	18.1	23.9

Source: Bloomberg, Coolabah Capital Investments



Source: Bloomberg, Coolabah Capital Investments

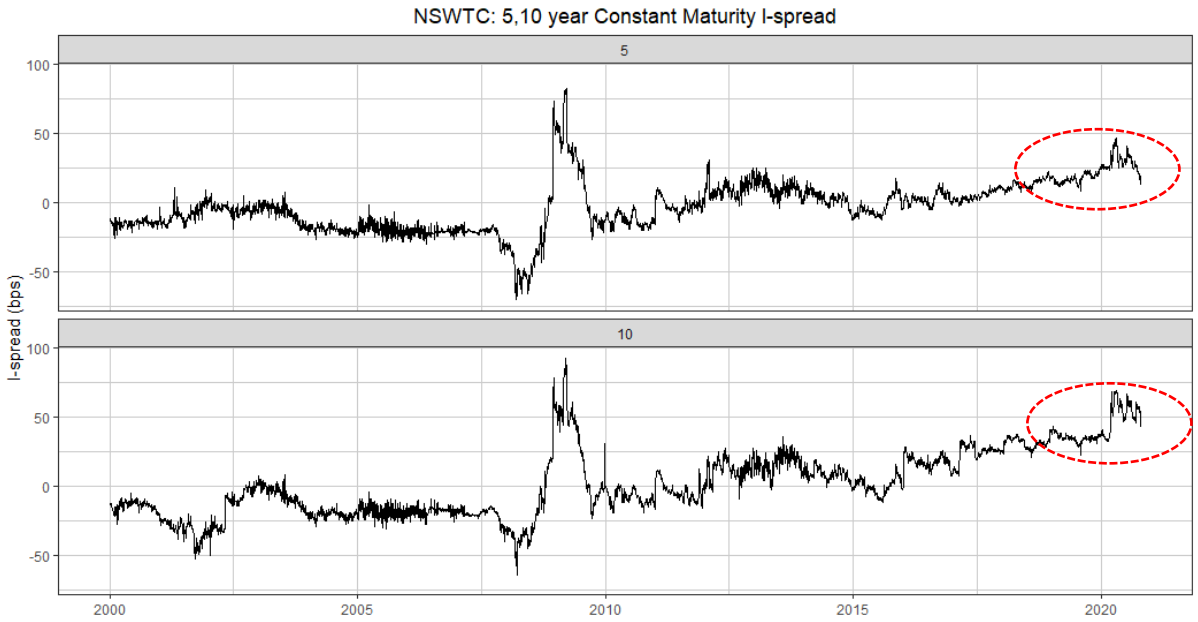
TCorp I-Spreads (From 2000 – now)

Here we show the 5- and 10-year constant maturity I-spreads for NSWTC (bond yield vs matched maturity swap yield) as a proxy for the asset swap spread. Data is sourced from the RBA and Bloomberg. Bank balance-sheets, which own about 50% of the semis market, are most focussed on I-spreads rather than G-spreads because they hedge out interest rate risk to a floating-rate spread above the quarterly bank bill swap rate using so-called asset swaps.

The table shows that the historical tights for 5-year and 10-year I-spreads are materially negative. Observe also in the chart overleaf that I-spreads look historically very cheap for banks notwithstanding some recent spread compression.

TCorp I-Spreads (From 2000 – now)					
Summary of Tights/Levels in bps (2000 – now)					
Tenor (yrs)	**Min**	**5th Percentile**	**10th Percentile**	**25th Percentile**	**Median**
5	-70	-24.8	-21.5	-16	-3.9
10	-64	-31.5	-24.6	-17	-2

Source: Bloomberg, Coolabah Capital Investments



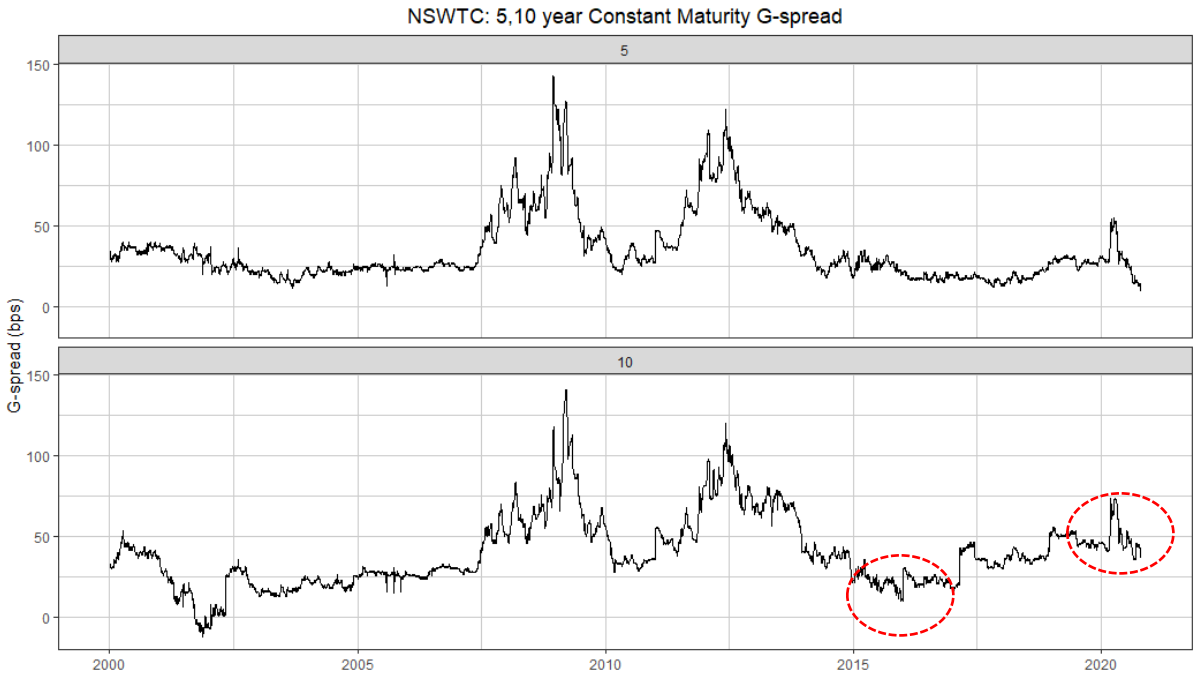
Source: Bloomberg, Coolabah Capital Investments

TCorp G-Spreads (From 2000 – now)

Finally, we examine the 5- and 10-year constant maturity G-spreads for NSWTC (NSWTC bond yield vs interpolated ACGB matched maturity yield) as a proxy for NSWTC spread to bond. Data is sourced from the RBA.

The table illustrates that the tights for 5-year and 10-year G-Spreads are in the single digit or negative territory and likely an artefact of withholding tax distortions that created unusually high demand for semis prior to the GFC. The chart overleaf shows that 10-year G-Spreads still look very cheap relative to the tights in the post-GFC period.

TCorp G-Spreads (From 2000 – now)					
Summary of Tights/Levels in bps (2000 – now)					
Tenor (yrs)	**Min**	**5th Percentile**	**10th Percentile**	**25th Percentile**	**Median**
5	9	16	18	22	27
10	-12	14	18	25	36



Source: Bloomberg, Coolabah Capital Investments

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