Bank Treasury

Special Interest Group 16 Nov 2018 11am – 1.15pm

Deloitte.



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CONFERENCE



APRA Funding and Liquidity

Topics for 2019

- Short-term wholesale funding for MLH ADIs
- Changes to reporting forms ARF 210.3 and 210.4
- Enhanced liquidity fire drill reporting
- Basel update for liquidity
- Elevated OIS to BBSW spreads
- Buffers over MLH, LCR and NSFR regulatory minimums

Finance & Treasury Association's 31st annual conference

16 November 2018

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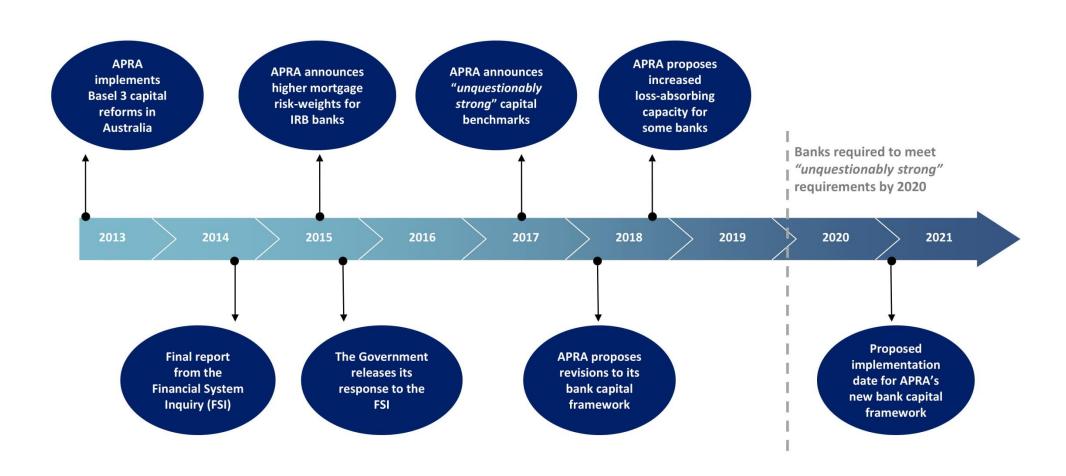
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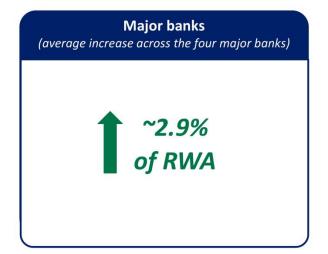
Snapshot of recent substantive Australian bank capital reforms

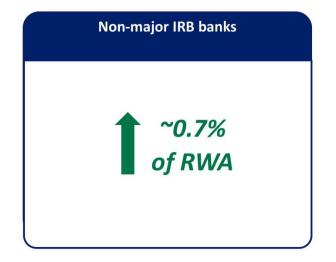


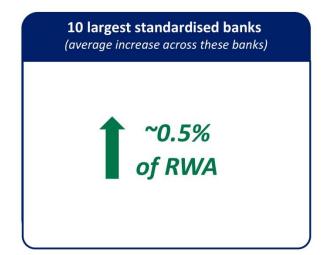


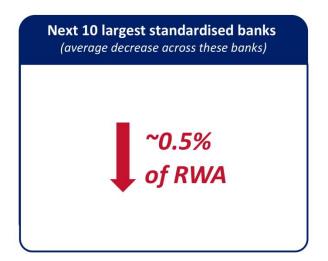
How much have CET1 ratios increased over the last 5 years?







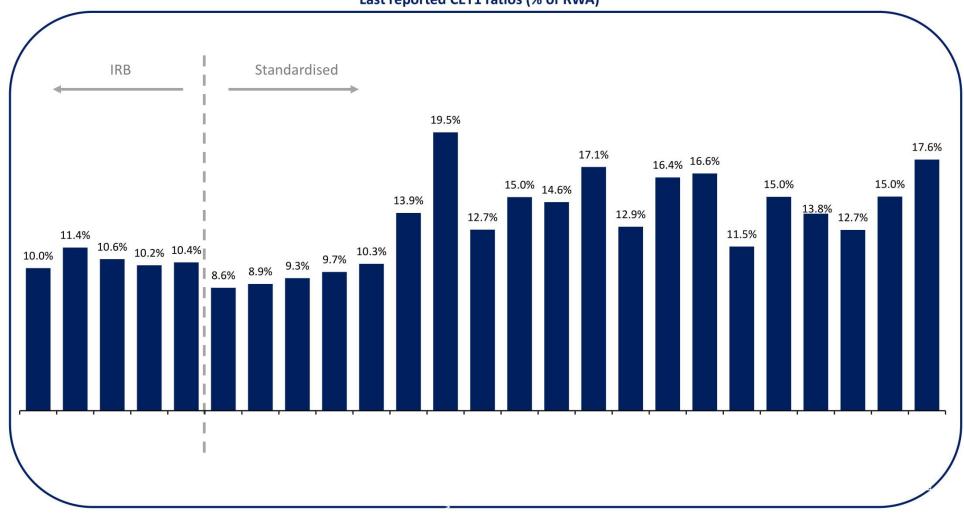




Current CET1 ratios for Australian banks

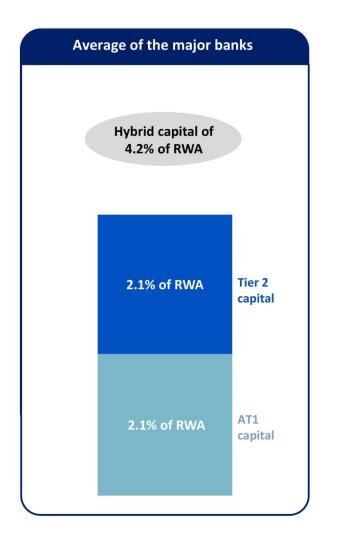


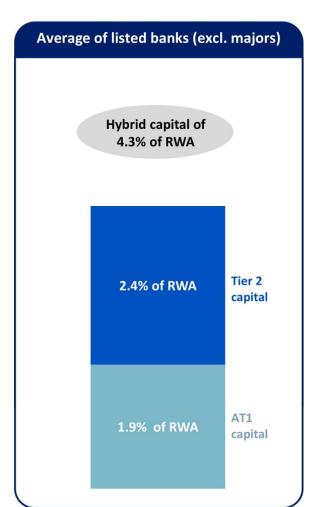


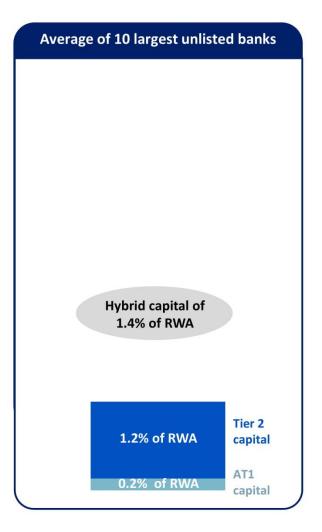


How much hybrid capital are Australian banks utilising?









Why do banks utilise hybrid capital?



Hypothetical capital stacks Illustrative cost comparison 14.0% total capital 14.0% total capital T2 = 2.0% CET1 ~10% cost of capital p.a. AT1 = 1.5% ~6% cost of capital p.a. AT1 (including franking credits) **CET1 = 14.0% CET1 = 10.5%** ~4% cost of capital p.a. T2 (pre-tax cost)

BBSW: The Ties that Bind



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November 2018





- Best Overall Research on Australian Fixed Income
- Best Research and Analysis of Australian Government and Semi-Government Bonds
- Best Relative Value Research in Australian Debt Market
- Best Trade Ideas
- Best Research on Supranational, sovereign and agency bonds
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- Domestic Corporate Bond Research
- · Bonds/Semi's Relative Value Research
- · Bonds/Semi's Most Useful Axe Sheets
- Corporate Bonds/FRN's Market Share (Equal)

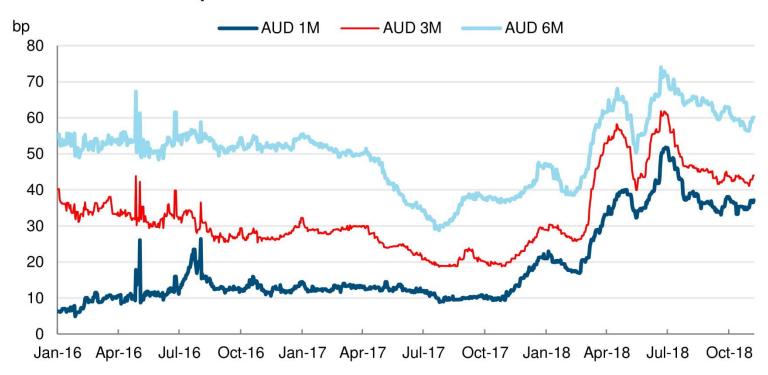


- Supranational Debt Overall Quality of Service
- · Bonds/Semi's Domestic Market Flow Feedback
- · Short Dated Securities Market Share

BBSW spreads widening

All maturities have risen

Spreads between Australian BBSW and OIS

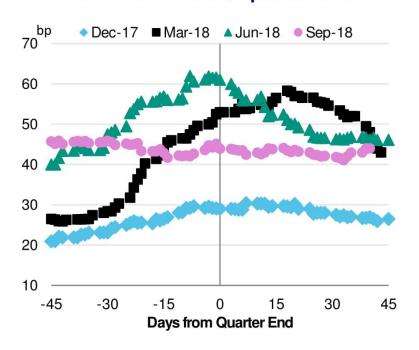


- There has been a clear rise in all maturities of BBSW.
- The quarterly seasonality was a new development but seasonal patterns not yet predictable. It makes pricing decisions more complex.
- Fears had been widespread of a poor performance in September, though ultimately BBSW markets were granted a reprieve.

Seasonality – or not?

September reprieve and patterns around quarter-end

3M BBSW around quarter-end



AUDUSD Cross-Currency Basis



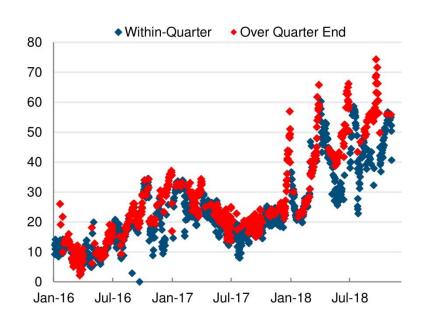
- No widening in September but no real tightening either!
- Widening likely to stay, but the unclear seasonal pattern makes it harder to calibrate or justify quarter-end pricing adjustments.
- Cross-Currency Basis is elevated, but comparatively stable at elevated levels.

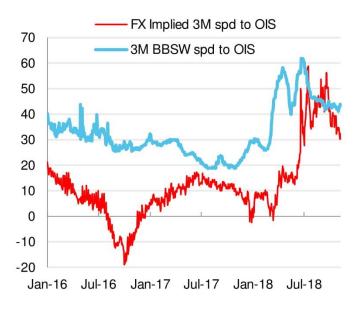


BBSW in a local context

Other front-end funding pressures are evident

Repo Spreads to OIS and FX Forward Spreads to OIS





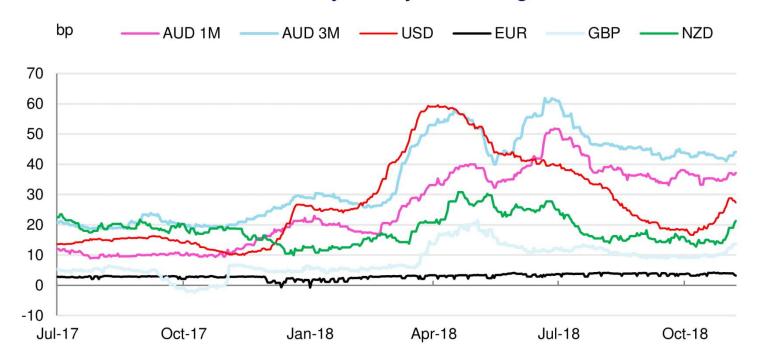
- There has been clear funding pressure evident in both RBA OMO Reporates (left) and Foreign Exchange markets (right).
- The September reprieve didn't happen in repo or FX markets. There remain risks that the BBSW can spike at future quarter-ends.



BBSW in a global context

Funding pressures are evident in other markets too

LIBOR Pressure early in the year – and again in December



- The US market is clearly a driver for Australian spreads.
- Timing of widening of US spreads: FOMC ending QE; massive US Treasury Bill issuance; Repatriation of funds following US Tax changes.
- There's been a clear widening of US LIBOR of late not (yet) affecting BBSW though.



Understanding BBSW

Not one Market, but many loosely linked markets

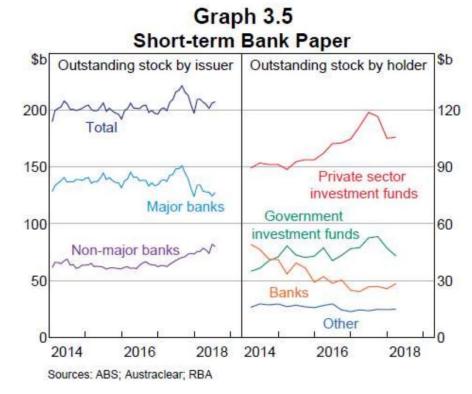
- The experience in BSBW cannot be understood by only looking at BBSW markets.
- Funding markets are linked across instruments and geography, but the links are loose, not tight.
- BBSW reprieve in September tempered by the fact that the Repo and FX markets both showed funding pressure over quarter-end.
- Market Segmentation is preventing arbitrage.
 - There are clear differences in the price of AUD funding in different markets.
 - The Arbitrage players are not able to force prices back into alignment across Repo, BBSW and FX.
 - RBA repo now frequently trades above BBSW, for example.



Segmentation of Markets

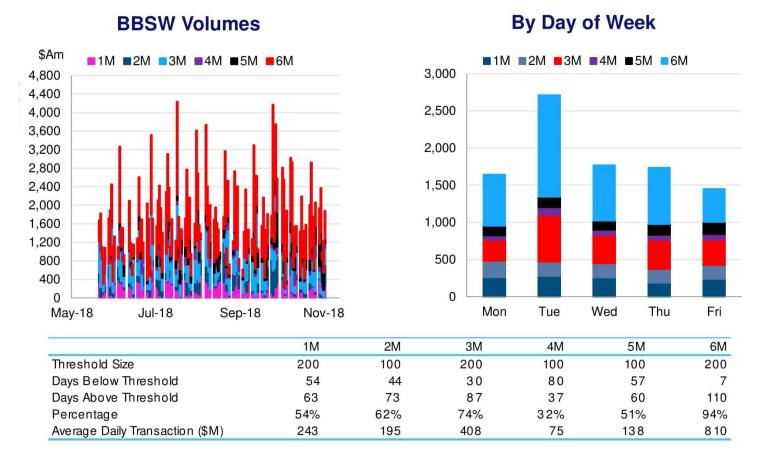
Not all organisations have access to all markets

- Total short-term debt is flat-lining.
 - Stark contrast to bond issuance, and to total credit measures.
- Highlights switch underway between Major banks and Non-major banks.
 - Cross-Bank holdings are declining – banks don't own much paper any more.
 - Issuance measures don't capture secondary trading.
 - Private Sector investment funds were a growing part of the market.
- BBSW only captures Major Bank funding costs.



Volumes in BBSW markets

The new system is better, but still uses fairly small volumes



- BBSW only sets by VWAP method some of the time. It has a process of fall-backs including interpolation.
- 6M very often using VWAP, 3M mostly doing so. 1M is less clearly liquid.



Conclusion

Pressure likely to remain in global funding markets

- Funding markets remain under pressure, with year-end factors a major global issue.
 - LIBOR likely to widen into December 31.
 - That is likely to put pressure on BBSW as well
 - Next year remains a question. Might June 30 prove a problem?
- Consider "Funding" rather than BBSW only. Funding markets are linked.
 - BBSW only part of the market. Repo and FX show signs of pressure too.
 - BBSW reprieve in September not repeated in other markets.
 - Expect BBSW to remain elevated for quarters to come. Risk of spikes on some quarter-ends.
- LIBOR may cease to exist over coming years.
 - Quite likely to at least become a secondary indicator.
 - BBSW has better prognosis, but could come under pressure.
 - Australia may well use multiple benchmarks.



Thank you for your time...



The Regulatory Background

The LIBOR scandal caused a reassessment

RIP LIBOR?

FCA CEO Andrew Bailey (27 July 2017)

- 'It is not only potentially unsustainable, but also undesirable, for market participants to rely indefinitely on reference rates that do not have active underlying markets to support them.'
- 'I and my colleagues have therefore spoken to all the current panel banks about agreeing voluntarily to sustain LIBOR for a four to five year period, i.e. until end-2021. Our intention is that, at the end of this period, it would no longer be necessary for the FCA to persuade, or compel, banks to submit to LIBOR ... the benchmark would no longer be sustained through the mechanism of the FCA persuading or obliging panel banks to stay.'
- 'The survival of LIBOR on the current basis, as a dynamic benchmark based on daily submissions and updates, could not and would not be guaranteed.'



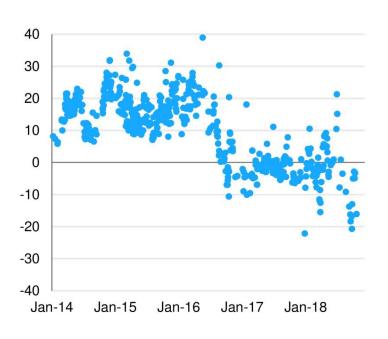




Repo vs BBSW

Secured lending is often more expensive than unsecured lending

BBSW compared to RBA Repo (60 day)



- Theory says BBSW should be higher than Repo...
- Since the funding pressure became clear the inversion has continued and exacerbated.
 - 10bp frequently, and 20bp occasionally.
- Different participants access different markets.
 - Major bank BBSW vs offshore bank repo
- Segmentation of markets is a growing concern.



Forecasts

AUD Swap Rates	08-Nov	De c-18	Mar-19	Jun-19	Sep-19	De c-19	Mar-20	Jun-20	Sep-20	Dec-20
Cash	1.50	1.50	1.50	1.50	1.50	1.75	1.75	2.00	2.00	2.25
1M BBSW	1.87	1.80	1.80	1.80	1.85	2.10	2.00	2.30	2.30	2.50
3M BBSW	1.94	1.90	1.80	1.80	1.93	2.05	2.18	2.30	2.43	2.55
6M BBSW	2.11	2.10	2.25	2.40	2.60	2.75	2.85	2.95	2.90	2.90
2-year	2.09	2.15	2.25	2.25	2.30	2.45	2.55	2.55	2.65	2.70
3-year	2.22	2.20	2.30	2.35	2.40	2.55	2.65	2.70	2.75	2.80
5-year	2.58	2.55	2.65	2.70	2.85	2.90	3.05	3.10	3.10	3.10
10-year	2.94	2.85	2.85	2.85	3.00	3.05	3.15	3.15	3.10	3.10

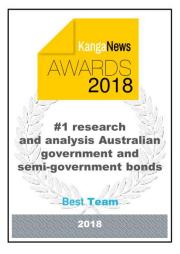
NZD Swap Rates	08-Nov	De c-18	Mar-19	Jun-19	Sep-19	Dec-19	Mar-20	Jun-20	Sep-20	Dec-20
2-year	2.16	2.40	2.50	2.55	2.75	2.95	3.15	3.25	3.35	3.45
3-year	2.30	2.55	2.70	2.90	3.10	3.25	3.35	3.45	3.50	3.60
5-year	2.58	2.80	2.90	3.00	3.05	3.20	3.30	3.40	3.45	3.50
10-year	3.06	3.35	3.45	3.40	3.45	3.50	3.50	3.60	3.60	3.65

USD Swap Rates	08-Nov	De c-18	Mar-19	Jun-19	Sep-19	Dec-19	Mar-20	Jun-20	Sep-20	Dec-20
3M LIBOR	2.59	2.85	2.95	3.03	3.13	3.13	3.13	3.13	3.13	3.00
2-year	3.14	3.05	3.10	3.15	3.20	3.15	3.05	2.95	2.80	2.65
5-year	3.21	3.15	3.15	3.15	3.10	3.00	2.90	2.85	2.75	2.65
10-year	3.29	3.15	3.25	3.15	3.00	2.85	2.80	2.75	2.65	2.65

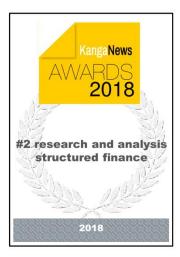


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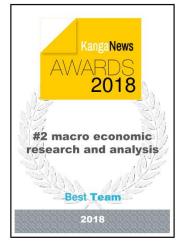














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IMPERIUM MARKETS



Transitioning the Money Market to platform trading:

The move to greater transparency & better benchmarks

Overview

- Australian based fintech
- Founded in December 2016
- Team of experienced practitioners
- ASIC markets license one of only 12 granted

Objective

Transition **entire** fixed income market to electronic platform and deliver to wholesale issuers and investors:

- transparency
- efficiency
- compliance

"On 5th September 2017, the transformation began when Imperium Markets was granted the only 'Australian Markets License' for Term Deposit by ASIC*."

Stu Burns – Founder & CEO

<u>Imperium at a glance</u>								
ADI's responding on platform	34							
Investors on platform	57							
Funds Under Management	>\$12.OB							
RFQ's actioned	\$3.02B							
Average ticket size	\$3,106,814.00							

The evolution of the money market

The current constraints:

- Highly manual & inefficient
- Largely traded by phone and e-mail
- Issuers can only access a limited number of investors
- Opaque and predominantly based on bilateral or brokered transactions

The short-end is trapped in the past and in the dark.



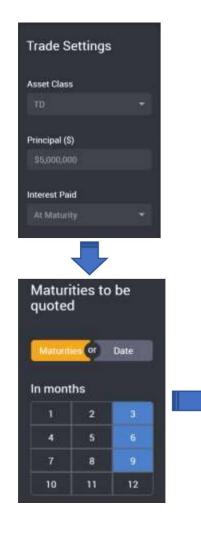
Image of present day money market dealer

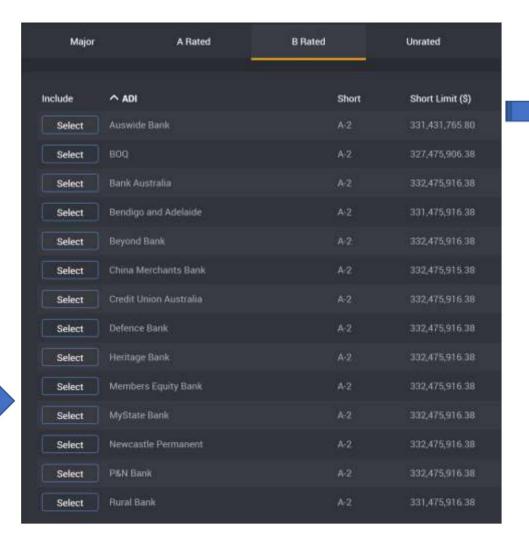
The opportunity:

Despite the large amount of trade data, this isn't made available to market participants.

By moving to platform trading, data is centrally stored. We improve visibility and contribute to more meaningful **tenor and credit-related benchmarks**.

How does the market transition? (in platform presentation)









ASIC requirement (RG-172, May 2018):

"the obligation to do all things necessary to ensure the market is fair, orderly and transparent"

Trading on platform:

- Brings greater transparency & enriches data available for all market participants
- Contributes meaningfully to **benchmarks** beyond Risk Free Rates (RFRs), the cash rate and BBSW
- Promotes liquidity in secondary markets for NCDs and CP, which rarely trade
- Improves **regulatory** oversight & eliminates brokerage





IMPERIUM MARKETS

Thank You