Deloitte.



Impact on Australian Corporates

Shehan Fonseka, Director, Treasury & Capital Markets Advisory Alastair Harris, Director, Treasury & Capital Markets Advisory

16 May 2019

Contents

Background	3
Expected transition approach	4
The RFR Landscape	5
What has the take-up been like?	6
Fallbacks: Current situation	7
ISDA Fallback methodology	8
One world – Many rates	9
Implications of benchmark reform for AUS and NZ markets	10
Who's Leading the Charge	11
What does it mean for Australian Companies?	13
Considerations for New Issuers	14
 Consideration for Existing Issuers 	15
 Other Operational Considerations 	16
 Operational Considerations – Accounting 	17
What should corporates do?	18
Contacts	20

Background

How did we get here?

- Transition has been on the global agenda since 2014
- July 2017 Andrew Bailey announces the FCA won't compel panel banks to contribute to LIBOR after 2021
- July 2018 Andrew Bailey announced that the Sterling RFR working group launched a consultation on a term structure for SONIA
- July 2018 J. Christopher Giancarlo from the CFTC provided opening remarks on the transition from LIBOR to SOFR
- September 2018 The FCA and PRA issued a "Dear CEO Letter" requiring the Board to sign-off on a comprehensive risk assessment of LIBOR transition
- December 2018 The ECB Working Group for EUR RFRs published proposed transition paths from EONIA to ESTER
- January 2019 Edwin Schooling Latter from FCA announced that market participants should not rely on the availability of an option to use LIBOR for legacy contracts
- January 2019 IASB issued a proposal on IBOR Transition and its effects on Financial Reporting
- May 2019 ASIC issued a "Dear CEO Letter" to several major financial institutions requesting an understanding of the preparedness for the LIBOR transition

"Since the financial crisis, Libor really has become the rate at which banks don't lend to each other."

Mark Carney, Governor, Bank of England, May 2018

Expected transition approach

	1 Apr 19		1 Jan 20		1 Jul 20		1 Jan 21		1 Jul 21		1 Jan 22	
		31 Dec 19		30 Jun 20		31 Dec 20		30 Jun 21		31 Dec 21		30 Jun 22
Phase 1: New products and curves for RFRs New products Eg FRNs on SOFR (term & compounded)												
New curves Eg SOFR												
Amend current products: Cross-currency swaps may be driven to RFR												
Phase 2: New fallback provisions Differentiate contracts with 'old' fallbacks vs 'new'		ISDA del change: <i>expected</i>	d P									
New curves Distinct curves per				AUD JPY EUR								
fallback New products Basis products between 'old' and 'new'				GBP CHF USD CAD HKD								
Phase 3: Post cessation requirements Robust switch-over to contractual fallback Additional market data per fallback Rates provider, vs										y LIBOR ation	•	
Rates provider, vs user input												

The Risk Free Rate Landscape

Currency	Reference Benchmark	Alternative RFR	Туре
AUD	BBSW	RBA Cash Rate	Unsecured
CAD	CDOR	CORRA	Secured
CHF	LIBOR	SARON	Secured
EUR	Euribor	ESTER**	Unsecured
GBP	LIBOR	SONIA~	Unsecured
JPY	LIBOR	TONA	Unsecured
USD	LIBOR	SOFR*	Secured

~ Reformed

* New

** To be created

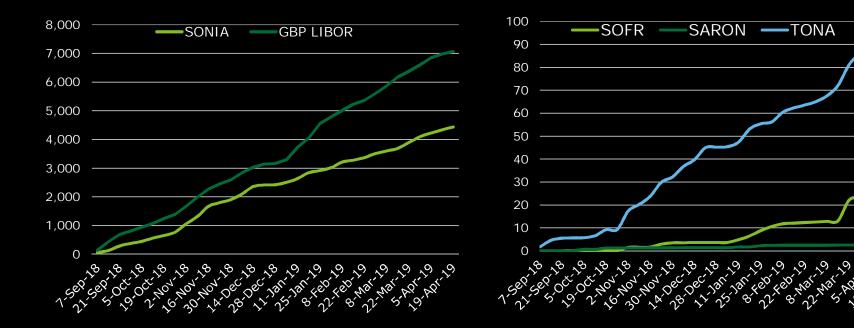
What has the take-up been like?

The pace is gathering

CBA issued a FRN referencing SONIA on 3 December 2018, and ANZ issued a covered bond referencing SONIA on 11 January 2019.

22 institutions have issued a total of \$81 billion notional in floating rate instruments tied to SOFR (source: Bloomberg and CME).

Cumulative volume (US\$bn)



GBP cumulative volume (US\$bn)

Fallbacks: Current situation

Current Contractual basis

Current ISDA definitions require obtaining quotes from major banks. If one or none received, they are currently generally not specified.

For BBSW, this scenario results in the calculation agent determining the rate having regard to comparable indices then available. For Wholesale Loans, this is varied:

- Obtain quotes from banks. If none received it would convert to an alternative base rate (prime rate). Or, the cost of funds rate of the lender(s).
- Or, historic rates.

For FRNs, this is again varied:

- The calculation agent would poll banks for quotes.
- Or, convert to a fixed-rate based on last IBOR rate.
- For MBSs, same procedure except the note holder (e.g. Fannie Mae) could name a successor rate.

These were not intended for a permanent cessation, and are not consistent across, or necessarily within, product types.

If this were to happen now – what would the impact be on you?

ISDA Fallback methodology

A recent industry consultation was held to solicit feedback on the preferred fallbacks to incorporate into standard documentation going forward for GBP LIBOR, CHF LIBOR, JPY LIBOR, TIBOR, and BBSW

This is not the same as the development of new RFR instruments, where the liquidity is expected to grow The fallbacks are characterised as a designated Risk Free Rate (RFR) adjusted for Term + Credit Spread

Term spread adjustment

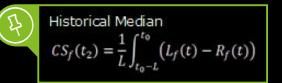
Compounded Setting in Arrears/Advance

$$ARR_{f}(t) = \frac{1}{\delta_{f}} \left(\prod_{u=T}^{T+f-1bd} (1 + \delta_{u}RFR_{u}) - 1 \right)$$

Convexity Adjusted $COR_f(t) = RFR_t(1 + \delta_1 RFR_t)^{\delta_f/\delta_t}$ Spot $SOR_f(t) = RFR_t$

Credit spread adjustment

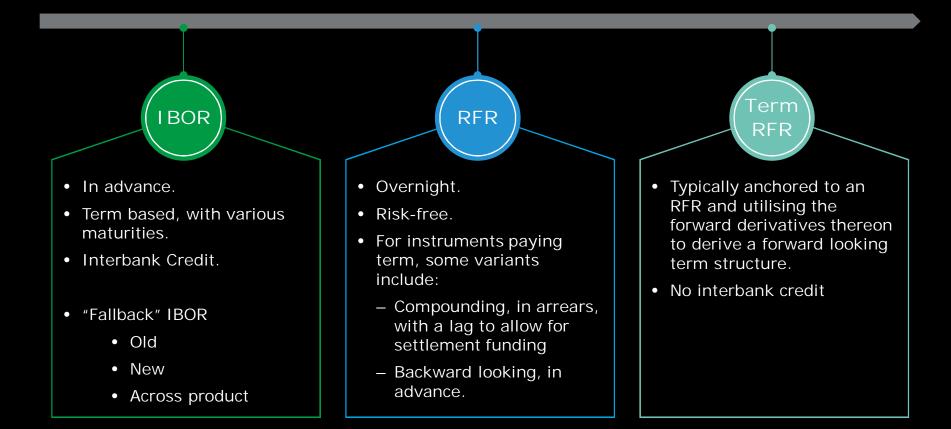
Forward Spread $CS_f(s,t) = FL_f(s,t) - FR_f(s,t)$



Spot $CS_f(t_0) = L_f(t_0) - R_f(t_0)$

The results are expected to be incorporated into the ISDA 2006 definitions in 2020 Q1; and would form the Priority fallback within the ISDA Benchmark Supplement calculation waterfall

One world – Many rates



And bear in mind, that each of these may employ different waterfalls, and embed different fallbacks.

Implications of benchmark reform for AUS and NZ markets

Benchmark Robustness

ASX BBSW change in methodology in May 2018, introducing a waterfall approach, with the pinnacle being a Volume Weighted Average Price.

NZFMA reviewing BKBM against IOSCO Benchmark Principles.

BBSW Liquidity from Europe

BBSW in first round of considerations for equivalence for EU BMR as a Third Country Administrator – relevant for ensuring continued liquidity in BBSW from EU post 2021. 1m BBSW – experiencing liquidity issues

"users of 1-month BBSW should be preparing to use alternative benchmarks" Christopher Kent, 19 March 2019 ASX, in order to reduce the volatility experienced have introduced a new methodology that tightens the window, which has the effect of further reducing the eligible trades, such that the VWAP method is expected 35% of the time

The RBA has continued to make public statements regarding the robustness of BBSW, and in a recent conference made it clear that they will only support the new fallback language for securities eligible in their market operations.

Definitions Replacement – Contract Certainty

Replacement ISDA 2006 fallback definitions will be announced in 2020 Q1.

This is irrespective of view of current robustness, but to provide contract certainty in the event of a permanent cessation, and to reference an RFR.

The market standard in liquidity will be on the new ISDA 2006 definitions – you need to evaluate, and be ready to adopt the new definitions in your confirmation process.

Cross Currency Market – Importing changes

"As market participants transition from referencing LIBOR to RFRs, there may be some corresponding migration away from BBSW towards the Cash Rate. This will depend on how international markets for products such as derivatives and syndicated loans end up transitioning away from LIBOR."

FSB progress report, 14 November 2018

This will necessitate an additional swap being transacted.

Who's Leading the Charge

Regulators, including ASIC, FCA, HKMA, MAS and FINMA, are putting pressure on their banks to ensure they are planning – with a request generally covering the following aspects

Board-approval of the firms' assessment of key risks relating to LIBOR discontinuation Detailing the action plan to mitigate those risks

Considering an appropriately wide range of scenarios and impacts and including a quantification of LIBOR exposures

Banks are responding to the market developments by mobilising their programme, taking inventory internally, stopping the problem from getting worse, and engaging externally

If you're not at the table, you're on the menu

What does it mean for Australian Companies?

Considerations for New Issuers

Transact debt and derivatives using new benchmark i.e. SOFR

Pros

- Financial institutions are already transacting SOFR debt and derivatives e.g. ANZ, MetLife.
- Cost of RFR bonds appears to less than Libor ability to lower cost of debt.
- Avoid Libor transition issues in 2022

Cons

- Can your systems and models handle the new benchmarks.
- Difficulty obtaining forward curves to fair value deals and forecast interest expenses.
- Update to policy and risk strategy will most likely be required.
- Are the new benchmarks liquid enough ability to exit positions.

Continue to Transact Libor based debt & derivatives

Pros

- Still a deep and liquid market and likely to be that way post 2021.
- Current systems and risk models set up to handle Libor.
- No change to existing strategy or policy required.

Cons

- Will eventually need to transition to new benchmark.
- Creates future uncertainty around cost of funding i.e. will there be additional margins after 2021.
- May need to transact additional basis derivatives which use up credit lines.
- Need to ensure fall back provisions are clearly articulated for debt and derivatives.

Are they the same?

Consideration for Existing Issuers

Focus is on debt and derivative which currently reference Libor and mature after 2021

Holders of Debt & Derivatives

- Is it clearly articulated in agreements? May need to negotiate terms with your banks.
- Is it the same between your debt and derivatives?
- May need to strengthen/clarify them.

What is your Fall Back rate



出

Ability to refinance

- Will prices exist for new RFR rates, out to the tenors required.
- Could impact ability to raise long term debt and transact corresponding hedges.

 Potential increase in cost of funding i.e. opportunity for banks to increase margins.

- MTM of derivative could change overnight on transition.
- Possible mismatch between debt & derivative due to different fall back rates.
- Lack of liquidity may make exiting positions harder/costlier.



Financial Risk Implications

Operational considerations

- Can existing systems/models handle fall back rates and new RFR benchmarks?
- Are your credit lines large enough to handle additional basis swaps that may be required post 2021.

Other Operational Considerations

Settlements

- Access to new benchmark prices (i.e. fall back and new RFR rates) to confirm bank settlement amounts.
- Can systems handle rates set in arrears e.g. SARON?

Risk Reporting

- Do risk models need to be updated for new benchmarks i.e. fall back and RFR rates?
- Where debt and derivative benchmarks differ, is this being picked up?
- Do current risk limits cater for a potential future mismatch in rates?



Documentation

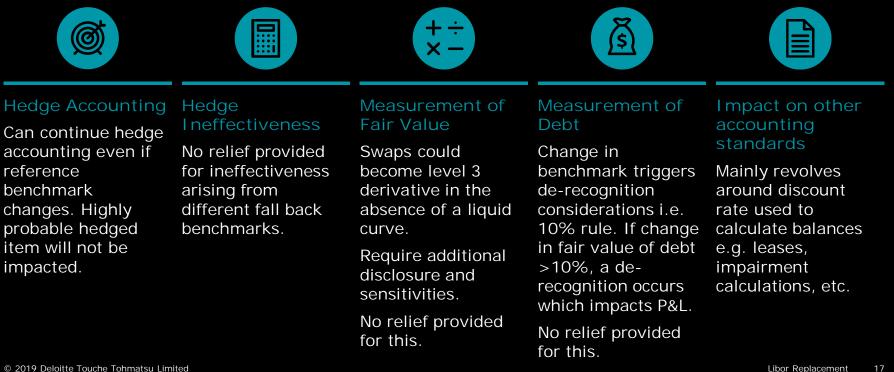
- Need to consider potential updates to derivative and debt documentation e.g. proposed update for 2006 ISDA. Need to involve legal
- Ability to access all relevant historical documentation.

Operational Considerations – Accounting

IASB is looking at Libor replacement in 2 phases:

- Phase 1 issues leading up to reform.
- Phase 2 Issues after reform.

ED issued in May in relation to phase 1, with final amendments published in late 2019.



What should corporates do?

Priorities	Challenges
Achieve senior level understanding (i.e. CFO, CEO and Board), support and sponsorship	 Convincing stakeholders of the scale and complexity of IBOR Reform, and the need to understand the impacts whilst the process is ongoing.
Undertake an impact analysis with a focus on strategy, systems, processes and documentation	 Resources, can you team handle it or do you need more resources. Where is all your relevant documentation e.g. ISDA, loan docs, term sheets, etc. Getting engagement from other parts of the business e.g. legal.
Stop the problem getting worse	 Updating fallback provisions for new trades/contracts. Engage with system vendors and bank counterparties to understand what they are doing to support the transition.
Engage externally, monitor industry developments and the response of banks and competitors	 Understanding how the market is responding to the issue especially your bank counterparties. Educating and managing stakeholders



https://www2.deloitte.com/content/campaigns/uk/ibor/ibor/iborreform.html

P.

Contacts



+61 4 0298 9858 sfonseka@deloitte.com.au

Shehan Fonseka Director



+61 2 9322 7989 alharris@deloitte.com.au

Alastair Harris

Director

Deloitte.

This publication contains general information only, and none of Deloitte Touche Tohmatsu Limited, its member firms, or their related entities (collectively the "Deloitte Network") is, by means of this publication, rendering professional advice or services. Before making any decision or taking any action that may affect your finances or your business, you should consult a qualified professional adviser. No entity in the Deloitte Network shall be responsible for any loss whatsoever sustained by any person who relies on this publication.

Deloitte refers to one or more of Deloitte Touche Tohmatsu Limited, a UK private company limited by guarantee, and its network of member firms, each of which is a legally separate and independent entity. Please see www.deloitte.com/au/about for a detailed description of the legal structure of Deloitte Touche Tohmatsu Limited and its member firms.

About Deloitte

Deloitte provides audit, tax, consulting, and financial advisory services to public and private clients spanning multiple industries. With a globally connected network of member firms in more than 150 countries, Deloitte brings world-class capabilities and high-quality service to clients, delivering the insights they need to address their most complex business challenges. Deloitte's approximately 200,000 professionals are committed to becoming the standard of excellence.

About Deloitte Australia

In Australia, the member firm is the Australian partnership of Deloitte Touche Tohmatsu. As one of Australia's leading professional services firms. Deloitte Touche Tohmatsu and its affiliates provide audit, tax, consulting, and financial advisory services through approximately 6000 people across the country. Focused on the creation of value and growth, and known as an employer of choice for innovative human resources programs, we are dedicated to helping our clients and our people excel. For more information, please visit our web site at www.deloitte.com.au.

Liability limited by a scheme approved under Professional Standards Legislation.

Member of Deloitte Touche Tohmatsu Limited © 2019 Deloitte Touche Tohmatsu