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LIBOR Across Financial Markets

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Meredith Coffey, LSTA
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The Speakers

ANN M. BATTLE

**Senior Counsel, Market Transitions & Head of Benchmark Reform
International Swaps and Derivatives Association, Inc. (ISDA)**

Ann M. Battle is Senior Counsel, Market Transitions & Head of Benchmark Reform at ISDA where she leads ISDA's global efforts related to the transition away from LIBOR and other benchmark reform initiatives. Ann represents ISDA on the Alternative Reference Rates Committee (ARRC), the CFTC Market Risk Advisory Committee (MRAC) and the Interest Rate Benchmark Reform Subcommittee of the MRAC. In addition, she led ISDA's global work with the FSB Official Sector Steering Group (OSSG) to implement more robust fallbacks for derivative contracts.

The Speakers

Meredith Coffey
EVP of Research, Co-Head of Public Policy
LSTA

Meredith Coffey is Executive Vice President of the Loan Syndications and Trading Association (LSTA). As a member of the senior leadership team, she runs the Research Department and co-heads the LSTA's public policy initiatives, which help facilitate continued availability of credit and the efficiency of the loan market. Ms. Coffey heads efforts to analyze loan market developments, helping the LSTA build strategy and improve market efficiency, and provides insight through weekly newsletters, periodic conferences, webcasts and media commentary. Ms. Coffey is on the Alternative Reference Rates Committee (ARRC), which is working to transition from LIBOR to a successor rate, and co-chairs the ARRC's Business Loans Working Group.

The Speakers

KRISTI LEO

President

Structured Finance Association

Kristi Leo is President of the Structured Finance Association, the principal trade association for the structured finance market – from corporate issuers to institutional investors. In this capacity she oversees the development and implementation of SFA’s strategic plan and manages day to day execution across the organization’s programs and initiatives including policy and advocacy, communication, education and research. Kristi represents SFA on the Alternative Reference Rates Committee (ARRC) and co-led a coalition of twenty-two associations supporting the passage of the Adjustable Interest Rate (LIBOR) Act.

Presentation Overview

- **The end of LIBOR as a panel rate (6.30.23)**
- **What is SOFR? What are the SOFR variants?**
- **LIBOR legislation for “tough legacy” contracts**
- **State of LIBOR remediation...**
 - In business loans
 - In derivatives
 - In securitizations
- **Aligning hedges in products**

The End of LIBOR

- USD LIBOR generally no longer can be used for new contracts
- USD LIBOR will cease as a panel rate on June 30, 2023
- Existing LIBOR contracts must fall back to a replacement rate
- Most USD LIBOR contracts are expected to fall back to SOFR – the Secured Overnight Financing Rate

What is SOFR?

- **SOFR is a broad measure of the cost of borrowing overnight collateralized by Treasury securities. It is based off overnight Treasury Repo.**
- **Unlike LIBOR, SOFR is effectively credit-risk free**
- **Most LIBOR “fallbacks” use a “spread adjustment” to address the shift from a credit sensitive rate (LIBOR) to a risk-free rate (SOFR)**
- **While SOFR is an overnight rate, there are several variants used broadly as reference rates for contracts**
 - **SOFR Compounded in Arrears – the overnight SOFR rate compounded during the contract period**
 - **Daily Simple SOFR – the overnight SOFR averaged (but not compounded) during the contract period**
 - **SOFR Compounded in Advance – the overnight SOFR rate compounded in the period before the contract period begins**
 - **Forward Looking Term SOFR – a forward looking SOFR Term curve constructed using SOFR futures data**

LIBOR Legislation for “Tough Legacy” Contracts

LIBOR Act Passed by Congress to Address “Tough Legacy”

- **Provides a clear and uniform federal solution for legacy contracts that lack sufficient contractual fallback provisions – *with a safe harbor from liability***
 - **Includes:** Many long-dated securitization bonds (such as those backed by residential mortgages, student loans and some commercial loans)
 - **Includes:** Small but meaningful amount of derivative contracts
 - **Excludes:** Contracts that provide a fallback – regardless of the fallback rate (e.g. Prime, Fed Funds, other)
- **Also provides a safe harbor to parties that opt into the LIBOR Act**
 - All contractual parties who have a right to determine the replacement rate must opt-in
 - **Expected to Include:** Many seasoned residential mortgages and student loans

LIBOR Act Passed by Congress to Address “Tough Legacy”

- **Consistent transition requires LIBOR to transition:**
 - to a SOFR-based rate set by the Federal Reserve Board by product type *plus* a mandated tenor spread adjustment
 - on first London banking date after June 30, 2023, unless Federal Reserve board determines that any LIBOR tenor will cease to be *representative* on a prior date
- **Safe harbor**
 - covers all contract parties for the selection and use of the mandated replacement rate and conforming changes
- **Preemption of State Law and Amendment of Other Federal Laws**
- **Federal Reserve Board Rulemaking**

State of LIBOR Remediation...in Loans

State of SOFR Remediation...in Loans (1)

- Existing LIBOR-based business loans need to be transitioned to a replacement rate by June 30, 2023
- Many business loans have “fallback” language
 - Hardwired fallbacks – will transition automatically to Term SOFR+ARRC “spread adjustment” at LIBOR cessation
 - “Amendment” fallbacks – require a streamlined amendment process to transition; typically subject to 51% negative consent by lenders
- Business loans *generally* are not subject to the LIBOR Act for “Tough Legacy” contracts

State of SOFR Remediation...in Loans (2)

- While new SOFR loan origination has gone smoothly, there is an enormous backlog of loans to be remediated
- In 2021, the Fed/FDIC/OCC tracked \$5 trillion of syndicated loans outstanding; many of these are LIBOR-based
- Most of these will require transition amendments
- Even a streamlined amendment process will pose significant operational challenges and will absorb enormous amounts of legal resources
- There is significant concern that there will not be time to remediate all contracts, if parties delay remediation process

State of LIBOR Remediation...in Derivatives

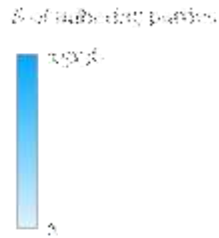
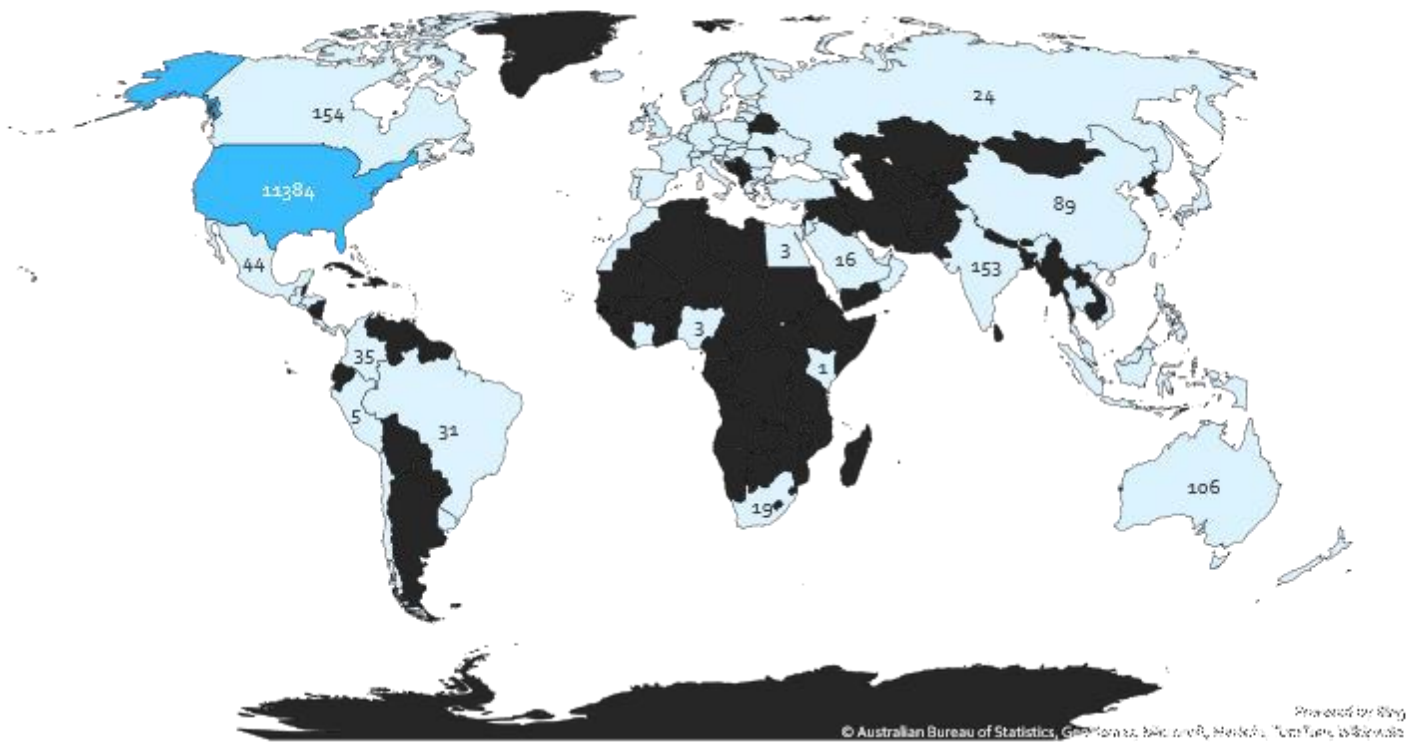
Forms of SOFR

Benchmark	Uses
SOFR	<p>Derivatives OIS – compounded in arrears by Calculation Agent with 2- day payment delay (typically)</p> <p>Derivatives fallbacks – compounded in arrears with shift, as published by Bloomberg</p> <p>Available to compute “daily simple SOFR” for cash products (confirmation templates available for derivatives hedges)</p>
CME Term SOFR	<p>ARRC non-derivatives fallbacks</p> <p>ARRC best practices for certain cash products and hedges (available in ISDA definitions)</p> <p>FRB proposal for certain cash products under LIBOR Act</p>
ICE Term SOFR	<p>ARRC best practices for certain cash products and hedges (available in ISDA definitions)</p>
SOFR averages (published by NY Fed)	<p>Potential for use in cash products and derivatives (available in ISDA definitions)</p>
SOFR index (published by NY Fed)	<p>Potential for use in cash products and derivatives (available in ISDA definitions)</p>

ISDA-Clarus RFR Adoption Indicator

- The ISDA-Clarus RFR Adoption Indicator increased to an all-time high of **51.1%** in August 2022 from 46.4% the prior month. The indicator tracks how much global trading activity (as measured by DV01) is conducted in cleared over-the-counter and exchange-traded interest rate derivatives (IRD) that reference the identified risk-free rates (RFRs) in six major currencies. On a traded notional basis, the percentage of RFR-linked IRD increased to **44.0%** of total IRD transacted in August compared to 39.0% the prior month.
- **Key highlights for August 2022 include:**
 - RFR-linked IRD DV01 increased to \$16.2 billion from \$13.7 billion the prior month.
 - Total IRD DV01 increased to \$31.8 billion from \$29.5 billion the prior month.
 - RFR-linked IRD traded notional increased to \$81.2 trillion from \$67.3 trillion the prior month.
 - Total IRD traded notional increased to \$184.3 trillion compared to \$172.8 trillion the prior month.
 - The percentage of trading activity in SOFR increased to an all-time high of 57.2% of total USD IRD DV01 in August compared to 51.7% the prior month.

ISDA 2020 IBOR FALLBACKS PROTOCOL – GLOBAL REPRESENTATION (January 2022)



Country	# AP	Country2	# AP2
United States	11384	Georgia	8
United Kingdom	692	Greece	8
Singapore	302	Panama	7
Switzerland	260	Portugal	7
Japan	221	Chile	6
France	213	Iceland	6
Thailand	193	Puerto Rico	6
Canada	154	Cyprus	5
India	153	Hungary	5
Hong Kong	136	Peru	5
Netherlands	110	Guernsey	4
Australia	106	Isle of Man	4
China	89	Liechtenstein	4
Germany	80	Slovenia	4
Italy	68	Vietnam	4
Sweden	54	Brunei Dar,	3
Denmark	52	Croatia	3
Korea, Republic of	51	Czech Republic	3
Luxembourg	45	Egypt	3
Norway	45	Lebanon	3
Mexico	44	Malta	3
Spain	41	Monaco	3
Taiwan	40	Morocco	3
Israel	36	Nigeria	3
Colombia	35	Oman	3
Austria	32	Romania	3
Brazil	31	Bulgaria	2
Finland	29	Cote d Ivoire	2
Belgium	28	Estonia	2
Indonesia	26	Guatemala	2
Russia	24	Kuwait	2
Turkey	23	Lithuania	2
UAE	22	Maldives	2
Ireland	21	Mauritius	2
Malaysia	21	Ukraine	2
South Africa	19	Uruguay	2
Poland	18	Andorra	1
Saudi Arabia	16	Bahamas	1
Bermuda	13	Costa Rica	1
Cayman Islands	12	El Salvador	1
Jersey	11	Honduras	1
New Zealand	11	Jordan	1
Bahrain	10	Kenya	1
Philippines	10	Latvia	1
Qatar	10	Slovakia	1

Additional Information

For additional information from ISDA relating to financial benchmark reform, visit the ISDA website at:

<https://www.isda.org/2020/05/11/benchmark-reform-and-transition-from-libor/>

For additional information about the ISDA 2020 IBOR Fallbacks Protocol and related documentation, including information about how to adhere, visit the ISDA website at:

<https://www.isda.org/protocol/isda-2020-ibor-fallbacks-protocol/>

State of LIBOR Transition...in Securitizations

State of Transition...in Securitizations

- Existing LIBOR-based securitization bonds and consumer loans need to be transitioned to a replacement rate by June 30, 2023
- Most long-dated securitization bonds and underlying consumer loans generally do not have sufficient “fallback” language
 - ABS backed by residential mortgages and student loans
 - The vast majority of these bonds and consumer loans are expected to transition via the LIBOR Act
- Shorter-dated securitization bonds and consumer loans have varying types of hardwired fallback

State of Transition...in Securitizations

	ABS	CLO (excl. refi/resets)	Private Label CMBS	RMBS
Total Issuance (\$bn)				
2022YTD	188	95	89	123
2021	266	184	157	239
2020	179	93	65	122
% SOFR Floating				
2022YTD	3%	100%	73%	16%
2021	0%	0%	0%	10%
2020	0%	0%	0%	2%
Typical SOFR Benchmark used in 2022	<ul style="list-style-type: none"> • Compounded SOFR determined “in Advance” (with provisions to switch to Term SOFR) 	<ul style="list-style-type: none"> • 3-mo Term SOFR 	<ul style="list-style-type: none"> • 1-mo Term SOFR (for most recent new issues) • Compounded SOFR (for new issues at beg of 2022) 	<ul style="list-style-type: none"> • Compounded SOFR

Aligning Benchmarks between Assets, Liabilities and Hedges in Securitizations

- **Legacy Contracts**
 - Potential impacts if assets, liabilities and/or hedges move to a different rate
 - Economic impact to transaction parties
 - Any potential ratings impact
- **SOFR rate on new issue floating rate securitization bonds**
 - If floating rate assets, benchmark on liabilities most often match the assets
 - If fixed rate assets, investor preference, and operational/administrative considerations are key

Questions!