Letting Go: A Commercial Mortgage Lender's Guide to Understanding the LIBOR Transition

November 2019

WHAT IS LIBOR?
&
WHY IS IT GOING AWAY?

WHAT IS LIBOR?

- ✓ LIBOR = London Inter-Bank Offered Rate
- ✓ Is the default **global reference rate** (*aka benchmark*) set for approximately $350 trillion of various financial products, including interest rate swaps, forward rate agreements, securities, commercial loans and mortgages (*as well as other consumer loans*).
- ✓ The rate originated in Britain in the mid-1980's when new products such as interest rate swaps, currency derivatives, and forward rate agreements started to gain popularity. It was first published by the British Banker's Association ("BBA") on January 1, 1986.
- ✓ Five Currencies:
    - U.S. Dollar – $
    - Euro – €
    - British Pound – £
    - Japanese Yen – ¥
    - Swiss Franc – Fr.
- ✓ Seven Different Maturities / Term Structure:
    - Overnight / Spot
    - One Week
    - One Month (*most frequently used for commercial mortgages*)
    - Two Months
    - Three Months
    - Six Months
    - Twelve Months
- ✓ Therefore, 35 daily combinations (*collectively referred to as IBORs*) are currently published (*prior to July 2013* – five other currencies and eight other maturities *for a total of 150 daily combinations*).

WHAT IS LIBOR? (Cont.)

- ✓ Most variable rate financial instruments reprice to the new respective LIBOR rate, plus a spread, as of a future specified rate.

- ✓ A Reference Panel of between 11 and 16 banks (*out of a total of 20 banks*) for each currency submit rates that they lend to other participant banks on an **unsecured** basis for the respective currency / tenor.

Reference Panel Members	
Bank of America	Lloyds Bank
Barclays	Mizuho
BNP Paribas	MUFG
Citibank	National Westminster
Cooperative Rabobank	Royal Bank of Canada
Credit Agricole	Santander
Credit Suisse	Society Generale
Deutsche Bank	Sumitomo
HSBC	The Norinchukin Bank
JP Morgan	UBS

- ✓ In the fall of 2012, the BBA announced that it would transfer oversight of LIBOR to UK Regulators (*specifically the Financial Services Authority or "FSA", which was then replaced by the Financial Conduct Authority or "FCA"*).
- ✓ On February 1, 2014, the Intercontinental Exchange (ICE) took over the **administration** of LIBOR and have since enhanced methodology and controls regarding the calculation of the rates.

WHY IS LIBOR GOING AWAY?

- ✓ Reduced credibility of the rate-setting process because of recent scandals
  - Banks were accused of colluding to falsely inflate / deflate their submitted rates (*since at least 1991, but only came to light in an April 2008 WSJ article addressing the rate during the credit crisis*).

- ✓ Multiple investigations by national legislatures / central banks / commissions resulting from the scandal.

- ✓ Billions of dollars in fines imposed on submitting banks by multiple national regulators and a related plethora of lawsuits.

- ✓ Resulting reticence of member banks to continue making LIBOR submissions.

- ✓ Lack of robust transactional data underlying LIBOR (*thin number of daily trades*)
  - In one of the 35 currency-tenor combinations, for which a benchmark reference rate is produced every business day using submissions from around a dozen panel banks, these banks, between them, executed just fifteen transactions of potentially qualifying size in that currency and tenor in the whole of 2016.[1]
  - LIBOR is essentially sustained by the use of "*expert judgment*" by the panel banks to form many of their submissions.

[1] *Bailey, A., (Chief Executive Financial Conduct Authority). (2017). London, England: Bloomberg.*

WHY IS LIBOR GOING AWAY? (Cont.)

- ✓ Two panel banks stopped submitting transactions to USD LIBOR, further weakening the rate.

- ✓ UK FCA has spent a lot of time persuading the remaining panel banks to voluntarily continue submitting LIBOR despite their discomfort about providing rates based on judgments with so little actual borrowing to validate those judgments:
  - Concern that further withdraw of panel banks would weaken the representatives and robustness of the rate;
  - The risk that if other banks leave the panel, more banks will want to do the same; and,
  - In a worst case scenario where LIBOR ceased to exist, financial contracts would continue to call for repricings based on the rate (*would be financial chaos*).

- ✓ However, in July of 2017, the FCA announced that by the end of 2021, it would "***no longer be necessary for the FCA to persuade or compel banks to submit LIBOR***."

Regulators have stated that the selected alternative rate should be market driven, not regulatorily mandated.

MBA RESEARCH ON LIBOR

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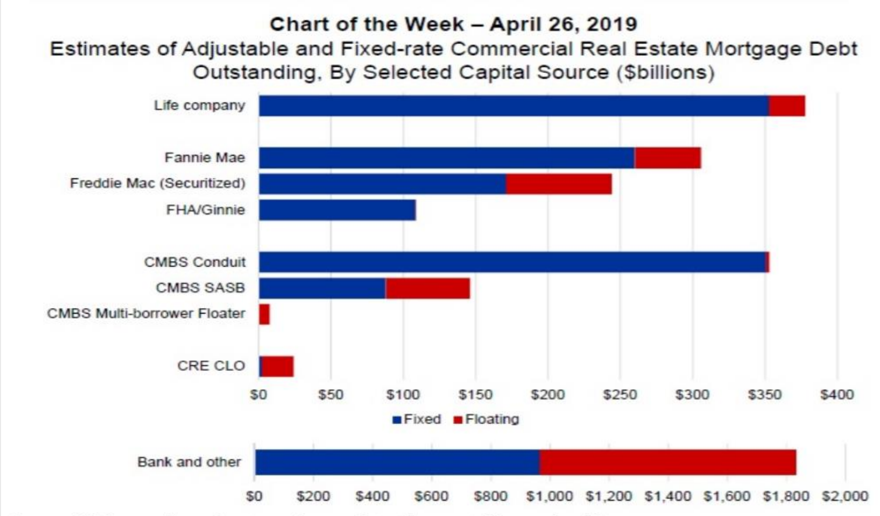
- ✓ Adjustable-rate mortgages are estimated to make up just less than one-third of the total balance of mortgage debt outstanding. The bulk of that adjustable-rate debt is held on bank balance sheets, but floating rate debt also makes up roughly 30% of Freddie Mac's securitized multifamily debt and 15% of the mortgages guaranteed by Fannie Mae.
- ✓ In the CMBS market, only 1% of conduit debt is floating rate, but so is 40% of single-asset / single-borrower mortgage debt, and 96% of multi-borrower floater debt.
- ✓ 91% of mortgages backing CRE CLOs – driven by investor-driven lenders like mortgage REITs and Debt funds – is floating rate, as is 7% of commercial mortgage debt held by life companies.



Source: MBA; Merrill Lynch; Pierce, Fenner & Smith; Fannie Mae; Federal Reserve

WHY SHOULD CRE LENDERS CARE?

- ✓ The transition will impact the economics of the floating rate lending business.

- ✓ The transition will impact the economics of your customers' businesses.

- ✓ The transition will impact your operations.
  - There may be disagreement by borrowers on the appropriate replacement rate or mechanics of how it is implemented.
  - There may also be disagreement by co-lenders and investors on these points.
  - Decision makers that choose the appropriate replacement rate may be a point of contention among various investors.
  - Loan documents may not clearly indicate the steps to take.
  - If modification of loan documents is needed, when should you begin?

- ✓ Managing the process and the various implications will require interdepartmental cooperation as there are financial, legal, accounting, operational and relationship management issues to be addressed.

- ✓ Existing loan documents often have not contemplated full implications of the transition(s) away from LIBOR index to a replacement rate.

INTERNATIONAL MOBILIZATION TO REPLACE LIBOR

International Mobilization to Replace LIBOR

- ✓ International effort led by IOSCO (International Organization of Securities Commissions) and OSSG (Official Sector Steering Group, a group of senior officials from Central Banks / regulatory agencies).
- ✓ U.S. effort led by ARRC (Alternative Reference Rates Committee), composed of the following groups:
  - 31 Members (Banks / Insurance Companies / CCPs / Industry Groups) plus 5 observers
  - Board of Governors of the Federal Reserve System
  - NY Federal Reserve
  - U.S. Treasury
  - Commodity Futures Trading Commission
  - Office of Financial Research
  - FDIC
  - OCC
  - SEC
  - CFPB
  - FHFA
  - Also Established Eleven Working Groups.
- ✓ UK effort led by the Working Group on Sterling Risk Free Rates.
- ✓ Swiss effort led by the National Group on Risk Free Reference Rates.
- ✓ EU effort led by the Euro Working Group on Risk Free Rates.
- ✓ Japanese effort led by the Cross-Industry Committee on Japanese Yen Interest Rate Benchmarks.
- ✓ The ISDA (International Swaps and Derivatives Association) is working to develop a framework by 2019 to transition swaps off of LIBOR.

RECOMMENDED ALTERNATIVES FOR LIBOR

- ✓ On June 27, 2017, the ARRC identified the Secured Overnight Financial Rate (SOFR) as its recommended alternative to USD LIBOR.
- ✓ Other rates considered included:
  - Term unsecured rates;
  - Effective Federal Funds Rate (EFFR);
  - Overnight Bank Funding Rate (OBFR);
  - Other secured repo rates;
  - Treasury bill and bond rates; and,
  - Overnight index swap rates linked to EFFR.
- ✓ ARRC preliminarily narrowed the list to two rates, discussed the merits, and sought feedback on SOFR (aka treasury repo rate) in a 2016 Interim Report and Consultation and in a public roundtable, eventually narrowing the list down to SOFR.
- ✓ The global view has been the following:

Location	Alternative Rate	Secured / Unsecured	Basis
United States	SOFR	Secured	Transaction Based
United Kingdom	SONIA	Unsecured	Transaction Based
Europe	ESTER	Unsecured	Transaction Based
Switzerland	SARON	Secured	Transaction & Quotes
Japan	TONAR	Unsecured	Transaction Based

WHAT IS SOFR?

WHAT IS SOFR?

- ✓ A broad measure of overnight repo (treasury security) financing transactions with approximately $700 billion in underlying transactions per day.
- ✓ A secured rate, not unsecured like LIBOR, so it will be a fundamentally different value, as less credit risk is priced into the rate.
- ✓ Currently only an overnight rate, however:
  - One and three-month SOFR futures began trading on the Chicago Mercantile Exchange in May 2018
  - Recent initiation of trading in SOFR swaps in July 2018 (*low liquidity – but volumes are building*)
- ✓ Has provided the widest coverage of any treasury-based report rate available, including the following repo market segments cleared through the Fixed Income Clearing Corporation:
  - Tri-party repurchase agreements;
  - General collateral finance repos; and,
  - Bilateral treasury repos.
- ✓ Began publishing in April 2018 by the New York Federal Reserve.
- ✓ SOFR is generally viewed as more of a capital markets / money market rate (versus a lending rate).
- ✓ Over $236 billion in SOFR security issuances by 31 unique issuers, through August 2019
  - 24% of issuances in August
  - Predominantly 1 year and less maturities, some 2 and 3 year maturities, and 1 five-year maturity
  - Generally, quarterly pay with simple interest (some compounding of overnight rates starting to emerge)

IS SOFR THE PERFECT REPLACEMENT?

- ✓ SOFR is a secured rate whereas LIBOR is an unsecured rate.
- ✓ Therefore, rates are not equivalent with SOFR being lower in theory.
- ✓ SOFR and LIBOR may not behave the same way in a stressed environment – SOFR could go down in a "*flight to quality*" whereas LIBOR might increase as more of a credit risk premium is demanded.
- ✓ SOFR is currently only an overnight rate versus seven maturity choices going out to one year with LIBOR.
- ✓ SOFR calculations of interest are currently backward looking (*only know your final cash flows at the end of the period*) versus forward looking for LIBOR (*know on the first day of the period how much will be due at the end of the period*).
- ✓ SOFR rates have tended to spike at quarter-end or year-end as a result of bank capital reporting (*for instance SOFR breached 9% in September 2019 prior to Federal Reserve "emergency" repurchase actions*), however, averaging daily rates to arrive at a term rate will lessen the impact of this volatility.
- ✓ Most existing contracts may not allow for fallback to SOFR or any other benchmark other than prime.
- ✓ Planned spread adjustment to be added to SOFR to make it comparable to LIBOR may be static (*fixed for the remaining term of the borrowing based on a historical 10 year lookback*) and not equal to LIBOR at the conversion date (*therefore, this adjustment will not be dynamic with respect to future credit spread widening*).
- ✓ Different instruments may convert to SOFR on different dates (*fallback language for derivatives may kick in prior to loans*) thereby causing basis risk.
- ✓ Difficult to predict how cash flows on positions will change subsequent to the publication of LIBOR.
- ✓ Value will transfer from either the borrower to the lender or vice versa on the conversion date – this will create winners, losers, and a possible taxable transaction.

LIBOR TRANSITION – EVOLVING ISSUES

LIBOR TRANSITION – EVOLVING ISSUES

Questions	Answers
Is the phase out of LIBOR certain?	"Some say only two things in life are guaranteed: death and taxes. But I say there are actually three: death, taxes and the end of Libor" = New York Federal Reserve President John Williams September 2019. Nevertheless, some market participants believe that institutions such as the Intercontinental Exchange (ICE) which is the current administrator of LIBOR will look to continue to publish a rate post-December 2021 which is giving rise to the concept of a potential "zombie" LIBOR. Nevertheless, institutions need to be prepared for a full phase out. It would be imprudent and unwise to hold-out for continued publication in 2022 and beyond.
What will the transition date(s) be?	Most market participants believe that the transition will be in late 2021 (as scheduled). However, some leading market participants are concerned that an earlier date is possible. Likewise, some believe that transition will extend beyond 2021 into 2022-2023. The MBA believes that institutions should anticipate a late 2021 conversion but have contingency plans in place should conversion occur sooner. Also it is possible that certain instruments may convert sooner than others (i.e. derivatives prior to loans). Institutions should be prepared for such a scenario.

LIBOR TRANSITION – EVOLVING ISSUES

Questions	Answers
How does SOFR compare to LIBOR?	SOFR is a secured rate whereas LIBOR is unsecured. In order to be comparable SOFR would need a credit spread component. SOFR has also proved to be more volatile recently given liquidity constraints in the repo markets. In addition, rates may behave differently in stress situations (SOFR declining whereas LIBOR widening). Lastly, there is no term structure to SOFR yet.
Will there be consensus around how to utilize a new rate among the finance industry? Real estate industry? CRE finance industry? Cash products and derivatives industries?	Though the ARRC consensus is slowly emerging, there is still significant concern with moving to SOFR as a replacement. Specific issues were raised to the Federal Reserve, OCC and FDIC in a September 2019 letter signed by ten mid-size banks. Market participants should recognize that this is a new rate and framework which will take time to address all open questions. Nevertheless, given the uncertainties as to how the conversion will evolve, it is paramount that institutions closely monitor developments.
When and how will a new rate become widely used?	SOFR debt issuance issuances are gaining momentum, with almost a quarter of a trillion in issuances. Derivative markets are also evolving quickly. Cash markets are evolving much more slowly with almost no SOFR linked borrowings issued to date. Therefore, we fully expect different markets and instruments to continue to evolve at a varying pace. This further highlights the need for institutions to keep fully abreast of this critical industry issue.

KEY CRE CONSIDERATIONS

- ✓ **Term Structure** - In the US, the Fed through the ARRC (Alternative Reference Rates Committee) is a proponent of SOFR as the replacement rate for LIBOR. Because SOFR is a new overnight index, it will require time to develop a term rate structure to become viable for cash products, such as commercial mortgages. The ARRC's phased transition plan has outlined the development of a forward-looking SOFR term reference rate by the end of 2021, although it is possible a term SOFR rate will be developed prior to the end of 2021.

- ✓ **Secured versus Unsecured** - Be aware that because LIBOR is an unsecured rate and SOFR is a secured rate, there will usually be a spread differential between the two indices. A spread adjustment will likely be required. Anticipated ISDA protocols should help with spread adjustment methodology.

- ✓ **Fallback Triggers** - Fallback triggers between some cash and derivatives markets are not currently aligned and should be monitored.

- ✓ **Rate Differences** - Reconciliation of the development of alternate rates applicable under ISDA for swap products and for various cash products will be critical. Note that ISDA is actively considering a compounded set in arrears approach to interest accrual periods, which would be a material change from current practice as period interest expenses would not be determined until the end of the relevant period.

- ✓ **Derivatives** - We anticipate ISDA protocols will help address the existing derivatives (swaps, interest rate caps, and other hedges) associated with existing LIBOR loans.

- ✓ **Basis Risk** - Note that in structured finance (CRE CLOs, conduits, and other CRE securitizations), there is a real possibility for basis mismatch between changes in the index and the timing of the changes in index in the underlying financial assets and the resulting certificates or bonds. There is not yet a consensus on how to deal with the mismatch and mismatches are likely to exist through and beyond the anticipated date for the expiry of LIBOR (December 31, 2021).

- ✓ **Transition Dates** - Non-bank market participants, such as CLO investors and hedge providers, may prefer a more definitive approach to conversion to the alternative index (such as the "hardwired approach" under discussion by the ARRC), rather than a gradual, voluntary adoption by lenders and borrowers.

HOW SHOULD MARKET PARTICIPANTS PREPARE?

PREPARATION STEPS

1. Establish Governance (BoD and Senior Executive Sponsors)
2. Mobilize and Allocate Resources
   a. Form Working Group (right representation)
      i. CFO
      ii. Treasury / CIO
      iii. Risk / Modeling
      iv. Accounting
      v. Operations
      vi. Lines of Business
      vii. Legal
   b. Establish Program Office / Single Point of Contact
   c. Procure Sufficient Budget
3. Develop Transition Plan
   a. Monitor Regulatory / ARRC / Global Developments
   b. Inventory Areas of Exposure

PREPARATION STEPS (Cont.)

c. Risk Assess Exposure Areas
    i. Quantify post-2021 positions (Balance Sheet / Off-Balance Sheet)
    ii. Transition plan for new positions
    iii. Begin to analyze fallback language for extending contracts
    iv. Develop exposure area action plans (e.g. is new fallback language necessary for new contracts?)
    v. Evaluate fallback / contingency plans

d. Advocate for preferred approach in industry forums / response to ARRC consultations

e. Other Areas of Emphasis
    i. Model impacts (discounting or other rate inputs)
    ii. Hedging (economic and accounting)
    iii. Consider developing a communication plan for impacted customers
    iv. Analyze trade processing / operations / systems (e.g. how will daily interest income accretion be handled if only a look-back rate?)
    v. Begin to understand second order consequences (i.e. contract with customer may not be referenced to LIBOR but they have significant LIBOR conversion risk, such as a material level of financing referenced to LIBOR)

f. Centrally quantify any potential transition date P/L impact

OTHER CONSIDERATIONS

- ✓ Identify and assess existing LIBOR exposure in your portfolio today, including what portion of the portfolio might be expected to be refinanced or mature pre-2022.
- ✓ Determine what actions you can take and when.
  - If your loan documents provide discretion to the lender, who will make the decision? Will it be uniform?
  - Do your loan documents provide any runway to determine how to act? If discretion is not provided, what are the note terms? Are you prepared to make the change as described in the loan documents?
- ✓ Prepare adequate contract fallback language for new floating rate loans being closed today.
  - Fallback provisions will aid in a smooth transition from LIBOR to a replacement index.
  - Endeavor to build sufficient flexibility to address a developing but not yet fully formed consensus on the new index and the new methodologies to calculate interest rates.
- ✓ Review operational requirements such as system integration issues for managing a new index and coordination with loan servicers, syndicate members in multi-bank facilities, and other interested parties.

OTHER CONSIDERATIONS (Cont.)

- ✓ Encourage voluntary adoption by lenders and borrowers of the successor rate at such time as all key constituencies have agreed on the means and methods of transitioning to an alternate rate.
  - The successor index will co-exist with USD LIBOR as long as a LIBOR trigger event has not occurred.
  - Be prepared for a floating rate portfolio which may include legacy LIBOR loans and new loans referenced off of the new benchmark index.
- ✓ Join the Federal Reserve Alternative Reference Rates Committee (ARRC) email distribution for key updates on the transition away from LIBOR. Review their published fallback language at:
  - https://www.newyorkfed.org/arrc/publications
  - https://www.newyorkfed.org/medialibrary/Microsites/arrc/files/2018/ARRC-Sept-20-2018-FAQ.pdf
- ✓ Monitor the ARRC and International Swaps and Derivatives Association (ISDA) regarding hedging products, as developments in ISDA are likely to drive the development of cash product indices. ISDA is also providing webinars for ISDA members that may be helpful to review at:
  - https://www.isda.org/2018/09/17/second-isda-ibor-fallbacks-webinar/
- ✓ Manage international implications of a replacement index (for instance, U.K. LIBOR transition to SONIA) to the extent your company has international floating rate exposure.

KEY QUESTIONS FOR BOARDS

- ✓ Do you have or are you or your customers exposed to any contracts extending past 2021 that reference LIBOR? For companies considering disclosure obligations and risk management policies, are these contracts material, individually or in the aggregate?
- ✓ For each contract identified, what effect will the discontinuation of LIBOR have on the operation of the contract?
- ✓ For contracts with no fallback language in the event LIBOR is unavailable, or with fallback language that does not contemplate the expected permanent discontinuation of LIBOR, do you need to take actions to mitigate risk, such as proactive re-negotiations with counterparties to address the contractual uncertainty?
- ✓ What alternative reference rate (for example, SOFR) might replace LIBOR in existing contracts? Are there fundamental differences between LIBOR and the alternative rate – such as the extent or absence of counterparty credit risk – that could impact the profitability or costs associated with the identified contracts? Does the alternative reference rate need to be adjusted (by the addition of a spread, for example) to maintain the anticipated economic terms of existing contracts?
- ✓ For derivative contracts referencing LIBOR that are utilized to hedge floating-rate investments or obligations, what effect will the discontinuation of LIBOR have on the effectiveness of the company's hedging strategy?
- ✓ Does the use of an alternative reference rate introduce new risks that need to be addressed? For example, if you have relied on LIBOR in pricing assets as a natural hedge against increases in costs of capital or funding, will the new rate behave similarly? If not, what actions should be taken to mitigate this new risk?

SEC July 12, 2019 Joint Staff Statement on LIBOR

WHAT CAN YOU DO NOW?

KEY ACTION ITEMS:

- ✓ Review existing loan documents and anticipated system requirements
- ✓ Create and use alternative reference rate language
- ✓ Determine potential economic impact (How will you react to non-optional extension requests)?
- ✓ Communicate with floating rate borrowers
- ✓ Determine lenders’ approach to making a change
  - Is the lender communicating with borrower or will the servicer be responsible?
- ✓ Educate your staff
  - Management
  - Client Relations
  - Reporting
  - Surveillance
  - Internal & External Counsel

IN THE WEEDS ISSUES - ACCOUNTING & TAX

ACCOUNTING & TAX

Issue	Commentary
Will SOFR or other replacement rates constitute a **benchmark rate** for hedging purposes?	In October 2018, FASB issued an Accounting Standards update allowing for the inclusion of SOFR and the Overnight Index Swap (OIS) rate as a benchmark interest rate for hedge accounting purposes. However, ICE's Bank Yield Index and AFX's AMERIBOR have not yet been designated benchmark rates by FASB.
Contract modifications (loans, leases and derivatives) where LIBOR is replaced with a new rate require analysis (on an instrument by instrument basis) to assess whether the modified contract is a new debt instrument (triggering a gain or loss) or a continuation of an existing contract.	In September 2019, FASB issued an Exposure Draft (comments were due on October 7, 2019) titled *Facilitation of the Effects of Reference Rate Reform on Financial Reporting*, which is expected to be adopted. The proposed standard provides considerable accounting relief (optional expedients), specifically: Eliminates contract by contract analysis; and, Allows instruments that are solely being modified for a new reference rate to a new reference rate (*not fixed*) would not trigger debt / derivative extinguishment accounting (gain / loss) and instead be a continuation of the existing contract.

ACCOUNTING & TAX (Cont.)

Issue	Commentary
Anticipated **changes in the critical terms of hedging relationships** (derivative and / or the item being hedged), would under current GAAP require automatic de-designation of the hedging relationship as well as the potential inability to qualify for hedge accounting.	The same September 2019, Exposure Draft addresses this issue and provide many optional expedients to allow amendments / replacements to the variable rate (as a result of reference rate reform) without terminating existing hedge accounting relationships.
Simple versus **compound interest**.	Because SOFR is currently only an overnight rate, instruments that pay on other than an overnight basis need to accumulate interest over the period (one month / three month / etc.). Most new SOFR issuance calculate interest on a simple interest basis. However, the market is beginning to require compound interest calculations. Market conventions for these calculations are still fluid and many accounting systems currently cannot perform this calculation (also see slides 33-34)

ACCOUNTING & TAX (Cont.)

Issue	Commentary
Multiple tax issues exist, including: a) **Section 1001** replacement which triggers a **taxable exchange**; b) Elimination of **integrated transactions** and hedges; c) **Source and character of any one-time payment** (made in connection with a conversion from LIBOR to new rate); d) Grandfathered debt instruments and non-debt contracts for **Foreign Account Tax Compliance Act (FACTA)** reporting;	Specifically, the rule proposes that: a) Replacement of an IBOR will generally not result in a deemed exchange for US federal income take purposes if the fallback rate is a qualifying rate (which is broadly defined), and the fair market value (FMV) of the instrument after the replacement or addition is substantially equivalent to the FMV of the instrument before the replacement. b) In the case of a hedge or an integrated transaction, if one leg of the transaction is altered such that IBOR is replaced with a qualified rate, then in general the underlying hedge or integrated tax treatment will not change, and the taxpayer will not be treated as "legging out" of the transaction. c) Relief with respect to one-time payments is not entirely clear in the proposed regulation and could differ between counterparties. One-time payments to non-US persons could also be subject to withholding rules different from those applicable to the relevant instrument. One-time payments on tax-exempt debt instruments could result in tax if the payments are treated as something other than adjustments of interest on the debt instrument. d) If there is no deemed exchange of an instrument (per Section 1001), the grandfathered status of the instrument is not impacted for FACTA reporting.

ACCOUNTING & TAX (Cont.)

Issue	Commentary
Multiple tax issues exist, including: e) Variable Rate Debt Instruments (VRDI) regulations could potentially trigger onerous **Original Issue Discount (OID) treatment**. f) **REMICs** g) **Interest expense of a foreign corporation**	Specifically, the rule proposes that: e)The proposed regulation seeks to eliminate OID concerns related to IBOR replacement. f)The proposed regulations provide that in general the alteration of a REMIC regular interest from an IBOR to a qualified rate will not violate the REMICs fixed terms as of the start-up date requirement, and such alteration will not result in an impermissible contingency with respect to the payments on such REMIC. However, certain other REMIC issues remain (as outlined in the Structured Finance Associations March 28, 2019 letter). g) Non-US banks may use SOFR in determining their interest expense on excess US-connected liabilities without requesting a change in accounting method from the IRS.

*IN THE WEEDS ISSUES -
DAILY RATE versus COMPOUNDING*

DAILY RATE vs. COMPOUNDING

- ✓ **Simple Interest Calculation =** daily calculated interest is summed at the end of the calculation period and paid to the investor.
- ✓ **Compound Interest Calculation =** daily calculated interest is effectively added to principal so that the next day's interest is calculated on the outstanding principal **plus** the accumulated and unpaid daily interest from previous days.
- ✓ To date, most of the ~$250 billon of SOFR debt issuances have been simple interest securities.
- ✓ However, some compound interest instruments are starting to be issued beginning in 2019.
- ✓ Simple interest securities were initially accepted because:
  - Low historical interest rate environment (compounding effect is more significant with higher rates);
  - Most pre-mid-2019 issuances were for less than two years (possibility of rates increasing substantially was low);
  - Most buyers of SOFR floating rate notes were money market funds which generally prefer a simple interest calculation.
- ✓ As tenors of securities increase and more non-money market funds acquire SOFR floating rate notes, the market is beginning to demand compound interest securities.
- ✓ Several issues arise (*some of which are further explored on the page that follows*) with respect to compound interest securities including:
  - Use of a calculator or an index
  - Treatment of the margin (or credit spread over SOFR)
  - In arrears or in advance framework
  - Lookbacks
  - Lockouts
  - Payment Date Delays

DAILY RATE vs. COMPOUNDING (Cont.)

	Multiple FRNs 2018-2019	Goldman Sachs FRNs May 2019	European Investment Bank FRNs June 2019; World Bank FRNs July 2019	Morgan Stanley FRNs June 2019; Bank of America FRNs July 2019	Standard Overnight Index Swap (OIS)
Averaging Method	Simple Averaging	Daily Compounding	Daily Compounding	Daily Compounding	Daily Compounding
Payment Date	On the interest period end date	On the interest period end date	On the interest period end date	2 business days following the interest period end date	2 business days following the interest period end date
Lookback	1 business day	2 business days	5 business days	No lookback	No lookback
Lockout	Generally 2 business days	None	None	Only applicable on final interest period: 2 business days	None
Day Count Convention	Actual/360	Actual/360	Actual/360	Actual/360	Actual/360

Methods to achieve cash flow certainty before an interest payment is due (*key terms*):

Lookback: The SOFR rate used to calculate a rate for each day in an interest period is based on the SOFR that represents repo transactions on a prior day.

Lockout: One of the daily SOFR rates is "suspended" meaning that it is repeated for several days, typically at the end of an interest period.

Payment Date Delay: Payment dates may be delayed for several days after an interest period concludes.

Source: Alternative Reference Rates Committee August 2019

Acknowledgements

The Mortgage Bankers Association gratefully acknowledges the following LIBOR Outreach Committee participants for their contributions to this document and the broader initiative.

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The LIBOR Outreach Committee represents MBA's commercial mortgage market participants that include capital sources that utilize LIBOR-based reference indices in their businesses. The goals of this Committee are to:

- ✓ Understand how various members view potential LIBOR transition challenges (legal, origination, servicing, tax, etc.) over time and how they are responding
- ✓ Elevate key issues, compare notes and share best practices
- ✓ Raise awareness and help educate the wider MBA membership
- ✓ Help MBA members and the industry to better understand the challenges facing our market with respect to what comes next for LIBOR and how MBA can be a valued resource