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LIBOR is phasing out. What does that mean for investors?

The London Interbank Offered Rate (LIBOR) is one of the world's most widely used interest rate benchmarks. The transition away from LIBOR is a dynamic process that requires careful planning, resources and focus. Preparing for the end of LIBOR is a priority for Nuveen, and our expertise in active management positions us well to manage the complexities.

KEY TAKEAWAYS

- Nuveen is committed to completing our LIBOR transition strategy in advance of the announced ending dates.
- After reviewing client portfolios on a security-by-security basis, we understand our LIBOR exposure.
- We believe the risks associated with Nuveen's LIBOR exposure are manageable, and we will continue monitoring industry developments.
- This complex transition lends itself to active management, to be addressed across all asset classes with in-depth research and selectivity.

WHAT IS LIBOR?

LIBOR represents the cost of short-term, unsecured, wholesale borrowing by large banks. It is a widely used floating-rate benchmark index, making it a critical component of the financial system. It is used as a reference rate in a broad spectrum of products ranging from residential mortgages to corporate bonds to derivatives, underpinning trillions of dollars of financial contracts.

LIBOR is regulated by the UK Financial Conduct Authority (FCA) and administered by the ICE Benchmark Administration (IBA). It is currently calculated for five currencies (U.S. dollar, pound sterling, euro, Swiss franc and Japanese yen) and seven tenors (overnight, 1 week, 1 month, 2 months, 3 months, 6 months and 12 months). That means 35 individual rates (one for each currency/tenor combination) are published every London business day.

WHY IS LIBOR BEING RETIRED?

LIBOR has been a long-established global benchmark for interest rates, but its credibility has declined over time. It has behaved in sometimes unpredictable and volatile ways, particularly during the Global Financial Crisis. Since then, changes to

bank capital rules and funding practices greatly reduced the amount of this type of unsecured interbank borrowing.

Due to such changes, LIBOR became a less robust benchmark, based in large part on estimates provided by contributing panel banks rather than actual transactions. A manipulation scandal involving several leading financial institutions in 2012 raised further questions about its reliability. As a result, the regulator of LIBOR called for the development of alternative risk-free benchmark rates supported by liquid and observable markets.

WHAT IS LIBOR BEING REPLACED WITH?

The financial industry has recommended alternative rates for each LIBOR currency and tenor. They are derived from actual transactions in large and liquid markets, increasing transparency and seeking to avoid potential market manipulation.

The Secured Overnight Financing Rate (SOFR) is the industry's preferred alternative to U.S. dollar LIBOR, the benchmark where Nuveen has the greatest exposure. The Alternative Reference Rates Committee (ARRC) – established by the Federal Reserve Board and the New York Fed to implement a smooth transition away from LIBOR – formally recommended SOFR in July 2017. SOFR is based on transactions in the overnight repurchase markets (repo), and the massive size of the underlying market makes SOFR a transaction-based rate, better reflecting current financing cost.

In July 2021, the ARRC formally recommended term SOFR rates, which indicate the forward-looking measurement of overnight SOFR, based on market expectations implied from derivatives markets.



The industry has made significant advancements to encourage more widespread use of the recommended replacement rates.

While Nuveen generally supports the transition to SOFR and the replacements for other currency-based LIBOR, we also continue to evaluate other reference rates, in the event they emerge as alternative benchmarks used by banks or other market participants.

As for the timing of the transition, the five currency-based LIBORs have varied final publication dates. All tenors of the pound sterling, euro, Swiss franc and Japanese yen benchmarks, as well as the 1-week and 2-month U.S. dollar benchmarks, are scheduled to end on 31 Dec 2021. The remaining U.S. dollar LIBORs extend to 30 Jun 2023.

WHAT ARE THE CHALLENGES FOR INVESTMENTS WITH LIBOR EXPOSURE?

Various asset classes use floating-rate instruments whose benchmark rates have historically been tied to LIBOR, including derivatives, business loans, consumer loans, floating-rate bonds and securitization securities.

For instruments that rely on LIBOR, the transition process remains uncertain and may bring increased volatility or illiquidity. The potential effects depend on the existing replacement and termination provisions in individual contracts, as well as how and when industry participants adopt new reference rates and fallback language. Fallback language addresses the methodology to be used for setting rates if LIBOR is not available.

It is difficult to predict the full impact of the transition, particularly when certain replacement rates like SOFR do not have a long performance history. Nevertheless, Nuveen believes the industry has made significant advancements over the last year to encourage more widespread use of the recommended replacement rates. We expect to see the full impact of the transition over an extended period of time.

HOW ARE THE INDUSTRY AND NUVEEN PREPARING FOR THE TRANSITION?

Regulators, agencies and working groups across U.S. and non-U.S. jurisdictions have been collaborating for several years to provide recommendations and best practices to help the industry prepare for the end of LIBOR. Additionally, lawmakers are currently enacting legislation that may provide a solution for LIBOR-linked securities where fallback language does not exist, is unclear or did not contemplate the end of LIBOR. If the currently pending federal legislation is passed, it could provide more clarity over the transition of these legacy investments away from LIBOR.

At Nuveen, we've taken several key steps:

- Established a robust transition management program sponsored by senior leadership with active participation from key stakeholders across all business functions.
- Aggregated an inventory of LIBOR exposures across all relevant investments, products, models, leverage facilities, benchmarks and service providers.
- Developed a baseline transition plan on a security-by-security basis for investments tied to LIBOR.
- Reviewed relevant contract language for sufficient fallback references.
- Participated regularly in industry working groups to obtain the latest information on transition efforts and proposed legislation, and provided input on relevant regulatory and industry proposals.



We believe that actively managing LIBOR-related risks should be a priority for client portfolios.

WHERE IS NUVEEN'S LIBOR EXPOSURE MOST CONCENTRATED?

Nuveen's highest concentrations of LIBOR exposure are in preferred securities, senior loans, middle market loans, collateralized loan obligations (CLOs), corporate bonds, securitized credit, private credit, and derivatives. The vast majority of our LIBOR exposure is tied to tenors that are set to expire on 30 Jun 2023.

While Nuveen is carefully planning for a smooth LIBOR transition across all asset classes, here we highlight additional considerations for our preferred securities and senior and middle market loan investments.

Preferred securities can be issued with a variety of coupon structures: fixed rate, fixed-to-fixed rate, fixed-to-floating rate and floating-rate coupons. The latter two categories could have coupons that reference LIBOR, which would be impacted by the phaseout.

Nuveen's preferred securities investment team has dedicated significant resources to reviewing the disclosure of all holdings to understand our LIBOR exposure, how LIBOR will transition and the risks clients may face.

We have found that fallback language is inconsistent across securities, and may not adequately explain how LIBOR will transition. Moreover, the industry continues to evolve – as evidenced by extending the phaseout of certain LIBOR tenors, passing New York state legislation and referencing alternative rates – further impacting how LIBOR-related risks are managed.

Given these circumstances, we believe that actively managing LIBOR-related risks should be a priority for client portfolios. As we move to a market environment without LIBOR, we will continuously reassess the risk profile of every impacted holding to further inform its transition strategy.

Senior loans pay a floating interest rate tied to a benchmark market rate, typically LIBOR. Similar to the preferred sector, senior loan investment teams have carefully reviewed fallback language to understand where LIBOR exposure exists, determine how LIBOR will transition and manage the associated risks. This is particularly important for loans with insufficient fallback language.

The senior loan sector has a well-established process for revising loan documents. Because senior loans can only be funded by large institutional investors, the pool of lenders for each loan is well known, which eases the process. For senior loans with insufficient fallback language, we expect that the administrative agent for the loan would drive the process for replacing LIBOR with an alternative market rate, generally through a simple majority vote.

Nuveen believes the ARRC's formal recommendation of term SOFR in July 2021 was a positive step for the senior loan sector. In light of this recent development, Nuveen continues to carefully evaluate its LIBOR transition strategy for all holdings. Although the broader market for term SOFR continues to develop, we believe it will become a more widely used replacement rate for LIBOR over time.

Middle market loans include both floating- and fixed-rate structures. Most pay a floating interest rate tied to a benchmark market rate, which is typically LIBOR. The middle market investment teams under Churchill Asset Management, an investment-specialist affiliate of Nuveen, have dedicated working groups to carefully assess the preferred fallback language, compile an inventory of transactions across the portfolio and analyze their existing fallback language. Where necessary, they formulate a plan and timeline to implement amendments.

Although a smaller market than traditional senior loans, middle market loans also have a well-established process for revising loan documents, as most of these loans are invested in by larger institutional investors including alternative credit funds.

The broader market continues to follow the ARRC's formal guidance on the transition and specifically at Churchill, we continue to proactively monitor our portfolio companies and seek to amend any existing documentations where relevant to reference the ARRC's recommended fallback language and expect to finalize all amendments prior to the cessation of LIBOR.

TRANSITION EFFORTS WILL CONTINUE

Although the transition process away from LIBOR has become increasingly well defined, uncertainty remains regarding the future of LIBOR and the market's adoption of any replacement rates. As such, Nuveen has a flexible LIBOR transition strategy that continues to adapt to this significant industry event. We believe the risks associated with our LIBOR exposure are manageable at this time, and we continue to monitor industry developments and our positions on behalf of our clients' investment objectives.

For more information, please visit us at nuveen.com.

Endnotes

Sources

Alternative Reference Rates Committee, CME Group, U.K. Financial Conduct Authority (FCA), U.S. Federal Reserve and Intercontinental Exchange (ICE).

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A word on risk

Investing involves risk; principal loss is possible. Debt or fixed income securities are subject to market risk, credit risk, interest rate risk, call risk, derivatives risk, dollar roll transaction risk, and income risk. As interest rates rise, bond prices fall. Foreign investments involve additional risks, including currency fluctuation, political and economic instability, lack of liquidity, and differing legal and accounting standards. These risks are magnified in emerging markets. Preferred securities are subordinate to bonds and other debt instruments in a company's capital structure and therefore are subject to greater credit risk. Certain types of preferred, hybrid or debt securities with special loss absorption provisions, such as contingent capital securities (CoCos), may be or become so subordinated that they present risks equivalent to, or in some cases even greater than, the same company's common stock. Asset-backed and mortgage-backed securities are subject to additional risks such as prepayment risk, liquidity risk, default risk and adverse economic developments. Non-investment-grade and unrated bonds with long maturities and durations carry heightened credit risk, liquidity risk, and potential for default. Senior loans are subject to loan settlement risk due to the lack of established settlement standards or remedies for failure to settle. These investments are subject to credit risk and potentially limited liquidity, as well as interest rate risk, currency risk, prepayment and extension risk and inflation risk.

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