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LIBOR's end

How financial firms can prepare for new reference rates





Introduction

First movers start to pull away from the pack

Most politicians don't know what it stands for. Your friends and family may have never heard of it. But it's hard to overstate the significance of the coming shift away from LIBOR, the London Interbank Offered Rate. The movement is more far-reaching than Sarbanes-Oxley, MiFID II, and other major changes to finance. With those changes, the contours were relatively clear, and most financial institutions appeared to know what they needed to do. This time, it's different, and that's a problem.

Technically, LIBOR is the prevailing interest rate that banks use to lend Eurodollar deposits to each other. Practically, it's the key pillar supporting an estimated US\$350 trillion¹ in financial contracts worldwide, and it's going away by the end of 2021.² In many financial institutions, dozens or even hundreds of front- and backoffice systems could need to be updated quickly—on an ambiguous schedule, in ways that might affect financial reporting, funding, and more. It's a big deal.

Alternatives to LIBOR are emerging. In the US, for example, firms already have issued more than US\$46 billion³ in floating rate debt tied to the Secured Overnight Financing Rate (SOFR). SOFR is still in its infancy, but it appears to be gaining acceptance at an exponential rate, as measured by daily trading in SOFR-linked futures and volume of SOFR-linked debt (see Figure 1). First movers are quickly gaining expertise with the new benchmarks, and they are commandeering the engineering talent to help with the extensive updates that their systems will need. They're also using the "burning platform" as a compelling opportunity: while winding down LIBOR, they're seeking an edge by creating new products, reshaping risk, streamlining operations, and improving customer relations.

It's time for other firms to step up with credible plans to move toward alternative rates without delay. If they don't, they could risk a hit to profits, disruption to their full range of operations, and competitive decline.

Figure 1: Firms are issuing increasing amounts of SOFR-linked debt



Source: Bloomberg

¹ Jones, Huw. "UK watchdog says Libor end game may be uncertain," January 28, 2019, www.reuters.com, accessed on Factiva January 30, 2019.

² PwC, "Áre these the last days of LIBOR?" November 2017, www.pwc.com, accessed January 29, 2019.

³ Bloomberg, accessed January 22, 2019.

∠ The challenges

LIBOR has been used since the 1980s, and its use has paralleled the explosive growth in global capital markets. Today, it serves as a reference rate for the full spectrum of financial transactions. Homebuyers may take out adjustable-rate mortgages of LIBOR plus a spread, or home equity loans for a kitchen renovation. Business loans might be pegged to LIBOR as well. The benchmark isn't particularly transparent, though, and the rate-setting process hinges on interbank funding transactions that are declining in volume.

As noted, there are other choices that would seem to address LIBOR's problems. SOFR, for example, is based on overnight repurchase agreements secured by Treasuries. But the transition involves more than searchand-replace. Here are three fundamental challenges affecting the shift:

1. Multidimensional risks

The move from LIBOR to other reference rates could jolt three drivers of profitability: revenue, expense, and cost of capital. By using a different reference rate, firms will need to recalculate valuations and rethink pricing. A transition plan will require changes to hedging and risk management to adjust for the different methodologies underlying LIBOR and alternatives rates. The gains and costs from investing and debt will shift. As a result, a firm's revenues and expenses will also change, altering their cost of capital.

The effects aren't exclusively financial. Firms may have to revisit accounting and tax treatments. They'll also want to reduce product, legal, market, credit, and operational risks by revamping the full range of business functions from strategy and financial management to accounting and contract management. How effectively firms manage through the transition has consequences for customer, conduct, brand and reputational risks.

2. Complexity

LIBOR is giving way to five alternative rates that differ by region, currency, tenor, and basis (see Figure 2). SOFR, overseen by the Federal Reserve Bank of New York, and SARON, administered by Zurich-based SIX Exchange, are secured rates, while SONIA (Bank of England), ESTER (European Central Bank), and TONAR (Bank of Japan) are unsecured. Some of these are already in use; others are waiting in the wings.

LIBOR differs significantly from the alternative rates, making the transition especially complicated. LIBOR reflects a degree of bank credit risk; some of the alternatives do not. LIBOR is a forward-looking term rate with a range of seven maturities up to a year. The alternatives are backward-looking overnight rates. There is no simple equation (such as LIBOR = SOFR + 2%) here-and while market participants would value a forward looking term representation of SOFR, one doesn't exist yet. If a firm adopts a default stance on contract renegotiations without factoring in tenor and other considerations, it could find that it incorrectly evaluates the impact of the transition. We also note that replacing LIBOR with five alternative rates may fragment the quotation and trading of securities, complicating pricing even further.

The complexity of the transition spreads from root to branch throughout company operations. Most market participants need to switch to the new rates across the full range of financial products. They also need to coordinate changes to settlement, accounting, cash management, and other critical operations with thousands of customers and vendors—and they may not all be ready on the same schedule.

Five contenders to replace LIBOR

Five reference rates are emerging as alternatives to the London Interbank Offered Rate (LIBOR), the benchmark for \$350 trillion in financial contracts worldwide.

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Jurisdiction	\$	€	£	(Fr)	¥	
Reference benchmark	USD LIBOR	EURIBOR	GBP LIBOR	CHF LIBOR	JPY LIBOR	
Replacement rate	SOFR	ESTER	SONIA	SARON	TONAR	
Borrowing type	Secured	Unsecured	Unsecured	Secured	Unsecured	

SOFR: Secured Overnight Financing Rate ESTER: Euro Short-Term Rate SONIA: Sterling Overnight Index Average SARON: Swiss Average Rate Overnight TONAR: Tokyo Overnight Average Rate

Source: PwC analysis

3. Ambiguity

Regulators and central banks aren't defining how the LIBOR transition should take place. Rather, they are collaborating with the industry, including trade associations, in plotting a way forward. To an extent, then, companies must create their own roadmaps while facing murky timelines before LIBOR rate-setting ends in December 2021.

Companies need to determine which alternative benchmark(s) they'll use and when the cutovers will take place across the front and back office. They also need to rely on untested legal and contractual language on such topics as fallback terms and trigger events. With regulators issuing few if any hard mandates, financial firms will probably make different operational changes and follow different strategies and timelines. The lack of industry uniformity may slow or disrupt the transition. Whatever path a firm chooses, it will need to find a way to work with multiple benchmarks for the foreseeable future. At the end of 2016, for example, the market's total exposure to USD LIBOR was roughly US\$200 trillion, 95% of which stemmed from derivative products.⁴ That still equates to more than US\$8 trillion of loans, bonds, and other cash products. As SOFR grows in popularity and derivative contracts expire, the LIBOR exposure will certainly decrease, but trillions of dollars in open interest will persist for several years across a range of asset classes.

⁴ Federal Reserve Bank of New York, "Second Report: The Alternative Reference Rates Committee," March 5, 2018, accessed January 29, 2019.

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Creating an effective transition plan

We often hear financial executives talk about wanting to be "fast followers" where LIBOR transition is concerned. In this situation, though, there's no single playbook to follow. Anyone who waits for these ambiguities and risks to be clarified could be sorely disappointed. In fact, under the current plan from the Alternative Reference Rates Committee, a panel of financial firms convened by the Federal Reserve, some key unknowns may not be resolved until the final months before the transition as new industry norms become clear.

Firms that delay will likely fall further behind their proactive rivals. For example, imagine a critical thirdparty system that institutions use to track investment activity. How many clients will that vendor be able to support with system upgrades? Will there be enough technical project management resources and programmers available to handle the changes? Will they also be able to manage simultaneous changes to risk and settlement systems, accounting platforms, treasury software, etc.? What are the implications of being moved to the second or third wave of upgrade work?

We already see first movers beginning to treat LIBOR's end as an event with strategic implications—and as an opportunity to improve operations and relations with clients, shareholders, and employees. They're using scenario planning to prepare for a variety of potential outcomes. They're also starting to make changes that will be needed regardless of the contours of post-LIBOR finance.

Financial institutions should consider taking the following steps **now**:

- **Create** a governance structure to execute, manage, and monitor the transition.
- Identify the businesses, functions, products, contracts, models, processes, and systems that use LIBOR and gauge the impact of the transition on each.
- Inventory contracts that reference LIBOR and the nature of existing fallback language, and determine which terms need alteration.

- Determine needed changes to infrastructure, cash products, derivative products, and trading and analytical systems, as well as risk and financial reporting systems with long lead times for remediation.
- **Plan** transition activities based on the above findings, including how to group, organize, and sequence the work.
- Clarify potential accounting outcomes, especially for hedging portfolios.
- Educate employees and clients about the transition, tailoring discrete messages for institutional and retail customers.
- Reduce issuance of new LIBOR-linked products while including in any new LIBOR contracts provisions for amendments after regulators and the industry have clarified fallback terms.
- Test operational readiness for a post-LIBOR market by tracking new products that use alternative rates.

Meanwhile, companies will want, **over time**, to fine-tune their LIBOR strategy as the industry and regulators clarify the biggest unknowns. For example, firms will need to monitor the evolution of fallback language across the industry to reduce litigation and reputation risk. With the change from LIBOR to a new reference rate, companies will need to renegotiate spreads, adjusting for the differences in term premium and credit between the two rates. Counterparties and clients that don't agree with the new terms could resort to litigation.

Companies will also need to track changes in taxation and accounting rules. Firms should determine whether a change in interest calculations for debt instruments would constitute a "significant modification" and require recharacterization of the debt for tax purposes. Also, banks need to ensure financial instruments bundled together under a new reference rate will be deemed as eligible hedges under accounting rules.

Benefits from making the switch

We know that financial institutions have a long list of development projects, and spending money on a reference rate change might not sound like a top priority. If a firm has not developed its strategy to translate between rates and update pricing accordingly, it could face millions of dollars in potential losses. Handling this change promptly (and well) could ultimately benefit the balance sheet far more than most projects on the "to do" list.

The benefits don't stop there. Many of the transitionrelated projects described here can yield other, substantial benefits at minimal incremental cost.

For example, for the transition, companies will have to identify contracts tied to LIBOR so they can update terms to refer to the alternative rate. Some companies are using optical character recognition (OCR) to identify references to LIBOR and to digitize contracts for classification, analysis, and, ultimately, remediation to a new benchmark rate.⁵ We are likely to see some firms taking advantage of this comprehensive review of contracts to boost efficiency by standardizing and digitizing records. As a result, documents would be easier to access, update, and share.

Digitization will help firms that, because of acquisitions, hold contracts with the same customers on different platforms. A company transitioning from LIBOR can align the accounts and improve customer relations. Digitization would also streamline client onboarding, contracting, and negotiating. It would help reveal patterns across the full spectrum of transactions, improving risk analysis and speeding reviews by accounting and compliance. Finally, while negotiating contracts, companies accessing digitized records can more easily alter terms such as fallback language. But let's be clear: it may take a long time to remediate a large volume of contracts. To achieve the full strategic benefit, firms should start now.

In addition, the sweeping demands of LIBOR transition offer an opportunity to promote agility, innovation, and efficiency across business units. A company can empower staff, speed decision making, and reduce operating costs. It can tear down stovepipes, spurring collaboration across functions and regions. With a flatter, nimbler organization, a company would be better able to innovate products based on an alternative rate that improves pricing for customers.

⁵ PwC, "Robotic process automation and intelligent character recognition: Smart data capture," July 2018, www.pwc.com, accessed January 29, 2019.

5 Conclusion

The transition away from LIBOR may turn out to be a slow rolling disaster or a once-in-a-generation opportunity, depending on how one prepares. We know it will broadly affect nearly all financial institutions, and those that transact with them, and it is undeniably daunting. Some firms have already jumped into action. The transition, though, will eventually force all firms to act or be acted upon.

A wait-and-see approach to LIBOR transition could spell losses for laggard firms as well as broad financial market turmoil. "Because of the great uncertainty over LIBOR's future and the risks to financial stability that would likely accompany a disorderly transition to alternative reference rates, we need aggressive action to move to a more durable and resilient benchmark regime,"⁶ former New York Fed President William Dudley told a Bank of England forum in 2018. In a few years, financial institutions will have to adapt to a world without LIBOR. The leaders—the firms acting now to prepare their systems and processes for the alternative rates—will be in a position to set the terms for post-LIBOR finance. They will be better able than sloweracting firms to reshape the market landscape through internal streamlining, product innovation, and client outreach. They will capitalize on the conversion's sweeping, fundamental changes by making internal improvements in agility, collaboration, and decision making. And they will be most likely to avoid mispricing large portions of their portfolios, sidestepping potentially huge losses.



The bridge from LIBOR to alternative rates lies ahead.

Let's cross it.

January 29, 2019.

⁶ Dudley, William C. "The Transition to a Robust Reference Rate Regime," Federal Reserve Bank of New York, May 24, 2018, accessed