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Legal Update

Breakage and Yield Protection in a Post-LIBOR World

The Origins of LIBOR as a "Cost of Funds" Rate

The London interbank offered rate (LIBOR) currently serves as the basis for the interest rate on almost all medium-term US dollar business loans. Banks started using the rate in the late 1960's as an alternative to making loans at fixed rates of interest or at rates of interest based on the US prime rate. As originally conceived, LIBOR for a syndicated bank loan was calculated by taking the fixed rate of interest that a specified bank (participating in the syndicated loan) would offer to pay on a short-term loan[1] that it would borrow from another bank; this interbank loan was structured as the borrowing bank selling a short-term deposit[2] to the lending bank.[3] The interest rate on the syndicated loan would be the average of the rates so offered by a specified group of banks (all participating in the syndicated loan) plus an interest rate margin.[4] The interest rate on the syndicated loan was fixed for the term of the underlying interbank loans (that period being referred to as an "interest period"), and, at the maturity date of the interbank loan,[5] LIBOR would be reset at then-current rates, and the interest rate on the syndicated loan would be adjusted upward or downward to reflect the new LIBOR for the new interbank loan.

During periods in which interest rates were rising, basing a loan's interest rate on LIBOR gave lenders the ability to increase the interest rate on the loan at the time of each recalculation of LIBOR, rather than being locked into a fixed rate of interest for the entire tenor of the loan. The use of LIBOR in syndicated loans also facilitated the inclusion in syndicated loans of non-US banks—for which the US prime rate might not be an appropriate basis for determining the interest rate on a loan.

Because LIBOR reflects (or is intended to reflect) the cost to the lender of obtaining financing to make a loan, it is referred to as a "cost of funds" rate.

Since the days when banks would calculate LIBOR by obtaining actual quotations for the sale of deposits, LIBOR has developed into a rate that is available on a screen and is calculated by an administrator—ICE Benchmark Administration—based on quotations provided to it by a panel of banks. Many bank regulators criticize the current calculation of LIBOR because it is not based on actual transactions.[6]

Pricing Theories

Loan documentation for LIBOR-priced loans now (almost universally) includes provisions that reflect two theories—matched funding and cost-plus pricing—that arose in the early days of the London interbank market and reflect the characterization of LIBOR as a cost of funds rate.

Matched funding. Because LIBOR was originally predicated on the idea that, to make a loan to a borrower, a bank would go into the London interbank market and obtain the funds that it needed to make the loan by taking a short-term deposit from another bank,[7] the bank's funding in the interbank market is said to "match" the loan it made to its borrower.

Cost-plus pricing. As a corollary to the matched funding theory, pricing a loan at a rate based on LIBOR is described as the borrower paying an interest rate that represents the lender's cost of obtaining the funds for the loan (that cost being LIBOR) plus an interest rate that represents the lender's profit on the loan.[8]

Contractual Provisions Arising Out of These Theories

Breakage (arising from matched funding). The terms of the deposits made in the London interbank market provide that those deposits cannot be prepaid prior to their maturity. Thus, if a borrower prepays a LIBOR-priced loan prior to the maturity of the underlying deposit that (in theory, at least) was used by the lender to fund the loan, the bank needs to make sure that at the maturity of the deposit it will have enough money to pay the full amount of interest on that deposit. To make sure the lender has enough money for that purpose, the loan agreement requires the borrower to pay accrued interest on the LIBOR-priced loan up to the date of the prepayment, plus an additional amount referred to as "broken funding" or "breakage."[9] This additional amount is equal to the amount of interest that would have accrued on the loan (oftentimes not including the interest rate margin) from the date of prepayment through the maturity of the underlying deposit minus the amount of interest that the lender could earn by reinvesting the prepaid principal for that period.[10] If interest rates have risen since the deposit was made, then it's likely that the borrower will not owe any breakage compensation to the lender since the lender could earn more money by reinvesting the principal than it would have made on the loan.[11]

Yield protection (arising from cost-plus pricing). Because of the cost-plus pricing theory, loan agreements that provide for LIBOR-priced loans typically have provisions that protect the lender from the occurrence of events that could increase the cost to the lender of making the loan (that is, costs that are in excess of LIBOR). These provisions, often called "yield protection" or "increased costs" provisions—protect the lender's "yield"—in other words, they make sure that the entire amount of the interest rate margin will constitute profit for the lender. They require, for example, that if there are increases in capital requirements, increases in reserve requirements, the imposition of new, or increases in existing, taxes, or other changes in law or regulation that increase the lender's cost of making or maintaining a loan, the borrower must pay additional amounts to the lender to reimburse the lender for those costs.[12] When first formulated in the 1970's, yield protection provisions applied solely to loans priced at a rate based on LIBOR. Many loan agreements today provide that the yield protection provisions apply to both LIBOR-priced loans and loans priced at a rate based on the prime rate.[13] Although yield protection

provisions in loan agreements can vary widely, they all derive from the theory that the lender is entitled to be paid by the borrower for its cost of funding the loan plus the agreed-upon interest rate margin.

Replacement of LIBOR with SOFR

It is likely that by the end of 2021 LIBOR will no longer be used as the basis for determining the interest rates on loans and, instead, the Secured Overnight Financing Rate (SOFR), or some variation of SOFR, will be used in its place.[14] Unlike LIBOR, SOFR is not a cost of funds rate but is instead a risk-free rate. Risk-free or nearly risk-free rates are rates "… embedding no or only small amounts of credit risk."[15] In the London interbank market, the lending bank takes the credit risk of the borrowing bank—the risk that the borrowing bank may not be able to repay the interbank loan—and so LIBOR is not a risk-free rate. SOFR, however, is not a rate at which a bank could obtain funds to make a loan: it's the rate at which an investor would expect to be compensated for an investment with no risk of loss.

The theories underlying the broken funding and yield protection provisions in today's loan agreements derive from aspects of the London interbank market that will not be relevant for SOFR-priced loans.[16] To date there's been little discussion among market participants on the applicability of these provisions for SOFR-priced loans. Here are some possible approaches that lenders might take:

Abandon broken funding and yield protection provisions

- SOFR is an overnight rate (i.e., not fixed for any period of time); accordingly, the concept of broken funding is entirely inapplicable for loans priced at a rate based on overnight SOFR.
- Even if a loan's interest rate is based on a variant of SOFR that is fixed for short periods (so-called "term SOFR"), the concept of broken funding is inapposite because there is no actual, or even theoretical, matching of a funding source with a loan.
- Charging a borrower increased costs due to changes in law or regulation is no longer appropriate because the theoretical underpinnings of the obligations to pay these costs have disappeared. The lender should take the risk of changes in law that increase its cost of lending because it has agreed to charge interest on the loan at a rate that has no relationship to its cost of making the loan.[17]
- In any event, the fact that the yield protection provisions have been invoked by lenders only a handful of times in the fifty years that they've been included in loan agreements shows that they are not material to a lender's pricing decisions and could easily be jettisoned.

Retain broken funding and yield protection provisions

- For a loan priced at a rate based on term SOFR, breakage provisions are still appropriate because:
  - They are simply a way for a lender to enhance its yield on a loan, and represents a cost to the borrower of obtaining fixed-rate pricing for a particular interest period, and the theory behind it isn't really relevant.
  - Since matched funding hasn't actually been done for almost a half-century and borrowers have paid breakage to lenders for all that time, there's no reason borrowers shouldn't continue to pay it in a post-LIBOR world.
- The fact that yield protection provisions arose out of the cost-plus pricing theory

doesn't mean that those provisions aren't still appropriate to protect lenders from changes in law or regulation. The agreement as to the interest rate was premised on the law and regulation as it existed at the time the loan agreement was entered into; a change in law and regulation may appropriately result in a change in the interest rate.

- Many lenders' loan agreements provide that yield protection provisions apply not only to LIBOR-priced loans but also to loans that bear interest at a rate based on the US prime rate. If borrowers have agreed to pay increased costs when borrowing at the prime rate, they should certainly do so for loans priced at a rate based on SOFR.

Discussions to date regarding the development and implementation of SOFR and its variants have not generally reflected views of borrowers. Loan agreements for loans priced at SOFR or one of its variants will reflect a number of mechanical and other changes to reflect the replacement of LIBOR. All parties will be closely looking at those provisions and, if lenders include broken funding or yield protection provisions in proposed documentation, borrowers may well object to them.[18]

Treatment in Fallback Language

There do not yet appear to have been any loans priced at an interest rate based on SOFR, so there is no documentation that takes a position on the applicability of breakage or yield protection for SOFR-priced loans. However, since the fall of 2017, many syndicated credit facilities have included fallback provisions that address the occurrence of a permanent cessation of quotations of LIBOR and the likely transition to an interest rate based on SOFR. These provisions typically provide that, if a permanent cessation occurs, the borrower and the administrative agent will attempt to agree on an alternative reference rate and a spread adjustment. If they reach agreement, that agreement is subject to veto by the required lenders.[19] These fallback provisions do not describe what will happen to the breakage or yield protection provisions in the credit agreement, but instead say that the amendment may address other matters related to the change to a new reference rate.

In September 2018, the Alternative Reference Rates Committee (ARRC) published a consultation paper on fallback provisions that presented for discussion two sets of provisions—the "amendment approach" and the "hardwired approach."[20] The Committee declined to address questions of broken-funding, yield protection and illegality as being outside the scope of their proposals.[21]

As lenders think more about the many issues involved in pricing loans at an interest rate based on SOFR, they will develop views on the applicability of provisions regarding breakage and yield protection (as well as illegality) for SOFR-priced loans.[22] As those views make their way into proposed loan documentation, borrowers will have an opportunity to express their perspectives on the proposed provisions.

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[1] At that time, typically with a tenor of three or six months.

[2] Typically a time deposit or a certificate of deposit.

[3] This interbank market was in London to avoid US bank regulations with respect to the taking of deposits.

[4] A typical definition of LIBOR from that time would say:

"… the arithmetic mean (rounded upwards, if necessary, to the nearest 1/16 of 1 percent), as determined by the Agent, of the rates per annum quoted by the respective [specified group of banks] at approximately 11:00 a.m. London time (or as soon thereafter as practicable) on the date two business days prior to the first day of such Interest Period for the offering by the respective [specified group of banks] to leading banks in the London interbank market of U.S. dollar deposits having a term comparable to such Interest Period and in an amount comparable to the principal amount of such loan to be made by the respective [specified group of banks] for such Interest Period …"

[5] In fact the rate would be reset two London business days prior to the maturity of the outstanding interbank loans (i.e., two days prior to the first day of the new interest period).

[6] *See* Randal K. Quarles, Vice Chairman for Supervision, Board of Governors of the Federal Reserve System, July 19, 2018: "With LIBOR reliant on expert judgment rather than direct transactions, many banks increasingly uncomfortable providing that judgment, and the official sector unable to compel them to do so indefinitely, it was obvious to us that this structure—which bases so many trillions of financial instruments on such a small number of underlying transactions—was potentially unstable."

[7] Banks today rarely (if ever) match their funding to their loans, and, of course, non-bank lenders don't even have the ability to do that.

[8] The interest rate on the loan is fixed only for the duration of the underlying interbank loan. When that interbank loan matures, LIBOR is reset to reflect then-current interest rates.

[9] Note that these provisions do not apply to loans that bear interest at a rate based on the US prime rate.

[10] The contractual provisions do not actually refer to the underlying deposit, but instead to the "interest period" of the LIBOR-priced loan. *See* text at note 5.

[11] Breakage cost issues also arise in the event a borrower requests a loan, the lender makes arrangements to fund that loan in the London interbank market, and then the borrower does not, in fact, borrow the loan.

[12] The provisions also often require payments in respect of costs from laws or regulations currently in effect (rather than solely from changes in law or regulation), such as costs arising under the Dodd-Frank Wall Street Reform and Consumer Protection Act, and Basel III requirements.

[13] There is no justification under the cost-plus pricing theory for a lender charging the borrower for additional costs that it incurs in respect of a loan when the interest rate on that loan is based on a rate (the prime rate) that has nothing to do with the lender's cost of funding the loan.

[14] For a description of SOFR, and the reasons for replacing LIBOR with SOFR, *see* Alternative Reference Rates Committee, *Interim Report and Consultation of the Alternative Reference Rates Committee*, May 2016. Available at https://www.newyorkfed.org/arrc/publications.

[15] Alternative Reference Rates Committee, *Interim Report and Consultation of the Alternative Reference Rates Committee*, May 2016, at 3.

[16] Another provision in some loan agreements that may be challenged by the change from LIBOR to SOFR is the requirement that a LIBOR-priced loan be prepaid, or converted into a US prime-priced loan, in the event it becomes illegal for a lender to price a loan at LIBOR. Those provisions were thought to be relevant when the London interbank market was viewed as a non-traditional way for a US bank to fund itself, and that US regulators might prohibit or regulate the volume of LIBOR lending by US banks.

[17] Of course, a bank can change its prime rate every day, although banks face practical and political implications in doing so. In practice, the US prime rate is closely correlated to the US federal funds rate, a rate that is set by the Federal Open Market Committee.

[18] Whether or not breakage and yield protection provisions continue to be in loan documents is, of course, a commercial question. What happens to those provisions in 2021 will likely be affected by the relatively bargaining power of lenders and borrowers at that time.

[19] If they reach agreement, that agreement is subject to veto by the required lenders. Failing an agreement, the loans will bear interest at a rate based on the US prime rate.

[20] See *ARRC Consultation Regarding More Robust LIBOR Fallback Contract Language for New Originations of LIBOR Syndicated Loans*, September 24, 2018. Available at https://www.newyorkfed.org/arrc/publications. On December 7, 2018, the ARRC published a related Consultation regarding bilateral loans.

[21] The Consultations state:

> "... it is important to keep in mind that the current LIBOR-based lending model is a 'cost-plus' funding model and SOFR may or may not be reflective of a bank's internal funding costs. There are a number of customary credit agreement provisions that have developed around the historical construct of LIBOR and such provisions, e.g., break-funding, increased costs, and illegality may need to be reconsidered if LIBOR is not the reference rate."

ARRC Consultation Regarding More Robust LIBOR Fallback Contract Language for New Originations of LIBOR Syndicated Loans, September 24, 2018, at 6.

[22] Credit agreements sometimes provide that the interest rate on a LIBOR-priced loan will be adjusted for the reserve requirements of Regulation D (12 C.F.R. § 204) (the so-called "in the rate" Reg. D pricing adjustment). An interesting question beyond the scope of this note (and possibly of only theoretical interest) is the effect on a bank's reserve requirements under Regulation D of pricing a loan at SOFR rather than LIBOR.

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