How to fix the LIBOR

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The LIBOR is an index of interbank borrowing rates that has become the benchmark for financial contracts with notional values of hundreds of trillions of dollars globally. It is used in everything from home mortgages to credit-default swaps. It is now the center of a major controversy resulting from allegations that banks manipulated the LIBOR in various ways for various reasons. Egged on by the UK Parliament and regulators, the search is on for a fix. The UK's Wheatley Review is trying to figure out what to do with the LIBOR having concluded that the current process for setting it is "not a viable option." They asked for comments and we've proposed an alternative.

The current LIBOR setting process is based on a fundamentally and predictably flawed design. Here's how it works. Each day a handful of banks—up to 18 depending on the currency—are asked "[a]t what rate could you borrow funds, were you to do so by asking for and then accepting interbank offers in a reasonable market size just prior to 11:00 a.m. London time?" The central party that calculates the LIBOR disregards the top and bottom quartile of the submissions and then takes a simple average of the remainder. They publish the resulting rate. Later in the day the central party reports the quotes submitted by each bank so every bank, and anyone else, can see how each answered the question.

It doesn't take much to see from this description that the process provided the incentives and opportunities for banks to manipulate the rate and a means for tacit or explicit collusion by them.

- The contributing banks don't have to report real transaction prices when these exist and they have no obligation to transact at any rate close to their submitted quote. They have no incentive (beyond "goodwill") to report an accurate rate. There are no efforts to verify, in any way, the rates ex post or provide any deterrence and punishment against the submission of unreliable data.

- The rates submitted by the bank each day are made publicly available on the same day with the identity of each submitter disclosed. As a result it is possible for each bank to learn the others' submissions in time to influence its own submission for the following day. This provides a facilitating device for tacit collusion, but also for explicit collusion in which banks can

determine whether other banks have followed agreements to fix rates and punish any deviations from such agreements.

- The rates are determined through the submission of a small number of banks—currently no more than 18 and as few as 6 depending on the currency. It is well known of course that it is easier to coordinate either tacitly or explicitly when there are a small number of market participants.

- The process for calculating the LIBOR makes it particularly easy for banks to submit quotes that with a high degree of confidence could cause a material movement in the LIBOR. In fact, there is a high probability that any bank can move the LIBOR in a predictable direction by manipulating the rate it submits. But then on top of that the current LIBOR setting is also highly susceptible to coordination among multiple banks. When only 16 banks contribute to LIBOR, a coalition of just five banks can be guaranteed to be able to move the rate.

- Moving the Libor by a few basis points can earn traders with material amounts of money. So nudging the LIBOR to the second decimal point can matter a lot.

Unfortunately, changing the LIBOR is a challenging task. There are two main problems. The first is that there are more than $300 trillion of contracts outstanding tied to the LIBOR. It isn't possible to simply end it. Doing so would result in massive renegotiation costs, lawsuits and disrupted financial markets. The second is that there is no obvious substitute for a market-based benchmark that is also guaranteed to provide useful information and comparable to an untainted LIBOR during a financial crisis. Of course it is possible that a poor proxy for the interbank lending rate is better than an unreliable and manipulated rate. But if the goal is an enhanced and more robust measure of interbank lending, then a new benchmark needs to be designed and implemented.

We have developed an alternative process of providing and disseminating reliable information on interbank lending and borrowing which we call the "Committed" LIBOR or CLIBOR. The new process would have the following features:

1. Require banks that participate in the CLIBOR to submit committed bid and ask quotes for interbank lending. Any transactions which occur after that

submission (and before the next submission) must be at rates no higher than the submitted ask quote and no lower than the submitted bid quote. A penalty would be paid for any transaction which occurs outside the submitted bid-ask range, unless such transaction can be justified by the bank.

2. Require banks above a certain size to report their interbank borrowing and lending transactions to a data-clearing house similar to the TRACE system that was established for corporate bonds in the US. This would increase substantially the number of banks for which reliable transaction-based data are available and provide not only a source for verification of the committed bids and asks, but also a (one-day lagged) alternative benchmark of interbank borrowing rates.

3. Establish a governance body for the data clearing and interbank lending rate reporting operations that would consist of representatives of banks, private parties that have a stake in the LIBOR, and perhaps academics or other independent parties.

4. Have the CLIBOR governance body select through a public bid an organization to manage the data clearing house and CLIBOR rate setting process and dissemination.

5. Have the selected organization publish the daily interbank lending rates for relevant maturities and currencies, verify that each bank transacts consistently with its own quoted ask and bid, determine and collect penalties as needed, and address banks with an excessive frequency of penalties.

6. Have the selected organization develop algorithms for calculating the CLIBOR in ways that would minimize the opportunity for abuse and regularly employ screening methods for detecting collusion and manipulation.

This process would cost somewhat more. But it would result in an interbank borrowing rate that would be more accurate than the LIBOR, restore the credibility of the process for setting an interbank borrowing rate, and reduce the incentives and opportunities for manipulating the rate by individual banks or through collusion. Importantly, it would ensure continuity with the existing LIBOR and minimize the transactions costs of replacing the index altogether.