About the Survey

Background and Purpose

The London Inter-Bank Offered Rate (LIBOR) refers to a series of daily interest rate benchmarks covering ten currencies and fifteen time periods, ranging from overnight to one year. Contributing banks submit the rates at which they expect to be able to borrow unsecured funds for a given currency and time period. After discarding the highest and lowest submissions, the average of the remaining rates determines LIBOR for the given day.

LIBOR, administered by the British Bankers Association, is the most frequently referenced interest rate globally, underpinning transactions with a notional outstanding amount of at least $300 trillion from derivatives to various credit products.

Since 2009, regulators in the United Kingdom, along with authorities in the United States, Canada, Japan, Switzerland and the European Union, have been investigating a number of institutions for alleged misconduct relating to the setting of LIBOR and other similar benchmarks. Among these investigations, Barclays was fined £291 million ($451m) by U.K. and U.S. regulators for manipulating its LIBOR submissions.

As part of its response to these investigations, the UK Government has established an independent review into LIBOR, referred to as the “Wheatley Review”. In order to inform the Wheatley Review and wider international regulatory efforts, CFA Institute collected members’ views on various reform options.

Methodology

On 22 August 2012, a regionally stratified random sample of 21,000 CFA Institute members were invited to participate in the online survey (7,000 from each of the following regions: the Americas, Asia Pacific, and Europe, Middle East, Africa). One reminder was sent to non-respondents on 28 August, and the survey closed on 4 September 2012. 1,259 members responded for a response rate of 6% and a margin of error of ± 2.7%.

Respondent Profile

Of the 1,259 members that responded, 30% are from the Americas, 27% from Asia Pacific, and 44% from Europe, Middle East, Africa. Global (total) results have been re-weighted to accurately reflect the entire CFA Institute membership (65% are from the Americas, 16% from APAC, and 18% from EMEA). Statistically significant regional differences are noted throughout the report. ¹

85% of respondents are CFA Institute charterholders. The top job functions of respondents are portfolio managers (20%), research analysts (14%), consultants (6%), risk managers (6%), corporate financial analysts (5%), investment banking analysts (5%), and financial advisors (5%). 25% of respondents listed other occupations and 10% of respondents did not provide an occupation.

¹ Significance testing (z-test) was conducted at the 95% confidence level to determine statistically significant differences by region.
Survey Results

Groups Negatively Affected by LIBOR Manipulation

34 percent of respondents think institutional investors have been most negatively affected financially by manipulation of LIBOR and 29 percent think that consumers (borrowers and savers) have been most negatively affected. A higher proportion of members in APAC (38 percent) than in AMER (27 percent) and EMEA (28 percent) think consumers have been most negatively affected.
Methodology for the Setting of LIBOR

56 percent of members think the most appropriate methodology for the setting of LIBOR would be an average rate based on actual inter-bank transactions only. Of those, 49 percent think using estimated rates would be acceptable if the inter-bank market becomes very illiquid, with a higher proportion of those in APAC (62 percent) than in AMER (45 percent) agreeing.

Which one of the following options do you believe to be the most appropriate methodology for the setting of LIBOR? (N=1258)

- Average rate based on actual inter-bank transactions only
- Hybrid methodology using some combination of estimated rates and actual transaction rates
- Arithmetic average of estimated rates submitted by contributing banks
- Other
- Not sure

Are there any circumstances where you think using estimated rates would be acceptable instead of, or in combination with, transaction rates? (N=672)

- Yes, if the inter-bank market is very illiquid
- No

Chart does not display proportions that selected 'Yes, other circumstances' (3%) or 'Not sure' (7%).
Regulation of LIBOR Submission Process

70 percent agree that the LIBOR submission process should become a regulated activity, with a higher proportion of those in APAC (81 percent) and EMEA (77 percent) agreeing than those in AMER (65 percent). 18 percent disagree, with a higher proportion of those in AMER than in other regions disagreeing.
Administration & Oversight of LIBOR

55 percent of members think LIBOR should be administered and overseen by industry bodies but subject to regulatory oversight. 26 percent think LIBOR should be administered and overseen by bank regulators. A higher proportion of members in AMER than in APAC and EMEA think LIBOR should remain administered and overseen by industry bodies, though only the preferred method of administering and overseeing LIBOR by 11 percent of members globally.

How should LIBOR be administered and overseen?

- Administered by industry body(ies), but subject to regulatory oversight
- Administered by bank regulators
- Administered and overseen by industry body(ies) (current process)
- Other
- Not sure
Regulator Powers to Pursue Criminal Sanctions

82 percent of members agree that the regulator should have powers to pursue criminal sanctions over LIBOR manipulation.

Do you agree or disagree that the regulator should have powers to pursue criminal sanctions over LIBOR manipulation? (N=1209)

- Agree, 82%
- Disagree, 9%
- Not sure, 9%

No significant regional differences
Alternatives to LIBOR

32 percent of members consider indices based on repo rates to be a viable alternative to LIBOR and 29 percent consider overnight index swaps to be a viable alternative. 43 percent of members consider other market-based interest rates (e.g. Treasury bill yield, certificates of deposit, commercial paper, etc.) to be a viable alternative, with a higher proportion of those in AMER than in EMEA considering that a viable alternative. A significantly higher proportion of members in EMEA and APAC than in AMER consider SONIA/EONIA to be a viable alternative.
47 percent of members think an alternative to LIBOR could be introduced within 1 year (15 percent within 6 months), and 26 percent think an alternative could be introduced within 3 years but not within a year. A higher proportion of members in APAC (21 percent) than in AMER (13 percent) think an alternative could be introduced within 6 months.

<table>
<thead>
<tr>
<th>Time Period</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Within 6 months</td>
<td>15%</td>
</tr>
<tr>
<td>Within 1 year</td>
<td>32%</td>
</tr>
<tr>
<td>Within 3 years</td>
<td>26%</td>
</tr>
<tr>
<td>More than 3 years</td>
<td>7%</td>
</tr>
<tr>
<td>Never</td>
<td>2%</td>
</tr>
<tr>
<td>No opinion</td>
<td>17%</td>
</tr>
</tbody>
</table>
Global Framework

89 percent of members agree that a global framework of key principles or best practices should be developed for internationally used benchmarks, while 5 percent disagree and 7 percent are not sure.

Do you agree or disagree that a global framework of key principles or best practices should be developed for internationally used benchmarks? (N=1206)
### Results Breakdown: UK Responses

159 responses were received by CFA Institute members located in the United Kingdom. Their responses, with one exception, are not significantly different from non-UK respondents. The only difference emerged in their response to the question about viable alternatives to LIBOR, in which (a) a significantly higher proportion of members in the UK (34 percent) than non-UK based respondents (12 percent) consider SONIA/EONIA to be a viable alternative and (b) a significantly lower proportion of members in the UK (27 percent) than non-UK based respondents (44 percent) consider other market-based interest rates to be a viable alternative (highlighted in blue in the data table below).

Which one of the following groups, if any, do you think has been most negatively affected financially by manipulation of LIBOR?

<table>
<thead>
<tr>
<th></th>
<th>Global</th>
<th>UK</th>
<th>All other countries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Institutional investors</td>
<td>34%</td>
<td>30%</td>
<td>34%</td>
</tr>
<tr>
<td>Consumers (borrowers and savers)</td>
<td>29%</td>
<td>22%</td>
<td>29%</td>
</tr>
<tr>
<td>Retail investors</td>
<td>7%</td>
<td>3%</td>
<td>7%</td>
</tr>
<tr>
<td>Broker/dealers</td>
<td>4%</td>
<td>8%</td>
<td>4%</td>
</tr>
<tr>
<td>Other</td>
<td>7%</td>
<td>9%</td>
<td>6%</td>
</tr>
<tr>
<td>None; I do not think anyone has been negatively affected financially by LIBOR manipulation.</td>
<td>7%</td>
<td>13%</td>
<td>7%</td>
</tr>
<tr>
<td>Not sure</td>
<td>12%</td>
<td>15%</td>
<td>12%</td>
</tr>
</tbody>
</table>

Which one of the following options do you believe to be the most appropriate methodology for the setting of LIBOR?

<table>
<thead>
<tr>
<th></th>
<th>Global</th>
<th>UK</th>
<th>All other countries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average rate based on actual inter-bank transactions only</td>
<td>56%</td>
<td>50%</td>
<td>57%</td>
</tr>
<tr>
<td>Hybrid methodology using some combination of estimated rates and actual transaction rates</td>
<td>32%</td>
<td>40%</td>
<td>32%</td>
</tr>
<tr>
<td>Arithmetic average of estimated rates submitted by contributing banks</td>
<td>2%</td>
<td>2%</td>
<td>2%</td>
</tr>
<tr>
<td>Other</td>
<td>3%</td>
<td>4%</td>
<td>3%</td>
</tr>
<tr>
<td>Not sure</td>
<td>6%</td>
<td>4%</td>
<td>6%</td>
</tr>
</tbody>
</table>

Are there any circumstances where you think using estimated rates would be acceptable instead of, or in combination with, transaction rates?

<table>
<thead>
<tr>
<th></th>
<th>Global</th>
<th>UK</th>
<th>All other countries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes, if the inter-bank market is very illiquid (e.g., if there are few actual transactions)</td>
<td>49%</td>
<td>55%</td>
<td>49%</td>
</tr>
<tr>
<td>Yes, other circumstance(s)</td>
<td>3%</td>
<td>7%</td>
<td>3%</td>
</tr>
<tr>
<td>No</td>
<td>42%</td>
<td>35%</td>
<td>42%</td>
</tr>
<tr>
<td>Not sure</td>
<td>7%</td>
<td>7%</td>
<td>7%</td>
</tr>
</tbody>
</table>

Do you agree or disagree that the LIBOR submission process should become a regulated activity?

<table>
<thead>
<tr>
<th></th>
<th>Global</th>
<th>UK</th>
<th>All other countries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agree</td>
<td>70%</td>
<td>74%</td>
<td>69%</td>
</tr>
<tr>
<td>Disagree</td>
<td>18%</td>
<td>13%</td>
<td>18%</td>
</tr>
<tr>
<td>Not sure</td>
<td>13%</td>
<td>12%</td>
<td>13%</td>
</tr>
</tbody>
</table>
## How should LIBOR be administered and overseen?

<table>
<thead>
<tr>
<th>Options</th>
<th>Global</th>
<th>UK</th>
<th>All other countries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administered by industry body(ies), but subject to regulatory oversight.</td>
<td>55%</td>
<td>63%</td>
<td>55%</td>
</tr>
<tr>
<td>Administered by bank regulators</td>
<td>26%</td>
<td>20%</td>
<td>27%</td>
</tr>
<tr>
<td>Administered and overseen by industry body(ies) (current process)</td>
<td>11%</td>
<td>9%</td>
<td>11%</td>
</tr>
<tr>
<td>Other</td>
<td>2%</td>
<td>1%</td>
<td>2%</td>
</tr>
<tr>
<td>Not sure</td>
<td>6%</td>
<td>7%</td>
<td>6%</td>
</tr>
</tbody>
</table>

## Do you agree or disagree that the regulator should have powers to pursue criminal sanctions over LIBOR manipulation?

<table>
<thead>
<tr>
<th>Options</th>
<th>Global</th>
<th>UK</th>
<th>All other countries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agree</td>
<td>82%</td>
<td>77%</td>
<td>82%</td>
</tr>
<tr>
<td>Disagree</td>
<td>9%</td>
<td>12%</td>
<td>9%</td>
</tr>
<tr>
<td>Not sure</td>
<td>9%</td>
<td>11%</td>
<td>9%</td>
</tr>
</tbody>
</table>

## Which of the following benchmark interest rates do you consider to be viable alternatives to LIBOR?

<table>
<thead>
<tr>
<th>Options</th>
<th>Global</th>
<th>UK</th>
<th>All other countries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other market-based interest rate</td>
<td>43%</td>
<td>27%</td>
<td>44%</td>
</tr>
<tr>
<td>Indices based on repo rates</td>
<td>32%</td>
<td>32%</td>
<td>32%</td>
</tr>
<tr>
<td>Overnight Index Swaps</td>
<td>29%</td>
<td>36%</td>
<td>29%</td>
</tr>
<tr>
<td>Central bank policy rate</td>
<td>14%</td>
<td>16%</td>
<td>14%</td>
</tr>
<tr>
<td>Sterling Overnight Index Average (SONIA) / EONIA</td>
<td>14%</td>
<td>34%</td>
<td>12%</td>
</tr>
<tr>
<td>Other</td>
<td>1%</td>
<td>3%</td>
<td>1%</td>
</tr>
<tr>
<td>None – no alternative is viable</td>
<td>7%</td>
<td>11%</td>
<td>6%</td>
</tr>
<tr>
<td>Not sure</td>
<td>17%</td>
<td>14%</td>
<td>17%</td>
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</tbody>
</table>

## Over what time period could an alternative to LIBOR be introduced, if at all?

<table>
<thead>
<tr>
<th>Options</th>
<th>Global</th>
<th>UK</th>
<th>All other countries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Within 6 months</td>
<td>15%</td>
<td>13%</td>
<td>15%</td>
</tr>
<tr>
<td>Within 1 year</td>
<td>32%</td>
<td>26%</td>
<td>32%</td>
</tr>
<tr>
<td>Within 3 years</td>
<td>26%</td>
<td>26%</td>
<td>26%</td>
</tr>
<tr>
<td>More than 3 years</td>
<td>7%</td>
<td>9%</td>
<td>7%</td>
</tr>
<tr>
<td>Never</td>
<td>2%</td>
<td>5%</td>
<td>2%</td>
</tr>
<tr>
<td>No opinion</td>
<td>17%</td>
<td>21%</td>
<td>17%</td>
</tr>
</tbody>
</table>

## Do you agree or disagree that a global framework of key principles or best practices should be developed for internationally used benchmarks?

<table>
<thead>
<tr>
<th>Options</th>
<th>Global</th>
<th>UK</th>
<th>All other countries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agree</td>
<td>89%</td>
<td>81%</td>
<td>89%</td>
</tr>
<tr>
<td>Disagree</td>
<td>5%</td>
<td>7%</td>
<td>5%</td>
</tr>
<tr>
<td>Not sure</td>
<td>7%</td>
<td>11%</td>
<td>6%</td>
</tr>
</tbody>
</table>
Additional Comments

- Banks lost on LIBOR fixing. Traders and their bosses made additional money, while plundering their firms. It is not the bank itself that is at fault, but the culture within the firms. (AMERICAS: CANADA)
- Establishing a clear and transparent system for accurately setting LIBOR rates is an issue of credibility for the Global Financial System. (AMERICAS: CANADA)
- I would be interested in reading an analysis of what, if any, damages there were from this - alleged or otherwise. (AMERICAS: CANADA)
- I would like to see LIBOR set in New York, rather than UK. I trust the American financial markets and their regulators much more relative to any other developed markets with the exception of the Canadian Financial markets and their regulators. While I know that there were many mistakes done over the past couple of years, while I know regulators in US were overwhelmed by the course of the events, while I know that many thinks US will never be able to handle the 16T dollars in debt, at the end of the day I still trust the Americans more than anyone else. My trust does not extend to the British financial markets and their regulators. (AMERICAS: CANADA)
- LIBOR has been trustworthy benchmark. Element of wrongdoers should be removed not the LIBOR itself. This investigations must find out culprits from bottom of sewer and be punished very hard. It is not repute of LIBOR or BA is at stake, it will open a window by other economic rivaling countries to develop parallel benchmark to LIBOR. (AMERICAS: CANADA)
- The reference rates need to be more transparent and regulated. However, regulators and central banks were complicit in many of the problems. The BoE and Fed both knew that dealers were under estimating their borrowing costs in 2008/09. It suited ALL for this to be the case at the time. In fact, for many LIBOR maturities LIBOR was basically made up as there was no offer for term money. None! (AMERICAS: CANADA)
- All interested parties, especially regulators, need to assume and expect that participants WILL try to find a way to game whatever system is developed, as in the final analysis, gaming the system to the disadvantage of other participants is their business model. Any small opening to monopoly of any kind, collusion of any kind, regulation re-write, WILL be exploited far beyond any awareness of that risk. (AMERICAS: USA)
- All markets are being manipulated-stocks through quantitative easing, so the LIBOR issue is not a major surprise (AMERICAS: USA)
- Any alternative needs to include the credit risk component that LIBOR has. Therefore it can't be based on T-bill or CD rates. Commercial paper rates are probably the best option. (AMERICAS: USA)
- Any properly constructed and broadly useful index should have a clear set of underlying assets. The regulators should consider that at least [25]% of all bank LIBOR transactions clear through a transparent exchange where prices are posted in real-time or nearly so. The banks cling to a view of the world where it was neither possible to collect nor disseminate all transaction prices (i.e., the world of paper and fax settlements). The banks' role is to intermediate credit lending decisions, not collect market rent from making market prices opaque. (AMERICAS: USA)
- Because the highest and lowest readings were thrown out, the manipulation had little material effect on the actual rate. If anything, borrowers benefited by paying a LOWER rate and were not hurt. It is unclear who really lost out. Banks were probably receivers of LIBOR, but some banks probably survived the crisis because they did not post "True" rates that might have signaled weakness and cause a Lehman style run on them. Investors in floating rate securities may have received lower coupon income, but a higher LIBOR would have resulted in more "bank stress" and market fears that would have likely lead to far greater principal Mark-to-market loss on those same securities that would have been far worse than small amount of lost coupon income. (AMERICAS: USA)
• Best practices” doesn’t address felonious corruption proclivity -- there has to be a severe punishment. Even then, I'm not sure whether testosterone-driven risk-takers will smell the coffee. Perhaps a very high whistle-blower reward could work -- that, at least, would put a form of "competition" on the floor. The good guys would become intelligence agents, and the bad guys would try to outrun them -- interesting dynamic! (AMERICAS: USA)

• Economist Magazine views on how LIBOR could be fixed are most succinct I have read. (AMERICAS: USA)

• I used to work in the energy industry. Traders were criminally prosecuted for misreporting industry benchmark data that impacted price setting. LIBOR should be no different. / / Also, a benchmark rate set by actual transactions would be much superior to LIBOR. The benchmark rate should be set by ALL transactions, though. Be VERY careful of "off exchange" trades that allow for gaming/manipulation. (AMERICAS: USA)

• In my opinion and in spite of the abhorrent behavior by some of the LIBOR setting participants, the way LIBOR is currently arrived at, can work the way it currently is set up albeit with some tweaks. Notably more oversight by regulators combined with the integration of "real rates" as inputs. Overall, and unless some hard quantitative evidence proves otherwise, my guess is the impact of this entire debacle is not significant, especially in consideration of the financial turmoil during the periods in question. (AMERICAS: USA)

• Let companies like S&P, Markit or others compute these global benchmarks (AMERICAS: USA)

• LIBOR began as a loan pricing mechanism for a specific group of banks for for relatively short loan /funding periods - from overnight to six month tenors. A sample of banks was selected -at first from the lending group - to provide representative rates from which LIBOR for that loan was calculated. Gradually, a "universal" LIBOR came to be calculated from a set group of reference banks and then used as an all-purpose benchmark for the cost of offshore funds in currency. The first step in defining the new LIBOR is to determine its precise role. Is it to be a rate for setting loan pricing? Or a wider benchmark? If the latter then the ideal situation is to have more market input than not into its calculation. The uses to which the rate is put would probably suggest what that rate should be. Like any market-based price, to accept that there will be gaps requiring interpolation. Interpolated rates should be specifically identified to prevent the illusion of there being a real market price. / / Using repo rates -which are for secured transactions - introduces the need for an adjustment to an unsecured basis for loans for example. And raises the question about transparency, for these rates into their setting. Care has to be taken to recognize he effects of tax regimes, required reserves or the absence thereof, etc.. (AMERICAS: USA)

• LIBOR essentially replaced the prime rate, which was clearly a bank-set rate, the correlation of which to daily market rates was positive, but variable. As such, LIBOR represented a step forward in closer market approximation. I don't think at the time anyone believed that LIBOR was a true unadulterated market rate, without any of the elements of a bank-set rate. The availability of information has progressed sufficiently in the intervening years to make it practical to use a purely market rate, either transaction-derived LIBOR or something else, in the future. (AMERICAS: USA)

• LIBOR needs to be estimated by banks estimating both estimating the rate at which they would borrow and also the rate at which they would lend to other banks. The latter is the primary failure of the current system. (AMERICAS: USA)

• Markets should be transparent, not manipulated by EITHER banks or policymakers. (AMERICAS: USA)

• Should consider using actual borrowing costs, and publish a list of banks that submitted the actual costs, but do not disclose which banks submitted which costs. This would provide more truthful values, yet eliminate the stigma of high borrowings costs. / / When no actual rates are available, then use estimates, but then disclose how many of the submissions were estimates as oppose to actual rates. (AMERICAS: USA)
• Since LIBOR submissions were always estimates, we should have been suspicious of this process all along. The banks will resist disclosing what it actually costs them to borrow, but there really is no other way to have an accurate benchmark of interbank rates. (AMERICAS: USA)

• Some have commented that the LIBOR scandal is an uproar that far exceeds any damages done to borrowers, savers or those involved in the derivatives market. While that may be true from an economic standpoint, the financial system functions better when integrity is maintained. Even if no one was harmed by misreporting rates by the institutions that report their borrowing rates for setting LIBOR, misreporting, for any reason, does not establish a basis for predictable ethical behavior. A lie is a lie. Some want to establish a threshold for what is a "real lie" versus an "insignificant lie". You cannot establish such a threshold. (AMERICAS: USA)

• Stop the looting and start prosecuting. The public will not regain confidence in the financial markets until some bankers go to prison. (AMERICAS: USA)

• Submitting banks should estimate rate at which best bank could borrow. (AMERICAS: USA)

• The commercial paper rate seems like the rate least able to be manipulated. If the banker can manipulate, they will. (AMERICAS: USA)

• The confidence of savers & borrowers across the entire global economy was damaged by the LIBOR scandal. Savers hurt & borrowers benefited. The perpetrators of this fraud need to be swiftly & severely dealt with by the justice system. The system needs to be changed so that this cannot happen again. (AMERICAS: USA)

• The current method kept the markets functioning during 2008 when the markets had all but frozen out. If actual transaction rates were required there was a period where the market could have completely collapsed. The banks and the regulators did the right thing by using an estimated rate to keep the markets functioning. Subsequent to that, the majority of the instances of which I have heard cited actually involve understating LIBOR which hurt investors in lending entities but helped borrowers. Anyone purposely misstating or encouraging the misstating of LIBOR in order to benefit other contracts to which they are a party should be investigated, and punished. We should not throw out the current system because of a few bad actors. The current system is still the best alternative for the intended purpose and the flexibility helped keep the 2008 crisis contained. (AMERICAS: USA)

• The manipulation that has apparently taken place is another black eye on our industry. (AMERICAS: USA)

• The process of determining the rate should not be easily manipulated for gain by inside participants at the expense of others affected by the process. (AMERICAS: USA)

• The regulators knew about biased LIBOR rates. Regulators instructed or encouraged the submissions of biased and incorrect LIBOR rates. Regulators make biased decisions and policies using biased rates. Regulators anywhere on the globe cannot be trusted, and the banks can't be trusted. / / Don't mend LIBOR rate methodologies, submissions or process, etc. End LIBOR rates. Substitute an arithmetic average of new-issue yields, quarterly, on 10 largest democratic countries based on GDP. If there is not a viable 2 or more parties political process in a country, it cannot be included in the average. (AMERICAS: USA)

• The rules for construction of the benchmark should be public and easy for an individual to understand. / If there are risks inherent in the construction (estimates, self-reporting) they should be explicitly disclosed. / The purpose for using the benchmark should be communicated to consumers (for example, an estimate of bank short term funding costs). / (AMERICAS: USA)

• The senior people responsible should spend time in prison. (AMERICAS: USA)

• This is an example of something working perfectly fine until there is an extreme event, some suggestion of possible manipulation, and the entry of opportunistic regulators and investors who feel they can pick the deep pockets. If there was a misstatement, it was motivated by cosmetics, not economics, and was not a conspiracy to rip off anyone. (AMERICAS: USA)
This is kind of a stupid survey. CFAs don't know enough to answer these questions, and the questions aren't well-thought out. This is a complex topic that does not work well with a "choose one" question style. All answers should have been format free, like the last box. Read my articles on the question, you might learn something: / / http://alephblog.com/2012/07/06/an-analysis-of-three-month-LIBOR-2005-2008/ / / http://alephblog.com/2012/07/12/on-floating-rates/ / / http://alephblog.com/2012/07/05/on-internal-indexes-like-LIBOR/ / / Not everyone will agree with my opinions/findings, but this question is more complex than your survey design admits. (AMERICAS: USA)

Those who manipulate rates should be liable for losses of those who relied on them (AMERICAS: USA)

Using an artificially low reference rate creates systematic risk more than harming any specific market participants more than other market participants. The problem is that one bank reporting artificially low rates will spur other banks to report artificially lower rates. Overall rates that are artificially low will crowd out yield seeking investors from fixed income markets and they will search for return in other investments like real estate, commodities and equities. (AMERICAS: USA)

AU/NZ has a very workable system based on actual bank bill transactions (ASIA PACIFIC: AUSTRALIA)

Estimation is not the problem. The total lack of accountability of the estimation is the problem. / I suggest estimated rates from each entity are compared with their actual transactions (i.e. back tested) and any large discrepancies queried for further explanation. / / I suggest that this is done on a monthly basis and the differences are published for public consumption. on Bloomberg. (ASIA PACIFIC: AUSTRALIA)

In answer to the first question I don't think borrowers have been adversely impacted, but savers may have been (ASIA PACIFIC: AUSTRALIA)

It is unclear how much the impacts were and who were most suffered. But it is clear it negatively impacted the credibility of financial markets. (ASIA PACIFIC: AUSTRALIA)

LIBOR is a market critical index. The fact that it has been manipulated is appalling and I believe regulators should acknowledge the loss to the public and prosecute/ penalize the entities involved. / We have seen moral hazard after moral hazard all a function of individual greed and I am sick of hearing there is no accountability, there should be criminal punishment like there should be criminal punishment for executives and Boards of "too big to fail" banks when they become reliant on central banks and governments to stay open. / The trust in the Financial markets and professionals has fallen enormously over the past 5 years, and it seems the way this fraud is being dealt with is another example of why investors should believe our profession is corrupt. I am ashamed of the financial services industry and the pointless efforts by regulators to hold individuals accountable to any minimum level of ethical behavior. (ASIA PACIFIC: AUSTRALIA)

LIBOR is merely a manipulated rate. (ASIA PACIFIC: AUSTRALIA)

No-one is forced to use LIBOR. LIBOR is a private benchmark created by voluntary participation by private businesses. It is not a government owned asset or a "public good", despite the fact that members of the public may use it. Participants in LIBOR owe no special obligation to users of LIBOR - perhaps the fact that this is not explicit is the problem. (ASIA PACIFIC: AUSTRALIA)

Send the crooked people to jail for defrauding others. Make the banks reimburse everyone who has suffered loss from their deceit. (ASIA PACIFIC: AUSTRALIA)

people get used to the benchmark but it is the time for change (ASIA PACIFIC: CHINA)

(1) RE-ELECTION: LIBOR submission member banks should be subject to regular qualification process (say, every 2~3 years) for re-election. / (2) REPORT: Member should report their daily submissions together with their actual inter-bank loan transactions, making these transparent to the public for evaluation, detection of abnormality, etc. / (3) REGULATED: A committee of
international regulators should be set up to over-see the daily activities involved in setting LIBOR. (ASIA PACIFIC: HONG KONG)

- Barclays, being one of the relatively more honest banks on this matter, is still fined. Most if not all of the other banks should also be fined, proportionally. Fairness must be maintained. The regulators must pursue all other banks ASAP. Unfair treatments between banks would lead to irreparable damages to the market. (ASIA PACIFIC: HONG KONG)

- If Regulators bring 'X'-IBOR benchmark creation into their remit, and at the same time migrate to a transaction based curve creation process, this will remove the subjectivity that has enabled Banks' to game the process to their advantage. (ASIA PACIFIC: HONG KONG)

- Interbank borrowing is in essence the same as issuing short-term bonds. So put them all on an open market with transparent bids and offers. At the same time put all sovereign and corporate bonds on similar trading screens. (ASIA PACIFIC: HONG KONG)

- More transparency in the process is key. Credit market participants are forced to make assumptions as to a counterparty's creditworthiness otherwise. Credit ceases to be provided to a counterparty when doubt regarding its solvency reaches a critical threshold. Transparently set counterparty lending rates would highlight this well in advance. The current opaque system sets up a binary situation where counterparty rates imply an institution is solvent one day and ends up in liquidation the next. This type of discreet event causes the credit market lock-ups and subsequent market chaos seen in 2008. / / I think credit default swaps provide a good model for LIBOR. They are a continuous indication of an institution's creditworthiness, I think a key factor is that they are set by a broad and changing set of market participants continuously bringing new information to the market. If one looks at the CDS levels for institutions leading up to their failure in 2008 it is obvious that they were giving a true indication of the deteriorating creditworthiness while the interbank rates upon which LIBOR is based were just a fiction. (ASIA PACIFIC: HONG KONG)

- Before introducing any benchmark rate, it needs to be tried and tested and based on the response it should be slowly and steadily expanded. (ASIA PACIFIC: INDIA)

- LIBOR should be provided with another chance to re-invent itself in more transparent and compliant way (ASIA PACIFIC: INDIA)

- The way LIBOR is fixed today it raises more questions on its trustworthiness as the true reflection of market perception of the overall risk inherent in overnight to one year lending as the deciding bankers will always want to use it to their advantage. The system was always suspicious as the association fixing it would always had the advantage of forming cartel or function in the oligopolistic manner. The surprise is that it has surfaced after decades though there was always an obvious chance of it happening and then no regulator or economist raised the alarm with the same voice as today. The best way to curve such untrustworthy nature of banking is to let the market decide at what rate they want to trade rather than giving any reference rate to it. Regulators should chip in when the market is overruled by few bankers. If we still feel that we need the reference rates and doing away with the same will impact the businesses negatively, then this association of bankers should be formed on rotation basis and each bank should be the part of the association for not more than six months based on some eligibility criteria. It will not only help in judging the consistency in rate fixing but also bring more competitiveness. (ASIA PACIFIC: INDIA)

- LIBOR has some problems however nothing can substitute LIBOR. LIBOR will be sustained. (ASIA PACIFIC: KOREA)

- The fracturing of the LIBOR market is part of a symptomatic unraveling of the world's capital market. The game has always been rigged, the indices manipulated by those with the most vested interest. Fixing the LIBOR issue would not address the larger problem at hand. The fundamentals of a free market system presupposes that there are there is no single person who can move the market, yet time and time again, this is not the case, as underscored by fantastical
blow-ups like LIBOR-gate. This would be less of a problem if you de-link the LIBOR offers from the other traders with vested interests in the LIBOR. However, the market would correct itself by moving away from the LIBOR towards other floating rate instruments if it perceives that this LIBOR-gate has cost the financial markets catastrophic amounts. It's more like knowing that the casinos are fixed, but gamblers still go there anyway. (ASIA PACIFIC: MALAYSIA)

- Again, if actors have malafide intent, it does not matter what methodology you adopt nor if there is regulatory oversight. This does not mean there should be no regulatory oversight. On the contrary banks have a conflict of interest with respect to LIBOR and other international rate indices that are used to price products or place borrowings. With respect to LIBOR that removes outliers and then averages the quotes is a means of trying to smoothen individual bank preferences, if all collude, this is meaningless. So again what steps the industry takes to bring integrity to the process is really the key. Regulatory oversight will help but the key responsibilities lies with the banks themselves and the internal processes they put in place to ensure that such collusion does not happen again. (ASIA PACIFIC: NEPAL)

- LIBOR rates as submitted by Banks are highly manipulative, the especially distort the rates at the time of big consumer or corporate lending's. (ASIA PACIFIC: PAKISTAN)

- The current LIBOR scandal has implications worth trillions of dollars. The reference rate for financial transactions should be independent and no party should be able to influence it in their favor not even the regulators. (ASIA PACIFIC: PAKISTAN)

- Banks will be banks. Which bank will not manipulate to their advantage. Banks cannot impute rates that are not actual. / The key is / 1. To use actual transactions where available so that it is documented and verifiable / 2. Where the bank has no transaction, imputed rates will be used. However imputed rates should not be under the control of the bank / 3. Imputed rates will be the median of the other submissions from the other contributing banks / 4. Then take the weighted (size of transaction) average rate from all the contributing banks / 5. Further reduce the risk of manipulation by averaging this rate with the interbank swap and repo rates (ASIA PACIFIC: SINGAPORE)

- Benchmark rates should be based as far as possible on actual, liquid market data. If the markets are illiquid, then that benchmark is irrelevant. (ASIA PACIFIC: SINGAPORE)

- Do an independent audit on random basis (ASIA PACIFIC: SINGAPORE)

- It was well known during distress periods that LIBOR was not a good basis of actual accessible rates and bond yields were seen as a better index. Rates should be set off the government bond yield curve.... (ASIA PACIFIC: SINGAPORE)

- LIBOR affects all globally. Industry players should lead in setting a new/uniform standard, tempered by a committee of regulators that are not aligned with any one country. (ASIA PACIFIC: SINGAPORE)

- We should strive towards keeping financial markets corruption-free and less prone to manipulation. At the same time, too much regulatory oversight and too complicated a calculation methodology in something as basic as determining a daily benchmark interest rate is only going to introduce and exponentially increase the cost & complexity in other processes / derivatives. A simple volume weighted average rate transacted by banks, calculated by market bodies with some degree of regulatory oversight should be more than sufficient to rectify the problem at hand. A simple calculation methodology and strong penalties in one-off market manipulation cases should act as strong deterrents for potential rogue contributors. Going overboard with the regulations right now is only going to cost everyone on a permanent basis. (ASIA PACIFIC: SINGAPORE)

- As long as a benchmark is only calculated based on submitted estimation (with no binding obligation) this opens the way to manipulation. It definitely needs to be calculated, at least in part, based on actually used rates and have this serve as an anchor, if you will. A regulator should
supervise this process and decide on whether the estimations submitted are realistic or not. (EMEA: AUSTRIA)

- sadly our industry has proven once again that it cannot self-regulate effectively - some regulatory oversight needed (EMEA: AUSTRIA)

- The reference rates should be set by the central banks based on actual trades (EMEA: AUSTRIA)

- Require that all LIBOR submitters complete the CFA program. / - trainings on Importance of the LIBOR submission / - internal audit review of the process. / - independent body in charge of submitting a detailed report periodically. / (EMEA: BELGIUM)

- time period for the introduction of an alternative to LIBOR would need to ensure there can be a smooth transition of current LIBOR-based contracts to the new benchmark without detriments to the parties. I am not sure of how much time would be needed. (EMEA: FRANCE)

- I would only use LIBOR transactions executed on regulated exchanges. Thus "reference prices on rates" would become transparent like equity index option settlement prices on option expiry. / If LIBOR transactions continue to trade OTC I would transfer MIFID regulations from equity markets to fixed income markets. (EMEA: GERMANY)

- Regarding question "Over what time period could an alternative to LIBOR be introduced, if at all?": LIBOR is the base for many long-running contracts, so it needs to be around for years. However, for new contracts alternatives can be used. / I think there is too much hype around the LIBOR scandal. The process needs adjustment, yes. The EURIBOR process might be a better process (more members, banks submit their estimates for others not for their own transactions). (EMEA: GERMANY)

- There is room for stronger and more efficient regulation to be implemented. So far, lack of monitoring has only led to having one scandal after another coming to surface, and more is certainly expected from institutions putting at the core of their mission the ethical function of global financial markets i. e. the CFA Institute. When scandals than that are revealed, the general public simply ask themselves whether information of this kind had not been common knowledge among informed market participants in the first place. This way, reacting to such scandals rather than being proactive is perceived by the general public as lack of efficiency. (EMEA: GREECE)

- After years of serving as lead investigator on a host of abuses by financial institutions and their employees, I have come to the conclusion that perhaps the only way to stop ongoing abuse, of which the manipulation of LIBOR is only a symptomatic example, is to have financial regulators the world over paid salaries commensurate with those they are regulating, with "commission"-based bonuses on top of those salaries, based on a percentage of the money recovered in complex fraud cases. / Until we get serious about hiring the best and brightest regulators, and compensating them as though they are bankers, we can expect systemic fraud in the financial sector to continue. (EMEA: ICELAND)

- Take it off from UK banks and use a mix of international banks. (EMEA: MAURITIUS)

- If there are irregularities in LIBOR, what else can we expect in the future? Is the regulator on top of everything? (EMEA: NETHERLANDS)

- Current method of fixing LIBOR stands discredited. Whatever be the alternative that could emerge within the next one to three years, it should be transparent . My personal preference for LIBOR alternative would be 1) indices based on discount rate or 2) policy rate of central bank. (EMEA: SAUDI ARABIA)

- Numerous swaps and instruments with maturities greater than 3 years are currently in issuance. even if alternatives are found, LIBOR will still have to be calculated in parallel with alternatives to accommodate these securities. (EMEA: SOUTH AFRICA)

- The LIBOR should be administered by the industry body but with an over sight from the regulator. / Increase the number of contributors for setting LIBOR and the rates contributed by banks should
be examined in great detail. Also increase the number of people on the committees that sets LIBOR. (EMEA: SOUTH AFRICA)

- When all the major banks actually transacted close to LIBOR, in volume, LIBOR was a plausible but not perfect benchmark. The GFC and the effective re-rating of all banks far from the LIBOR 'benchmark', together with the interbank liquidity freeze, rendered LIBOR unfit for purpose. It's not clear that any substitute will be better able to withstand a repeat of the 'perfect storm' of 2008 but, notwithstanding that caveat, any replacement must be representative (whatever that is defined to be) of real, actual and verifiable commercial arms-length transactions. (EMEA: SOUTH AFRICA)

- The LIBOR panel must be, as minimum, as the same size as the EURIBOR panel. For me, the main problem for LIBOR is the reduced number of contributors. (EMEA: SPAIN)

- I am not an expert in this field. It is clear that the manipulation which has taken place is breathtaking, but I'm not sure how it should be solved. (EMEA: SWEDEN)

- Consider that all ISDA based transactions have to be migrated (EMEA: SWITZERLAND)

- Has anyone looked at potential manipulation in the US money market for setting benchmark rates? How is the obvious manipulation of interest rates and interest rate curves by central banks judged? (EMEA: SWITZERLAND)

- In any case avoid to rely only on a single rate (EMEA: SWITZERLAND)

- LIBOR can be saved; it is a very important tool. But we need clarity as to who manipulated, and why... and then learn our lessons (EMEA: SWITZERLAND)

- LIBOR rate should remain in the hand of the industry, as it serves the industry, and not regulated per se, all players of the financial sectors have a strong interest to arrive at a fair and correct rate, the fact that some irregularities may have been done by certain players does not mean that the system is wrong, adding more regulation will not help. Maybe we could thing of enlarging the number of sample banks for the calculation with certain criteria which is not necessarily the volume or the size (EMEA: SWITZERLAND)

- Many products for conservative private investors are based on LIBOR and the potential manipulation, although it may ultimately not have deprived these clients from much wealth, has shaken their trust in the industry. One needs to come with a "new LIBOR" that is less prone to manipulation and correctly communicate to private investors on the measures taken to avoid manipulations. (EMEA: SWITZERLAND)

- Nobody was really hurt by the manipulations since most of the investors, consumers etc. are most of the time indirectly receiver and payer in product that are linked to LIBOR (such as bonds, money market transactions, mortgages, loans, discount rates for pension funds etc.) (EMEA: SWITZERLAND)

- Question re time period > no opinion: I know that trillions of dollars are linked to the LIBOR and looking at some long-term structured products or loans etc., there might be an alternative within 6months, but the question is, to what degree would this alternative be used at the beginning and maybe it would take years if not decades to have this alternative as standard benchmark. (EMEA: SWITZERLAND)

- The current methodology is a failure by construction and hence I don't think that any investigation of fraudulent activities will make sense and end up positive. Furthermore, judging over longer term, I believe it will be difficult to estimate whether LIBOR has been overstated or understated compared to an "ideal" benchmark, therefore the discussion should be closed soon and a better sampling methodology should be established with a regulatory control process. (EMEA: SWITZERLAND)

- The manipulation of interest rates in not a bad thing per say; central bank do it all the time, and are happy when the banking industry goes along with their policy. The more important story here is that during a financial crisis, most banks become technically insolvent. This is not the first time this has happened (see S&L crisis in the USA in the early 1990's). During such periods,
regulators do all they can to prevent bank failures in order to save the system. This is known as "regulatory forbearance." In the LIBOR rate setting process, bank regulatory were happy not to have too many "outliers" that could signal potential bank failures. During this period, banks continued to earn profits and repair their balance sheets while still making loans. This is a much preferred outcome to massive bank failures due to accurate reporting of borrowing costs, upon which other banks might react by not extending liquidity. / (EMEA: SWITZERLAND)

- the problem wasn't LIBOR but the manipulation of it for personal gain. It's no reason to over-regulate, just punish the manipulators. (EMEA: SWITZERLAND)
- There can still be differentials between OIS rates and LIBOR rates but not at current levels I think. / (EMEA: SWITZERLAND)
- Is it Euribor-EBF a viable alternative? / (EMEA: UKRAINE)
- the whole legal and regulatory process around the issue is cumbersome. the simplest way to ensure greater transparency is to ensure that the rate provided by banks should be within the range of the rate quoted during the day rate should be contributed by the finance division of the bank rather than dealers who quote the rate, (EMEA: UNITED ARAB EMIRATES)
- There is a conflict of interest in the way LIBOR is determined which stimulates the tendency to report lower levels of LIBOR. Had an independent market platform (electronic, efficient and transparent market platform rather than OTC) been set up to monitor demand and supply bid and offer rates, this conflict of interest would be minimized. (EMEA: UNITED ARAB EMIRATES)
- Trust is critical! I think the key should be in regaining the trust of all market participants (not just investors) in an index that can then be used to measure (or standardize) transactions. / / Imagine if the kilogram (which is the weight of an actual thing) was found to be wrong! Would you trust any seller of physical goods? (What would you base your transactions on?) (EMEA: UNITED ARAB EMIRATES)
- Another black-eye for the financial industry. Global regulation needs to be put in place for such matters, and further regulation required (EMEA: UNITED KINGDOM)
- As a "risk free" discount curve clear that LIBOR is not appropriate. As a risk measure for unsecured funding it might be useful but the "credit" element needs to be properly defined in a tradable way. The focus for this needs to be some arbitragable liquid product that defines the spread to GC collateralized rates not a survey of submissions. The biggest crime is that the credit element of the LIBOR fix is not "known" to the vast majority of the end users, in effect it's predominance in financial contracts has forced large proportions of the market (often well collateralized savers) to borrow at unsecured bank rates rather than at a rate more appropriate to their own financial position. (EMEA: UNITED KINGDOM)
- As a former investment banking professional I always assumed that LIBOR submissions were scrutinized by the BBA and the Bank of England as a sign of market health. What is shocking about the LIBOR scandal is that the very basics of sound practice - traders announcing and submitters collating with regulators reviewing - were not being adhered to. There is nothing wrong with any of the mechanisms in place if people are doing their jobs.....banks, regulators and other overseeing bodies. Incompetence is the key scenario at play here and no amount of regulatory change will alter the competence issue; this is the key variable that needs to be addressed. (EMEA: UNITED KINGDOM)
- Daily submission should include actual borrowing rates (for the previous day), in addition to expectations by lenders. Large discrepancies would need to be explained and this would also help in the oversight effort (EMEA: UNITED KINGDOM)
- I am concerned that the LIBOR 'problem' will now be used by foreign regulators especially in order to try and wrestle 'top spot' from London in this important area of influence. I am also concerned that the UK's authorities will concede too much ground on this issue in order to placate foreign peers. (EMEA: UNITED KINGDOM)
I am skeptical that we will be able to find a solution easily. LIBOR and swap rates always assumed a certain amount of credit risk: counterparties receiving a variable rate may not be willing to switch to benchmarks like SONIA/EONIA or repo rates as those rates are generally lower (as those transactions have a lower amount of credit risk). Sadly, a quick solution will only come by political will, as big banks may agree to compromise on this and deflect further inquiries on their role in manipulation. (EMEA: UNITED KINGDOM)

I am still not 100% sure what exactly the "LIBOR riggers" are accused of (newspaper accounts were vague and I am a pharma analyst). Based on what I've read, my understanding is that the banks were asked to provide their best estimate of the rates at which they would be able to borrow money from other banks, and are now accused of having lowballed the number relative to their "true" expectations, i.e. the regulators are trying to look inside the brains of the traders who provided the quotes. This sounds a bit like a market maker quoting a price in a stock, or an investor placing a limit order on a stock and then being taken to account because the price at which he/she was looking to buy or sell seems wrong to someone. Shouldn't they just lose out on the transaction unless everyone in the space is completely irrational? It also is unclear to me how the "rigged" LIBOR rates affected transactions - surely the banks that lent money did so at a rate that they felt was a sufficient reward for the risk they were taking? In general, I find this whole concept of trying to pursue finance professionals whose quotes, opinions etc. are believed not to have reflected their "true" opinions very murky and liable to abuse (aka witch hunting by under-pressure politicians). Therefore, I am against criminal sanctions for anything other than outright fraud that can be proven unequivocally. I think that regulators have to accept that you can't look into someone's brain to see what they really think. There are only 2 options for LIBOR, and any other key indicator in finance: 1) Base it on actuals only, so that it becomes a straightforward calculation. 2) Base it on estimates provided by finance professionals and ensure that they are incentivized to give their best estimate, and that market forces are in place that will penalize banks for giving misleading numbers (e.g. by being unable to transact business because the prospective counterpart does not agree to the number). I am against involving any politicians (this includes organizations subject to political influence) in any rate-setting mechanisms, as then the real rigging would start. (EMEA: UNITED KINGDOM)

I do not believe the retail market to have been particularly exposed financially as I am not aware of many retail products being exposed to LIBOR. Furthermore, mortgage pricing derived from LIBOR will have benefitted from the manipulation in financial terms as LIBOR was manipulated downwards. (EMEA: UNITED KINGDOM)

I think the LIBOR 'scandal' is merely an opportunity for the regulators to fine banks, cannot see any impact of LIBOR setting on the real economy. (EMEA: UNITED KINGDOM)

It is surprising that after so much progress on regulatory oversight in other parts of the market that such a central measure as not been brought into such a framework (EMEA: UNITED KINGDOM)

LIBOR arose from the demand from clients for such a benchmark. It was thus market driven, although the circumstances of its birth were in a very different era, and the small club of London banks which introduced LIBOR in the seventies did not foresee the explosive growth in its use in the subsequent decades. It is still used because despite its drawbacks and inadequacies there is no better alternative. If a group of banks or anyone else wishes to set up an alternative there is nothing to stop them. (EMEA: UNITED KINGDOM)

LIBOR should continue as it is. If the people using LIBOR are unhappy with it, they should use other indices, or set up a system to establish such indices. Then the market users will decide which they want to use. Let the market decide! (EMEA: UNITED KINGDOM)

Probably best to try to remove the subjectivity (so use actual transactions) and the credit risk element (use repo or derivatives). (EMEA: UNITED KINGDOM)
• Rates should reflect the real perceived credit quality of the borrower, so could be based on certificates of deposit (where rates are set by investors and issuers, and are executed rather than theoretical). Replacing the current LIBOR rates by a new benchmark will require time though, as so many contracts are linked to LIBOR. Existing contracts will need grandfathering. (EMEA: UNITED KINGDOM)

• Surprised at the lack of responsibility demonstrated by market participants. / Surprised by the 'soft touch' regulatory environment of 2000-10 in UK / Surprised by the rotten nature of corporate cultures of financial institutions in London over the same time period. / Clearly, there is tremendous growth potential for 'business ethics' in the City. (EMEA: UNITED KINGDOM)

• the BBA never forced anyone to use LIBOR rate as a benchmark rate for their transactions: it is just the same as with rating agencies, we blame them for relying too much on them. Let’s do our homework and we would avoid such issues (EMEA: UNITED KINGDOM)

• The introduction of average actual rates could harm the financial system during times of financial stress. Any proposed method must take into account that sometimes extreme rates can happen for different reasons. Additionally any political/ BoE influence must be kept to a minimum or should be openly disclosed so that the market can assess any sudden movements in LIBOR submissions (EMEA: UNITED KINGDOM)

• The LIBOR scandal has just been a media “beat-up”, with very little underlying substance. / Politicians are finding it extremely convenient to vilify banks, to distract the voting public from their own shortcomings. (EMEA: UNITED KINGDOM)

• the public deserves convictions on this scandal, or perhaps the insurance scandal(s), or perhaps the reckless lending requiring bailouts. At some point people actually being held to account would be nice. (EMEA: UNITED KINGDOM)

• The use of LIBOR worked well in the past but without much interbank lending it is no longer a food benchmark. Also, with the government manipulating interest rate at levels never seen before, there is not a 'true' rate anymore. (EMEA: UNITED KINGDOM)

• There is a bit of a hypocrisy going on here: central banks keep printing money and cutting rates. But when big banks try to keep rates down they become criminals. The banking system is all in the same boat, I am pretty sure if interbank rates were high, the CB would have called them and asked them to keep rates down. so at the end of the day what they did was also for the greater benefit of the system. (EMEA: UNITED KINGDOM)

• This is a very difficult topic. I am surprised that the powers that be were surprised to find out that LIBOR was manipulated. It had to be obvious that this was the case during the Global Financial Crisis. I don't think that the powers that be would have been happy with the true LIBOR (if there was one) during the crisis. (EMEA: UNITED KINGDOM)

• Regulatory oversight is important (EMEA: ZIMBABWE)
Respondent answers to ‘other (please specify)’ response options

Which one of the following groups, if any, do you think has been most negatively affected financially by manipulation of LIBOR?

- Lenders in general (ie. savers, but not borrowers) (AMERICAS: BRAZIL)
- Banks (AMERICAS: CANADA)
- Corp borrowers (AMERICAS: CANADA)
- Everyone due to lack in confidence in industry self-regulation. A total disgrace. (AMERICAS: CANADA)
- Municipalities/local borrowers (AMERICAS: CANADA)
- shareholder and lenders to those banks that under-reported cost of capital (AMERICAS: CANADA)
- speculators (AMERICAS: CANADA)
- whole of the financial community (AMERICAS: CANADA)
- All investors (AMERICAS: USA)
- Any party relying on LIBOR settings in any contract. (AMERICAS: USA)
- Bank reputational risk (AMERICAS: USA)
- Bank shareholders (AMERICAS: USA)
- Banks (AMERICAS: USA)
- commercial borrowers (AMERICAS: USA)
- counterparty (AMERICAS: USA)
- Employees (AMERICAS: USA)
- Everyone. Traders would not have bothered manipulating the rate unless they were able to make /save money doing it. Also another blow to investor confidence (AMERICAS: USA)
- fixed income investors (AMERICAS: USA)
- Lenders (AMERICAS: USA)
- Municipalities with interest rate swaps (AMERICAS: USA)
- On average, I don't think anyone was negatively affected. Spreads adjust to reflect their benchmark (AMERICAS: USA)
- savers, not borrowers (AMERICAS: USA)
- State and Local Governments (AMERICAS: USA)
- swap counterparties/lenders (AMERICAS: USA)
- Swap purchasers (AMERICAS: USA)
- The biggest are the citizens of many countries as regulators and lawmakers made incorrect responses and policies based on LIBOR statistics. (AMERICAS: USA)
- ultimately everyone loses due to reduced confidence in the markets (AMERICAS: USA)
- Unleveraged Institutional Investors (AMERICAS: USA)
- Difficult to identify a particular group, the effect is broad-reaching. (ASIA PACIFIC: AUSTRALIA)
- Everyone (ASIA PACIFIC: AUSTRALIA)
- everyone due to lack of confidence in the sector (ASIA PACIFIC: AUSTRALIA)
- None in aggregate (ASIA PACIFIC: AUSTRALIA)
- Society - due to loss of confidence in financial system (ASIA PACIFIC: AUSTRALIA)
- banks and their shareholders whose people manipulated the rate (ASIA PACIFIC: JAPAN)
- Corporate and household borrowers (ASIA PACIFIC: KOREA)
- any consumer who has a financial product that is based on LIBOR (ASIA PACIFIC: NEPAL)
- Everyone (ASIA PACIFIC: NEW ZEALAND)
• All Investors (Retail & Institutional) (ASIA PACIFIC: SINGAPORE)
• All market participants have indirectly been affected (ASIA PACIFIC: SINGAPORE)
• Corporate Borrowers (ASIA PACIFIC: SINGAPORE)
• Corporations (ASIA PACIFIC: SINGAPORE)
• Corporations (EMEA: FRANCE)
• both, retail and institute. investors (EMEA: GERMANY)
• depends on product not groups of market participants (EMEA: GERMANY)
• Hard to say b/c sometimes groups might have been positively affected (zero net effect?) (EMEA: GERMANY)
• there are winners and losers in every group (EMEA: GERMANY)
• The first 3 groups above (EMEA: NETHERLANDS)
• consumers and corporate who use plain vanilla floating rate loans (EMEA: ROMANIA)
• participants of derivatives transactions, especially the trading desks (EMEA: SLOVAKIA (SLOVAK REPUBLIC))
• Everyone (EMEA: SOUTH AFRICA)
• smaller commercial banks (EMEA: SPAIN)
• all but broker / dealers (EMEA: SWITZERLAND)
• Banks - reputational damage (EMEA: SWITZERLAND)
• everybody (EMEA: SWITZERLAND)
• Receivers of LIBOR across the categories above (EMEA: SWITZERLAND)
• Speculators betting on deteriorating banks (EMEA: SWITZERLAND)
• Everyone (EMEA: UNITED ARAB EMIRATES)
• Individual savers and Pension funds (EMEA: UNITED ARAB EMIRATES)
• All categories except Broker/dealers (EMEA: UNITED KINGDOM)
• Banking industry (EMEA: UNITED KINGDOM)
• Banks (EMEA: UNITED KINGDOM)
• Banks - reputational risk (EMEA: UNITED KINGDOM)
• Consumer - Savers only (EMEA: UNITED KINGDOM)
• corporate depositors (EMEA: UNITED KINGDOM)
• corporates (EMEA: UNITED KINGDOM)
• Depends which way it was manipulated (EMEA: UNITED KINGDOM)
• every one of these (EMEA: UNITED KINGDOM)
• government (EMEA: UNITED KINGDOM)
• market infrastructure (EMEA: UNITED KINGDOM)
• Retail and institutional savers (EMEA: UNITED KINGDOM)
• The entire industry (EMEA: UNITED KINGDOM)
• This is too complicated to make such a simple observation. Yes, LIBOR was obviously manipulated but the financial system would have had to be rewritten at the worst possible time if true LIBOR was produced during the GFC. (EMEA: UNITED KINGDOM)
• traders, hedge funds (EMEA: UNITED KINGDOM)

Which one of the following options do you believe to be the most appropriate methodology for the setting of LIBOR?

• a market with actual & transparent bids & offers like an equity market (ASIA PACIFIC: HONG KONG)
- Actual estimates need to be used but without interbank lending this is obviously tricky (EMEA: UNITED KINGDOM)
- Actual transacted rates excluding outliers and take arithmetic mean on them (ASIA PACIFIC: HONG KONG)
- Aggregated method with a reconciliation. All banks should submit the rate they pay AND the rate they offer to other financial institutions to an independent body. The latter would have in it its possession a detailed list which can be reconciled and checked. LIBOR could be calculated as the weighted average rate. (EMEA: BELGIUM)
- Arithmetic average of rates submitted by panel banks after excluding say top and bottom deciles (ASIA PACIFIC: AUSTRALIA)
- Average based on actual transactions, but with a clear process as to where to set the rate in the event that interbank markets are closed (EMEA: AUSTRIA)
- Average rate based on actual inter-bank transactions only but excluding the highest and lowest value. (ASIA PACIFIC: SINGAPORE)
- Average rate based on actual inter-bank transactions. During periods when such rates are not available than the best estimate of rate at which money would be lent. (ASIA PACIFIC: INDIA)
- Average rate of interbank transactions between banks with similar if not the same credit rating. (EMEA: UNITED ARAB EMIRATES)
- Average weighted rate based on the average of all actual interbank transactions done by the bank in the last 24 hours. If the bank has no transactions done, then the rate imputed will be the median of all the rates from the other contributing banks (ASIA PACIFIC: SINGAPORE)
- Banks’ quoted rates at which they must be prepared to trade (not just hypothetical). (EMEA: UNITED KINGDOM)
- Can’t fix LIBOR. Don’t use it for anything. (AMERICAS: USA)
- CDS (ASIA PACIFIC: THAILAND)
- Commercial paper rate is better (AMERICAS: USA)
- Current method (ASIA PACIFIC: TAIWAN)
- Current method (first does not eliminate each end) (AMERICAS: USA)
- Daily auction (ASIA PACIFIC: KOREA)
- Deal size weighted average rate based on actual inter-bank transactions only (EMEA: UKRAINE)
- Force the outliers to transact at the submitted rate (EMEA: UNITED KINGDOM)
- Hybrid combination of (1) weighted actual trans rates, (2) spread+liquid gov/corporate/bank bond yields (ASIA PACIFIC: HONG KONG)
- Let the market decide (ASIA PACIFIC: TAIWAN)
- Like VWAP (AMERICAS: USA)
- Market rate from large basket of traded unsecured debt of similar maturity (AMERICAS: USA)
- Math’s is not important. Objectivity and independence of the rate setting mechanism is! (EMEA: UNITED ARAB EMIRATES)
- Maybe a hybrid method, but what happens when there is no quote or even a likely quote. (EMEA: UNITED KINGDOM)
- Median of actual transaction rates reported to third party (AMERICAS: USA)
- Needs to be an actual, not estimated, rate for real transactions, e.g. repo - also must be sufficiently deep and broad to be truly representative (EMEA: SOUTH AFRICA)
- Nothing wrong with the current methodology. It’s the implementation that was fudged. Any methodology can be manipulated if actors so want it. So the focus should be on what steps you can take to maintain integrity in the process. (ASIA PACIFIC: NEPAL)
- OIS (fed funds effective) - set benchmark rates using actual trading data (AMERICAS: USA)
• problem is that the rate is not appropriate for use as risk free discount curve, any improvement should make this explicit. Based on some similar process but on credit default swaps for a wide range of banks added to collateralized 3 & 6 months. (EMEA: UNITED KINGDOM)
• Rates at which banks lend to each other (ASIA PACIFIC: AUSTRALIA)
• Replace with an observable market rate (AMERICAS: USA)
• Set by regulator (AMERICAS: USA)
• Short term government overnight rate, e.g. Fed funds (AMERICAS: USA)
• similar to EURIBOR (EMEA: GERMANY)
• Us actual transactions only (ASIA PACIFIC: AUSTRALIA)
• Use market Price i.e. Government Tbill to set price (AMERICAS: USA)
• using savings point- see Jak Bank in Sweden (EMEA: UNITED ARAB EMIRATES)
• VWAP actual transactions (EMEA: SWITZERLAND)
• weighted average of actual interbank transactions (EMEA: UNITED KINGDOM)
• weighted average of real transactions (AMERICAS: USA)
• Weighted average rate based on actual inter-bank transactions only (ASIA PACIFIC: INDIA)
• weighted average spread based on bank's credit rating (i.e. AA+ banks would be put in one bucket) (EMEA: UNITED KINGDOM)

Are there any circumstances where you think using estimated rates would be acceptable instead of, or in combination with, transaction rates?

• if the inter-bank market is very illiquid and giving an appropriate disclosure that estimated rates are being calculated (AMERICAS: BRAZIL)
• no bid/ask (AMERICAS: CANADA)
• With the approval of a distinct body of overseers for circumstances where liquidity must be altered to ensure balance of healthy markets (AMERICAS: CANADA)
• Expand number of banks submitting quotes (AMERICAS: USA)
• In the event the inter-bank lending were to stop due to a bank crises. (AMERICAS: USA)
• Market disruptions (AMERICAS: USA)
• thin volume or low value of actual transactions (ASIA PACIFIC: AUSTRALIA)
• there are some huge biased actual transactions (ASIA PACIFIC: VIET NAM)
• independent review of sound internal documentation to derive estimate (EMEA: GERMANY)
• no transactions (EMEA: HUNGARY)
• but with arithmetic average (EMEA: ROMANIA)
• when financial institute submitted rate is actively involved in actual transactions (EMEA: RUSSIAN FEDERATION)
• In state of financial emergency as declared by the regulator (EMEA: SOUTH AFRICA)
• Maybe be third party, not the banks (EMEA: SWEDEN)
• clear market failure (EMEA: UNITED KINGDOM)
• Estimated LIBOR separate from LIBOR, Estimated LIBOR can be used in contracts (EMEA: UNITED KINGDOM)
• If financial meltdown of the system is threatened (EMEA: UNITED KINGDOM)
• Only in a situation where conflicts of interest can be avoided. (EMEA: UNITED KINGDOM)
• too few good quality suppliers (EMEA: UNITED KINGDOM)

How should LIBOR be administered and overseen?

• an order book with bids, asks, lasts, and volume (AMERICAS: CANADA)
• An independent commission with no ties to the industry and who have agreed not to accept any job therein for numerous years subsequent to their service. (AMERICAS: USA)
• Central Bank Oversight and Regulation (AMERICAS: USA)
• Don’t regulate it. Don’t use it. (AMERICAS: USA)
• Expand industry bodies to include other stakeholders (AMERICAS: USA)
• free market (AMERICAS: USA)
• Get rid of LIBOR (AMERICAS: USA)
• Interbank loans of over a certain size would be sent to the BBA as data (AMERICAS: USA)
• no regulation - use commercial paper rate (AMERICAS: USA)
• Overseen by Central Banks (AMERICAS: USA)
• someone without a vested interest (ASIA PACIFIC: HONG KONG)
• The regulators & administrators have already failed. Sunlight is the best disinfectant. Put it on an open market (ASIA PACIFIC: HONG KONG)
• Based on actual transactions that is verifiable. Imputed rates are only to be used if there are no transactions. Imputed rates will not be submitted by the bank but will be imputed from the median of submissions from all the other contributing banks (ASIA PACIFIC: SINGAPORE)
• No change to the current process us not an option as the recent experience has clearly demonstrated that investors' confidence must be restored. Subjecting the process to oversight by regulators appears to be an attractive at the first glance. But then again, which regulators is in a position to oversight and how it should be carried out should prove to be a daunting task if at all it can be implemented within a reasonable time frame. A more viable option is to broaden the 'membership' of those institutions who are eligible to make contribute the the rates. The current as well as the historical rates contributed by each of the institutions should be made readily available on the internet to improve transparency. (ASIA PACIFIC: SINGAPORE)
• on a sample basis by independent auditors (EMEA: GERMANY)
• central bank (EMEA: POLAND)
• As long as it's an independent third party (EMEA: SWEDEN)
• Objective, independent and lean. Markit Data for example or even Bloomberg (EMEA: UNITED ARAB EMIRATES)
• Rule driven traded indices published daily. No different to leading equity indices (EMEA: UNITED ARAB EMIRATES)
• Certifying agent (EMEA: UNITED KINGDOM)
• If it was formula there would be no problem. (EMEA: UNITED KINGDOM)

Which of the following benchmark interest rates do you consider to be viable alternatives to LIBOR?

• Better if the reference rate was exchange traded or exchanged based. OTC products may be too opaque to be used as reference rates (AMERICAS: CANADA)
• commercial paper rate only (AMERICAS: USA)
• Index of publicly traded unsecured bank debt (AMERICAS: USA)
• Note that market-based rates may have second order effects in crises (AMERICAS: USA)
• Use above and also use short-dated bank bond YTM as a "sanity check" number as banks always have short dated notes outstanding (AMERICAS: USA)
• Depends on who is using it and why! (ASIA PACIFIC: AUSTRALIA)
• Credit Default Swaps (ASIA PACIFIC: HONG KONG)
• LIBOR set by transparent bids & offers. Who on earth suggested central bank policy rate. (ASIA PACIFIC: HONG KONG)
• SIBOR (ASIA PACIFIC: HONG KONG)
• The average of the interbank swap and repo rates (ASIA PACIFIC: SINGAPORE)
• EURIBOR (EMEA: GERMANY)
• VWAP actual interbank transactions (EMEA: SWITZERLAND)
• An index of commercial market short term rates. It would need to reflect a market environment and not that of a specific counterparty, e.g. UK Govt. or niche products. (EMEA: UNITED KINGDOM)
• Combination of cash and swap rates (EMEA: UNITED KINGDOM)
• No alternatives, although LIBOR indices should be benchmarked against actual transaction rates during the oversight process (EMEA: UNITED KINGDOM)
• Surprised at this. LIBOR included long term rates e.g. 12m. The above options are only short term rates. The interbank index should be actual transactions going through electronically across a platform e.g. Bloomberg. (EMEA: UNITED KINGDOM)
• These are all okay, except Central Bank rate, but they are not always available. (EMEA: UNITED KINGDOM)
Survey Questionnaire

1. Which one of the following groups, if any, do you think has been most negatively affected financially by manipulation of LIBOR?
   a. Broker/dealers
   b. Institutional investors
   c. Retail investors
   d. Consumers (borrowers and savers)
   e. Other (please specify): [text box]
   f. None; I do not think anyone has been negatively affected financially by LIBOR manipulation.
   g. Not sure

2. Which one of the following options do you believe to be the most appropriate methodology for the setting of LIBOR?
   a. Arithmetic average of estimated rates submitted by contributing banks
   b. Average rate based on actual inter-bank transactions only
   c. Hybrid methodology using some combination of estimated rates and actual transaction rates
   d. Other (please specify): [text box]
   e. Not sure

3. [IF Q2=B] Are there any circumstances where you think using estimated rates would be acceptable instead of, or in combination with, transaction rates?
   Select all that apply
   Yes, if the inter-bank market is very illiquid (e.g., if there are few actual transactions)
   Yes, other circumstance(s) (please specify): [text box]
   No
   Not sure

4. Do you agree or disagree that the LIBOR submission process should become a regulated activity?
   Agree
   Disagree
   Not sure

5. How should LIBOR be administered and overseen?
   a. Administered and overseen by industry body(ies) (i.e. no change to the current process)
   b. Administered by industry body(ies), but subject to regulatory oversight.
   c. Administered by bank regulators
   d. Other (please specify): [text box]
   e. Not sure

6. Do you agree or disagree that the regulator should have powers to pursue criminal sanctions over LIBOR manipulation?
   Agree
   Disagree
   Not sure
7. Which of the following benchmark interest rates do you consider to be viable alternatives to LIBOR? Select all that apply
   a. Sterling Overnight Index Average (SONIA) / EONIA (overnight cash lending rate)
   b. Overnight Index Swaps (interest rate swap between a fixed rate and SONIA/EONIA for a specific maturity)
   c. Central bank policy rate
d. Indices based on repo rates (i.e. discount rate on repurchase agreements)
e. Other market-based interest rate (e.g. Treasury bill yield, certificates of deposit, commercial paper, etc.)
f. Other (please specify): [text box]
g. None – no alternative is viable
h. Not sure

8. Over what time period could an alternative to LIBOR be introduced, if at all?
   a. Within 6 months
   b. Within 1 year
c. Within 3 years
d. More than 3 years
e. Never
f. No opinion

9. Do you agree or disagree that a global framework of key principles or best practices should be developed for internationally used benchmarks?
   Agree
   Disagree
   Not sure

10. Please provide any additional comments on LIBOR in the box below:
    [text box]