Principles for Financial Benchmarks
Comments on the OICU-IOSCO Consultation Report on Financial Benchmarks

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I. Summary and Background

1. In this brief Comment to the OICU-IOSCO Consultation Report on Principles for Financial Benchmarks dated April 2013 (“IOSCO’s April Report” or “Report”), I provide suggestions on four main issues on transaction-based benchmarks, committed versus uncommitted quotes, data-clearing houses and the use of expert judgment.

2. Before so, I would like to congratulate IOSCO for an excellent effort and report on best practices for financial benchmarks. It is my hope that most jurisdictions will be convinced of the need to adopt the majority of the recommendations put forward.

3. My comments to the Report pertain to the Report’s Chapter 3 Consultation Questions numbers 2 and 3. In summary, it is my opinion that:
   a. Benchmarks based on committed quotes should be preferable to those based on uncommitted quotes;
   b. Benchmarks based on transactions are also susceptible of manipulation;
   c. Data-clearing houses should be requested for all benchmarks based on any types of quotes; and
   d. Expert judgment is necessary, but immediate disclosures around such judgment should be limited; more complete disclosures can be made later if there is a market need for them.

4. I make a few brief remarks on my qualifications for presenting these recommendations and refer IOSCO to my attached curriculum vitae.
   a. Professor Rosa Abrantes-Metz is the co-author of a paper which identified, through econometric screening methods, possible problems with LIBOR in 2008. Her paper addressed not only the possibility of manipulation but also collusion among the contributing banks.1 The U.K. House of Commons discussed Professor Abrantes-Metz’s various papers on LIBOR during its preliminary findings on July 3 2012, and in the subsequent testimonies of Mr. Bob Diamond and Mr. Paul Tucker.2 The U.K. House of Commons Treasury Committee has also cited her work in its findings in August and December of 2012, and so have other governmental investigators.3 She has provided written and oral comments

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Professor Abrantes-Metz has a Ph.D. in Economics from the University of Chicago.

II. Transaction-Based, and Committed versus Uncommitted Quotes

5. The OICU-IOSCO Consultation Report on Financial Benchmarks dated January 2013 (“IOSCO’s January Report”) explains in detail that there are essentially three different types of benchmarks distinguished by the type of inputs: transaction-based, committed quotes and uncommitted quotes.4

6. IOSCO’s April Report then takes the position that transaction-based benchmarks are preferable, but it is silent on whether a committed quotes system is preferable to an uncommitted quotes system. As explained in my comments to IOSCO’s January Report, it is my opinion that, everything else equal, the first best is a transaction-based system, the second best is a committed quotes system, while the uncommitted quotes system is the least preferable option for a benchmark.5

IOSCO’s April Report is also silent on the possibility that transaction-based benchmarks may still be manipulated. In my view, it would be important for IOSCO to provide further guidance on these issues.

7. Specifically, it is my opinion that regulators should discourage, except under unusual circumstances where there is no feasible alternative, the use of benchmarks or indices based on uncommitted quotes. Such benchmarks are highly susceptible to abuse and are more likely to provide unreliable information to the market than are committed quotes.

8. Regulators should instead encourage the development of benchmarks that are based on liquid markets for which a sufficiently large number of transactions are available on a daily basis to reduce the influence of any single actor, and IOSCO’s April Report also takes this view. Transaction data are usually the most reliable and representative measure of the market. While transaction-based benchmarks are the least susceptible to manipulation, since there would still be gains to be made by particular parties depending on the value the benchmark takes on any particular day, there may still be an incentive to produce artificial prices. As a consequence, these benchmarks are also at some risk for

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9. For example, when the benchmark is based on the last few minutes of (floor only or floor and electronic) trading of the day, and there are only a handful of transactions occurring at that time (as it is often the case in many markets), any of those individual transactions can have a meaningful effect on the value of the benchmark for that day. As a consequence, the index may easily be moved in a particular direction due to one individual transaction. That may be further reinforced when the benchmark uses a volume-weighted average as a formula. In that case, the largest volume transactions will have the greatest influence on the benchmark, and very few of them may be needed to effectively move the benchmark. Another possibility to cheat on these benchmarks are wash sales executed to artificially increase the volume in the market of interest, and to affect prices in any particular direction.

10. No doubt that it is harder to manipulate a price than a quote, but no benchmark is immune to cheating, not even transaction-based benchmarks. It would therefore be helpful to have a discussion on the risks associated with these specific benchmarks.

11. In the absence of reliable transaction data for a benchmark, or category of benchmarks, regulators should encourage the development of benchmarks that are based on committed quotes in which the parties submitting the quote announce their willingness to enter into transactions at the relevant bid and ask prices and agree that if they do transact, they will do so within those margins. Regulators should ensure that a penalty is assessed for any transaction occurring outside the submitted bid-ask range without adequate justification.

12. Where possible, regulators should require that submitters report transactions to a data-clearing house which would function both to verify compliance with the committed bids and asks as well as to provide a (one-day lagged) alternative benchmark based on actual transactions (see Section III).

13. When necessary, regulators should compel certain market participants to submit transaction data, committed or uncommitted quotes for the purpose of preparing reliable benchmarks. This may prove necessary because the liability exposed by the LIBOR scandal is likely to discourage financial institutions from voluntarily participating in other financial benchmarks.

14. Compared with uncommitted quotes, committed quotes are more likely to be representative and reliable, as they reduce the likelihood of manipulation or collusion. Compared with pure transactions-based benchmarks, committed quotes provide continuity through illiquid and financially stressful periods, periods during which, arguably, benchmarks become even more critical.

15. Committed quotes (a) enhance the incentive to report accurate submissions; (b) are verifiable against actual transactions; and (c) avoid full transparency (namely of the submissions) which could facilitate collusion and manipulation. Such a system becomes more effective if the benchmark (d) is calculated as a median, mode or inside spread rather than an average, since this reduces the impact of outliers which may represent attempts at manipulation; (e) is subjected to regular “screening tests” to detect manipulation and collusion; and (f) is administered by parties with no conflicts of interest with the outcome of the benchmark. Finally,
the resulting benchmark is more reliable and continuous if (g) direct regulatory interventions are minimized; and (h) quotes continue to be submitted during episodes of market illiquidity.

III. Data-Clearing Houses

16. The Report explains that, “[w]hen a benchmark is based on Submissions: Administrators should promote the integrity of inputs by (...) d) [e]stablishing and employing measures to effectively monitor and scrutinize inputs or Submissions. This should include pre-compilation or pre-publication monitoring to identify and avoid errors in inputs or Submissions; as well as ex post analysis of trends and outliers,” which is an important component to ensure robustness and integrity of the benchmark.

17. But the Report does not put forward the requirement that data-clearing houses exist in which transactions related to the market of interest for the benchmark can be registered, and in my view, this is a critical component.

18. If the benchmark is based on quotes (whether committed or uncommitted), it presumably still does represent a market that exists, i.e., a market for which there are transactions, though possibly not enough on which to reliably and robustly base the calculation of the benchmark on a daily basis.

19. Given this, in my view a critical function of both the benchmark Administrator and the Independent Auditor is to check quotes provided by the parties on what they would expect prices in the market of interest to be, against what actual transactions show that prices truly were. I recommended a similar check in my proposal on how to reform LIBOR dated September 6, 2012, jointly with Professor David Evans.6

20. If such comparisons of quotes against actual data are not undertaken, the auditing process related to checking the validity of the quotes submitted will be significantly impaired. There is no better or more precise way of screening for possible manipulation of quotes than a comparison against actual prices. Though it is critical to recall that even actual prices can be manipulated, and that Administrators and Auditors need to have the tools to assess such a possibility.

21. In order for these comparisons to be promptly and efficiently made, it is necessary for data-clearing houses to be set up in which all relevant transactions for the market of interest to the particular benchmark are registered, and directly accessible to the Administrator and Auditor.

22. Additionally, the transactions deposited in the data-clearing house could not only serve as a check, but could also play the role of providing an additional benchmark to that market, based on actual transactions, whenever these are available, alongside with the benchmark based on quotes. I have first proposed such a dual system in my comments on how to reform LIBOR (Abrantes-Metz & Evans (2012)).

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IV. Expert Judgment

23. The report raises the question of whether Administrators should be required to describe and publish first the benchmark methodology, and second an explanation of any judgment applied to that methodology. Such questions highlight the general tension between the need for transparency, which is necessary for market confidence, and the need for discretion, which helps complicate efforts at manipulation.

24. I would suggest that the question is not whether the methodology should be published, but rather the level of detail it should contain. As an example, a methodology might state that “when sufficient transactions data are available, the benchmark will be calculated as the simple average after excluding outlying observations.” This is understandable, but doesn’t precisely define how many transactions are “sufficient” and how “outlying observations” are identified. While the methodology could, perhaps, be completely prescriptive on these points, how would that additional detail increase market confidence, and would that be worth the increased risk of manipulation?

25. The benchmark methodology should leave room for discretion and judgment. The alternative is a mechanistic and fully transparent algorithm and inputs (such as LIBOR) which, again, is more easily susceptible to manipulation. And the market may need general indications as to when judgment was applied relative to the algorithm. The balancing question remains whether the increased transparency is worth the risk of manipulation. Is it helpful to simply tell the market, “judgment was applied to the benchmark today?” Presumably not. Is it helpful to inform the market that “judgment was applied to the benchmark today which had the effect of increasing the estimated relative to the algorithmic calculation?” This would seem more useful. Or maybe even “judgment was applied today and since there were no available transactions, interpolation mechanisms had to be applied in order to calculate today’s value for the benchmark.” Or instead “judgment was applied today and since no transactions were available, the benchmark was calculated using additional data from related markets.” But does the market need to know how much judgment was applied, i.e., what exactly the interpolation mechanism used was or what was the exact formula used to combine additional data in order to calculate the value of the benchmark for that day? Maybe not, not at least in real time.

26. We should keep in mind that there is an issue of the timing of disclosures. To maintain market confidence, it might be necessary to be fully transparent about what judgments and discretion were applied – but only long after the fact. If the market never knows what is being done behind the scenes, it may indeed lose confidence in the benchmark. It may be adequate to understand what happened 3 months ago, or a year ago; it may not be necessary to have full information in real time.