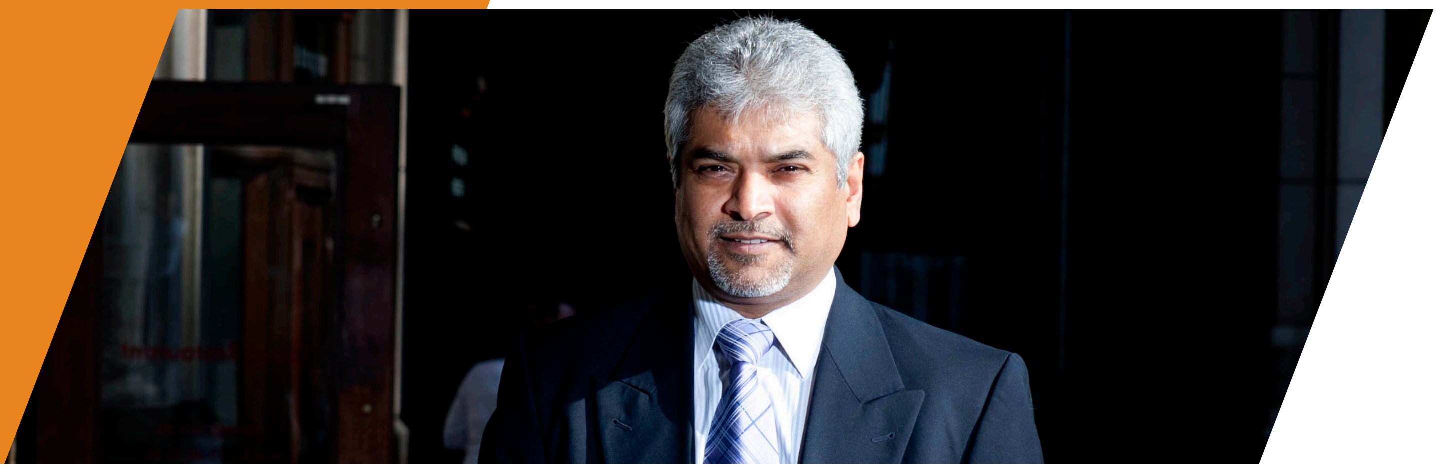
Financial Conduct Authority

Financial Benchmarks:

Thematic review of oversight and controls

July 2015



Thematic Review

TR15/11

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Foreword

Robust financial benchmarks play a significant role in the global economy and impact a multitude of financial instruments and contracts used by companies, governments and consumers.

Misconduct by some financial firms and their staff in the management of benchmark activities has been widely publicised. Regulators across the globe have taken strong enforcement action against firms and individuals. Authorities have sought to address the root causes of benchmark misconduct through more structural intervention including changes to the scope of regulation. The Fair and Effective Markets Review evaluated the impact of the significant reforms completed or under way, as well as making further recommendations for raising industry standards in relation to firms' engagement in benchmark activities.

This thematic review was carried out between August 2014 and June 2015 to provide an early assessment of the extent to which firms had learnt the lessons from previous failures around benchmark activities and taken appropriate action in response. Our review suggests that, although firms have made a number of positive changes to improve their governance and controls around benchmark activities, significant further work is needed to ensure that all of the risks are managed appropriately. It is essential that firms' senior management pay heed to the findings and messages outlined here, and take the steps necessary to identify and resolve any outstanding issues.

We will continue to monitor the pace of improvement as part of our supervision of benchmark activities.

1. Review summary

Background

1.1 Financial benchmarks[1] are an embedded feature of global financial markets and the global economy. Benchmark activities[2] include any activity that can affect a benchmark either directly or indirectly. There are a significant number of benchmarks which, whether regulated or not, are important to the stability of financial markets[3]. Benchmarks help to reduce information asymmetries and price-search costs for a wide range of users[4].

Examples of benchmark usage

Consider a long-term rental contract, where any increments in the rent are agreed to follow an independent house price index. The index provides a neutral reference point for a landlord and a tenant who have opposite incentives for it to be set at higher or lower points. The index also reduces the costs of market research for both the landlord and the tenant, and facilitates an agreement on future price changes.

Equity indices, like the FTSE100, allow investors to measure the relative performance of an investment manager without having to incur costs to measure the individual performance of each one of the one hundred index components.

1.2 Given the extensive use of benchmarks in both institutional and retail contracts, it is vital that consumers and markets are confident that the provision of benchmarks is credible, trustworthy and accurate.

What is this document and who does it affect?

1.3 This report presents the findings from our thematic review of firms' oversight and controls in relation to financial benchmarks. It highlights our key messages to the industry and provides examples of good and poor practice we saw at the sample of banks and broking firms we assessed.

1 In this report we refer to the International Organisation of Securities Commissions (IOSCO) definition of benchmarks. The definition is stated in Section 2.
2 A more detailed explanation of what constitutes benchmark activities is outlined in Section 2.
3 Only eight benchmarks are regulated under the Financial Services and Markets Act 2000 (FSMA) in the UK. These are defined as a 'specified benchmark'. This review however also included unregulated benchmarks that do not fall within this definition.
4 See Reforming LIBOR and Other Financial Market Benchmarks by Darrell Duffie and Jeremy Stein - www.darrellduffie.com/uploads/working/DuffieSteinLIBOR2014.pdf

1.4 This document will be of interest to all users of benchmarks and especially those firms that engage in activities related to benchmarks, namely firms that are benchmark submitters, administrators or data providers. It will also be of interest to those who trade in underlying instruments that could affect a benchmark (for example, those executing trades where the transaction data can be used as an input to a benchmark).

Action taken in response to historic misconduct

1.5 Enforcement cases brought by regulators and public authorities around the world have provided examples of misconduct in a wide range of benchmarks. The previous benchmark failures affected different asset classes using different benchmark methodologies[5]. These included LIBOR (the London Interbank Offered Rate), G10 foreign exchange spot rates (FX; WM/Reuters London 4pm Closing Spot Rate) and the commodity fix relating to gold (London Gold Fix[6]).

1.6 The benchmark failures identified by these enforcement cases occurred over an extended period of time before, during, and after the global financial crisis. Specific misbehaviour included attempted false submissions by traders and brokers, collusion between individuals at submitting firms, trading with the purpose of influencing the benchmark, or requesting that prices published on a broker screen be changed without any trading actually taking place to justify the move.

1.7 These benchmark failures, when taken together, suggest that firms failed to understand the wider importance of benchmarks to the economy and the potential for damage to market integrity. As a result they failed to identify and develop controls to manage conflicts of interest that arose in relation to benchmark activities, with some conflicts being intrinsic to their business models.

1.8 Following the Wheatley Review[7] the UK government introduced legislation to regulate certain benchmarks (from April 2013 LIBOR, subsequently extended to seven others from April 2014). Specific FCA rules relating to market conduct (MAR 8[8]) were implemented in the UK in April 2013. These apply to persons who submit to or administer regulated benchmarks.

1.9 The FCA has used a number of supervisory tools to drive an improvement in standards in this area. These include regulatory fines, requiring individual firms to conduct remediation exercises, and our ongoing supervisory work with firms. We have also been active in promoting international dialogue in relation to benchmarks[9].

1.10 See Annex 2 for a timeline of benchmark-related events.

5 These benchmarks use a range of methodologies including prices determined by auctions, a weighted average price of transactions, and a combination of transactions and expert judgement.
6 In March 2015 the London Gold Fix was replaced by the LBMA Gold Price.
7 Wheatley Review of LIBOR, Final Report - www.gov.uk/government/wheatley_review_libor_finalreport
8 MAR 8 - https://fshandbook.info/FS/html/FCA/MAR/8
9 Important international initiatives with respect to benchmark activities are continuing at IOSCO and Financial Stability Board (FSB) levels. See Annex 1 for more details.

What we did

1.11 Given the context above, we decided to carry out a review, assessing the extent to which firms had acted in response to the concerns, problems and failings highlighted by benchmark enforcement cases. We wanted to understand whether firms had implemented appropriate oversight and controls to manage the risks posed by their involvement in wider benchmark activities.

1.12 The review covered firms' systems and controls arrangements around benchmark activities, including the design and management of benchmarks. We also discussed the firms' understanding and implementation of the IOSCO Principles for Financial Benchmarks (see Section 2), which all regulated firms involved in benchmark activities in the UK are encouraged to implement, where applicable, on a proportionate basis.

1.13 All benchmarks[10] were in scope with two exceptions:

a. LIBOR, which was the only regulated benchmark at the time of our onsite visits, was out of scope as considerable work had recently been carried out to assess controls over the submission of LIBOR by panel banks.

b. FX (WM/Reuters London 4pm Closing Spot Rate) was excluded to avoid duplication with the industry-wide remediation programme that we announced in November 2014 following fines levied on a number of firms for failure to have appropriate systems and controls in place to prevent the manipulation of G10 spot FX rates.

1.14 For this review, we conducted onsite visits to a sample of twelve banks and broking firms. This involved engaging in direct dialogue with senior management, compliance, desk heads and traders/brokers. We were interested in the approach taken to particular aspects of benchmark-related activities, including:

- governance, accountability, oversight and controls
- monitoring and surveillance arrangements
- identification and management of the potential conflicts of interest arising in day-to-day activities

Findings

1.15 Our review found that all firms had made changes to their approach to benchmark activities. We identified a number of areas where firms needed to take further action in order to manage the risks of their benchmark activities appropriately.

1.16 No firm had fully implemented changes across all benchmark activities. All firms still have work to do. A summary of the key findings is set out below.

10 This is in the context of the IOSCO definition of benchmarks, see Section 2.

Progress has been uneven

1.17 The progress firms had made in improving their oversight and controls for contributing data, designing, managing, administering or trading around benchmarks varied. While some had made significant changes to their approach, others were still at an early stage in the process.

1.18 There was, however, evidence to suggest that previous enforcement fines levied by the FCA and other authorities have been effective in instigating change at firms. Senior management had taken steps to focus on conduct issues and undertake reviews to identify and develop controls to manage conflicts of interest that arise in relation to benchmark activities.

1.19 Banks had more structured and fully developed programmes to improve oversight and controls around benchmark activities than brokers. A number of banks and brokers had also given due consideration to the segregation of duties in managing potential conflicts of interest. There was some evidence of a change in culture in most firms with this change more pronounced around those business areas where previous failings had been widely publicised.

1.20 Some firms had a coordinated approach to their benchmark activities where all three lines of defence tried to identify deficiencies in their oversight and controls. They utilised the front office's knowledge and expertise of benchmark methodologies and made efforts to understand best practice and establish proper governance to deal with conflicts of interest that could arise across a wide range of asset classes. This approach appeared to be effective.

1.21 The scope and pace of change was uneven across different benchmarks and benchmark activities. It was disappointing that most firms had not yet taken all appropriate steps to identify and then manage fairly and effectively relevant conflicts of interest. Some firms were still not able to identify all the benchmarks they administered, submitted data to or published.

1.22 A number of firms displayed deficiencies in their governance framework around benchmark activities, as they neither had relevant oversight functions, clearly defined roles and responsibilities for either the first or second[11] lines of defence, nor adequate monitoring and surveillance in place.

1.23 Firms generally need to ensure that their lines of defence are strengthened and robust. This can mean a reinforcement of the first line of defence including developing strong management information to both guard against and deal with problems as they arise. The second line of defence also needs to be reinforced to ensure it provides an overall picture of common failings and provides challenge and oversight to the first line of defence.

Change has lacked urgency

1.24 Overall, the progress to improve oversight and controls around benchmark activities across most firms and within individual firms appeared slow. This lack of urgency is disappointing given the importance of benchmarks to the economy, the similarity and severity of a number of previous benchmark failures, the high level of public concern as a result of the misconduct made public, and the scale of enforcement fines levied on firms.

11 The first line of defence refers to the risk mitigation and control exercised by front-line staff. Firms need to ensure that the front line is aware of the standards they are expected to adhere to. The second line of defence refers to the activity of control functions such as Compliance, Legal and Risk as well as other independent control functions such as Financial Control. The third line of defence refers to the activity of Internal Audit.

Inconsistent benchmark identification and follow-up

1.25 There was inconsistency in how firms determined the range of benchmark[12] activities within the firm and how change programmes and lessons learnt from previous benchmark failures were applied across business areas. A small number of firms sought to broadly interpret the IOSCO definition of benchmarks, including activities such as the calculation and publication of a rate or price, that could be widely used for trading and valuation purposes. This is in contrast to most firms, which adopted a narrow interpretation of the IOSCO definition of benchmarks and this is a less rigorous approach to the governance and controls that ought to apply around these benchmark activities.

1.26 Some firms chose to interpret the IOSCO definition of benchmarks such that it did not fully encompass their strategic in-house benchmark business. As a consequence, firms did not give sufficient consideration to establishing a relevant governance framework around their in-house benchmark business.

Identifying and managing conflicts of interest

1.27 Narrow interpretations of the IOSCO definition of benchmarks as well as stand-alone structures led to firms not applying the lessons learnt from one benchmark to another. Improvements in identification, monitoring and management of conflicts of interest were not transmitted to other teams undertaking similar benchmark activities in the same firm.

Withdrawal from benchmark activities

1.28 We recognise that, in line with normal market dynamics, benchmarks should be allowed to evolve or cease in an orderly way. Some firms we assessed had ceased to administer or submit to certain benchmarks. While we understand that firms will make commercial decisions to withdraw from certain benchmarks, we were concerned that firms did not, in all cases, pay sufficient consideration to the potential consequences of their actions. Careful attention should be given to establishing an appropriate governance framework around the decision to enter or exit a benchmark. Consumers of financial products and contracts typically rely on the correct functioning of benchmarks, so due consideration needs to be paid to the potential impact on clients and the integrity of the market when making such decisions.

Example of withdrawal from a benchmark

The evolution of the London Silver Fix is a good example of coordination between benchmark administrators, market participants and the regulatory authorities. Following the announcement by the London Silver Market Fixing Company that it would cease to administer the London Silver Fix from August 2014, the London Bullion Market Association (LBMA) began the process of finding a market-based replacement to the London Silver Fix and conducted a market consultation. In coordination with the FCA, the administrators and a number of willing participating firms provided the necessary window of time to allow for an orderly transition to the new index, the LBMA Silver Price, which commenced on 15 August 2014 and took into account the needs of the market and the IOSCO recommendations.

12 As captured by the IOSCO definition of benchmarks.

There are six key messages from our work:

Firms need to ensure that they identify all of the activities that constitute a benchmark activity or that could affect a benchmark.

Firms should adopt the broad IOSCO definition of benchmarks and then consider their business activity, business practices and controls. Where firms interpret the broad IOSCO definition of benchmarks too narrowly, there is risk that their benchmark strategy, governance arrangements, oversight, controls and risk management processes will not be applied to all benchmark activities.

Firms' senior management need to act quickly to improve any outstanding gaps in their approaches to benchmark activities.

Firms need to ensure that the lessons learnt from previous benchmark failures are applied in a consistent way across all business lines engaged in benchmark activities. There should be comprehensive improvement plans in place with clear senior management focus and accountability for delivering this work in a timely manner.

Firms need to strengthen their governance and oversight of benchmark activities.

In particular, firms need to ensure they have relevant oversight functions providing effective challenge and formal sign-off around decisions relating to benchmarks. Firms also need to ensure that there is an integrated approach to adequate management information, monitoring and surveillance with clearly defined roles and responsibilities for the first, second and third lines of defence.

Firms need to continue to identify, raise awareness of and manage conflicts of interest in relation to benchmark activities.

Firms should regularly review all of the processes linked to benchmark activities to identify whether and how conflicts might manifest themselves. Where they are identified, firms should ensure they take adequate steps to manage them.

Firms should ensure they establish robust controls and oversight for any in-house benchmarks being used.

Even where benchmark methodologies are in-house, firms still need to ensure that the methodologies are robust and adhered to, and that potential conflicts of interest are identified and managed. For example, staff that input to the design and production of a particular in-house benchmark, but who also have other economic incentives linked to its composition and/or performance, may be conflicted.

When exiting benchmark activities, it is essential that firms give due consideration to the wider impact of their actions.

Firms need to engage constructively with other stakeholders such as the administrators and submitters of those benchmarks and the firm's clients, to ensure exits are undertaken in an orderly manner. Firms should take into account any legal, operational and financial risks (amongst others) that could arise as a result of not exiting from a benchmark in an orderly manner.

1.29 These messages apply to the wider UK financial services industry, not just to those banks and brokers that participated in our review. In particular, firms are urged to take note of the outcome of recent enforcement cases relating to benchmarks such as LIBOR, FX and Gold, and apply the lessons learnt more widely across any business lines engaged in benchmark activities.

Next steps

1.30 We expect all firms to identify, manage and control the risks arising from their benchmark activities, put in place appropriate oversight and controls, and instil a culture in which market integrity and consumers interests are at the heart of how they run their businesses.

1.31 We have provided feedback to each of the firms involved in our review. Where we have identified shortcomings, we expect improvements to be made. We will follow up on this work as part of our supervision of benchmark activities.

1.32 Further background to misconduct, other initiative and future developments can be found in Annex 1 – Regulatory Background.

2.
Key standards and provisions for benchmark-related activities

2.1 This section outlines the benchmark definition used in this report and provides an overview of some of the risks that are inherent within a firm's benchmark activities.

What is a financial benchmark?

2.2 In this report we refer to the International Organisation of Securities Commissions (IOSCO) definition of benchmarks, which defines benchmarks[13] as prices, estimates, rates, indices or values that are:

a. Made available to users, whether free of charge or for payment.

b. Calculated periodically, entirely or partially by the application of a formula or another method of calculation to, or an assessment of, the value of one or more underlying interests.

c. Used for reference for purposes that include one or more of the following:

- determining the interest payable, or other sums due, under loan agreements or under other financial contracts or instruments
- determining the price at which a financial instrument may be bought or sold or traded or redeemed, or the value of a financial instrument
- measuring the performance of a financial instrument

2.3 There are many hundreds of thousands of benchmarks; eight of these are regulated under the Financial Services and Markets Act 2000 (FSMA) in the UK[14].

What are benchmark activities?

2.4 The FCA regards benchmark activities as including any activity that can affect a benchmark either directly or indirectly.

2.5 Examples of benchmark activities include:

- administering benchmarks whether by designing, calculating or publishing them
- submitting quotes or transactional data inputs to a benchmark

13 See 'Benchmark' in Annex A, page 35 for IOSCO definition- www.iosco.org/library/pubdocs/pdf/IOSCOPD415.pdf

14 These benchmarks are subject to the definition of a 'specified benchmark' under FSMA 2000. This review however also included unregulated benchmarks that do not fall within this definition.

- communicating indicative prices to clients that are used by them for the purposes of executing, terminating or valuing third party contracts
- trading (or avoiding to trade) at or close to benchmark windows where transactional data may be used to determine a benchmark

Guidance and best practices for the industry

2.6 The IOSCO Principles for Financial Benchmarks[15] are applicable to all benchmark administrators (whether regulated or not), with some minor exceptions[16]. UK regulated benchmark administrators should consider implementing the IOSCO Principles, which should be understood as a set of recommended practices. The application of these Principles should be proportionate to the size and risks posed by each benchmark. Benchmark administrators should publicly disclose the extent of their compliance with the IOSCO Principles annually.

Provisions relevant to benchmark activities

2.7 The FCA Principles for Businesses apply to firms undertaking regulated activities and also apply in respect of certain activities relating to unregulated benchmarks.

2.8 Specific FCA rules on market conduct, as set out in MAR 8[17], apply to benchmark administrators and submitters, where the benchmark is specified in UK legislation. MAR 8 sets out the requirements applying to firms that are benchmark submitters or administrators when carrying out the activities of providing information in relation to a specified benchmark (MAR 8.2) or administering a specified benchmark (MAR 8.3).

2.9 The Fair and Effective Markets Review (FEMR)[18] which reported on 10 June 2015 was launched to reinforce confidence in the wholesale FICC (Fixed Income, Currency and Commodities) markets. An early FEMR recommendation was that a further seven benchmarks be brought into the scope of UK regulation, in addition to LIBOR[19]. This took effect from 1 April 2015.

2.10 The EU Benchmarks Regulation is under negotiation by the European Parliament, the Council and the Commission of the EU and will further define the regulation of benchmarks in the European Union in future.

Risks that need to be addressed

2.11 Firms play a variety of important roles related to benchmarks such as submitters, administrators and generators of benchmark input data. Firms also have economic incentives linked to the design and the value of a benchmark at a given point in time. This creates conflicts of interest that need to be addressed. We summarise below some examples of economic interests firms have, and the conflicts of interest that could arise.

2.12 Economic incentives include:

- being counterparty to contracts referenced to a benchmark

15 IOSCO Principles for Financial Benchmarks - www.iosco.org/library/pubdocs/pdf/IOSCOPD415.pdf

16 Ibid. page 4, Benchmark Administration by a National Authority used for public policy purposes (e.g., labour, economic activity, inflation or consumer price indices) is not within the scope of the Principles. However, Benchmarks where a National Authority acts as a mechanical Calculation Agent are within the scope of the Principles. The Principles also exclude reference prices or settlement prices produced by Central Counterparties (CCPs), provided that they are produced solely for the purposes of risk management and settlement. The prices of single financial securities (e.g., equity securities underlying stock options or futures) are not considered Benchmarks for the purposes of these Principles.

17 MAR 8 - https://fshandbook.info/FS/html/FCA/MAR/8

18 Fair and Effective Markets Review Final Report - www.bankofengland.co.uk/markets/Documents/femrjun15.pdf

19 The eight UK regulated benchmarks are: LIBOR, SONIA, RONIA, ICE Swap Rate, LBMA Gold Price, LBMA Silver Price, WM/Reuters London 4pm Closing Spot Rate and ICE Brent Index.

- using benchmarks to value a firm's positions
- acting as an agent (or broker) to firms that have an interest in, or sensitivity to, the performance of a benchmark

2.13 The risks associated with benchmark activities manifest themselves in many ways depending on the circumstances and nature of each benchmark. Potential conflicts of interest may arise as firms employ sales and trading strategies, either proprietary or on behalf of clients, where the payoff is dependent on the value of benchmarks or indices. If the firm acts as principal or agent to a contract referencing the benchmark, incentives may exist for individuals to influence these benchmarks in their favour to increase profit for themselves at the expense of other firms or individuals, or even their own firm and its clients.

2.14 Some key risks include the failure by firms to:

- identify the conflicts of interest between sales and trading activities and benchmark administration or design
- establish appropriate arrangements to identify and mitigate risks occurring in their benchmark activities
- detect potential manipulation attempts as a result of a lack of appropriate oversight or monitoring
- recognise that individual desks including sales staff or traders/brokers might have incentives that differ from those of the firm as a whole
- implement effective training programmes that enhance and improve long-term adherence to conduct standards

Two simple examples of potential conflicts of interest are summarised below

Benchmark data input process: Conflicts can arise in a situation where a bank or broker firm provides input data, or its activity is captured by a particular benchmark, while at the same time the firm or its clients have an economic interest in where the benchmark sets. A firm may have an economic incentive to make small incremental trades, perhaps incurring a loss, while at the same time the firm or its client has a much larger position elsewhere that would benefit from the impact of those smaller trades and this compensates for the losses incurred in executing them.

In-house benchmark administration: Potential conflicts of interest arise when the trading desk designs and manages an in-house benchmark that is referenced to a structured product it has issued. Conflicts may arise, for example, where the firm exercises discretion and is able to change the components of an in-house benchmark. There is an incentive therefore for the trader to design this in a way that economically benefits the firm. This is an area of significant concern.

3. Our findings

Benchmark approach and strategy

- Most firms had interpreted the IOSCO definition of benchmarks too narrowly. Some firms had not given sufficient consideration to the proper identification of and controls around their benchmark activities.
- Most firms had developed a formal benchmark strategy to ensure that they had adequate oversight and controls around benchmark activities.
- The implementation of formalised, forward-looking improvement plans varied widely across firms, with large differences in the levels of resource commitment, comprehensiveness of scope and urgency of pace. Only a few firms had a plan in place.
- Generally, firms had assessed the importance of benchmark activities to their business models and some had chosen to exit certain activities. Not all firms had given due consideration to market integrity, and the impact on clients and the wider market when deciding to exit a benchmark.

Oversight and controls

- Only some firms had established a governance framework with appropriate oversight functions to manage their benchmark activities.
- Firms had generally committed further resource to surveillance and monitoring and while improvement was evident it remained inadequate.
- Firms had specifically introduced oversight and controls at desk level to reduce the risks associated with submissions to benchmarks, including the monitoring of inappropriate submissions or trader/broker behaviour.
- Senior management appeared to be initiating a change in culture (and conduct), but it was not evident that the messages had yet been embedded at desk level.
- The efficiency of the first and second lines of defence varied in terms of the degree of their involvement and the robustness and level of challenge provided on benchmark submission and administration processes.

Conflicts of interest

- Awareness and understanding of conflicts varied between firms and also within firms between desks, as well as between desk heads and traders/brokers on the same desk.
- Most firms had attempted to mitigate conflicts of interest by automating the submissions process wherever possible, creating separate reporting lines and ensuring the physical separation of desks. Some firms still had manual submissions processes and inadequate surveillance in place.
- Most firms had compulsory training programmes for relevant staff, but to varying degrees, with most not covering any benchmark other than LIBOR. The format of the training ranged from e-learning to case studies and face-to-face training.

In-house benchmarks

- Only one firm could demonstrate that it had an awareness of the IOSCO recommendations for their in-house benchmark administration activity and had published a comprehensive IOSCO Compliance Statement. A few other firms signalled an intention to do so.
- Some firms had a governance committee in place to ensure independent ownership and oversight of the design, management, marketing, maintenance and cessation of their in-house benchmarks.
- Where firms used internally generated inputs to calculate their in-house benchmarks, only some had put processes in place to manage the potential risks associated with this.
- Some firms conducted back-testing and independent price verification where possible, to ensure compliance with the in-house benchmark calculation methodology.

Benchmark approach and strategy

3.1 Most firms had developed a formal benchmark strategy as a result of their review and better understanding of their benchmark activities. At the time of our review, most firms were at early stages in their review programme with considerations typically having been given to the overall approach to strengthening controls, the identification of all activity that constitutes a benchmark activity, and an assessment of whether such activity is critical to their business.

Understanding the full scope of benchmark and benchmark-related activities

3.2 To understand what should be identified as constituting a benchmark activity, we referred the firms to the IOSCO Principles for Financial Benchmarks. Most firms had interpreted the IOSCO definition of benchmarks too narrowly. Firms were unaware that the definition also captured activities such as in-house benchmarks and data regularly sent out by the firm that could be used for purposes such as the execution, termination and valuation of contracts.

3.3 A small number of firms had considered factors that go beyond administration and contribution by including the impact of trading activity on the underlying data used to construct benchmarks, given that this activity could influence benchmark levels. Some firms also demonstrated awareness of the possible impact of future regulatory developments in benchmarks such as the Fair and Effective Markets Review and European Union Regulation.

3.4 On the other hand, we observed a lack of understanding by some firms of what constitutes benchmark activity, or an inability to recognise that benchmarks were deeply rooted in their business models. This could result in a firm not treating benchmarks as such and therefore consequently not having robust controls in place around all relevant activity thereby giving rise to risks of potential benchmark manipulation.

Good practice

To help ensure that all potential benchmark-related activities were captured by their formalised, forward-looking improvement plan, three firms had given adequate consideration to what activity should be considered as contributing to or constitute administration of a benchmark. This included a wide application of the IOSCO definition of benchmarks and controls around trading activity in the underlying securities to which the benchmark refers.

A few firms adopted an approach that included proactive engagement by senior management on conduct risks, relevant training in relation to benchmarks, and appropriate management information (MI). This delivers a more comprehensive and impactful message across the firm around benchmark activities.

Poor practice

Several firms were unable to show evidence of awareness of all the activities that they undertook that were caught under the IOSCO definition of benchmarks. Six firms did not realise that prices calculated and published by the firm (that could be used for valuation purposes) could be a benchmark, thereby making the firm a potential benchmark administrator or a data provider.

In addition, a number of firms had not considered the impact of their trading/broking activity on benchmarks where they were not a direct submitter but their transactional data may have had an impact on the benchmark.

Different business lines at one firm had an inconsistent understanding of and approach to what constituted benchmark activity, evidencing a lack of clarity within the firm.

Assessing importance of benchmark activities to business models and developing robust controls around benchmark activities

3.5 As a result of the LIBOR and FX enforcement cases and the intense level of public and regulatory scrutiny, some firms had chosen to exit benchmark activities which were not commercially important to their business.

3.6 The decision by two firms to exit a benchmark was not accompanied by a full consideration of the impact on other stakeholders and, ultimately, on market integrity. Lack of consideration of these factors may result in a disorderly exit, this could also cause a disorderly failure of the benchmark. This can lead to client detriment and affect the reliability and/or credibility of the benchmark as well as negatively affect confidence in the overall market.

3.7 Firms were in the process of strengthening their controls around the benchmark activities they continue to undertake. This had been approached in different ways, with some firms undertaking extensive projects and/or employing external consultants to assist. The speed and extensiveness of the improvements varied across firms with completion timescales ranging from several months to two or three years.

3.8 Overall, we found that the level of progress by firms in implementing their formalised, forward-looking improvement plans and developing their benchmark controls, while varied, often lacked urgency. We would encourage firms to set more ambitious deadlines and complete projects more rapidly.

Good practice

Driven by a desire to develop and/or improve benchmark controls in a timely manner, a small number of firms had undertaken a comprehensive survey of all their benchmark activities. These firms then assessed the relative importance of each activity to their business model and created a formalised, forward-looking improvement plan detailing their approach to the review and improvement of controls around those benchmarks they wanted to continue submitting to.

To ensure risks were addressed strategically based on urgency and proportionality, some firms had adopted a risk-based approach to their remedial work, tackling the areas perceived to be of highest risk first (such as direct submissions to benchmarks).

Poor practice

We found that, where firms did not have a formalised approach to reviewing and strengthening their controls with respect to contributing to or administering benchmarks, there was an increased risk that they did not adequately address deficiencies in their controls in a formalised and timely manner.

A number of firms did not have a documented, forward-looking benchmark improvement plan which comprehensively addressed their benchmark activities across all their business areas. In the absence of such a plan, which should have specific and achievable timelines for addressing the firms' benchmark activities, it would be difficult for firms to monitor and track their progress and provide evidence of improvements that have been made.

Oversight and controls

3.9 Given the risk of benchmark manipulation and the impact this could have on the market, most firms sought to ensure they had appropriate and robust controls, policies and oversight to minimise and manage this risk. This included an adequate governance framework to oversee benchmark activities and sufficient monitoring, surveillance and challenge by both the first and second lines of defence. We observed that only a few firms had fully implemented an adequate governance framework.

Establishing robust governance framework and oversight

3.10 Some firms had established a governance framework with appropriate oversight functions for their benchmark activities. In terms of oversight, firms had given some consideration to putting in place appropriate controls for all benchmark-related activities to leverage lessons learnt from previous benchmark failures and benchmark good practice across different asset classes.

3.11 Senior management at firms broadly appeared to be engaged in communicating lessons learnt, and initiating and instilling a cultural change within the firm, but it was not always evident that the message had penetrated down to desk level. A few firms displayed evidence of a strong top-down message to staff on conduct behaviour. It was encouraging to see evidence of an open culture at these firms where traders/brokers were not afraid to escalate matters to their supervisors, compliance or other control functions, if they were in doubt about what they needed to do.

3.12 One firm had made it absolutely clear to their traders why some of their colleagues were no longer employed by the firm. Such examples were incorporated into their training which appeared to be a useful technique to deliver important messages.

Good practice

To enable formal oversight of their benchmark activities, some firms had established an overarching governance committee structure. These firms aimed to monitor the risks posed by their benchmark activities and applied sufficient scrutiny as well as determine an appropriate escalation path should issues arise.

A few firms had introduced a global benchmark policy. An example included a firm formally reviewing (on an annual basis) the decision to submit to a specific benchmark. This formal review assisted the firm to give due consideration to market integrity, consistency and continuity of support for benchmarks.

Poor practice

A few firms did not have an overarching governance framework for their benchmark activities in place, which could result in inadequate oversight by the firm of the management and mitigation of risks posed by engaging in benchmark activities.

While many firms had adequate oversight of the data that was sent out by the firm that could potentially be used for valuation purposes, one firm had no such oversight.

Developing controls by the first and second lines of defence

3.13 Firms were keen to have robust controls and adequate monitoring of their benchmark activities in place to detect and identify any issues or potential manipulation and provide documented audit trails. To do this proactively, some firms ensured the monitoring of the submissions process by both the first and second lines of defence, and where appropriate, by the third line of defence, to assess the strength and quality of the controls and surveillance processes.

3.14 Generally, firms had introduced controls at desk level to reduce the risks associated with submissions to benchmarks. One firm had a code of conduct in place for the submissions process for one of its benchmarks.

3.15 A number of firms had controls around data that was sent out, with traders/brokers being formally barred from directly sending any valuation data to clients. A small number of firms also undertook independent verification of their prices against external or market consensus data, escalating anomalies internally when found. However, the front office at one firm sent non-validated data to clients, which may give rise to a potential conflict of interest if not independently verified.

3.16 Some firms had also sought to educate traders to ensure that they understood their duties and would escalate questions when clarification was needed. Some firms had also incorporated notable aspects, good or bad, of trader behaviour in performance scorecards and year-end reviews.

3.17 We observed that the coordination of roles and responsibilities of the first and second lines of defence varied. In general, firms had devoted resource and effort towards this and one firm had created a separate benchmark supervision team to cover all benchmark activities that reported directly to the CF40[20]. Surveillance improvement was a work-in-progress with many firms currently only at the early stages of developing their systems and processes[21]. In addition, some firms had transferred individuals from the first to the second line of defence to improve coordination between those lines.

3.18 In some cases a separate department such as IT or back office/operations took a snapshot of the required data and delivered it to the benchmark administrator. While this reflected segregation of responsibility there was little evidence of data integrity checks, either through an IT system or by the first or second lines of defence.

3.19 The reviewing and testing of processes and controls by the internal audit function or external independent auditors to ensure they are well-functioning and sufficiently robust, was evident in several firms. One firm also used external consultants to identify checkpoints and controls in key areas of trading, including the process around the fix for one of their desks.

20 The Wheatley Review recommended a new control function CF40 (benchmark submission function) for individuals who manage the team responsible for submitting LIBOR.

21 The Fair and Effective Markets Review Final Report comments on refocusing oversight on the first line of defence, see section 5.3.3.4 - www.bankofengland.co.uk/markets/Documents/femrjun15.pdf

Good practice

Controls around benchmark activities are relatively new measures for firms to introduce. To aid their initial development and ensure the controls were appropriately comprehensive in scope, a few firms had engaged with a variety of stakeholders for input at the design stage.

One firm engaged the front office in developing the submissions methodology and training materials for staff. Another firm engaged the first and second lines of defence as well as external legal advice to develop benchmark framework documents (which also covered expectations around the behaviour of submitters).

The first line of defence at two firms provided for periodic attestations around the certification of contributions or to confirm adherence to the firm's policies. This appeared to raise awareness and accountability from a controls perspective.

To manage and ensure oversight of its benchmark activities, another firm had a benchmark repository, with periodic attestations by global business heads to confirm that information contained in the repository was accurate; it also identified the benchmark submitters at desk level.

Some firms had controls for trading around the fix, in order to reduce any influence by traders on the fixing price such as the placing of orders strategically close to the timing of the fix. Examples of these controls included only permitting trading if for a client order (with the risk hedged later), hedging the exposure if large within a time deadline before the fix, implementing a time deadline by which large client orders had to be received, or assessing the potential impact of an order received from a client and declining them where appropriate.

Firms had increased their monitoring and surveillance around benchmark submissions to enable detection of any inappropriate behaviour or pricing action that could manipulate benchmarks. A small number of firms were able to evidence controls by both the first and second lines of defence, with one firm conducting this on a T+1 basis.

In terms of trade surveillance, examples of good controls observed included the implementation of post-trade surveillance arrangements whereby the front office reviewed the data from the administrator, the expansion of eComms surveillance lexicons to include foreign languages, the creation of an independent investigation unit to monitor and deal with ad-hoc issues, and the creation of a separate analytical team to detect any suspicious trades.

Poor practice

Some firms did not have adequately documented policies and procedures for their benchmark activities. Front office supervisory staff at two firms had no oversight of the submissions process and one of these firms also had no oversight by the second line of defence.

We found instances of inadequate or poor monitoring by the first line of defence at a number of firms. These firms therefore had a higher risk of failing to detect instances of breaches by submitters, presenting greater potential opportunities for traders/brokers to engage in inappropriate behaviour. The weaknesses identified included:

- one desk not having oversight of alterations made to submissions by the trader
- monitoring arrangements at several firms that focused mainly on LIBOR with no or little coverage of other benchmarks
- monitoring of submitted data at a small number of firms that was manual, infrequent and inconsistent
- at some firms there was evidence of adequate first line of defence controls, but little or no involvement from the second line of defence

Conflicts of interest

3.20 Firms need to assess and consider the conflicts of interest arising in their day-to-day benchmark activities. Conflicts can arise via:

- benchmark submissions, administration or publication
- trading or sending of trade data out of the firm (e.g. for valuation purposes)
- publishing pages that could be used as a reference point in financial contracts

Understanding and awareness of conflicts of interest

3.21 Some firms recognised that it was critical that all levels of the firm had a good understanding of the potential conflicts of interest that could arise when contributing to or administering benchmarks and how to identify and manage these through appropriate policies and procedures. Consideration ought to be given to where conflicts could arise in manual or person-to-person processes as well as in the accessibility of data where processes are automated, with sufficient information barriers in place to manage these. Where firms did not have an appreciation of the breadth of the IOSCO definition of benchmarks, it was unclear whether they were thinking broadly enough about the conflicts of interest that encompassed their benchmark activities.

3.22 Educating front office and relevant staff through effective and comprehensive training helps to ensure that traders/brokers understand what constitutes acceptable conduct and helps them to make appropriate judgments in their day-to-day roles. The FEMR Final Report confirms the importance of meaningful continuing professional development as a mechanism for improving long-term adherence to conduct standards[22].

3.23 Generally, firms understood the importance of educating their staff to be able to identify potential conflicts of interest and escalate issues where necessary and this message had generally been reinforced by senior management.

22 Training was highlighted in the Fair and Effective Markets Review Final Report as an area that would help raise standards of professionalism, see section 5.2 - www.bankofengland.co.uk/markets/Documents/femrjun15.pdf

3.24 With respect to the scope of training, a small number of firms had training programmes in place that specifically covered benchmarks other than LIBOR. The format of training is likely to impact its effectiveness. Some firms had training that incorporated real-life scenarios, case studies and behaviour. Additionally, completion was tracked and/or fed into their year-end performance reviews.

Improving controls around widely identified benchmark activities

3.25 Inadequate management or identification of conflicts of interest and inadequate segregation of duties within a firm could present opportunities for individuals to engage in inappropriate behaviour and make it more challenging for the firm to manage and mitigate conflicts of interest (and demonstrate that they are doing so).

3.26 In terms of the segregation of duties, most firms had attempted to automate their submissions processes where possible, introduced separate reporting lines, and had given due consideration to the physical location of desks, which could help mitigate potential conflicts of interest arising where potential sensitivities to the performance of a benchmark existed.

3.27 Awareness and understanding of conflicts generally varied significantly between firms and also within the firm between desks (and between desk heads and traders/brokers on the same desk).

Automated submissions

Good practice
A small number of firms had controls around their automated submissions, such as threshold limits to ensure that unusual submissions are caught by the system and checked before being sent to the benchmark administrator.

Poor practice
We observed that a small number of firms still had manual submission processes. Insufficient surveillance and monitoring around these could give rise to potential malpractice or misconduct.

Awareness of conflicts of interest by front office

Good practice

Front office staff at some firms articulated a good understanding of the potential conflicts of interest within their roles and there appeared to be a general awareness of the importance of raising issues or concerns to compliance if in doubt. In some cases, front office management were actively engaged in managing the conflicts of interest.

Poor practice

Some front office functions were unable to articulate their understanding of conflicts of interest.

Poor awareness and understanding of conflicts of interest across the firm could result in traders/brokers being unable to identify risky situations resulting in the unintentional engagement in inappropriate behaviour, which could compromise the integrity of a benchmark.

Formalised conflicts of interest policies and logs

Good practice

One firm had a log for conflicts of interest that was benchmark-specific and covered each asset class.

Poor practice

No evidence of any formalised consideration of benchmark-specific conflicts of interest was found at a number of firms, which could make it very difficult for firms to identify and manage potential conflicts. Some firms also did not have a conflicts of interest log or register that incorporated benchmarks.

Barrier options – An example of a conflict of interest

Our final notice, issued to Barclays in relation to manipulation of the London Gold Fix[23], highlighted the conduct risks posed by barrier options and the importance of firms having appropriate controls in place to identify, manage and monitor conflicts of interest.

Barrier options can often give rise to conflicts of interest where traders may put their own or their firm's interests, ahead of that of their clients or those who act as counterparties to these options.

What is a barrier option?

An option that only becomes valuable if the price of the underlying asset stays within or crosses a pre-determined threshold(s) or barrier(s).

A binary option can have a payoff based on only two possible outcomes, either a fixed amount or nothing at all.

What risks do they pose to benchmark integrity?

In relation to a benchmark fix or rate, there is a risk that traders could place orders strategically to increase the likelihood of the fix occurring at a price above or below the barrier, which would allow the firm to profit at the client's expense accordingly.

Why use barrier options as compared to simpler or 'plain vanilla' options?

Barrier options can help reduce costs and can be cheaper than plain vanilla options for firms, the trade-off being lower or limited protection. Barrier options can also form the building blocks for a wide range of other complex financial contracts such as 'knock-in and knock-out options'.

What we observed

Following this case, a number of other firms had reviewed their controls and policies in relation to barrier options. This included implementation of computerised algorithms and imposing delta limits in an attempt to prevent manipulation of such options by traders.

A small number of firms had introduced conflicts of interest training for traders around barrier options.

23 Final Notice - www.fca.org.uk/static/documents/final-notices/barclays-bank-plc.pdf

In-house benchmarks

3.28 It is crucial that firms appreciate that the production of in-house benchmarks could fall under the scope of benchmark administration. The IOSCO Principles for Financial Benchmarks outline the expectations for benchmark administrators and the arrangements they should have in place, including the publication of a self-assessment of their benchmarks against the IOSCO Principles.

3.29 The controls around in-house benchmark activity were reviewed at some firms, as at the time, the other firms in our sample either did not operate in-house benchmarks, or did not operate them within the UK.

3.30 Four firms had considered the governance arrangements around their in-house benchmarks and generally the calculation was performed by an independent function, through segregation from the front office, use of a committee, or outsourcing to a third party. These steps should help to mitigate the risk of traders applying undue pressure on staff involved in producing in-house benchmarks.

3.31 Firms had reviewed their participation in in-house benchmarks with some considering withdrawal from this activity whilst others, conversely, were considering expanding their engagement in this business using the IOSCO Principles as an overarching framework for their activities[24].

3.32 Firms generally shared their in-house benchmark methodologies with investors with some also publishing these on their external websites to ensure transparency.

Developing and establishing a governance framework around in-house benchmarks

3.33 Firms generally had a governance committee or an oversight function in place to provide effective challenge and oversight of the design, maintenance and cessation of their in-house benchmarks, although this was not the case for all firms.

3.34 Lack of appropriate ownership and formal oversight could provide opportunities for the front office to influence the construction, design, inputs to an index or prices for their own self-interest.

3.35 At one firm the in-house benchmarks business sat within a separate legal entity.

Good practice

With respect to ownership of the in-house benchmarks, a small number of firms ensured a separation from the front office trading businesses to reduce potential conflicts of interest. Traders may have had strategies and therefore potential profits dependent on the levels of those in-house benchmarks and therefore could have an incentive to influence the price levels in their favour.

One firm also evidenced its awareness (and implementation) of the IOSCO recommendations for their benchmark administration activity by publishing a comprehensive IOSCO Compliance Statement. This is likely to contribute to a better understanding by users of governance and methodology, reviving market confidence in the aftermath of the LIBOR and FX misconduct. Some other firms had considered publishing an IOSCO Compliance Statement but only two could provide expected publication timelines.

24 The Fair and Effective Markets Review Final Report comments on maintaining the push towards compliance with the IOSCO Principles, see section 3.3.1 - www.bankofengland.co.uk/markets/Documents/femrjun15.pdf

Poor practice

Two firms had not established a governance framework around in-house benchmarks in line with the IOSCO recommendations. Those firms were over-reliant on robust benchmark methodologies and did not consider the need for strong governance or oversight of the in-house benchmarks. The lack of a governance framework or oversight function could make it difficult for firms to identify and manage potential conflicts of interest.

There was a heightened risk at one firm, which had not given full consideration to conflicts of interest that could arise when traders provided a rebalanced basket of indices or updated prices for a credit/equity strategy to clients. Where the strategy involved complex elements such as an option to be written, the traders used an index algorithm to derive pricing data that could affect the strategy pricing that was sent to the client; this may give rise to a potential conflict as there was no independent check before the prices were sent to clients.

A small number of firms were not able to identify whether ownership of in-house benchmarks rested with the front office or a committee, suggesting that any arrangements to manage conflicts of interest were not clearly communicated or understood by all front office staff.

Controls around in-house benchmark prices

3.36 A number of firms used internally generated inputs to calculate their in-house benchmarks (especially when operating in illiquid environments), but only some had arrangements in place to manage the potential risks associated with this.

3.37 With respect to back testing and independent verification of price inputs in the production of in-house benchmarks, a number of firms had verification controls in place to ensure compliance with the calculation methodology.

Good practice

To reduce the risks associated with using internally produced inputs in the calculation of an in-house benchmark, one firm had automated the process for sourcing/collecting internal data and employed an independent function to carry out the calculation process. Another firm did not use internally produced inputs for its in-house benchmarks.

Some firms performed independent verification of prices in parallel to the calculation agent to ensure compliance with the in-house benchmark calculation methodology.

Poor practice

For one firm there was no process in place to address or escalate any challenge from a client for the calculation of an in-house benchmark.

4. Next steps

4.1 Robust benchmarks support market integrity. Given their extensive use in both institutional and retail contracts, it is vital that consumers and markets are confident that benchmarks are credible, trustworthy and accurate.

Action being taken with the firms in our review

4.2 Firms are at various stages in their efforts to improve their oversight and controls in relation to financial benchmarks. We have written to all the firms in our sample providing them with individual feedback. Where we have identified shortcomings, we expect the relevant improvements to be made. We will follow this up as part of our supervision of benchmark activities.

Action being taken in the market in relation to financial benchmarks

4.3 The Fair and Effective Markets Review (FEMR)[25] was launched to reinforce confidence in the wholesale FICC (Fixed Income, Currency and Commodities) markets. One of the first FEMR recommendations was that a further seven benchmarks be brought into the scope of UK regulation, which took effect from 1 April 2015.

4.4 Important international initiatives regarding benchmark activities are continuing at IOSCO and Financial Stability Board (FSB) levels (see Annex 1 for more details).

4.5 The European Commission tabled its draft regulation[26] in 2013, which is currently being negotiated with representatives of the European Parliament, the Council and the Commission of the EU.

What firms should do next

4.6 All regulated firms involved in benchmark activities should carefully consider this report.

4.7 Firms' senior management should satisfy themselves that their current approaches are coordinated across their businesses, in line with regulatory requirements where applicable and take into account industry best practices described by IOSCO. These approaches should be robust enough to manage the inherent risks associated with benchmarks (including operational, legal and reputational risks) in a wide range of asset classes, and should ensure delivery of fair outcomes to consumers and maintain market integrity.

25 Fair and Effective Markets Review Final Report - www.bankofengland.co.uk/markets/Documents/femrjun15.pdf

26 Regulation of the European Parliament and of the Council on indices used as benchmarks in financial instruments and financial contracts http://ec.europa.eu/internal_market/securities/docs/benchmarks/130918_proposal_en.pdf

Annex 1
Regulatory background

Misconduct associated with benchmarks

1. Various types of misconduct have come to light that have eroded public trust in financial markets.

2. At the onset of the financial crisis in September 2007, liquidity concerns sparked public scrutiny of LIBOR (the London Interbank Offered Rate). Banks attempted to manipulate LIBOR submissions to avoid a potential negative interpretation of their credit quality. They did this by indicating an ability to borrow at lower rates than they were actually paying. This made them appear less risky and preserved the market perception that they were able to borrow cash from the interbank market at low rates.

3. In addition, a further significant problem arose out of the failure to manage properly (or at all) the conflicts of interest between trading products referenced to LIBOR and the responsibility for determining the LIBOR submissions, which contributed to the calculation of the published LIBOR rate. The issues were compounded by the influence that traders and brokers could assert on those submissions.

4. Traders and brokers behaved unacceptably. Some traders made internal requests to their benchmark submitters for submissions to be changed to benefit their trading positions. They also colluded with traders at other firms and at contributing banks and acted in concert with brokers in advance of and on particular days on which, the traders stood to benefit. The ultimate aim of these requests was to influence the final benchmark interbank offered rates and was done in a way that could potentially disadvantage their clients and the market. We first took action against such attempted manipulation in 2012 and since then enforcement fines levied by the FCA alone for attempted manipulations of LIBOR and related failures of systems and controls stand above £700m.

5. A widespread lack of effective systems and controls allowed traders to attempt to manipulate benchmarks in the foreign exchange spot market (FX fix, WM/Reuters London 4pm Closing Spot Rate). Traders had access to confidential information regarding, among other things, the size and direction of various client orders that would reference the FX fix. While receiving and using such information for risk management purposes can be legitimate, traders used this client data, acting either alone or in collusion with other traders, to attempt to influence the FX fix for their own benefit and to the disadvantage of certain clients. Global fines in relation to spot FX failings exceed £6 billion with about £1.4 billion levied by the FCA.

6. There has been misconduct relating to the London Gold Fix, which has been replaced by the LBMA Gold Price. This benchmark is used by most Central Banks, including the Bank of England, to value their gold reserves. Also, many retail outlets such as coin dealers and gold jewellery manufacturers used the London Gold Fix to adjust their prices once a day. A trader at a bank placed certain orders on a particular day with the intention of increasing the likelihood that the price of gold would fix below a particular price (a barrier or threshold above or below which one party to a contract would make a profit), which it did. This meant that the bank was not obliged to make a significant payment to a customer that would have been payable had the price fixed above the barrier.

7. Looking beyond the UK, traders with the help of brokers had tried to influence ISDAFIX in the US, which is a daily measure of the fixed rate leg for interest rate swaps. This benchmark, which used to rely on submissions from panel banks, affects the price of trillions of dollars of derivatives. Clients of banks seek to hedge losses on their investment portfolios caused by adverse interest rate movements. The benchmark was vulnerable to manipulation and banks could have boosted profits or avoided losses on interest rate swaps, options and other derivatives pegged to the benchmark to the disadvantage of counterparties involved in these contracts. ISDAFIX is now known as ICE Swap Rate which uses a new methodology based on tradable quotes sourced from electronic trading venues.

Our role

8. The FCA (and formerly the FSA) aims to ensure that markets operate properly so that confidence in UK financial services is maintained. We have been engaging with firms to ensure that they initiate behavioural change, foster good conduct across their firm and promote a culture where traders and brokers identify their inherent conflicts of interest and put in place more appropriate governance, systems and controls to manage those conflicts.

9. We have levied enforcement fines on firms in relation to LIBOR and EURIBOR submissions and systems and controls failings leading to LIBOR and FX misconduct. In attempting to manipulate LIBOR and FX, banks breached one or more of our Principles for Business (namely 2, 3, 5 and 8) ranging across management and control, care and diligence, market conduct to conflicts of interest management.

10. We have also implemented an industry-wide supervisory programme relating to FX remediation to ensure that firms learn the lessons from past failures. We have asked senior management at the firms in question to attest that they have appropriate controls in place.

Background to UK benchmark regulation

11. The first enforcement fine levied in the UK for benchmark misconduct was in June 2012. Following this fine, which was the first FSA enforcement case in relation to benchmark misconduct to be made public, the Chancellor of the Exchequer commissioned Martin Wheatley (the then FCA CEO-designate) to undertake a review[27] of the framework for the setting of LIBOR, a benchmark widely known and used in contracts worth more than $350 trillion in July 2012.

12. Legislation was introduced to make LIBOR the first regulated benchmark. A series of recommendations were then implemented including the creation of a new chapter in the FCA Handbook (MAR 8) and the creation of two new Controlled Functions (CF40 and CF50).

13. With the introduction of MAR 8, there are now a number of specific requirements for both the administrator and the submitters of specified benchmarks. Regulated submitters, for example,

27 Wheatley Review of LIBOR, Final Report - www.gov.uk/government/wheatley_review_libor_finalreport

have to establish appropriate oversight of the submission process by senior personnel and compliance, appoint a benchmark manager (CF40), ensure they have an effective methodology for submitting the benchmark which has to be reviewed at least quarterly, establish a conflicts of interest policy and effective controls around them, notify suspicious transactions and have a periodic external audit.

14. Administrators have to appoint a benchmark administrator manager (CF50), carry out monitoring and surveillance of benchmark submissions (if submissions are made), set up an oversight function, notify the FCA of any misconduct or attempt of manipulation, produce periodic statistics and have adequate financial resources.

Other initiatives

The Fair and Effective Markets Review (FEMR)

15. In June 2014, the UK Government announced the Fair and Effective Markets Review (FEMR)[28] to reinforce confidence in the wholesale FICC (Fixed Income, Currency and Commodities) markets in the wake of the serious misconduct seen in recent years and to influence the international debate on trading practices. The focus of FEMR included the extent to which regulatory, organisational and technological changes since the crisis would be sufficient to ensure FICC markets are effective in the future. FEMR also looked at the structure of the FICC markets as well as the conduct of the market participants.

16. One of the first FEMR recommendations was that a further seven benchmarks be brought into the scope of UK regulation: SONIA, RONIA, ICE Swap Rate, LBMA Gold Price, LBMA Silver Price, WM/Reuters London 4pm Closing Spot Rate and ICE Brent Index. This took effect from 1 April 2015.

ESMA-EBA Principles for Benchmarks

17. In June 2013, the European Securities and Markets Authority (ESMA) and the European Banking Authority (EBA) published the *ESMA-EBA Principles for Benchmark - Setting Processes in the EU*[29]. The aim was to address the widespread problems associated with benchmarks that came to light from previous misconduct in relation to LIBOR, until a formalised regulatory and supervisory framework is created in Europe.

18. The report lists a series of principles for benchmark submitters, calculation agents, publishers and users. It also included principles for the continuity of benchmarks suggesting that all those participating in the benchmark setting process should have in place credible contingency provisions to ensure key benchmarks remain available to the market.

International Organisation of Securities Commissions (IOSCO) work

19. In July 2013, IOSCO issued a report with the objective of creating an overarching framework of Principles for Financial Benchmarks[30] (Principles). The Principles, which cover governance, quality of benchmarks, quality of methodology and accountability, offer a global standard of good market practice and benchmark administrators are encouraged to adopt them.

20. IOSCO stated that the Principles are not intended to be 'one size fits all' and that administrators may apply them proportionately. Administrators are expected to describe their level of

28 Fair and Effective Markets Review, Final Report - www.bankofengland.co.uk/markets/Documents/femrjun15.pdf
29 ESMA-EBA Principles for Benchmark - Setting Processes in the EU. Final Report - www.esma.europa.eu/el/system/files/2013-658_esma-eba_principles_for_benchmark-setting_processes_in_the_eu_-_final_report.pdf
30 IOSCO Principles for Financial Benchmarks - www.iosco.org/library/pubdocs/pdf/IOSCOPD415.pdf

implementation of the Principles in public statements of compliance. The Principles were endorsed by the G20 leaders in September 2013.

21. IOSCO conducted a review of the implementation of the Principles across a sample of administrators from a variety of jurisdictions and asset classes and the findings were published in February 2015[31].

FSB Official Sector Steering Group (OSSG)

22. The OSSG published a report in July 2014, *Reforming Major Interest Rate Benchmarks*[32], which contained two main recommendations to be applied to major existing interest rate benchmarks, with particular emphasis on EURIBOR (Euro Interbank Offered Rate), LIBOR and TIBOR (Tokyo Interbank Offered Rate). The first recommendation was to strengthen these benchmarks by looking to underpin them to the greatest extent possible with transaction data. The OSSG also recommended the development of alternative, nearly risk-free, reference rates in order to encourage market choice around interest rate benchmark selections. The OSSG is to publish an interim report in July 2015 and a final report in July 2016, covering the implementation of its recommendations.

23. The Financial Stability Board (FSB) also published a report in September 2014, *Final Report on Foreign Exchange Benchmarks*[33], which focused on a number of benchmarks in particular the WM/Reuters London 4pm Closing Spot Rate. The report made a series of recommendations regarding the methodology for these benchmarks, their use within the industry, and management of conflicts of interest. An interim report was published in June 2015.

24. The FSB endorsed the IOSCO Principles for Financial Benchmarks and commissioned IOSCO to conduct a review of the implementation of its Principles. IOSCO published its review into the administrators of EURIBOR, LIBOR and TIBOR in July 2014[34] and its review of WM/Reuters London 4pm Closing Spot Rate in September 2014[35].

Future developments in benchmarks

25. In general, there is a trend to move from submissions-based benchmarks to other forms of price formation and to support expert judgement using as much transactional data as possible. Transparency is now a key feature, with expert judgement becoming a less frequent feature of benchmarks. In precious metals, for example, LBMA Gold Price has moved from a conference call to a public and electronic auction.

26. Another example includes moving from a submission based model to an algorithm which utilises fully tradable prices streamed on multilateral trading facilities.

27. We have ongoing supervisory work streams regarding the eight regulated benchmarks to make sure that the administrators and submitters continuously meet the high standards set out by MAR 8.

28. The integrity of benchmarks is being discussed at European level and a European Union Regulation was proposed in 2013. The Regulation remains subject to EU negotiations and, once finalised, will supersede the current UK regime and widen the FCA's regulatory scope beyond the eight benchmarks we currently regulate.

31 Review of the Implementation of IOSCO's Principles for Financial Benchmarks - www.iosco.org/library/pubdocs/pdf/IOSCOPD474.pdf
32 Reforming Major Interest Rate Benchmarks - www.financialstabilityboard.org/2014/07/r_140722/
33 Final Report on Foreign Exchange Benchmarks - www.financialstabilityboard.org/2014/09/r_140930/
34 Review of the Implementation of IOSCO's Principles by Financial Benchmarks by Administrators of LIBOR, EURIBOR and TIBOR - www.iosco.org/library/pubdocs/pdf/IOSCOPD444.pdf
35 This was published as an annex of the FSB's Final Report on Foreign Exchange Benchmarks.

Annex 2
Timeline of key benchmark events in the UK

Regulatory Developments

2012

- **2012 - to date,** the FSA/FCA working closely with IOSCO on benchmark reform
- **Sep 2012,** Wheatley Review published

2013

- **2013 - to date,** The FCA working closely with FSB on benchmark reform; drafting of the EU Market Abuse Regulation
- **Apr 2013,** LIBOR becomes first UK regulated benchmark; new chapter in the Code of Market Conduct of our Handbook (MAR 8) becomes effective
- **Jun 2013,** ESMA-EBA Principles for Benchmark Setting Process in the EU published
- **Jul 2013,** IOSCO Principles for Financial Benchmarks published
- **Sep 2013 – to date,** negotiations on EU Benchmark Regulation

2014

- **Jun 2014,** FEMR launched
- **Jul 2014,** FSB Final Report on Reforming Major Interest Rate Benchmarks published
- **Sep 2014,** FSB Final Report on Foreign Exchange Benchmarks published
- **Sep 2014 – Jul 2015,** FCA's thematic review on financial benchmarks
- **Nov 2014 – to date,** FCA FX remediation supervisory programme
- **Dec 2014,** FEMR recommended seven additional benchmarks to be regulated in the UK

2015 to date

- **Apr 2015,** Seven additional benchmarks become regulated; MAR 8 updated
- **Jun 2015,** FEMR Final Report published

Enforcement fines imposed in the UK

- **Jun 2012,** Barclays fined £60m for LIBOR and EURIBOR misconduct
- **Dec 2012,** UBS fined £160m for LIBOR and EURIBOR misconduct
- **Feb 2013,** RBS Plc fined £88m for LIBOR misconduct
- **Sep 2013,** ICAP Europe Limited fined £14m for LIBOR misconduct
- **Oct 2013,** Rabobank fined £105m for LIBOR misconduct
- **Mar 2014,** Mark Stevenson fined £663k
- **May 2014,** Martin Brokers (UK) Ltd fined £630k for LIBOR misconduct
  Barclays fined £26m for LBMA Gold Price
  Daniel Plunkett fined £96k for LBMA Gold Price
- **Jul 2014,** Lloyds Bank Plc and Bank of Scotland fined £105m for Repo rate and LIBOR misconduct
- **Nov 2014,** for spot FX failings
  Citibank fined £227m
  HSBC fined £216m
  JP Morgan fined £222m
  RBS fined £217m and
  UBS fined £234m
- **Jan 2015,** David Chaplin fined £210k
  Jeremy Kraft fined £105k
- **Apr 2015,** Deutsche Bank AG fined £227m for LIBOR and EURIBOR misconduct
- **May 2015,** Barclays fined £284m for spot FX failings

Annex 3
Abbreviations used in this document

EBA	European Banking Authority
EU	European Union
EURIBOR	Euro Interbank Offered Rate
ESMA	European Securities and Markets Authority
FCA	Financial Conduct Authority
FEMR	The Fair and Effective Markets Review
FICC	Fixed Income, Currency and Commodities
FSB	Financial Stability Board
FSMA 2000	Financial Services and Markets Act 2000
FX	Foreign Exchange
G10	The Group of Ten is made up of eleven industrial countries (Belgium, Canada, France, Germany, Italy, Japan, the Netherlands, Sweden, Switzerland, the United Kingdom and the United States)
IBOR	Interbank Offered Rate
ICE	Intercontinental Exchange
IOSCO	The International Organization of Securities Commissions
ISDAFIX	International Swaps and Derivatives Association Fix
LBMA	London Bullion Market Association
LIBOR	London Interbank Offered Rate
OSSG	Official Sector Steering Group
TIBOR	Tokyo Interbank Offered Rate

Glossary:
For more information on some of the terms used in the report, please see the 'Glossary of Key Terms' on page 35 of the IOSCO document – www.iosco.org/library/pubdocs/pdf/IOSCOPD415.pdf.

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