



Recommendations on additional financial benchmarks to be brought into UK regulatory scope

Report to HM Treasury

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1. Background

1.1 The Fair and Effective Markets Review

1. On 12 June 2014 the Government announced the Fair and Effective Markets Review (the 'Review') to reinforce confidence in the fairness and effectiveness of wholesale financial market activity conducted in the United Kingdom and to influence the international debate on trading practices.¹

2. The Review is led by Nemat (Minouche) Shafik (Deputy Governor for Markets and Banking, Bank of England) and co-chaired by Charles Roxburgh (Director General, Financial Services, HM Treasury) and Martin Wheatley (Chief Executive Officer, Financial Conduct Authority). The Review will draw on the insights of market participants, public officials and end users of wholesale financial services.

3. The Review has been tasked with investigating those wholesale markets, both regulated and unregulated, where most of the recent concerns about misconduct have arisen: fixed-income, currency and commodity (FICC) markets, including associated derivatives and benchmarks. It will make recommendations on:

- principles to govern the operation of fair and effective markets, focusing on fixed income, currency and commodities;
- reforms to ensure standards of behaviour are in accordance with those principles;
- tools to strengthen the oversight of market conduct;
- whether the regulatory perimeter for wholesale financial markets should be extended, and to what extent international action is required; and
- additional reforms in relation to benchmarks, in order to strengthen market infrastructure.

4. The Review will publish its final report in June 2015. But as a near-term interim output, the Chancellor of the Exchequer asked the Review to recommend a list of additional major benchmarks across the FICC markets that should be brought into the regulatory framework originally implemented in the wake of the LIBOR misconduct scandal.²

5. This Report sets out the Review's recommendations in response to that request. The Review will also be giving further consideration to the role of benchmarks in the context of its broader analysis

¹ The terms of reference for the Fair and Effective Markets Review are available here: <http://www.bankofengland.co.uk/publications/Documents/news/2014/tor120614.pdf>

² See the Annual Mansion House speech by Chancellor of the Exchequer, RT Hon George Osborne MP., 12th June 2014 <https://www.gov.uk/government/speeches/mansion-house-2014-speech-by-the-chancellor-of-the-exchequer>

over the coming year, and in light of developments in the international framework for benchmark regulation, and may make further recommendations in its final report.

1.2 The role of benchmarks and the objectives of benchmark regulation

6. The Review takes as its starting point the definition of a benchmark set out in the Financial Services and Markets Act 2000 (FSMA), as amended by the Financial Services Act 2012. That legislation describes the framework for benchmark regulation in the United Kingdom, and states that a “benchmark” means an index, rate or price that:

- (a) is determined from time to time by reference to the state of the market;
- (b) is made available to the public (whether free of charge or on payment); and
- (c) is used for reference for purposes that include one or more of the following:
 - (i) determining the interest payable, or other sums due, under loan agreements or under other contracts relating to investments;
 - (ii) determining the price at which investments may be bought or sold or the value of investments;
 - (iii) measuring the performance of investments.

7. Given the widespread use of benchmarks in financial contracts, it is vital that consumers and market participants are confident that benchmarks – particularly those that lie at the heart of systemically important markets – are credible, trustworthy and accurate. The credibility of a benchmark can be undermined if the benchmark can be distorted, either by accidental errors in its compilation or calculation, through the exposure of participants to conflicts of interest or incentives to manipulate the benchmark, or through abuse of a dominant competitive position in the compilation of a benchmark.

8. The objectives of benchmarks regulation, generally, are therefore to ensure that, when financial activities come to depend significantly on a benchmark, protections are available to deal with risks associated both with the mechanism for producing the benchmark and with the data that go into the benchmark.

1.3 The current UK regulatory framework for benchmarks

9. A framework of legislation for financial market benchmarks was introduced in the United Kingdom following the 2012 *Wheatley Review of LIBOR*.³ That legislation created two new regulated activities: (i) administering a specified benchmark; and (ii) providing information in relation to a specified benchmark. These new regulated activities, which became law through amendments to

³ See: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/191762/wheatley_review_libor_finalreport_280912.pdf

FSMA and the associated Regulated Activities Order, mean that firms that either contribute to or administer any 'specified benchmark' named by Government in secondary legislation must be authorised by the Financial Conduct Authority (FCA).⁴

10. This regulatory regime subjects administrators of, and submitters to, specified benchmarks to a number of specific rules and pieces of guidance⁵. Authorised firms may face a range of sanctions if they breach any of the FCA's rules and principles. These include being subject to financial penalties, suspensions and censures. As individual benchmarks will vary in their construction and operation, the current rules may if necessary be adapted to their specific characteristics.

11. For **benchmark administrators**, the requirements include:

- implementing effective governance and oversight measures, including the establishment of an oversight committee and the development of practice standards in a published code;
- monitoring of benchmark submissions to identify irregularities in benchmark submissions and breaches of the practice standards and conduct that may involve manipulation, or attempted manipulation, of the benchmark;
- notifying the FCA of any suspicions in relation to the above;
- having arrangements in place to identify and manage conflicts of interest; and
- appointing a benchmark administration manager to oversee the firm's compliance with the FCA's requirements for benchmark administration.

12. The requirements on **benchmark submitters** include:

- maintaining effective organisational and governance arrangements for the process of making benchmark submissions;
- having an effective methodology, based on objective criteria and relevant information, for determining their submissions to benchmarks (including keeping relevant records);
- notifying the FCA of any suspicions in relation to manipulation, attempts to manipulate, or potential collusion to manipulate the benchmark;
- having arrangements in place to identify and manage conflicts of interest; and
- appointing a benchmark manager to oversee the firm's compliance with the FCA's requirements for benchmark submission

⁴ The general requirements of an authorised firm are that they must comply with the Threshold Conditions for authorisation, which include that the firm must be capable of being effectively supervised, that it has appropriate resources (including financial resources) in relation to the activities it carries out, and that its business model is suitable. It is necessary for individuals working for authorised firms and carrying out controlled functions to show they are fit and proper to do so. In addition to these general requirements, there is a new power under FSMA for the FCA to make rules requiring authorised persons to take steps in connection with the setting of a regulated benchmark, which could include requiring benchmark submitters to continue contributing to a benchmark.

⁵ Formally set out in the 'MAR 8' section of the FCA Handbook: see <http://fshandbook.info/FS/html/FCA/MAR/8>

13. As recommended by the Wheatley Review, the Financial Services Act 2012 also introduced a new criminal offence of manipulating a 'relevant benchmark' either by making misleading statements or by creating a false or misleading impression of the value of investments that could affect such a benchmark. Like the 'specified benchmarks' subject to enhanced regulation, 'relevant benchmarks' that are subject to criminal sanctions may also be defined by the Government in secondary legislation.

14. The Government initially applied the new regulatory and criminal framework to LIBOR. That reflected the serious design deficiencies that came to light as a result of the LIBOR misconduct scandal – both on the part of submitters (where the reliance on judgment made LIBOR susceptible to manipulation given deficiencies in systems, controls and governance arrangements) and on the part of the then administrator (which, as noted in the Wheatley Report, did not exercise sufficiently robust oversight). The new regime ensured that both the administrator and the panel of contributing banks were subject to full supervision by the FCA in respect of their LIBOR related activities. It was nevertheless always envisaged that further benchmarks could be brought within scope, as set out in Chapter 7 of the Wheatley Report.

1.4 The scope of the Review's recommendations

15. Although there are many benchmarks in use across all financial markets, the focus of the Review's recommendations is on benchmarks used in FICC markets, where the most serious recent concerns about misconduct have arisen.

16. The Review has also focused on those FICC benchmarks with the greatest importance for the financial system. Disruption to the credibility or reliability of such benchmarks, through attempted distortion or abuse, poses the biggest risks to retail and wholesale investors and the wider economic and financial system.

17. For the purposes of this interim output, the Review's recommendations only cover UK-based benchmarks. This will allow HMT and the FCA to ensure that these benchmarks are quickly brought into regulation. But this is only a first step. There are also important benchmarks administered overseas that participants in London's financial markets contribute to directly, or use in their businesses. As part of the wider Review, consideration will also be given to recommendations the Review could make about coordination with other international bodies and regulatory authorities to strengthen the integrity of these benchmarks further.

18. The IOSCO Principles for Financial Benchmarks, published in July 2013⁶, set out an internationally-agreed set of recommended practices for benchmark administrators and submitters,

⁶ <http://www.iosco.org/library/pubdocs/pdf/IOSCOPD415.pdf>

and provide a strong framework within which to seek further international convergence. The IOSCO principles are intended to promote the reliability of benchmarks and address benchmark governance, quality and accountability mechanisms. Benchmark administrators were asked to disclose their compliance with the principles publicly by July 2014, and IOSCO intends to review the extent to which the principles have been implemented by the end of 2014.

19. The international community has also been considering longer term reform options for widely used financial benchmarks. The Financial Stability Board (FSB) was tasked by the G20 in 2013 to co-ordinate and guide work on the necessary reforms to short-term interest rate benchmarks, to ensure that widely-used benchmarks were held to appropriate standards of governance, transparency and reliability. A high-level Official Sector Steering Group of regulators and central banks published its final report on 22 July 2014, alongside an IOSCO review of LIBOR, EURIBOR and TIBOR.⁷ The FSB also published a consultation paper containing recommendations for reform in the foreign exchange market on 15 July 2014.⁸

20. In September 2013 the European Commission proposed legislation that will regulate the provision of financial benchmarks at EU level.⁹ This legislation is currently being considered by the European Parliament and the Council of the European Union. While it is anticipated that this legislation will eventually replace the UK regulatory framework (although not the UK criminal framework), it is not expected to be fully in place for some time. Given the importance of a number of significant benchmarks to the UK financial system, the Review considers it necessary to take action now under current UK powers whilst discussions on the development of EU legislation continue.

21. These work streams, in which the UK has been closely involved, and their subsequent national and international implementation, collectively set the direction for the longer-term international framework for managing the risks surrounding benchmarks. The Review believes that its recommendations are complementary to these initiatives, and will ensure there are adequate regulatory protections around the most significant UK benchmarks for the period until the wider international initiatives are fully implemented.

1.5 Structure of the Report

22. The rest of this Report is structured as follows. Section 2 describes the assessment framework used by the Review to select the benchmarks it has recommended, and sets out those recommendations. Section 3 describes how the Review believes that the legislation should be applied

⁷ http://www.financialstabilityboard.org/publications/r_140722.pdf

⁸ http://www.financialstabilityboard.org/publications/r_140715.pdf

⁹ <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52013PC0641&from=EN>

to the recommended benchmarks. Section 4 concludes.

2. Assessment framework and the recommended benchmarks

23. In order to identify a shortlist of benchmarks for inclusion within the scope of UK regulation, the Review followed a three-step approach:

- i) identifying the potential universe of FICC benchmarks;
- ii) defining selection criteria consistent with the principles set out in the introduction to this Report; and
- iii) applying those criteria to the universe of benchmarks to identify a set of benchmarks to recommend.

2.1 Identifying the potential universe of FICC benchmarks

24. There are a wide variety of benchmarks across FICC markets, which vary greatly in scope and nature. These include, but are not limited to:

- **Money markets** – these benchmarks relate to the cost of lending and borrowing in the wholesale money markets and its derivative products. In the UK, prominent money market benchmarks include overnight lending rates, swap rates and inter-bank term borrowing rates;
- **Credit markets** – these benchmarks take a variety of different forms, varying from cash bond indices, to those that relate to more complex instruments including credit default swaps;
- **Foreign exchange markets** – these benchmarks measure the price at which foreign exchange transactions are made at a given time of day; and
- **Commodity markets** – these are benchmarks that track, or are based on, the prices of single commodities or baskets of commodities (whether physical or derivatives), including agriculture, energy and metals.

25. The method of construction of benchmarks also varies widely. Some are based on a set of market transactions; some on a combination of quotes, transactions and committed prices; and others are determined through an auction process. Although some of these structures may in principle be more robust than others, all benchmarks face potential risks around their production to differing degrees. The Review considers that the most important factor in assessing the overall risks from a benchmark is the extent to which financial markets depend on that benchmark, and has therefore not sought to differentiate between benchmarks on the basis of their calculation methodology alone.

26. In drawing up its recommendations, the Review has considered a wide range of FICC benchmarks. No institution is responsible for collecting information on the population of benchmarks. The Review nevertheless drew on a number of information sources, including those benchmarks expected to assess their compliance with the IOSCO principles and data received by the Bank of

England, FCA and HM Treasury as part of their wider market monitoring and regulatory activities. The Review has throughout sought to adopt a proportionate approach.

2.2 Defining the selection criteria

Criterion 1 - Benchmarks that are major FICC benchmarks

27. Only those benchmarks which are major benchmarks in FICC markets are in the scope of this work, as explained in Section 1.4. The current UK legal framework is designed to provide for supervision of persons who provide information or expressions of opinion in respect to a regulated benchmark, as well as persons responsible for administering a benchmark. This is necessary in cases such as LIBOR and the others identified later in this report, where significant sections of the financial sector depend on the benchmark, but it is not appropriate for the many thousands of benchmarks where the level of dependence is far smaller. For this reason, the Review is only concerned with benchmarks which have major dependencies in financial markets.

28. In judging whether a benchmark could be regarded as 'major', the Review had regard to a number of indicators, including the number and value of financial contracts directly or indirectly linked to the benchmark, the range of different usages to which the benchmark is put, and the degree of market recognition. In the Review's judgment, it is these benchmarks that would have the biggest impact on retail and wholesale investors if they were distorted or abused, and would represent the greatest source of systemic vulnerability and risk if their integrity were questioned.

29. This criterion therefore excludes, for example, a range of proprietary benchmarks provided by individual banks and other agents, which do not represent a significant portion of the market in the UK or globally.

Criterion 2 - Benchmarks where the main benchmark administration activities are located in the United Kingdom

30. For the purposes of this report, the Review's recommendations only cover UK-based benchmarks – i.e. administrators and contributors who are physically located in the United Kingdom (either through a legal person or a branch). As discussed in Section 1.4, this will allow HMT and the FCA to ensure that these benchmarks are brought quickly within the scope of regulation.

31. There are of course important financial market benchmarks that are not administered in the United Kingdom. As part of the wider Review, consideration will also be given to recommendations about coordination with ongoing international work streams and authorities to further strengthen the integrity of benchmarks administered overseas that participants in London's financial markets either contribute to or use in their businesses.

Criterion 3 - Benchmarks that are based on transactions in financial instruments which are not covered comprehensively by existing market abuse regulation

32. An important consideration for the Review in making its recommendations is the extent to which the risks associated with the production of a given benchmark are already addressed by the existing framework for tackling market abuse, under which the FCA can take enforcement action in relation to certain behaviours.

33. In the case of benchmarks that are calculated as a result of information in relation to financial instruments covered by the existing market abuse regime¹⁰, the Review considers that the FCA already has tools to address problems that could arise. The Review's approach is therefore to target those benchmarks which are based directly on instruments that are outside the scope of the existing market abuse regime, or which have indirect dependencies on instruments outside the scope of the market abuse regime where additional mechanisms may be needed to monitor against potential sources of abuse.

34. For example, some of the leading global benchmarks in the base metals market are based on the price of traded futures. However, these benchmarks are determined as the price of futures contracts traded on a so-called 'prescribed' market already covered by market abuse legislation, and the Review has therefore concluded that the benchmark does not meet the criteria for inclusion.

2.3 Recommended benchmarks

35. Given the three selection criteria (which apply cumulatively) described in Section 2.2, the Review narrowed down its recommendations to the following seven benchmarks (summarised in **Table 1**). The remainder of this section explains each in turn.

SONIA and RONIA

36. Other than LIBOR (which is already a regulated benchmark), the major benchmarks for the sterling money markets are the Sterling Overnight Index Average (**SONIA**) and the Repurchase

¹⁰ The UK civil market abuse regime applies to qualifying investments traded on a prescribed market as defined in the FSMA Prescribed Markets and Qualifying Investments Order 2001.

The criminal market abuse regime in relation to misleading statements and impressions applies to relevant investments, relevant agreements and relevant benchmarks as defined in Financial Services Act 2012.

The criminal market abuse regime in relation to insider dealing applies to price-affected securities, as defined in the Criminal Justice Act 1993

Overnight Index Average (**RONIA**). Both benchmarks are administered by the UK-based Wholesale Markets Brokers' Association (WMBA).

37. SONIA is the daily weighted average interest rate of unsecured sterling overnight cash transactions brokered in London by five contributing members of the WMBA. RONIA is the daily weighted average interest rate of all secured sterling overnight cash transactions, also brokered by five WMBA members.¹¹ The transactions that form the basis of these benchmarks are not fully captured under the scope of UK market abuse regime.

38. SONIA and RONIA are used by wholesale market participants as the reference rates for overnight index swaps (OIS) and to remunerate sterling collateral. Both UK and international institutions use overnight index swaps to hedge or speculate on changes in future short-term interest rates. The Depository Trust & Clearing Corporation (DTCC) estimates that the total notional value of sterling OIS swaps as of 1 August 2014 was \$13.4 trillion.¹² In turn, OIS curves are used to value major sterling swap portfolios estimated at \$52 trillion.¹³ Taken together, the scale of reference transactions based on these benchmarks qualifies them as 'major' for the purposes of this Report.

WM/Reuters (WMR) 4pm London Closing Spot Rate

39. The foreign exchange market spans various jurisdictions, time zones, and types of market participants. The Bank for International Settlements (BIS) estimates that the global average daily turnover across foreign exchange instruments was over \$5 trillion in April 2013, with over 40% of that turnover taking place in the United Kingdom. Spot foreign exchange contracts are not qualifying investments under the existing market abuse regulation in the United Kingdom.

40. The FSB's recent Consultative Report on Foreign Exchange Benchmarks¹⁴ highlighted that the **WM/Reuters (WMR) 4pm London Closing Spot Rate** (produced by the UK-based WM Company, which provides a broad range of foreign exchange benchmarks) is by far the dominant benchmark.

41. The WMR closing spot fixes are, at least for the most widely used currencies, based on actual trades, supported by transactable bids and offers extracted from electronic trading systems, taken over a one minute window from -/+ 30 seconds either side of the specified fix time.¹⁵ There are 160 WMR closing spot fixes in total. The WMR benchmarks are used by market participants for a variety of purposes, but most notably for valuing, transferring and rebalancing multi-currency asset portfolios.

¹¹ For further details on SONIA and RONIA, see www.wmba.org.uk

¹² <http://www.dtcc.com/market-data/gtr-interest-rate-swap-data/table-3.aspx>

¹³ <http://www.bis.org/statistics/dt21a21b.pdf>

¹⁴ http://www.financialstabilityboard.org/publications/r_140715.pdf

¹⁵ <http://www.wmcompany.com/pdfs/WMReutersMethodology.pdf>

In particular, the mid-rates produced by WMR are embodied in the construction of published indices used for tracking multi-country portfolios of bonds, equities or credit instruments, and hence are implicit in many investment mandates. Given the extent of the dependence on WMR across numerous different sectors of the financial services industry, the benchmark meets the Review's definition of 'major'.

ISDAFIX

42. **ISDAFIX** is recognised as the principal global benchmark for swap rates and spreads for interest rate swap transactions. It represents average mid-market rates for fixed-for-floating interest rate swaps in four major currencies (euro, British pound, Swiss franc and U.S. dollar) at selected maturities on a daily basis. On 1 August 2014, ICE Benchmark Administration Limited (IBA), part of Intercontinental Exchange Group (ICE) became the administrator of ISDAFIX.

43. ISDAFIX is currently calculated from quotes from a panel of submitting banks. The banks are asked to provide a mid-market rate derived, where practicable, from a live (i.e. executable) bid/offer spread published by the submitter in the relevant maturity in relation to trading in a typical contract size on a cleared basis. ISDAFIX is then calculated as a trimmed average of the contributing rates. Where practicable, IBA plans to transition the calculation methodology from this polled submission model to an algorithm-based approach, using tradeable quotes from regulated trading venues as the input for the rate. The majority of interest rate swaps fall outside the scope of market abuse regulation in the United Kingdom.

44. Market participants use ISDAFIX as a settlement rate for the majority of cash-settled transactions in the interest rate swaption market (estimated at \$32 trillion).¹⁶ ISDAFIX is also used as a reference rate for cash settlement in connection with early terminations of swap transactions and as a reference rate for some floating rate bonds. The scale of reference transactions based on ISDAFIX qualifies it as 'major' for the purposes of this Report.

Commodity benchmarks

45. There are a multitude of commodity benchmarks including those used in energy, metals and agriculture markets. In most cases the Review considers that they do not meet one or more of the selection criteria. There are however two sectors where the Review considers that there is a case for inclusion: precious metals and crude oil.

46. There are two leading precious metal benchmarks based in the United Kingdom: the **London Gold Fixing** and the **LBMA Silver Price**. These determine the price of gold and silver respectively in

¹⁶ <http://www.dtcc.com/market-data/gtr-interest-rate-swap-data/table-3.aspx>

the London market in USD, GBP and EUR. These prices are globally regarded as providing the international benchmarks for the pricing of a variety of bullion transactions and products, and have a number of global users (including miners, refiners, funds and central banks). The fixings allow participants to trade physical metal in London and provide daily reference prices for valuation and investment performance. The transactions that form the basis of these benchmarks are not fully captured under the scope of UK market abuse regime.

47. The London Gold Fixing is currently produced through an auction system involving participating members. At the start of each fixing, the Chairman announces a price to the participating members who relay this price to their customers. Based on orders received from customers, the members then declare themselves as buyers or sellers. The price is moved up or down accordingly in order to equate supply and demand, and fixed when the maximum amount of metal is exchanged.

48. The LBMA Silver Price benchmark was launched on 15 August, replacing the previous Silver Fix. It is an electronic auction, based on transactions, involving three participants at the time of writing. An initial price is set at the start of the process, and in the first round the system algorithm will attempt to match buy and sell orders within the permitted tolerance level. If the buy and sell orders are out of tolerance, the auction price will change and the auction will restart until the buy and sell volumes are in tolerance and the equilibrium price is set.

49. The BIS estimates that the gross outstanding notional amount of gold swaps, forwards and options was \$341 billion as of December 2013 (although not all will use the London Fixing).¹⁷ The value of assets under management for European Exchange Traded Products referenced to Gold and Silver Fixes are \$25.7bn and \$3.7bn respectively.¹⁸

50. The Review considers that these two benchmarks currently meet all three of its criteria for inclusion. However, the Review recognises that its recommendations will also need to take account of ongoing developments in the London Gold Fixing, and that the regulatory recommendations will need to be tailored to the emerging future benchmark, rather than the benchmark that is in the process of being transitioned or wound down.

51. In the crude oil market, the main UK-based benchmarks relate to a basket of physical oil cargoes in the North Sea - Brent, Forties, Oseberg and Ekofisk (BFOE). There are a number of benchmarks set by Price Reporting Agencies (PRAs) based on the physical market. However, the main financial benchmark is the price of the **ICE Brent** futures contract traded on ICE Futures Europe (IFEU) exchange. In 2012, ICE Brent became the world's largest crude oil futures contract in terms of

¹⁷ <http://www.bis.org/statistics/dt21c22a.pdf>

¹⁸ Blackrock ETP landscape 30 April 2014 - http://www.blackrockinternational.com/content/groups/international/site/documents/literature/etfl_industryhighlight_apr14.pdf

volume, and it is used by a wide range of financial market participants as well as producers and consumers of oil.¹⁹

52. ICE Brent is a cash-settled futures contract, and the expiry price is set by reference to an index based on physical BFOE Crude transactions and prices reported by a number of different PRAs. The futures and the physical markets are therefore linked and influence each other through arbitrage relationships. While the futures are within scope of market abuse regime, transactions in the physical market are not directly covered. Given the importance of ICE Brent to the markets as a whole and its dependency on physical markets outside the scope of regulation, the Review considers that ICE Brent meets all its criteria.

¹⁹ https://www.theice.com/publicdocs/futures/ICE_Brent_FAQ.pdf

Table 1: Benchmarks meeting the Review's selection criteria

Benchmark	Administrator	Asset class	Input	Description
SONIA	WMBA	Overnight Interest Rate	Transactions-based (based on submissions from brokers)	Transaction-based measure of the cost of unsecured sterling overnight funding, calculated as a weighted average of actual market overnight funding rates brokered in London by WMBA member firms.
RONIA	WMBA	Overnight Interest Rate	Transactions-based (based on submissions from brokers)	Transaction-based measure of the cost of secured sterling overnight funding, calculated as a weighted average of actual market overnight funding rates brokered in London by WMBA member firms.
ISDAFix	IBA	Inter-bank rate	Quote-based	Represents average mid-market rates for vanilla fixed-for-floating interest rate swaps in four major currencies at selected maturities on a daily basis. A panel of submitting banks are asked to provide their mid-market rate in the relevant maturity in respect to trading in a typical contract size and on a cleared basis. The fixing is then calculated as a trimmed average of these rates.
WM/Reuters 4pm London Closing Spot Rate	WM Company	Currency	Transactions-based (based mostly on information extracted from trading platforms)	The WMR fixes are, for the most widely used currencies, based on actual trades, supported by transactable bids and offers extracted from electronic trading systems, taken over a one minute window from +/- 30 seconds either side of the fix time. Non-trade currency rates are based on quoted rates with checks in place to validate the rates are indicative of the market.
London Gold Fixing	London Gold Market Fixing Ltd	Commodities	Transaction-based (an auction involving a panel of fixing banks)	A measure of the price of gold in the London market in US dollars, sterling and euro. It is calculated twice daily through an auction process amongst participants.
LBMA Silver Price	Thomson Reuters	Commodities	Transaction-based (an auction run on an electronic platform)	A measure of the price of silver in the London market in US dollars, sterling and euro. It is calculated through an electronic auction process amongst participants.
ICE Brent	ICE Futures Europe	Commodities	Transaction-based	A futures contract which settles in cash against an index using the price of physical cargoes of crude oil from Brent, Forties, Oseberg and Ekofisk (BFOE).

3. Application of the UK benchmark regulatory and legislative regime to the Review's recommended benchmarks

53. Section 1.3 of this Report set out the current UK regulatory framework for benchmarks. The Review proposes that all seven benchmarks recommended in Section 2 be made both a "specified benchmark" and a "relevant benchmark" under that framework to ensure that both FSMA and criminal sanctions are available in all cases.

54. The Review anticipates that the regulatory framework will apply to the seven benchmarks in somewhat different ways, reflecting the differences in their underlying construction summarised in Table 1. As set out in Section 1.3, there are separate requirements for those classed as benchmark administrators and benchmark submitters.

55. Under the framework, an administrator of a specified benchmark is responsible for, generally speaking, collecting, analysing or processing information or expressions of opinion used to determine a specified benchmark and must be authorised and subject to FCA rules. The Review expects that the administrators of all seven recommended benchmarks will be treated in this way.

56. Under the framework, anyone who acts as a benchmark submitter – ie someone who provides information or expressions of opinion to a benchmark administrator required for the purpose of determining a specified benchmark – must also be authorised and subject to FCA rules. Those requirements are however disapplied when, among other things, that information consists solely of factual data obtained from a publicly available source. On that basis, the Review anticipates that these requirements would be applied to: the contributing brokers who submit brokered overnight transaction rates and volumes to the WMBA for the purpose of determining SONIA and RONIA; and the submitting banks who contribute mid-market swap rates to ICE Benchmark Administration for the purpose of determining ISDAFIX.

57. On the basis of available information, the Review understands that (other than London Gold Fixing) the remaining benchmarks are based on factual data available from public sources, and therefore the regulatory framework regarding submitters would not apply. Given the ongoing developments in the London Gold Fixing, the precise application of the regulatory framework will however need to depend on the methodology for setting the emerging future gold benchmark rather than the current arrangements.

58. In addition to the application of the regulatory regime described above, the Review also notes that further safeguards are provided by various measures designed to prevent market manipulation (which will apply to all persons, rather than just those authorised by the FCA). First, the criminal offence of making false or misleading statements or creating a false or misleading impression established in the Financial Services Act 2012 will apply to any person manipulating any benchmark on the Review's recommended list. And, second, the EU Market Abuse Regulation will soon create a comprehensive civil offence of benchmark manipulation to complement this.

59. In summary, the Review recommends that all benchmarks on the recommended list should be made "specified" benchmarks for the purposes of the Regulated Activities Order and be designated as "relevant" for the purposes of the criminal offence of making misleading statements in relation to benchmarks, so that these benchmarks are brought under the FCA's regulatory regime and the manipulation of these benchmarks is subject to criminal legislation.

4. Conclusions

60. The Chancellor asked the Fair and Effective Markets Review to recommend a list of additional major benchmarks across the FICC markets that should be brought into the UK regulatory framework.

61. Given the widespread use of benchmarks in financial contracts, it is vital that consumers and markets are confident that benchmarks – particularly those that lie at the heart of systemically important markets – are credible, trustworthy and accurate. The credibility of a benchmark, and hence wider trust in the markets to which it applies, can be undermined if the benchmark can be distorted, either by accidental errors in its compilation or calculation, or through the exposure of participants to conflicts of interest or incentives to manipulate the benchmark, or through abuse of a dominant competitive position in the compilation of a benchmark.

62. A framework of legislation for financial market benchmarks was introduced in the UK in the wake of the LIBOR misconduct scandal. It put in place rules that set out requirements on firms to ensure the integrity of the submission process, gave the regulator power to supervise the conduct of firms and individuals involved in the process, and, critically, meant the regulator could take regulatory action against firms and individuals in relation to misconduct, including public censure and financial penalties. This legislation was initially applied to LIBOR, reflecting its systemic importance in financial markets. The Review recommends that HM Treasury now extends the legislation to cover the other major benchmarks in the UK FICC markets set out in this Report.

63. In drawing up its recommendations, the Review has considered a wide range of FICC benchmarks, and selected a recommended list from this to ensure regulation targets those benchmarks where the regulator currently has fewer powers and where manipulation of such a benchmark would have the greatest impact on financial markets. In order to make its selection, the Review has sought to identify:

- benchmarks that are major FICC benchmarks;
- benchmarks where the main benchmark administration activities are located in the United Kingdom; and
- benchmarks that are based on transactions in financial instruments which are not covered comprehensively by existing market abuse regulation.

64. Given these three selection criteria, the Review recommends the following seven classes of benchmark be made both a "specified benchmark" and a "relevant benchmark" to ensure that both FSMA and criminal sanctions are available.

- SONIA;
- RONIA;
- ISDAFIX;
- WM/Reuters 4pm London Closing Spot Rate;

- London Gold Fixing;
- LBMA Silver Price; and
- ICE Brent.

65. The recommendations above have been based, by necessity, on an analysis of the benchmark universe as it exists today. Over time, new FICC benchmarks may be created that meet the Review's selection criteria, or business may migrate to existing benchmarks that are not currently considered to be major benchmarks. Additionally, it is possible that benchmarks which currently meet the criteria fall out of favour in financial markets and no longer meet the criteria. Historically, the usage of major benchmarks has been relatively slow to adjust. But if evidence of such shifts occurs, the existing legislative framework allows further benchmarks to be brought into legislation (or others taken out) in future.

66. The Review has focussed on the question of how to extend existing legislation to cover further FICC benchmarks of systemic importance. The recommendations in this Report are not general recommendations for addressing structural weaknesses across all benchmarks. A key feature of current UK legislation is that it applies intensive supervisory requirements to the administrator of and contributors to a benchmark. This regulatory framework is designed to deal with a situation, like LIBOR, where there is a significant dependence on the benchmark in the financial markets. However, such a regulatory regime would not be appropriate for the many benchmarks that exist where the level of dependence is smaller.

67. Supervisory responses can and should differ depending on the significance of the benchmark. Existing and prospective market abuse provisions in regulated markets, together with other processes, including the ongoing assessment of compliance with the IOSCO principles, should provide additional safeguards. But the Review will also consider making further recommendations relating to the structure or construction of benchmarks (or their underlying markets) that have not been recommended in this Report, or indeed those that have been recommended. Particular emphasis is needed on ensuring that international processes, including those taking place under the auspices of the FSB and the European Union, produce effective regimes for ensuring the integrity of a wider set of internationally-important systemic benchmarks, in a proportionate and appropriately targeted manner.

68. In its final report in June 2015, the Review will also consider, and where appropriate make recommendations on, a much wider range of ways in which wholesale FICC markets might be made fairer and more effective, including potential reforms to market structure and infrastructure, principles governing the operation of those markets (and ways to ensure behaviour is more in line with those principles), tools to strengthen the oversight of market conduct, and possible extensions to the regulatory perimeter.