IN THE COMPETITION APPEAL TRIBUNAL

Case No: 1336/7/7/19: **PHILLIP EVANS v BARCLAYS BANK PLC AND OTHERS**

SUMMARY OF MR EVANS' PROPOSED COLLECTIVE PROCEEDINGS

References to the electronic bundles are in the form **[Bundle prefix / Tab / page number (if relevant)]**. *Bundle prefixes are: (i) letters A to H for joint bundles; and (ii) "EV" for the Evans CPO application bundle.*

A. INTRODUCTION

1. This is Mr Evans' summary of his proposed collective proceedings, served pursuant to the directions of the Tribunal at PHR on 21 June 2021. It is structured as follows:

    a. **Section B** provides a **short overview** of Mr Evans' proposed proceedings;

    b. **Section C** outlines the **factual foundation** for the proposed proceedings;

    c. **Section D** explains Mr Evans' **theory of harm** and the expert evidence that he has adduced in support of that theory;

    d. **Section E** briefly describes Mr Evans' **proposed classes**; and

    e. **Section F** describes the **proposed quantum methodology and the available data** that Mr Evans' experts have identified to operate that methodology.

B. MR EVANS' PROPOSED COLLECTIVE PROCEEDINGS IN OVERVIEW

2. Mr Evans' proposed collective proceedings seek to combine "follow-on" claims for losses suffered as a result of the Proposed Defendants' breaches of statutory duty in infringing Article 101 TFEU and Article 53 of the EEA Agreement. Those infringements are determined by two decisions of the European Commission in Case AT.40135-FOREX (Three Way Banana Split) and Case AT.40135-FOREX (Essex Express) (**"the Decisions"**).

3.   Mr Evans seeks to bring these proceedings on an opt-out basis on behalf of two classes of persons: Class A and Class B, which are explained in section E below. He seeks an aggregate award of damages on behalf of each class.[1]

4.   Mr Evans' case, in summary, is that the effect of the infringements was the unlawful widening of bid-ask spreads on FX Spot and Outright Forward Transactions involving G10 currency pairs, during the period covered by the infringements (i.e. 18 December 2007 – 31 January 2013).[2] The effect of a widened bid-ask spread is two-fold:

    a.   The price offered to customers to sell currency (i.e. the bid price) was lower than would otherwise have been the case absent the infringements; and

    b.   The price charged to customers to buy currency (i.e. the ask price) was higher than would otherwise have been the case absent the infringements.

5.   Mr Evans intends to establish that the infringements produced:

    a.   **Direct effects** on the bid-ask spreads charged for transactions entered into with the Proposed Defendants <u>during</u> their participation in the infringements; and

    b.   **Indirect effects** (commonly termed "umbrella" effects) on the bid-ask spreads charged for transactions entered into with either the Proposed Defendants when they were not participating in the infringements <u>or</u> other major FX dealers (referred to in Mr Evans' class definition as Relevant Financial Institutions or **"RFIs"**).

6.   The distinction between direct and indirect effects is the backbone to Mr Evans' theory of harm, his proposed class definition and quantum methodology, as explained in sections D - F below.

C.   THE FACTUAL FOUNDATION FOR THE PROPOSED CLAIMS

The Decisions

7.   The Decisions contain a number of key findings of fact that underpin Mr Evans' proposed claims. Mr Evans took the initiative to obtain non-confidential versions of the Decisions

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[1]   Amended Collective Proceedings Claim Form at ¶¶153-154 **[EV/1/61-62]**.

[2]   Mr Evans' case is summarised in his Amended Collective Proceedings Claim Form at ¶¶17-19 **[EV/1/8]** and further particularised at ¶¶247-256 **[EV/1/107-110]**.

from the Commission on 1 October 2019 following a request (made on 5 July 2019) pursuant to the Access to Documents Regulation.[3] As a result Mr Evans and his team were able to carefully and precisely frame his proposed claims to reflect the Commission's findings in the Decisions.

8.   Mr Evans' Amended Collective Proceedings Claim Form contains a detailed summary of those findings,[4] and is not repeated here. Instead, it is sufficient for present purposes to recall the following by way of overview only:

   a.   The Decisions establish two single and continuous infringements covering the whole EEA in G10 FX spot trading (the **"Infringements"**).[5] Each of the Proposed Defendants is an addressee of one or both of the Decisions.[6]

   b.   The Infringements each "*consisted in an underlying understanding reached among certain individual traders… and implemented by them to exchange - on mostly multilateral, private chatrooms and on an extensive and recurrent basis - certain current or forward-looking commercially sensitive information about certain of their trading activities and to occasionally coordinate their trading activity with respect to Forex (FX) spot trading of G10 currencies.*"[7]

   c.   The periods covered by the Decisions are: (i) 18 December 2007 – 31 January 2013 in the Three Way Banana Split Decision; and (ii) 14 December 2009 – 31 July 2012 in the Essex Express Decision.[8]

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[3]   Regulation (EC) No. 1049/2001 of the European Parliament and of the Council of 30 May 2011 regarding public access to European Parliament, Council and Commission Documents. OJ L 145, 31.5.2001, pp.43-48. Mr Evans also obtained disclosure of the confidential versions of the Decisions from the Proposed Defendants and made minor amendments to his Collective Proceedings Claim Form in consequence.

[4]   Amended Collective Proceedings Claim Form, ¶¶174-243. **[EV/1/68-105]**

[5]   See Article 1 of the Decisions. **[EV/2/44; EV/3/42]**

[6]   The period of each Proposed Defendant's participation in the Infringements is summarised at ¶244 of the Amended Collective Proceedings Claim Form. **[EV/1/106-107]**

[7]   TWBS Decision, recital 1. **[EV/2/5]** EE Decision, recital 1 is materially identical. **[EV/3/5]**

[8]   Recital 2 to the Decisions. **[EV/2/5; EV/3/5]**

The Commission's case file

9.   As the Decisions were adopted pursuant to the Commission's settlement procedure, they necessarily contain a shorter description of the Infringements, and provide much less detail than would have been provided in a full infringement decision.[9] However, as the Tribunal has acknowledged, "*in any quantum case it must surely be an elementary starting point that the court or tribunal has a full and comprehensive understanding of the detailed workings of the cartel in question.*"[10] Accordingly, Mr Evans intends to supplement his understanding of the Infringements by seeking disclosure of all the documents in the Commission's case file(s) for the Decisions.

10.   In particular, given that infringing conduct took place in online Bloomberg chatrooms, disclosure of the transcripts will be essential in order to understand the nature, scope and functioning of the Infringements. Mr Evans' experts have explained how and why access to those transcripts will enable them to develop their analysis of the adverse effect of the Infringements.[11] More specifically, Professor Rime considers that the transcripts will assist in understanding matters such as the nature, extent and frequency of the exchanges of commercially-sensitive information regarding bid-ask spreads;[12] the currency pairs discussed in the chatrooms;[13] and the existence of any monitoring or punishment mechanisms as part of the Infringements[14]. Mr Evans is confident these transcripts will be available since they are cited in footnotes to the Decisions.[15]

11.   As noted in Mr Evans' Litigation Plan, it may also be appropriate to seek further disclosure from the Proposed Defendants regarding the nature and scope of the

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9   As noted in Amended Collective Proceedings Claim Form at ¶176-177. **[EV/1/69]**

10   *Peugeot S.A. and others v NSK Ltd and others* [2018] CAT 3 at [28]. See further [29]-[31].

11   See, for example, Knight 1, ¶192 **[EV/8/64]**; and Rime 1, footnote 31 **[EV/9/13]**.

12   Rime 1, footnote 108 **[EV/9/48]** and ¶161 **[EV/9/51]**; and Rime 2, ¶86 **[C/6/43]**.

13   Rime 1, ¶201. **[EV/9/64-65]**

14   Rime 2, ¶41. **[C/6/21]**

15   Mr Evans has compiled tables containing those example dates in his Amended Collective Proceedings Claim Form: see ¶¶210A, 211A, 213A, 215A and 219A. **[EV/1/85-95]**

Infringements, to the extent that such information cannot be obtained via the Commission's file.[16]

Industry experience and expertise

12. Mr Evans' experts' analysis of the impact of the Infringements is (as it must be) informed by a detailed understanding of the markets concerned. To that end, Mr Evans has instructed two experts with substantial knowledge of this area:

    a.   Mr Richard Knight, an expert in FX markets and trading with over 25 years of experience obtained via employment with major banks in various roles in FX sales between 1988 and 2013. Mr Knight has already served three expert reports in which he has provided evidence relating to, *inter alia*, the structure and operation of FX markets and the relevant FX instruments. He has also commented upon the Commission's findings in the Decisions and has provided evidence relating to the sources of data regarding FX trading that he expects (based on his professional experience) would be available.

    b.   Professor Dagfinn Rime, a Professor of Finance at the BI Norwegian Business School in Oslo, Norway. His central research interest and primary area of expertise is FX market microstructure, and he has published extensively in this area. Professor Rime has served three expert reports in which he provides his views on the impact of the Infringements on members of the proposed classes (i.e. the theory of harm), to which Mr Evans now turns.

D.   THEORY OF HARM

13. Mr Evans' theory of harm is supported by the expert evidence of Professor Rime, who has reviewed the Decisions and provided his preliminary views on the impact of the Infringements on the proposed classes. His views are firmly grounded in the academic literature on FX market microstructure (including his own, extensive, research in this field) and he also draws upon the industry expertise contained in Mr Knight's reports.

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[16]   Litigation Plan, ¶105. **[EV/14/39]** Similarly, at ¶201A of the Amended Collective Proceedings Claim Form, Mr Evans notes that the Decisions contain limited information on the traders participating in the chatrooms, and in particular the roles they held during the Infringements. He intends to seek disclosure on these matters if a CPO is granted in his favour. **[EV/1/79]**

14. Professor Rime considers that the mechanisms by which the Infringements caused direct harm and indirect harm are different.

15. **Direct harm:**[17] Professor Rime considers that the sharing of bid-ask spread information in the chatrooms, as described in the Decisions, would have reduced uncertainty as to the spreads being charged by other participants and the market conditions they were pricing under. This would facilitate tacit coordination on the levels of bid-ask spreads quoted to customers,[18] which would, in turn, have resulted in wider spreads being charged on transactions entered into with the Proposed Defendants during their relevant infringement periods. This impact would have occurred in two main ways:

    a. There would have been a short-term initial impact resulting from each instance of sharing bid-ask spread information in the chatrooms. As explained in the Decisions, the sharing of bid-ask spread information would have enabled coordination on prices charged to a particular client, and that piece of information could remain useful for a period of time thereafter.[19] For example, it could also be used in the pricing of bid-ask spreads to other clients within the same window.

    b. There would also have been longer-term impact resulting from the cumulative effects of sharing information on bid-ask spreads on multiple occasions. In particular, the sharing of information on bid-ask spreads on multiple occasions would enable the participating traders to gain an insight into each other's overall pricing strategies, and especially their baseline spreads.[20]

16. In Professor Rime's expert opinion, there are a number of potential ways in which the information shared within the chatrooms could have been used in a way that influenced the decisions of other traders. For example, the collegial environment of an FX trading

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[17] See Rime 1, section 5.1. **[EV/9/46-53]** See also Rime 2, ¶115.a. **[C/6/53-54]**

[18] Professor Rime explains in footnote 108 to Rime 1 that it is not clear from the Decisions whether there was explicit coordination on the level of bid-ask spreads quoted to customers. This would become clear on reviewing the transcripts of the chatrooms. He has therefore only addressed tacit coordination in his report, and notes that he will update it if he is provided with further information about the communications that took place in the chatrooms. **[EV/9/48]**

[19] See, for example, recital 58 to the Decisions. **[EV/2/14; EV/3/14]**

[20] Baseline spreads are explained in Rime 1, ¶71 as "*the usual level of return a dealer expects to make on a given currency pair under normal market conditions*". **[EV/9/27]**

desk[21] and the seniority of the participants gave them ample opportunity to use the insights gained from commercially sensitive and confidential information shared in the chats to influence others and they had the motive to use the information in ways that would have augmented the effects of the Infringements.[22]

17. Thus, Mr Evans has adduced expert evidence explaining how and why the Infringements might have informed *both* the participating traders' approaches to discussions (e.g. in relation to pricing) and potentially influenced other traders working for the Proposed Defendants at the time.[23]

18. **Indirect harm:** Professor Rime considers that the Infringements would cause indirect harm in two main ways:[24]

   a. On the basis that the impact of the Infringements was to enable the Proposed Defendants (during their relevant infringement periods) to charge wider bid-ask spreads to their customers, this would, in turn, reduce the competitive pressures on other FX dealers[25]. This caused the wider market to become less competitive, meaning there was less pressure on those FX dealers to quote competitive spreads. As a result, those dealers were able to charge wider spreads to their customers.

   b. The commercially-sensitive information exchanged between the participants in the Infringements gave them an information advantage over other FX dealers in the inter-dealer market. This information advantage would give rise to increased adverse selection risks.[26] In response to increased adverse selection risks, FX dealers would adjust their prices (namely by: (i) decreasing the bid prices; and (ii) increasing the ask prices, offered on the inter-dealer market) in order to protect themselves. This would, in turn, increase the transaction costs of trading in the inter-dealer market, and FX dealers would pass these costs on to customers.

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[21] This is based on the industry expert evidence of Mr Knight in Knight 2, ¶¶50-54. **[C/5/15-16]**

[22] Rime 2, ¶65(a)(i). **[C/6/34]**

[23] Rime 2, ¶¶70-72. **[C/6/38-39]**

[24] Rime 1, section 5.2. **[EV/9/53-62]** See also Rime 2, ¶115.b. **[C/6/54-55]**

[25] Including the Proposed Defendants outside of their relevant infringement periods.

[26] Adverse selection risk is explained in detail in Rime 1, section 4.3. **[EV/9/39-43]**

19. Professor Rime also considers the Infringements would have produced **"spillover" effects**, as follows:

    a.   Any widening of bid-ask spreads applicable to FX Spot Transactions would also have resulted in widened spreads applying to FX Outright Forward Transactions.[27] In this regard, Professor Rime refers to the evidence of Mr Knight, who explains that the price of a FX Outright Forward Transaction is determined by taking the price of the equivalent FX Spot Transaction and adding "forward points" which reflect the interest rate differential between the two currencies involved in that transaction.[28] It follows that to the extent the Infringements affected the price of FX Spot Transactions, they would, in turn, have impacted the price of FX Outright Forward Transactions.

    b.   While the Decisions do not concern FX spot e-commerce trading,[29] Professor Rime's view is that any widened bid-ask spreads caused by the Infringements would affect the spreads applied to trades via electronic trading platforms such as Single-Bank Platforms (**"SBPs"**) and Multi-Bank Platforms (**"MBPs"**). In particular, his expert opinion is that:[30]

        i.   Pricing on these platforms is usually set by algorithms, which may take into account of range of pricing inputs. Both Professor Rime and Mr Knight consider it is likely that one of those inputs would be prices on the inter-dealer market.[31] Thus, any widening of bid-ask spreads on the inter-dealer market is likely to be reflected in the prices set by the algorithm on the electronic platform.

        ii.   Further, the algorithm may have been programmed to take account of other pricing data, such as wider market pricing on other platforms. Therefore, to the extent that those prices were also affected by widened

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[27]   Rime 1, section 5.3.2. **[EV/9/64]**

[28]   Knight 1, section 4.3.2. **[EV/8/38-40]**

[29]   This is defined in footnote 6 to the Decisions as "*FX spot trades that are automatically booked by, or executed by either the relevant bank's proprietary electronic trading platforms or computer algorithms.*" **[EV/2/5; EV/3/5]**

[30]   Rime 1, section 5.3.1. **[EV/9/62-63]**

[31]   Rime 1, ¶196 **[EV/9/62-63]**; Knight 1, ¶181 **[EV/8/61]**.

bid-ask spreads as a result of the Infringements, this would also be reflected in the prices set by the algorithm.[32]

iii. Further still, the "principle of economic equilibrium" would dictate that bid-ask spreads offered in the market would be consistent with each other (but not necessarily identical), regardless of the particular forum in which they are offered. It follows that any changes to bid-ask spreads applied to voice trades would have affected electronic trades conducted through SBPs and MBPs.[33]

20. As noted in ¶10 above, further disclosure of the chatroom transcripts will enable Mr Evans' experts to refine their views about the impact of the Infringements. In addition, Mr Evans expects that he will seek disclosure after any CPO in order to understand better the means and methods by which bid-ask spreads are set by the Proposed Defendants.[34] This is especially so for pricing set by electronic platforms, as an understanding of the inputs into the pricing algorithms on electronic platforms will enable Mr Evans' experts to develop further their views as to the effects of the Infringements on those methods of trading.[35]

E.   THE MEMBERS OF THE PROPOSED CLASSES

21. In overview, the proposed class members are persons who entered into FX Spot or Outright Forward Transactions in the EEA involving a G10 currency pair during the period covered by the Infringements.[36]

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[32]   Rime 1, ¶196. **[EV/9/62-63]**

[33]   Rime 1, ¶195. **[EV/9/62]**

[34]   Mr Evans noted the likely need for such disclosure in his Litigation Plan at ¶105. **[EV/14/39]**

[35]   Indeed, while Mr Knight and Professor Rime have set out their views on how pricing algorithms are likely to operate, they both properly acknowledge they are not in a position to know the exact inputs that would be used in a pricing algorithm. These are matters within the exclusive knowledge of the Proposed Defendants. See Knight 2, ¶38 **[C/5/12]** and Rime 2, ¶99 **[C/6/48]**.

[36]   This is subject to certain exclusions for persons or types of transactions, which are addressed in Mr Evans' proposed class definition. **[EV/5]**

Class definition

22.   Mr Evans proposes to bring proceedings on behalf of two classes of claimants:[37]

    a.   <u>Class A</u> comprises persons making claims for losses suffered on transactions with a Proposed Defendant during its participation in the Infringements.

    b.   <u>Class B</u> comprises persons making claims for losses suffered on transactions with either an RFI or a Proposed Defendant if it was not participating in the Infringements at the time of the transaction.

23.   There is also potential for overlap between the two classes in that a person might be a member of both Class A and Class B.[38]

24.   Mr Evans' decision to propose two classes is consistent with his theory of harm,[39] since the way in which the Infringements caused direct harm (to Class A) differs from the mechanisms by which they caused indirect harm (to Class B): see ¶¶14-18 above. Similarly, the approach to estimating the harm suffered by Class A and Class B will be different due to the different data sources that will be used to calculate the harm to each class, as is explained further in ¶34 below.

25.   Mr Evans has also carefully defined other aspects of his classes based on the information available to him, and drawing upon the knowledge, experience and expertise of his experts. In particular:

    a.   **Transactions entered into in the EEA:** Mr Evans has devised a clear and workable definition of when a transaction is entered into in the EEA, based upon whether the Proposed Defendant/RFI <u>and/or</u> the class member is located in the EEA. This definition reflects the terms of the Decisions. Mr Evans has sought to capture the territorial scope of the Infringements, which cover the whole EEA.[40]

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[37]   See Amended Collective Proceedings Claim Form at ¶¶71-112. **[EV/1/25-45]**

[38]   However, as explained in the Amended Collective Proceedings Claim Form at ¶77, **[EV/1/29]** there is no conflict of interest between these classes as they comprise entirely separate sets of transactions and the theories of harm are consistent with one another.

[39]   Those reasons are explained further in the Amended Collective Proceedings Claim Form at ¶75. **[EV/1/26-28]**

[40]   *Ibid,* ¶¶87-95. **[EV/1/31-36]**

b. **RFIs:** Mr Evans has also compiled a list of RFIs that were counterparty to one or more transactions with Class B so as to reflect the main institutions offering FX trading services in the UK.[41] To that end, he considered the lists of Reporting Dealers both to the FXJSC semi-annual turnover survey and the BIS Triennial Survey. Both Mr Knight and Mr Ramirez have provided further evidence relating to the trading activities of some of those RFIs, drawing on industry experience (in the case of Mr Knight) and additional survey data from Euromoney (in the case of Mr Ramirez).[42]

c. **Excluded Persons/Transactions:** Mr Evans' proposed class definition excludes those FX transactions that are either not capable of giving rise to recoverable loss or produce loss that cannot be calculated on a class-wide basis.[43] It also excludes certain persons that either suffered no harm or whose inclusion may give rise to a conflict of interest.[44]

26. Moreover, Mr Evans has sought to define his proposed classes so that it would be straightforward for any given person to know whether or not they are a member.[45] Many of the factors that determine whether a person falls within the proposed classes are matters that would be known at the time of entering into the transaction.[46]

Class composition

27. The proposed classes are likely to be substantial in both size and scope. They are presently estimated to comprise tens of thousands of individuals and entities. Mr Ramirez

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[41]   *Ibid*, ¶¶98-101. **[EV/1/37-39]**

[42]   Knight 3, section 2; **[C/8/5-6]** Ramirez 3, section 4 **[C/10/15-17]**.

[43]   Amended Collective Proceedings Claim Form, ¶103. **[EV/1/40-42]** In particular, Mr Evans has explained in detail (and with reference to supporting expert evidence) the reasons why he has excluded benchmark trades, limit orders/resting orders from his proposed proceedings in his Amended Collective Proceedings Claim Form (see ¶¶103(c)-(d) and material cited therein) **[EV/1/41]** and in his submissions on the carriage dispute (see Mr Evans' Written Submissions on the Carriage Dispute at ¶¶79-85 **[A/5/36-38]** and material cited therein, and his Reply to the Submissions of the O'Higgins PCR on the Carriage Issue at ¶¶90-91 **[A/10/33]** and material cited therein).

[44]   Amended Collective Proceedings Claim Form, ¶104. **[EV/1/42-43]**

[45]   *Ibid*, ¶108-112. **[EV/1/44-45]**

[46]   E.g. date of the transaction, type of transaction, the currency pair involved and the counterparty.

has provided preliminary estimates of class size in Ramirez 1.[47] He estimates there would be 42,015 class members belonging to either one or both classes, which is broken down into: (i) 18,154 financial institutions; and (ii) 23,861 non-financial customers.[48] The class members are diverse, since a variety of persons may enter into FX transactions for a range of different purposes: from hedge funds trading large amounts of FX frequently, through to SMEs and High Net Worth Individuals trading small amounts occasionally.

F.   QUANTUM METHODOLOGY BASED ON THE AVAILABLE DATA

28.   Mr Evans has instructed Mr John Ramirez, an expert competition economist, to assist with quantification of damages to the proposed classes. Mr Ramirez is a Managing Director at Econ One Research, Inc., an economic consulting firm.

29.   Ramirez 1 sets out a proposed methodology for calculating the harm identified by Professor Rime. Professor Rime has also commented upon the appropriate methodology for calculating harm in Rime 1. This is because, as he explains, "*... as a large amount of research into FX market microstructure involves empirical research into market dynamics, I consider that I am also well placed to offer some brief comments on the appropriate methodology to be adopted. In particular, Mr Ramirez proposes to use regression analysis to quantify the impact of the Cartels, and I have regularly conducted regression analyses as part of my research.*"[49] Mr Ramirez has taken account of Professor Rime's expertise in formulating his proposed methodology.

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[47]   See section 4.3 of Ramirez 1. **[EV/10/23-33]** Mr Ramirez explains at ¶69 of Ramirez 1 that there are certain limitations to his estimates given the early stage of proceedings. Nevertheless, he views these estimates as a reasonably broad overview of the number of class members, which are "*perhaps conservative as they do not account for smaller firms or certain HNWIs who did trade with FX dealers or through intermediaries.*" **[EV/10/30-31]**

[48]   See Table 4 in Ramirez 1. **[EV/10/30]** Mr Ramirez has also provided estimated sizes for each of the classes: (a) Class A would consist of between 14,201 and 42,015 class members; and (b) Class B would consist of between 27,814 and 42,015 class members. The broad range of estimates is due to the inability, at this stage of proceedings, to ascertain the number of persons that may belong to both classes. Therefore, Mr Ramirez adopts two approaches to estimating the size of the classes: (a) a "maximal" approach, which assumes that all class members belong to both classes; and (b) a "conservative" approach, which assumes that a class member belongs to only one class: Ramirez 1, ¶¶70-71. **[EV/10/31]**

[49]   Rime 1, footnote 32. **[EV/9/14]**

30. In outline, Mr Ramirez's methodology of quantifying the loss (exclusive of interest) suffered by the members of Class A and B as a result of the Infringements entails the following calculations:[50]

   a. Quantify the value of FX Spot and Outright Forward transactions covered by Class A and Class B (the **"VoC"**);

   b. Assess the extent to which half-spreads paid by Class A and B on FX Spot and Outright Forward transactions were directly or indirectly widened as a result of the Infringements (the **"overcharges"**);[51] and

   c. Compute the aggregate losses suffered by Classes A and B (essentially, by applying the overcharge for Class A to its VoC and applying the weighted average overcharge for Class B to its VoC).[52]

   VoC

31. Mr Ramirez intends to calculate VoC from the following data sources:

   a. **Class A:**[53] VoC will be calculated from the Proposed Defendants' transaction data. Mr Ramirez considers these data will allow him to calculate VoC across the relevant transactions included in Class A, and his review of the expert reports in the US FX class action confirms that expectation.

   b. **Class B:**[54] Mr Ramirez intends to use detailed statistics on FX transaction volumes from BIS and the BoE to calculate VoC for Class B; and he will employ market share data in conjunction with the Proposed Defendants' transaction data in order to sense check and refine his VoC estimates.

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[50] See Ramirez 1, sections 5.1, 5.2, 6 and 8; **[EV/10/33-41, 45-69, 75-82]** and Ramirez 2, section 3.2.4.1 **[C/7/22-29]**.

[51] Ramirez 1, ¶151 summarises the overcharge percentages that will be estimated for each instrument (i.e. FX Spot and Outright Forward Transactions). **[EV/10/69-70]**

[52] Mr Ramirez has set out plausible methodologies for estimating any pass-on, see: Ramirez 1, ¶¶162-174 **[EV/10/75-79]** and Ramirez 2, ¶¶54-65 and 69-75 **[C/7/22-26, 27-29]**. Mr Evans' team has instructed a funds industry expert, Mr Mark Bickford-Smith, who will assist with this analysis if required: see Bickford-Smith 1. **[D/11]**

[53] Ramirez 1, section 5.1. **[EV/10/33-34]**

[54] Ramirez 1, section 5.2. **[EV/10/35-41]**

Overcharge: proposed methodology

32. The core elements of Mr Evans' proposed quantum methodology for calculating aggregate damages are as follows.[55]

33. **Method:** Mr Ramirez intends to use multiple regression analysis in order to quantify the loss suffered by Class A and B on a class-wide basis.[56] The use of multiple regression analysis is rooted in the academic literature on FX markets. It is a common statistical technique and is well-recognised as a methodology to identify the presence and magnitude of overcharges caused by cartels.[57]

34. The multiple regression analysis will be adapted to the particular circumstances of members of Class A and of Class B as:[58]

   a. The harm to Class A will be based upon a multiple regression analysis applied to the Proposed Defendants' transaction data; whereas

   b. The harm to Class B will be based on multiple regression analyses applied to different data sources, which are described in ¶38 below. The use of these different data sources will enable an assessment of the harm suffered on different groups of affected transactions within Class B (namely, transactions entered into with the Proposed Defendants outside of their infringement periods; transactions entered into with RFIs; and transactions entered into with RFIs specifically on inter-dealer platforms).[59] These multiple regression analyses will be adapted, where necessary, to take account of the differences between the sources used. The overcharges calculated as a result of these analyses will be combined into a weighted average overcharge for Class B.

35. **Dependent variable:** the multiple regression analysis focuses on half-spreads paid by Class A and Class B, which represents the trade cost incurred by class members on FX

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[55] See further ¶¶155-165 of the Amended Collective Proceedings Claim Form. **[EV/1/62-65]**

[56] See also Ramirez 1, ¶106. **[EV/10/50]**

[57] Amended Collective Proceedings Claim Form, ¶157. **[EV/1/62-63]**

[58] Amended Collective Proceedings Claim Form, ¶162; **[EV/1/64]** Ramirez 1, sections 6.1.5 and 6.2 **[EV/10/58-60; 61-69]**.

[59] This is reflected in the different regression models proposed in sections 6.2.1 to 6.2.3 of Ramirez 1. **[EV/10/62-69]**

Spot and FX Outright Forward transactions.[60] The half-spread is calculated as the difference between: (i) the price agreed by a class member for a particular FX transaction; and (ii) a reference price for the currency pair involved in that transaction (known as the "market-wide reference price" or "market-wide mid-point") which is calculated based upon the best bid price, and best ask price available on the inter-dealer market platforms Reuters and EBS.[61]

36. Professor Rime considers that the effect of the Infringements was to increase bid-ask spreads and this would, in turn, be reflected in increased half-spreads.[62] Accordingly, the multiple regression analysis proposed by Mr Ramirez compares half-spreads during the Infringements with those in an unaffected period, after holding constant variables that determine half-spreads other than the Infringements.[63] This will enable Mr Ramirez to assess whether, and to what extent, the half-spreads were inflated as a result of the Infringements, and therefore the overcharge incurred by members of the proposed classes in their FX Spot and Outright Forward transactions.[64]

37. **Explanatory variables:** While Mr Ramirez is not, at this early stage of proceedings, able to identify the exact variables that would be used in his regression analysis, he has nevertheless conducted a very detailed survey of the academic literature on FX markets in order to identify a range of potential variables that may be included in his analysis.[65] He also notes that the Proposed Defendants' transaction data will also inform the precise explanatory variables that will be deployed in his analysis.[66]

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[60] Amended Collective Proceedings Claim Form, ¶158; **[EV/1/63]** Ramirez 1, ¶108 **[EV/10/51]**. The half-spreads referred to by Mr Ramirez and Professor Rime are also known as the "effective half-spread".

[61] Mr Ramirez has confirmed the availability of data from Reuters, and a sample of that data is provided at ¶103 of Ramirez 1. **[EV/10/48]** He has also confirmed that the experts in the US class action proceedings had access to data from EBS: Ramirez 1, ¶103. **[EV/10/48]**

[62] Rime 1, ¶214. **[EV/9/68-69]**

[63] Amended Collective Proceedings Claim Form, ¶159; **[EV/1/63]** Ramirez 1, ¶96 **[EV/10/46]**.

[64] Amended Collective Proceedings Claim Form, ¶159; **[EV/1/63]** Ramirez 1, ¶106 **[EV/10/50]**; Rime 1, ¶215 **[EV/9/69]**.

[65] Amended Collective Proceedings Claim Form, ¶160; **[EV/1/63]** Ramirez 1, ¶¶112-116 **[EV/10/51-57]**.

[66] Ramirez 1, ¶112. **[EV/10/51-52]**

Overcharge: available data

38. Mr Ramirez has identified multiple sources of available data to operate his methodology:[67]

    a. Harm to Class A could be calculated on the basis of the Proposed Defendants' transaction data. Mr Evans would intend to seek disclosure of these data if a CPO were granted in his favour;[68] and

    b. Harm to Class B could be calculated from a combination of the following data sources: [69]

        i. The Proposed Defendants' transaction data;

        ii. Data from FX trading platforms, such as multi-bank platforms. In particular, Mr Ramirez has confirmed that data would be commercially available from Cboe FX, and a sample is included at ¶137 of Ramirez 1.[70]

        iii. Data from CLS Bank International, which was set up by a group of major FX market participants, known as the G20 banks, for settling FX transactions. By 2010, it settled roughly 43% of all spot transactions.[71] Mr Ramirez has confirmed that data would be commercially available, and a sample is included at ¶138 of Ramirez 1; and

        iv. Data from the Reuters and EBS platforms.

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[67] See also ¶164 of the Amended Collective Proceedings Claim Form. **[EV/1/64-65]**

[68] Litigation Plan, ¶104. **[EV/14/38-39]**

[69] See, generally, Mr Evans' Litigation Plan at ¶¶110-113. **[EV/14/40-41]** As noted in ¶34.b above, these data sources will be used in different regression models, which will facilitate an assessment of the harm suffered on different groups of affected transactions within Class B.

[70] Cboe FX was formerly known as "*Hotspot*" which was one of the first electronic communication networks for the institutional FX marketplace: see Amended Collective Proceedings Claim Form, footnote 119. **[EV/1/65]**

[71] Ramirez 1, ¶138. **[EV/10/64-66]**

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29 June 2021