

UNITED STATES DISTRICT COURT
SOUTHERN DISTRICT OF NEW YORK

IN RE LIBOR-BASED FINANCIAL INSTRUMENTS ANTITRUST LITIGATION	Master File No. 11-md-2262 (NRB)
THIS DOCUMENT RELATES TO:	
METZLER INVESTMENT GmbH, et al., Plaintiffs, v. CREDIT SUISSE GROUP AG, et al. Defendants.	No. 11 Civ. 2613

**DECLARATION OF CHRISTOPHER M. MCGRATH IN FURTHER SUPPORT OF
EXCHANGE-BASED PLAINTIFFS' FINAL APPROVAL MOTION AND FEE AND
EXPENSE APPLICATION**

Pursuant to 28 U.S.C. §1746, I, Christopher M. McGrath declares as follows:

1. I am a partner at the law firm of Lovell Stewart Halebian Jacobson LLP (“Lovell”). The Court appointed the Lovell firm and Kirby McInerney LLP as interim co-lead counsel for the Exchange-Based Plaintiffs (“Plaintiffs”) and the putative class in the above-captioned action. *See In re LIBOR-Based Fin. Instruments Antitrust Litig.*, No. 11 Md. 2262 (NRB), 2011 WL 5980198 (S.D.N.Y. Nov. 29, 2011), ECF No. 66; *see also* Pre-Trial Order No. 1, ECF No. 90, at ¶ 18.

2. I respectfully submit this declaration in further support of the motion by the Exchange-Based Plaintiffs¹ for final approval of the Settlements with Defendants Barclays, BOA,

¹ “Exchange-Based Plaintiffs” or “Plaintiffs” are Metzler Asset Management GmbH (f/k/a Metzler Investment GmbH), FTC Futures Fund SICAV, FTC Futures Fund PCC Ltd., Atlantic Trading USA, LLC, 303030 Trading LLC, Gary Francis, and Nathaniel Haynes. Unless otherwise defined herein, all capitalized terms have the same meaning as set out in the (1) Settlement Agreement with Barclays Bank plc (“Barclays”), dated October 7, 2014 [ECF No. 680-

Citi, Deutsche Bank, HSBC, JPMorgan and SG, certification of the Settlement Classes and for approval of the Revised Plan of Distribution for allocating the proceeds of the Settlements to eligible Class Members. ECF Nos. 3141-42.

3. Attached as Exhibit A hereto is the Supplemental Declaration of Steven Straub on Behalf of A.B. Data, Ltd. Regarding Objections and Requests for Exclusion, dated September 10, 2020.

4. Attached as Exhibit B hereto is a true and correct copy of the [Proposed] Plan of Distribution submitted on or about August 31, 2016 in the action *In re Foreign Exchange Benchmark Rates Antitrust Litig.* (“*In re Forex*”), No. 13 Civ. 7789 (S.D.N.Y. Aug. 31, 2016), ECF No. 653-5.

5. Attached as Exhibit C hereto is a true and correct copy of the Order Approving the Plan of Distribution entered on or about August 6, 2018 in the action *In re Forex*, No. 13 Civ. 7789 (S.D.N.Y. Aug. 6, 2018), ECF No. 1095.

6. Attached as Exhibit D hereto is a true and correct copy of the Plan of Distribution submitted on or about March 30, 2018 in the action *Alaska Elec. Pension Fund, et al., v. Bank of America, N.A., et al.*, No. 14 Civ. 7126 (S.D.N.Y. Mar. 30, 2018), ECF No. 602-1.

3] (“Barclays Settlement Agreement”); (2) Amendment to the Barclays Settlement Agreement, dated September 15, 2017 [ECF No. 2307-3] (“Barclays Amendment”); (3) a Settlement Agreement with Citigroup Inc., Citibank, N.A., and Citigroup Global Markets Inc. (collectively, “Citi”), dated July 27, 2017 [ECF No. 2307-4] (“Citi Settlement Agreement”); (4) a Settlement Agreement with Deutsche Bank AG, Deutsche Bank Securities Inc., and DB Group Services (UK) Ltd. (collectively, “Deutsche Bank”), dated July 13, 2017 [ECF No. 2307-5] (“Deutsche Bank Settlement Agreement”); (5) a Settlement Agreement with HSBC Bank plc (“HSBC”), dated July 6, 2017 [ECF No. 2307-6] (“HSBC Settlement Agreement”); (6) a Stipulation and Agreement of Settlement with JPMorgan Chase & Co. and JPMorgan Chase Bank, N.A. (collectively, “JPMorgan”) and Bank of America Corporation and Bank of America, N.A. (collectively, “BOA” and with JPMorgan, “JPMorgan/BOA”) dated June 14, 2018 [ECF No. 2728-5] (“JPMorgan/BOA Settlement Agreement”); and (7) a Stipulation and Agreement of Settlement with Société Générale (“SG”) dated January 13, 2020 [ECF No. 3023-4] (“SG Settlement Agreement”). The foregoing settlement agreements are collectively referred to as the “Settlement Agreements.”

I certify under the laws of the United States of America that the foregoing is true and correct to the best of my knowledge, information and belief. Executed on September 10, 2020 in Rhinebeck, New York.

/s/ Christopher M. McGrath
Christopher M. McGrath

CERTIFICATE OF SERVICE

I hereby certify that on September 10, 2020, I caused the foregoing to be electronically filed with the Clerk of the Court using the CM/ECF system, which will send notification of such filing to the email addresses denoted on the Electronic Mail Notice List.

I hereby also certify that on September 10, 2020, I caused a copy of the foregoing to be served via email and First Class Mail to:

Mr. Todd Rowan



/s/ David E. Kovel
David E. Kovel

EXHIBIT A

3) On August 12, 2020, I executed my original declaration (ECF No. 3146-1) (the "Mailing Declaration"), attesting to, among other things, the Report on Objections and Requests for Exclusion as of the date of execution of the Mailing Declaration.

4) As stated in ¶ 31 of the Mailing Declaration, written objections must be received and filed (not simply postmarked) by August 27, 2020. Although objections are not to be sent to A.B. Data, nevertheless, as part of its standard procedures, A.B. Data personnel examine all emails and mail received to search for, among other things, objections and requests for exclusion. To date, A.B. Data has received one objection. Attached hereto as Exhibit A is a copy of the objection.

5) As stated in ¶ 32 of the Mailing Declaration, requests for exclusion from the Class must be in writing and mailed to A.B. Data postmarked by August 27, 2020. As of the date of this declaration, A.B. Data has received six (6) requests for exclusion that were postmarked on or before the exclusion deadline. Attached hereto as Exhibit B is a complete listing of the names and A.B. Data's exclusion numbers of the six (6) requests for exclusion from the Class.

6) As previously reported in ¶ 34 of the Mailing Declaration, exclusion numbers 1 through 4 did not provide proof of membership in the Settlement Class. A.B. Data mailed deficiency letters to each of these entities requesting exclusion. To date, A.B. Data has received one response to the deficiency letters for exclusion number 1. The response did not provide proof of membership in the Settlement Class.s

I certify under penalty of perjury under the laws of the United States of America that the foregoing is true and correct. Executed on September 10, 2020, in Milwaukee, Wisconsin.



Steven Straub

EXHIBIT A

Objection Notice In Regards to Case 1:11-cv-02613-NRB

- The objecting Settlement Class Member's name, address, and telephone number;

Todd Rowan



- A statement identifying the Settlement(s) to which the Settlement Class Member is objecting;

I, Todd Rowan, am objecting to the plan of distribution. More specifically and solely in regards to the 75% distribution of Recognized Net Loss as detailed:

"The Settlement Administrator will first calculate the amount of "Net Loss," if any, which each Eligible Claimant has in respect of each Legal Risk Period as specifically set forth in the eight Legal Risk Periods in paragraph 8 below. An Eligible Claimant will have a Net Loss under a particular Legal Risk Period if such Eligible Claimant's losses exceed such Eligible Claimant's gains pursuant to the specific calculations for that Legal Risk Period. See ¶8 below. The Settlement Administrator will adjust each Eligible Claimant's losses or gains, if any, for each Legal Risk Period based on any applicable Legal Risk Adjustments (see ¶8 below) and/or Hedger or Swaps Dealer discounts (see ¶9 below). The Settlement Administrator will then sum the Adjusted Net Loss, if any, in each Legal Risk Period in which an Eligible Claimant has an Adjusted Net Loss to determine each Eligible Claimant's Recognized Net Loss. Only Legal Risk Periods in which an Eligible Claimant has an Adjusted Net Loss will be summed for purposes of calculating an Eligible Claimant's Recognized Net Loss. However, gains and losses within each Legal Risk Period are netted as provided in paragraph 8 below. Approximately seventy-five percent (75%) of the Net Settlement Fund shall be distributed to each Eligible Claimant in a pro rata manner based on their respective amounts of Recognized Net Loss, if any, compared to the total Recognized Net Loss of all Eligible Claimants. Example: If an Eligible Claimant has a Recognized Net Loss that constitutes one-half of 1% of the total Recognized Net Loss of all Eligible Claimants, then the distribution amount to that Eligible Claimant in respect of Recognized Net Loss shall equal one-half of 1% of the portion of the Net Settlement Fund allocated to pay Recognized Net Losses."

"8 Net Loss under this Legal Risk Period (a) shall be calculated as follows: (1) the mark-to-market gain and/or loss on each Eurodollar futures contract or option on a Eurodollar futures contract opened prior to Legal Risk Period (a) and closed during Legal Risk Period (a), plus (2) the gain and/or loss on each position in a Eurodollar futures contract or option on a Eurodollar futures contract opened and closed during Legal Risk Period (a), plus (3) the mark-to-market gain and/or loss of each position in a Eurodollar futures contract or option on a Eurodollar futures contract opened during Legal Risk Period (a) and that remained open at the end of Legal Risk Period (a). For purposes of calculating

Net Loss under sub-sections (a)-(h) of paragraph 8 of the Plan, if the Settlement Administrator is unable to determine from the records submitted by an Eligible Claimant the price at which a particular position was opened and/or closed, the Settlement Administrator may use the settlement price on the day the position was opened and/or closed."

• The specific reasons for the objection(s) along with any supporting materials or documents;

1. The 75% distribution of Recognized Net Loss classification lacks substantial details and clarity as to how it will be handled by the claim's administrator. This does not allow several settling member of the class to determine their own standing of represented loss during any of the legal periods. This is in comparison with the 25% distribution of Recognized Net Volume where all settling member can directly identify the exact amount of volume their claim has in full detail.

2. The 75% distribution of Recognized Net Loss classification does not identify details in regards to which contract months of Eurodollars will be examined and counted towards the net loss calculation. Eurodollars have several serial and quarterly futures that can be traded individually or intrinsically hedged by offsetting the position with another quarterly future to create a spread or butterfly contract that can also be traded in the marketplace. The Recognized Net Loss Classification does not adequately detail how this will be taken into account or shown on a statement of proof. An example of how this could play out on a Daily Statement would be to show a possible net gain in one contract month but a larger offsetting net loss in another. If not addressed properly, or if one contract month is counted but another is not, it would have a direct impact on the calculation of net loss.

3. The 75% distribution of Recognized Net Loss classification does not adequately detail how it plans to take into account the net losses imposed upon speculative daily liquidity providers of the Eurodollar Contracts. It could be argued that a speculative daily liquidity provider was one of the most impacted representatives of the class. As a daily participant in the market place, they would have been exposed to the full impact of the Libor manipulation across most, if not all, legal periods that they traded due to their daily interactions. Due to the nature of the daily Libor release, the Eurodollar marketplace would move in anticipation of, and immediately upon the release of the figure. As the Libor release figure was detailed to be manipulated, it would have directly impacted any position the daily liquidity provider had including the net profit and loss for the day due to the exits of the trades. It also severely impacted the daily liquidity provider's market psychology and perception of market direction. A few examples of this would be a situation where a liquidity provider may show a net profit for the day of \$1,000 but that does not mean that the liquidity provider's profit was not impacted or theoretically could have been \$10,000 or more if not for the manipulation of the Libor figure. Another example could be a situation where the liquidity provider starts the day off down \$30,000 due to the Libor release impacting their position and liquidation points but later on in the

day with new trades, they make back \$35,000 to show a gross impact of a \$5000 profit for the day. If overlooked and those gains are calculated as an offset in determination of the net class period loss, this would unjustly impact the net loss calculation for the daily liquidity provider.

4. The 75% distribution of Recognized Net Loss classification does not adequately take into account or acknowledge the severity of an infringed loss on a daily liquidity providers annual earnings. An example of this would be a situation where a liquidity provider may have suffered a combined daily \$80,000 loss during a class period. Over the course of the remaining year the daily liquidity provider is able to make \$200,000 netting them a \$120,000 profit for the year. The Recognized Net Loss classification fails to detail if a daily liquidity provider would be unjustly classified as a net gain for the class period. Discounting the loss of \$80,000 due to the gain of \$200,000 does not adequately address the losses suffered by the daily liquidity provider or the impact on their market psychology due to the infringed losses that caused them to trade a debit account at any point in time during the year.

5. The 75% distribution of Recognized Net Loss classification also does not take into account the opportunity cost suffered by a daily liquidity provider. Trading commodities on a daily basis involves multiple decisions to be made throughout the day. This can lead a liquidity provider, market maker, or trader to make decisions that cause them to over or under trade given the market conditions. Due to the market place being altered by the Libor manipulation, these damages are not taken into account or acknowledged by the Recognized Net Loss classification.

I therefore, respectfully ask for clarification and consideration of the treatment regarding the 75% distribution of Recognized Net Loss as I have detailed above. I propose that the distribution amount be lowered to 50% while increasing the distribution of the Recognized Net Volume to an equal 50%. I feel it more adequately represents class members who were a larger volume component of the Eurodollar market place and who were directly impacted by the manipulation of the Libor rate on a daily basis. Net losses for a daily liquidity provider I fear may be severely overlooked if not clarified or adjusted properly. I will make myself available to discuss any of these items in further detail with the Settlement Class Counsel before the September 17, 2020 fairness hearing. I appreciate the opportunity to represent a portion of the class that I feel respectfully would like clarity and representation in regards to the matters above.

• A statement indicating whether the objecting Settlement Class Member plans to appear at the Fairness Hearing;

Yes. Todd Rowan plans to attend the fairness hearing.

• Proof of membership in the Settlement Class(es) associated with the Settlement(s) to which the Settlement Class Member is objecting. Specifically, a description of and

documentation evidencing that the objecting Settlement Class Member's transactions fall within the Settlement Class definition (including, for each transaction, the identity of the broker (if any), the date of the transaction, the type of the transaction, the counterparty (if any), the exchange on which the transaction occurred, any transaction identification numbers, the rate, and the notional amount of the transactions);

Todd Rowan is a member of the settlement class who has submitted 2 separate claims on the AB Data website; totaling over 18 million combined Eurodollar contracts to be analyzed for the legal class periods. 1780 statements have been provided for the time frame of December 14, 2004 to May 31, 2011. Todd was a member of the CME IMM division as well as the owner of a CME 106.H Member Class Firm during that time frame. All executed trades done by Todd Rowan or his member firm Rowan Financial Capital were done through the CME Globex platform and were cleared by Refco, Fortis, Man Financial or MF Global during the class legal periods.

• [REDACTED]

EXHIBIT B

Requests for Exclusion from the Class

Exclusion #	Name of Claimant
1	Kellogg, Hansen, Todd, Figel & Frederick, P.L.L.C on behalf of the National Credit Union Administration ("NCUA")
2	Quinn Emanuel on behalf of Salix Capital US, Inc. ("Salix")
3	Quinn Emanuel on behalf of The City of Philadelphia ("The City") and The Pennsylvania Intergovernmental Corporation Activity ("PICA")
4	Quinn Emanuel on behalf of Prudential Investment Portfolios 2, f/k/a Dryden Core Investment Fund, obo PGIM Core Short-Term Bond Fund(f/k/a Prudential Core Short -Term Bond Fund) and PGIM Core Ultra Short Bond Fund (f/k/a Prudential Core Taxable Money Market Fund)(the "Funds")
5	Quinn Emanuel on behalf of Darby Financial Products ("Darby") and Capital Ventures International ("CVI")
6	The Federal Home Loan Corporation ("Freddie Mac")

EXHIBIT B

EXHIBIT 4

**UNITED STATES DISTRICT COURT
SOUTHERN DISTRICT OF NEW YORK**

IN RE FOREIGN EXCHANGE
BENCHMARK RATES ANTITRUST
LITIGATION

No. 1:13-cv-07789-LGS

[PROPOSED] PLAN OF DISTRIBUTION

TABLE OF CONTENTS

I. DEFINED TERMS 1

II. SUMMARY OF ALLEGATIONS 7

III. THE NET SETTLEMENT FUND FOR DISTRIBUTION 8

IV. ADMINISTRATIVE AND DISTRIBUTION PROCEDURES 9

 A. Administrative Procedures 9

 B. Distribution Procedures 12

V. CLAIMANTS’ OPTIONS FOR SUBMITTING CLAIMS 13

 A. Option 1: Estimated Claim Option 13

 B. Option 2: Documented Claim Option 16

 C. Notifications to Claimants 18

VI. CALCULATING SETTLEMENT TRANSACTION VOLUME 19

VII. CALCULATING ELIGIBLE PARTICIPATION AMOUNTS 21

 A. Currency Pair Traded 22

 B. Trade Size 22

VIII. ALLOCATION BETWEEN DIRECT SETTLEMENT CLASS AND EXCHANGE-ONLY SETTLEMENT CLASS 23

IX. CALCULATING *PRO RATA* ADJUSTMENTS 24

Class Plaintiffs are advised in the formulation of the procedures and methodology set forth in this [Proposed] Plan of Distribution by Kenneth Feinberg, the Court-appointed Settlement Administrator. Mr. Feinberg is a leading specialist in mediation and alternative dispute resolution and has served as the fund administrator for many of the nation's most widely known disputes and tragic disasters. Mr. Feinberg's team includes experts in formulating distribution plans in a variety of contexts, including antitrust class actions. The Plan of Distribution also includes input from Class Counsel and Allocation Counsel and their respective consulting experts, whose work continues in order to ensure fairness for all members of the Settlement Classes.

I. DEFINED TERMS

“Allocation Counsel” means the counsel Class Counsel designated to separately advocate for the interests of the Direct Settlement Class and the Exchange-Only Settlement Class to achieve an equitable allocation of the Net Settlement Fund.

“Authorized Claimant” means any Class Member who will be entitled to a distribution from the Net Settlement Fund pursuant to the Settlement Agreements and Plan of Distribution approved by the Court.

“Claimant” means a Person who submits a Claim Form.

“Claims Bar Date” means the deadline established by the Court in the Order Approving the Form and Manner of Notice of Settlements and Preliminarily Approving the Plan of Distribution by which Class Members must submit Claim Forms to the Claims Administrator.

“Claim Deficiency Notice” means the notice sent by the Claims Administrator to a Claimant whose Claim Form is deficient in one or more ways such as, for example, failure to provide required information or documentation.

“Claims Administrator” means Garden City Group.

“Claim Form” means the proof of claim and release form provided to or requested by members of the Settlement Classes.

“Class Counsel” means Christopher M. Burke of Scott+Scott, Attorneys at Law, LLP and Michael D. Hausfeld of Hausfeld LLP.

“Class Member” means a Person who is a member of one of the Settlement Classes and has not timely and validly excluded himself, herself, or itself in accordance with the procedures approved by the Court.

“Class Plaintiffs” are Aureus Currency Fund, L.P., The City of Philadelphia, Board of Pensions and Retirement, Employees’ Retirement System of the Government of the Virgin Islands, Employees’ Retirement System of Puerto Rico Electric Power Authority, Fresno County Employees’ Retirement Association, Haverhill Retirement System, Oklahoma Firefighters Pension and Retirement System, State-Boston Retirement System, Syena Global Emerging Markets Fund, LP, Tiberius OC Fund, Ltd., Value Recovery Fund L.L.C., and United Food and Commercial Workers Union and Participating Food Industry Employers Tri-State Pension Fund, J. Paul Antonello, Marc G. Federighi, Thomas Gramatis, Doug Harvey, Izee Trading Company, John Kerstein, Michael Melissinos, Mark Miller, Robert Miller, Richard Preschern d/b/a Preschern Trading, Peter Rives, Michael J. Smith, Jeffrey Sterk, Kimberly Sterk, and Systrax Corporation.

“Court” means the United States District Court for the Southern District of New York.

“Direct Settlement Class” means all Persons who, between January 1, 2003 and December 15, 2015, entered into an FX Instrument directly with a Defendant, a direct or indirect parent, subsidiary, or division of a Defendant, a Released Party, or co-conspirator where such

Persons were either domiciled in the United States or its territories or, if domiciled outside the United States or its territories, transacted FX Instruments in the United States or its territories. Specifically excluded from the Direct Settlement Class are Defendants; Released Parties; co-conspirators; the officers, directors, or employees of any Defendant, Released Party, or co-conspirator; any entity in which any Defendant, Released Party, or co-conspirator has a controlling interest; any affiliate, legal representative, heir, or assign of any Defendant, Released Party, or co-conspirator and any person acting on their behalf; provided, however, that Investment Vehicles shall not be excluded from the definition of the Direct Settlement Class. Also excluded from the Direct Settlement Class are any judicial officer presiding over this action and the members of his/her immediate family and judicial staff, and any juror assigned to this Action.

“Eligible Participation Amount” means the amount of an Authorized Claimant’s claim before any *pro rata* adjustments are applied and is equal to the Claimant’s Settlement Transaction Volume, as described in §VI, *infra*, and as adjusted by the Relative Damages Factors described in §VII, *infra*.

“Exchange-Only Settlement Class” means all Persons who, between January 1, 2003 and December 15, 2015, entered into FX Exchange-Traded Instruments where such Persons were either domiciled in the United States or its territories or, if domiciled outside the United States or its territories, entered into FX Exchange-Traded Instruments on a U.S. exchange. Specifically excluded from the Exchange-Only Settlement Class are Defendants; Released Parties; co-conspirators; the officers, directors, or employees of any Defendant, Released Party, or co-conspirator; any entity in which any Defendant, Released Party, or co-conspirator has a controlling interest; any affiliate, legal representative, heir, or assign of any Defendant, Released

Party, or co-conspirator and any person acting on their behalf; provided, however, that Investment Vehicles shall not be excluded from the definition of the Exchange-Only Settlement Class. Also excluded from the Exchange-Only Settlement Class are: (i) any judicial officer presiding over this Action and any member of his/her immediate family and judicial staff, and any juror assigned to this Action; and (ii) any Person who, between January 1, 2003 and December 15, 2015, entered into an FX Instrument directly with a Defendant, a direct or indirect parent, subsidiary, or division of a Defendant, a Released Party, or co-conspirator, where such Person was either domiciled in the United States or its territories or, if domiciled outside the United States or its territories, transacted FX Instruments in the United States or its territories.

“FX Exchange-Traded Instruments” means any and all FX Instruments that were listed for trading through an exchange, including, but not limited to, FX futures and options on FX futures.

“FX Instruments” means FX spot transactions, forwards, swaps, futures, options, and any other FX instrument or FX transaction the trading or settlement value of which is related in any way to FX rates.

“Investment Vehicles” means any investment company or pooled investment fund, including, but not limited to, mutual fund families, exchange-traded funds, fund of funds and hedge funds, in which a Defendant has or may have a direct or indirect interest, or as to which its affiliates may act as an investment advisor, but of which a Defendant or its respective affiliates is not a majority owner or does not hold a majority beneficial interest.

“Net Settlement Fund” means the Settlement Fund less payment of the Fee and Expense Award, costs and expenses reasonably and actually incurred in connection with providing Class

Notice and the administration of the settlement, Taxes and tax expenses, and any other Court-approved fees and expenses.

“Non-Settling Defendants” means The Bank of Tokyo Mitsubishi UFJ Ltd.; Credit Suisse AG, Credit Suisse Group AG and Credit Suisse Securities (USA) LLC; Deutsche Bank Securities Inc. and Deutsche Bank AG; Morgan Stanley, Morgan Stanley & Co. LLC, and Morgan Stanley & Co. International PLC; RBC Capital Markets LLC; Société Générale S.A.; and Standard Chartered Bank.

“Person” means an individual or entity, and his, her, or its spouses, heirs, predecessors, successors, representatives, or assignees.

“Settlement Administrator” means Kenneth Feinberg.

“Settlement Agreements” and **“Settlements”** means the Stipulation and Agreement of Settlement with Bank of America Corporation, Bank of America, N.A., and Merrill Lynch, Pierce, Fenner & Smith Incorporated; Stipulation and Agreement of Settlement with Barclays Bank PLC and Barclays Capital Inc.; Stipulation and Agreement of Settlement with BNP Paribas Group, BNP Paribas North America Inc., BNP Paribas Securities Corp., and BNP Prime Brokerage, Inc.; Stipulation and Agreement of Settlement with Citigroup Inc., Citibank, N.A., Citicorp, and Citigroup Global Markets Inc.; Stipulation and Agreement of Settlement with The Goldman Sachs Group, Inc. and Goldman, Sachs & Co.; Stipulation and Agreement of Settlement with HSBC Holdings PLC, HSBC Bank PLC, HSBC North America Holdings Inc., HSBC Bank USA, N.A., and HSBC Securities (USA) Inc.; Stipulation and Amended Agreement of Settlement with JPMorgan Chase & Co. and JPMorgan Chase Bank, N.A.; Stipulation and Agreement of Settlement with The Royal Bank of Scotland Group PLC, The Royal Bank of Scotland PLC, and RBS Securities Inc.; and Stipulation and Amended Agreement of Settlement

with UBS AG, UBS Group AG, and UBS Securities LLC – which were preliminarily approved by the Court on December 15, 2015.

“**Settlement Class**” and “**Settlement Classes**” mean, collectively, the Direct Settlement Class and the Exchange-Only Settlement Class, unless otherwise indicated.

“**Settlement Class Period**” means the period of time commencing on January 1, 2003 and continuing through December 15, 2015, inclusive.

“**Settlement Fund**” means the \$2,009,075,000 in payments made pursuant to the Settlement Agreements by Settling Defendants and held in the escrow accounts established pursuant to the Settlement Agreements, including all monies held therein and interest earned thereon.

“**Settlement Transaction Volume**” means a Class Member’s eligible transaction volume in FX Instruments and/or FX Exchange-Traded Instruments, as adjusted by the Conversion Ratios described in §VI, *infra*.

“**Settling Defendants**” means Bank of America Corporation, Bank of America, N.A., and Merrill Lynch, Pierce, Fenner & Smith Incorporated; Barclays Bank PLC and Barclays Capital Inc.; BNP Paribas Group, BNP Paribas North America Inc., BNP Paribas Securities Corp., and BNP Prime Brokerage, Inc.; Citigroup Inc., Citicorp, Citigroup Global Markets Inc., and Citibank, N.A.; The Goldman Sachs Group, Inc. and Goldman, Sachs & Co.; HSBC Holdings PLC, HSBC Bank PLC, HSBC North America Holdings Inc., HSBC Bank USA, N.A., and HSBC Securities (USA), Inc.; JPMorgan Chase & Co. and JPMorgan Chase Bank, N.A.; The Royal Bank of Scotland Group PLC, The Royal Bank of Scotland PLC, and RBS Securities Inc.; and UBS AG, UBS Group AG, and UBS Securities LLC.

Unless otherwise defined herein, all other capitalized terms have the same meaning as set forth in the Settlement Agreements.

II. SUMMARY OF ALLEGATIONS

Class Plaintiffs allege that Defendants conspired to fix prices in the FX market in violation of Sections 1 and 3 of the Sherman Antitrust Act, 15 U.S.C. §§1, 3, and that Defendants manipulated the FX market in violation of the Commodity Exchange Act, 7 U.S.C. §1, *et seq.* Class Plaintiffs allege that Defendants carried out collusive and manipulative conduct in the FX market as part of a single or overarching, continuous conspiracy effected through multiple devices.

Class Plaintiffs allege that Defendants conspired to fix the bid-ask spreads that Defendants quoted to members of the Settlement Classes. The bid-ask spread is the difference between the rate at which a Defendant indicated it would buy a currency and the rate at which a Defendant would sell a currency. Class Plaintiffs allege that Defendants discussed and agreed to fix bid-ask spreads, primarily through communications in chat rooms but also by other means. The conspiracy to fix bid-ask spreads is alleged to have reduced competition in the FX market and artificially increased bid-ask spreads, with the result that Class Members paid more for currencies they purchased and received less for currencies they sold than they would have in a competitive market.

Another conspiratorial device alleged in the Complaint involved rigging FX Benchmark Rates paid by members of the Settlement Class. FX Benchmark Rates are rates that are published at certain times during the day. Like the bid-ask spreads, FX Benchmark Rates are prices at which Defendants offered to and did transact with members of the Settlement Classes. The most widely used FX Benchmark Rates are the WM/Reuters Closing Spot Rates, which for

the most widely traded currency pairs, were set at 4:00:00 p.m. London time using median prices of actual trades done in the market on certain venues between 3:59:30 p.m. and 4:00:30 p.m. London time. As with bid-ask spreads, Class Plaintiffs allege Defendants shared confidential order and trade information to collude with respect to their trading positions and trading strategy to fix the FX Benchmark Rates. Such collusive trading strategies included front-running client orders, “banging the close” (*i.e.*, breaking up large orders into small trades immediately before and during the setting of FX Benchmark Rates), and other tactics.

Other alleged conspiratorial devices used to fix prices in the FX market include triggering clients’ stop loss and limit orders, working client limit orders at levels better than the limit order price, and front-running customer orders throughout the trading day.

As a result of this multi-faceted conduct carried out as part of a single conspiracy, Class Plaintiffs allege that members of the Settlement Classes paid supra-competitive prices for FX Instruments and FX Exchange-Traded Instruments. Defendants deny that the allegations made against them in the lawsuit have merit.

III. THE NET SETTLEMENT FUND FOR DISTRIBUTION

Settling Defendants have agreed to settle the above-described claims and have paid \$2,009,075,000 into the Settlement Fund, pursuant to Settlement Agreements reached in the Action. If the Settlement Agreements are approved, the Net Settlement Fund will be distributed to all Authorized Claimants in accordance with the Plan of Distribution approved by the Court. No monies will revert to Settling Defendants if there is final approval of the Settlement Agreements by the Court.

The Net Settlement Fund consists of the \$2,009,075,000 Settlement Fund less payment of the Fee and Expense Award, costs and expenses reasonably and actually incurred in connection

with providing Class Notice and the administration of the settlement of the settlement, Taxes and tax expenses, and any other Court-approved fees and expenses.

IV. ADMINISTRATIVE AND DISTRIBUTION PROCEDURES

The proceeds of the Net Settlement Fund will be paid to Authorized Claimants who submit valid Claim Forms by the Claims Bar Date. This section describes the administrative procedures that will apply to determine eligibility and the effect of Class Members submitting (or not submitting) Claim Forms. This section then discusses the procedures for distributing funds to Authorized Claimants.

A. Administrative Procedures

To be eligible to submit a Claim Form, a Claimant must be a member of one of the Settlement Classes. To determine if a Claimant is a member of one of the Settlement Classes, the following conditions apply:

- (1) To be a member of the Direct Settlement Class, a Person must have, between January 1, 2003 and December 15, 2015, entered into an FX Instrument directly with a Defendant, a direct or indirect parent, subsidiary, or division of a Defendant, a Released Party, or co-conspirator, and such Persons must also either (a) be domiciled in the United States or its territories, or (b) if domiciled outside the United States or its territories, have transacted FX Instruments in the United States or its territories.
- (2) To be a member of the Exchange-Only Settlement Class, a Person must have, between January 1, 2003 and December 15, 2015, entered into an FX Exchange-Traded Instrument, and such Person must also either (a) be domiciled in the United States or its territories, or (b) if domiciled outside

the United States or its territories, entered into a FX Exchange-Traded Instrument on a U.S. exchange.

- (3) In considering whether a trade by a non-U.S. domiciled Person was transacted in the United States, the Claims Administrator will consider all information provided by the Person, including, to the extent this information is known, where a trade was priced, placed, booked, financed, cleared, and/or settled.
- (4) The Settlement Classes also exclude certain Persons, such as Defendants and certain of their representatives and affiliates, as well as their co-conspirators. Investment Vehicles in which a Defendant holds a non-majority interest or with which a Defendant has an advisory relationship, however, are not excluded.
- (5) Any member of the Direct Settlement Class who traded both over-the-counter (“OTC”) FX Instruments and FX Exchange-Traded Instruments is a member of the Direct Settlement Class. All members of the Direct Settlement Class are excluded from the Exchange-Only Settlement Class.

For purposes of determining whether a Claimant is entitled to be treated as an Authorized Claimant, the following conditions apply:

- (1) Each Class Member wishing to receive proceeds from the Net Settlement Fund must submit a Claim Form, which, *inter alia*, releases all Released Claims against all Released Parties, is signed under penalty of perjury by an authorized Person, and is supported by such documents or proof as set out in the Claim Form.

- (2) Any Class Member who does not submit a Claim Form by the Claims Bar Date will not be entitled to receive any of the proceeds from the Net Settlement Fund, but will otherwise be bound by the terms of the Settlement Agreements, including the terms of the Final Judgments and Orders of Dismissal to be entered in the Action and the releases provided for therein, and will be enjoined from, and, upon final approval of the Settlement Agreements, barred from bringing any action against any of the Released Parties concerning the Released Claims.
- (3) Each Claim Form must be submitted to and reviewed by the Claims Administrator, which will determine whether the Claim Form is in accordance with the Settlement Agreements and any applicable orders of the Court, and the extent, if any, to which each claim will be allowed, subject to review by the Court.
- (4) Claim Forms that do not meet the submission requirements may be rejected. Prior to rejection of a Claim Form, the Claims Administrator will provide the Claimant with a Claims Deficiency Notice. The Claims Deficiency Notice will, in a timely fashion and in writing, notify all Claimants whose Claim Forms the Claims Administrator proposes to reject, in whole or in part, and set out the reasons therefor.
- (5) If any Claimant whose Claim Form has been rejected, in whole or in part, desires to contest such rejection, the Claimant must, within twenty (20) days after the date of mailing of the Claims Deficiency Notice, serve on the Claims Administrator a notice and statement of reasons, indicating the

Claimant's grounds for contesting the rejection, along with any supporting documentation.

- (6) If a dispute concerning a claim cannot be resolved¹, Class Counsel will thereafter present such disputes to the Court in Class Plaintiffs' motion for a distribution order (discussed at §IV.B., *infra*).

B. Distribution Procedures

It is anticipated that there will be a holdback of the Net Settlement Fund and at least two (and possibly more) distributions. The holdback and multiple distributions will ensure that Authorized Claimants in this first round of notice and any future claimants who submit valid claim in subsequent rounds of notice are treated equitably in the distribution. The amount of this holdback² will be disclosed when Class Plaintiffs move for a distribution order.

In the event additional settlement(s) are reached (or a judgment is entered), following a subsequent round of notice, submission of claims by Class Members, and approvals by the Court, a distribution – taking into account additional funds, any remaining holdback amount, and any additional transaction data – would occur. The holdback and multiple distributions are to ensure that a clawback of previously-distributed funds to Authorized Claimants would not be required.

In the event of no additional settlements (or no judgment is entered), the holdback amount will be reallocated in a Court-approved, equitable fashion. Redistributions will be repeated until any remaining balance in the Settlement Fund is *de minimis*.

¹ Class Counsel will have the right, but not the obligation, to advise the Claims Administrator to waive what Class Counsel reasonably deems to be technical defects in any Claim Forms submitted, including, without limitation, failure to submit a document by the Claims Bar Date, in the interests of achieving substantial justice.

² The holdback amount will be determined using standard Monte Carlo estimation techniques.

No distribution resulting from this first round of notice will occur until after the Effective Date and after: (1) all timely Claim Forms have been processed and evaluated by the Claims Administrator; (2) all Claimants whose Claim Forms have been rejected or disallowed, in whole or in part, have been served with a Claims Deficiency Notice, and all such Claimants have had an opportunity to respond and/or to cure any deficiencies; (3) all objections with respect to all Claims Deficiency Notices have been resolved by the Court, and all appeals therefrom have been resolved or the time therefor has expired; (4) all matters with respect to the Fee and Expense Application have been resolved by the Court, and all appeals therefrom have been resolved or the time therefor has expired; (5) all fees and costs of claims administration have been paid; and (6) the Court has entered an order authorizing a distribution.

Class Plaintiffs request that the timing of subsequent distributions be left to the discretion of the Settlement Administrator, subject to the approval of the Court. Because the amount of information available to the Settlement Administrator will increase over time, this flexibility would enable the Settlement Administrator to implement an efficient and equitable distribution accounting for changing circumstances.

V. CLAIMANTS' OPTIONS FOR SUBMITTING CLAIMS

This section describes the two options Claimants will have when submitting their Claim Forms. Under both options, an Authorized Claimant's payment amount is his, her, or its "Eligible Participation Amount," as adjusted by any *pro rata* reductions based on claims rates. The calculation of Eligible Participation Amount is described in §§VI and VII, *infra*.

A. Option 1: Estimated Claim Option

This option will allow the Claimant to accept a payment amount calculated by the Claims Administrator based on estimates of the Claimant's "Settlement Transaction Volume" using

transaction data produced by Settling Defendants. The Estimated Claim Option is not available to Claimants who traded with Non-Settling Defendants only.³ ***Note: Claimants with transactions in FX Exchange-Traded Instruments (including FX futures and options on FX futures) must submit documentation of such transactions, whether they are in the Direct Settlement Class or the Exchange-Only Settlement Class.***

The methodology for Calculating Eligible Participation Amount under the Estimated Claim Options is described below.

Settling Defendants have produced transaction data generally covering the time period January 1, 2009 to December 15, 2015; some of the Settling Defendants have produced data for additional years, and others have produced data for fewer years. For a Claimant submitting a claim under the Estimated Claim Option, the Claims Administrator will:

- (1) Extract the Claimant's transaction data available from the data submitted by Settling Defendants.
- (2) Estimate the Claimant's transaction volume with Settling Defendants for those years not covered by the data submitted by Settling Defendants, relying on an analysis of the data produced by Settling Defendants, including analysis of the propensity of Class Members to trade with multiple banks and in multiple years.
- (3) Estimate the Claimant's transaction volume with Non-Settling Defendants for the entire Settlement Class Period relying on an analysis of the data produced by Settling Defendants, including analysis of the propensity of Class Members to trade with multiple banks and in multiple years.

³ Claimants who traded with Non-Settling Defendants only will be required to submit their claim under Option 2 (Documented Claim Option), as discussed in §V.B., *infra*.

- (4) If applicable, using claimant-submitted records of FX Exchange-Traded Instruments, calculate the Claimant's transaction volume in such instruments based on the documentation submitted by the Claimant. If any volumes submitted by Claimants are rejected, the Claims Administrator will send the Claimant a Claim Deficiency Notice, and the Claimant will have an opportunity to respond and/or cure. Additionally, such Claimants will be required to provide the names of their Futures Commission Merchants ("FCMs") and associated accounts via the Claim Form, which Class Counsel and/or Claims Administrator may use, if necessary, to aid in acquiring supplemental transaction data from the Chicago Mercantile Exchange ("CME") or ICE Futures U.S. ("ICE Futures") to help resolve deficient claims and/or verify claims.
- (5) If necessary, convert values into USD.
- (6) Adjust the Claimant's transaction volume as described in §VI, *infra*, to yield the Claimant's Settlement Transaction Volume.
- (7) Adjust the Claimant's Settlement Transaction Volume as described in §VII, *infra*, to yield the Claimant's Eligible Participation Amount.
- (8) Determine the Claimant's payment amount by multiplying the Net Settlement Fund amount times the Claimant's share of total Eligible Participation Amounts, making any required *pro rata* adjustments, as described in §§VIII and IX, *infra*.
- (9) Determine those Claimants with estimated compensation of \$10 or less who will be offered a *De Minimis* Payment of \$10 (the *De Minimis* Payment

amount may be adjusted to take into account additional data to be submitted by Settling Defendants and additional analysis by Class Counsel).

(10) Determine those Claimants with estimated compensation of \$250 or less (but more than \$10) who will be offered an Automatic Payment of \$250 (the Automatic Payment amount may be adjusted to take into account additional data to be submitted by Settling Defendants and additional analysis by Class Counsel).

(11) Claimants who have not been determined to fall within the *De Minimis* Payment or Automatic Payment will be offered a *Pro Rata* Share Payment (determined by the calculation in ¶(8) of this section, *supra*) of more than \$250 (as noted in ¶(10), *supra*, the Automatic Payment Amount of \$250 may be adjusted).

B. Option 2: Documented Claim Option

This option will require the Claimants to fully document their eligible transaction volume using their own records (or records obtained by them from other sources) and to submit such records to the Claims Administrator. The Documented Claim Option is designed for Claimants with high transaction volumes and accessible trading records. *Note: Claimants with transactions in FX Exchange-Traded Instruments (including FX futures and options on FX futures) must submit documentation of such transactions, whether they are in the Direct Settlement Class or the Exchange-Only Settlement Class.*

The methodology for calculating Eligible Participation Amounts under the Documented Claim Options is described below.

Claimants selecting the Documented Claim Option will be required to electronically submit to the Claims Administrator records of their eligible transactions volumes in FX Instruments and FX Exchange-Traded Instruments using the template available on the Settlement Website (WWW.FXANTITRUSTSETTLEMENT.COM). Using the Claimant-submitted records, the Claims Administrator will:

- (1) Calculate the Claimant's transaction volume based on the documentation submitted by the Claimant. If any volumes submitted by Claimants are rejected, the Claims Administrator will send the Claimant a Claim Deficiency Notice, and the Claimant will have an opportunity to respond and/or cure. Additionally, such Claimants will be required to provide the names of their FCMs and associated accounts via the Claim Form, which Class Counsel and/or Claims Administrator may use, if necessary, to aid in acquiring supplemental transaction data from CME or ICE Futures to help resolve deficient claims and/or verify claims.
- (2) If necessary, convert values into USD.
- (3) Adjust the Claimant's transaction volume as described in §VI, *infra*, to yield the Claimant's Settlement Transaction Volume.
- (4) Adjust the Claimant's Settlement Transaction Volume as described in §VII, *infra*, to yield the Claimant's Eligible Participation Amount.
- (5) Determine the Claimant's payment amount by multiplying the Net Settlement Fund amount times the Claimant's share of total Eligible Participation Amounts, making any required *pro rata* adjustments, as described in §§VIII and IV, *infra*.

- (6) Determine those Claimants with estimated compensation of \$10 or less who will be offered a *De Minimis* Payment of \$10 (the *De Minimis* Payment amount may be adjusted to take into account additional data to be submitted by Settling Defendants and additional analysis by Class Counsel).
- (7) Determine those Claimants with estimated compensation of \$250 or less (but more than \$10) who will be offered an Automatic Payment of \$250 (the Automatic Payment amount may be adjusted to take into account additional data to be submitted by Settling Defendants and additional analysis by Class Counsel).
- (8) Claimants who have not been determined to fall within the *De Minimis* Payment or Automatic Payment will be offered a *Pro Rata* Share Payment (determined by the calculation in ¶(5) of this section, *supra*) of more than \$250 (as noted in ¶(7), *supra*, the Automatic Payment Amount of \$250 may be adjusted).

C. Notifications to Claimants

After a Claimant submits a Claim Form (whether under Option 1 (Estimated Claim Option) or Option 2 (Documented Claim Option)), the Claims Administrator will review the Claim Form, and make all the calculations required to determine what resolution category a Claimant falls within (*De Minimis* Payment, Automatic Payment, or *Pro Rata* Share Payment). The Claims Administrator will then provide the Claimant with a written notice that includes the following information about the Claimant's potential claim:

- (1) The Claimant's resolution category (*De Minimis* Payment, Automatic Payment, or *Pro Rata* Share Payment);

- (2) The scope of the data produced by Settling Defendants and/or the Claimant (or, where applicable, the data obtained from CME or ICE Futures) on which the Claims Administrator's estimated determination was based (*e.g.*, years, types of trades included, and/or any other limitations on the data);
- (3) The modifications made to the Claimant's transaction volumes to produce a Settlement Transaction Value and Eligible Participation Amount, as described in §§VI and VII, *infra*);
- (4) That the Claims Administrator's calculations are subject to *pro rata* adjustments based on the claims rate; and
- (5) If the Claimant has not already submitted a Claim under Option 2 (Documented Claim Option), the Claimant may do so after being advised of the foregoing information.

VI. CALCULATING SETTLEMENT TRANSACTION VOLUME

This section defines the types of FX Instruments and FX Exchange-Traded Instruments that Claimants may have traded during the Settlement Class Period. Following each definition, the section discusses how Claimants' transaction volumes, involving these different types of instruments, will be adjusted by a "Conversion Ratio" to produce a "Settlement Transaction Value." The Settlement Transaction Value facilitates the application of "Relative Damage Factors" to produce an "Eligible Participation Amount," as described in §VII, *infra*.

- (1) ***FX spot transactions***: An agreement to exchange sums of currency at an agreed-on exchange rate on a value date that generally is within two bank business days' time, traded OTC. For FX spot transactions, the notional

value of the transaction needs no conversion before the application of the Relative Damage Factors. The Conversion Ratio will be 1.0.

For all other instruments, including FX forwards, FX swaps, OTC FX options, FX futures, and options on FX futures, the transaction values need to be converted by a Conversion Ratio to facilitate calculation of an Eligible Participation Amount.

- (2) ***FX forwards***: An agreement to exchange sums of currency at an agreed-on exchange rate on a value date that will usually be in more than two bank business days' time, traded OTC. The exchange rate for an FX forward transaction is called the outright forward. This category also includes the outright forward component of FX swaps and non-deliverable forwards ("NDFs"), which are cash-settled between two counterparties with no exchange of principal. The Conversion Ratio for FX forwards will be close to 1.0.
- (3) ***FX swaps***: An agreement to buy and sell one currency against another currency with defined rates of exchange and on two defined dates, traded OTC. This category includes FX swaps and non-deliverable forward swaps ("NDF swaps"). FX swaps give rise to claim value when the structure of an FX swap creates an FX forward risk; the FX forward risk component of the FX swap will be treated as an FX forward under ¶(2), *supra*.
- (4) ***OTC FX options***: Options contracts give the buyer of the option the right, but not the obligation, to buy or sell a defined amount of one currency in exchange for another currency at a specified rate, during a specified time, traded OTC. An option's delta is its sensitivity to a change in price in the

underlying exchange rate. The relevant amount is therefore the face value of a live traded OTC FX option, multiplied by its delta. The Conversion Ratio will be significantly less than 1.0.

- (5) ***FX futures***: Standardized contracts trading on an exchange and calling for delivery of a specified quantity of a specified currency at a defined rate on a specified date. Because FX futures are mechanically similar to FX forwards (but are traded in standard contracts on exchanges), the Conversion Ratio for FX futures will be close to 1.0.
- (6) ***Options on FX futures***: Standardized contracts trading on an exchange, and upon exercise, calling for the establishment of an FX futures position. Options on FX futures will be treated similarly to live traded OTC FX options. The Conversion Ratio will be significantly less than 1.0.
- (7) ***Other FX products***: These are other FX products derived from the above-listed products. A small volume of non-standard FX structures is also possible. Other FX products will be decomposed into the above-listed individual instruments where possible, and the Conversion Ratio applicable to the underlying instruments will be applied. The methodology of breaking more complex products into component parts will cover a large portion of eligible structured products; however, there may be small volumes of non-standard FX structures that may not break down this way.

VII. CALCULATING ELIGIBLE PARTICIPATION AMOUNTS

In §VI, *supra*, the Claimant's Settlement Transaction Volume was defined. Because not every unit of the Claimant's Settlement Transaction Volume was equally damaged, it is

necessary to account for certain transaction characteristics that affect damages. These adjustments for transaction characteristics are called “Relative Damage Factors” and include currency pair traded and trade size. The Claimant’s Settlement Transaction Volume, as adjusted by the Relative Damage Factors results in the Claimant’s Eligible Participation Amount.

A. Currency Pair Traded

This Relative Damage Factor recognizes the effect of the liquidity of a currency pair on damage. In general, a liquid market is a market with many bids and asks (offers to trade), low spreads, and low volatility, and therefore, changes in supply and demand have a relatively small impact on price. In the FX market, EURUSD and USDJPY are examples of currency pairs that are generally considered liquid. For currency pairs that are less liquid, the relative price impact of collusion will be greater on a damage per unit basis than for more liquid currency pairs. This is because Defendants can maintain a wider bid-ask spread on a less liquid pair, owing to its lower liquidity. Similarly, Defendants’ use of collusive front running is more effective at moving prices against their counterparties in less liquid pairs, owing to less liquidity. All else being equal, trades in currency pairs with higher liquidity are likely damaged less per unit of Settlement Transaction Volume than trades in currency pairs with lower liquidity.

The liquidity of currency pairs will be measured and grouped⁴ based on similar liquidity profiles. Claimants’ Settlement Transaction Volume will be adjusted to account for this Relative Damage Factor.

B. Trade Size

This Relative Damage Factor recognizes the effect of trade size on damage. Because

⁴ Non-standard currency pairs – sometimes called “crosses” and typically are pairs that do not involve USD or EUR – will be broken down into the two or three separate trades that would have been required to execute the trade, and the trade will be treated as the least liquid currency pair in the cross.

larger trades are more likely to move the market, the incentives for Defendants to act collusively were enhanced the larger the trade size and were susceptible to greater damage.⁵ All else being equal, larger trades are likely damaged more per unit of Settlement Transaction Value than smaller trades. Claimants' Settlement Transaction Volume will be adjusted to account for this Relative Damage Factor.

VIII. ALLOCATION BETWEEN DIRECT SETTLEMENT CLASS AND EXCHANGE-ONLY SETTLEMENT CLASS

The following allocation is recommended by Allocation Counsel as a fair method of allocating the settlement proceeds and is adopted in the [Proposed] Plan of Distribution.

- (1) All claims should be treated equally in the allocation. Accordingly, the [Proposed] Plan of Distribution applies the same Relative Damage Factors to Settlement Transaction Volume for any FX Instruments or FX Exchange-Traded Instruments to determine Eligible Participation Amounts for all Class Members.
- (2) Once all Authorized Claimants' Eligible Participation Amounts have been calculated, the Claims Administrator will calculate (a) the volume of Exchange-Only Class Members' Eligible Participation Amounts and (b) the volume of Direct Settlement Class Members' Eligible Participation Amounts for FX Exchange-Traded Instruments. The sum of (a) and (b) is

⁵ For instance, as alleged in the Complaint, large trades, such as trades done at the WM/Reuters Closing Spot Rate, were subject to collusive front running by Defendants. The Complaint alleges that, before the calculation of the WM/Reuters Closing Spot Rates at 4 p.m. London time, Defendants' traders exchanged detailed, nonpublic information about their customers' orders and Defendants' net trading positions. These communications are alleged to have allowed Defendants to know the likely direction of price movements at 4 p.m. London time. Based on this knowledge, Defendants are alleged to have collusively front run their customers' orders, taking proprietary positions (*i.e.*, trades made on Defendants' own accounts) in the same direction, thus, aligning their interests.

the total volume of Authorized Claimants' Eligible Participation Amounts for FX Exchange-Traded Instruments.

- (3) To fund distributions to (a) Exchange-Only Settlement Class Members and (b) Direct Settlement Class Members which traded in FX Exchange-Traded Instruments (collectively, "Exchange Traders"), the \$59,575,000 in Exchange Only funds are contributed.
- (4) If \$59,575,000 is not sufficient to cover *pro rata* distributions to Exchange Traders, funds would pour over from the Direct Settlement funds to cover the shortfall.
- (5) If \$59,575,000 exceeds the *pro rata* distributions to Exchange Traders, any remainder in the Exchange Only funds will pour back to the Direct Settlement funds.

IX. CALCULATING *PRO RATA* ADJUSTMENTS

After each Authorized Claimant's Eligible Participation Amount is calculated, the Claims Administrator can calculate each Authorized Claimant's *pro rata* share of the Net Settlement Fund. To make this calculation, the Claims Administrator will:

- (1) Make the calculations to implement the method of allocation for Exchange Traders, described in §VIII, *supra*;
- (2) Divide the Authorized Claimant's Eligible Participation Amount by the estimated total Eligible Participation Amount of all Class Members trading with any Defendant (a Settling Defendant or Non-Settling Defendant); and
- (3) Multiply that fraction times the Net Settlement Fund (reduced by the holdback amount).

EXHIBIT C

USDC SDNY
DOCUMENT
ELECTRONICALLY FILED
DOC #:
DATE FILED: 8/6/2018

UNITED STATES DISTRICT COURT
SOUTHERN DISTRICT OF NEW YORK

IN RE FOREIGN EXCHANGE
BENCHMARK RATES ANTITRUST
LITIGATION

No. 1:13-cv-07789-LGS

~~PROPOSED~~ ORDER APPROVING THE PLAN OF DISTRIBUTION

WHEREAS, a class action is pending in this Court entitled *In re Foreign Exchange Benchmark Rates Antitrust Litigation*, No 1:13-cv-07789-LGS;

WHEREAS, Class Plaintiffs have entered into settlements as set forth in the Stipulation and Agreement of Settlement with Bank of America Corporation, Bank of America, N.A., and Merrill Lynch, Pierce, Fenner & Smith Incorporated; Stipulation and Agreement of Settlement with Barclays Bank PLC and Barclays Capital Inc.; Stipulation and Agreement of Settlement with BNP Paribas Group, BNP Paribas North America Inc., BNP Paribas Securities Corp., and BNP Prime Brokerage, Inc.; Stipulation and Agreement of Settlement with Citigroup Inc., Citibank, N.A., Citicorp, and Citigroup Global Markets Inc.; Stipulation and Agreement of Settlement with The Goldman Sachs Group, Inc. and Goldman, Sachs & Co.; Stipulation and Agreement of Settlement with HSBC Holdings PLC, HSBC Bank PLC, HSBC North America Holdings Inc., HSBC Bank USA, N.A., and HSBC Securities (USA) Inc.; Stipulation and Amended Agreement of Settlement with JPMorgan Chase & Co. and JPMorgan Chase Bank, N.A.; Stipulation and Agreement of Settlement with The Royal Bank of Scotland Group PLC, The Royal Bank of Scotland PLC, and RBS Securities Inc.; Stipulation and Amended Agreement of Settlement with UBS AG, UBS Group AG, and UBS Securities LLC; Stipulation and

Agreement of Settlement with The Bank of Tokyo-Mitsubishi UFJ, Ltd.; Stipulation and Agreement of Settlement with Morgan Stanley, Morgan Stanley & Co., LLC, and Morgan Stanley & Co. International plc; Stipulation and Agreement of Settlement with RBC Capital Markets, LLC; Stipulation and Agreement of Settlement with Société Générale; Stipulation and Agreement of Settlement with Standard Chartered Bank; and Stipulation and Agreement of Settlement with Deutsche Bank AG;

WHEREAS each of the foregoing stipulations are collectively referred to as the “Settlement Agreements,” and the foregoing defendants are collectively referred to as the “Settling Defendants;”

WHEREAS the Settlement Agreements provide for a complete dismissal with prejudice of the claims asserted against the Settling Defendants on the terms and conditions set forth in the Settlement Agreements, subject to the approval of this Court;

WHEREAS, unless otherwise defined in this Order Approving the Plan of Distribution (the “Order”), the capitalized terms herein shall have the same meaning as they have in the Settlement Agreements;

WHEREAS, by Orders dated December 15, 2015, September 8, 2017, and September 29, 2017 (the “Preliminary Approval Orders”) and September 29, 2017 (the “Notice Order”), this Court: (a) preliminarily approved the Settlement Agreement and Plan of Distribution; (b) preliminarily certified the Settlement Classes; (c) ordered that notice of the Settlement Agreements be provided to potential members of the Settlement Classes; (d) provided members of the Settlement Classes with the opportunity either to exclude themselves from the Settlement Classes or to object to any of the proposed Settlement Agreements; (e) designated Christopher M. Burke and Michael D. Hausfeld as settlement class counsel for the Settlement Class (“Class

Counsel”) and Class Plaintiffs as class representatives of the Settlement Classes; and (f) scheduled a hearing regarding final approval of the Settlement on May 23, 2018;

WHEREAS, due and adequate notice has been given to the Settlement Classes;

WHEREAS, the 90-day period provided by the Class Action Fairness Act, 28 U.S.C. §1715(d), having expired;

WHEREAS, the Court conducted a hearing on May 23, 2018 (the “Fairness Hearing”) to consider, among other things, whether the Plan of Distribution should be approved; and

WHEREAS, the Court having reviewed and considered the Plan of Distribution, all papers filed and proceedings held herein in connection with the Settlement Agreements, and the record in the Action, and good cause appearing therefore,

IT IS HEREBY ORDERED, ADJUDGED, AND DECREED:

1. **Jurisdiction** – This Court has jurisdiction over the subject matter of the Action, all matters relating to the settlements, as well as personal jurisdiction over all Parties and each of the Settlement Class Members.

2. **CAFA Notice** – The notice provisions of the Class Action Fairness Act, 28 U.S.C. §1715, have been satisfied.

3. **Notice** – Notice of Class Plaintiffs’ motion for approval of the Plan of Distribution was given to all members of the Settlement Classes who or which could be identified with reasonable effort. The form and method of notifying the Settlement Classes of the motion for approval of the proposed Plan of Distribution satisfied the requirements of Rule 23 of the Federal Rules of Civil Procedure and the United States Constitution (including the Due Process Clause), constituted the best notice practicable under the circumstances, and constituted due and sufficient notice to all Persons entitled thereto.

4. **Plan of Distribution** – The Court finds and concludes that the Plan of Distribution is, in all respects, fair and reasonable to the Settlement Classes.

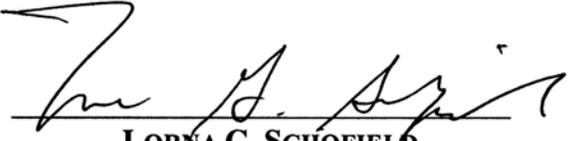
5. **Retention of Jurisdiction** – Without affecting the finality of this Order in any way, this Court hereby retains continuing jurisdiction over the Parties and the Settlement Class Members for all matters relating to this Action, including the administration, interpretation, effectuation, or enforcement of this Order.

6. **Separate Orders** – Separate orders shall be entered regarding Final Approval and Judgment and awarding attorneys’ fees and reimbursement of litigation expenses. Such orders shall in no way disturb or affect this Order and shall not affect or delay the Effective Date of the Settlement.

7. **Entry of Order** – There is no just reason for delay in the entry of this Order, and immediate entry by the Clerk of the Court is expressly directed.

IT IS SO ORDERED.

DATED: August 6, 2018



LORNA G. SCHOFIELD
UNITED STATES DISTRICT JUDGE

EXHIBIT D

EXHIBIT A

**UNITED STATES DISTRICT COURT
SOUTHERN DISTRICT OF NEW YORK**

ALASKA ELECTRICAL PENSION FUND,
et al.,

Plaintiffs,

v.

BANK OF AMERICA, N.A., et al.,

Defendants.

Lead Case No.: 14-cv-7126 (JMF)

PLAN OF DISTRIBUTION

TABLE OF CONTENTS

DEFINED TERMS 1

I. THE NET SETTLEMENT FUND FOR DISTRIBUTION..... 5

II. ADMINISTRATIVE AND DISTRIBUTION PROCEDURES..... 5

A. Administrative Procedures..... 5

B. Claimant’s Submission of Data 7

C. Claims Procedures and Timing..... 7

III. CALCULATION OF TRANSACTION CLAIM AMOUNTS 7

A. Pool A – Instruments Directly Linked to an ISDAfix Benchmark Rate..... 8

1. Cash-settled Swaptions 8

2. Other ISDAfix-linked Transactions with Payments Linked to an ISDAfix Benchmark Rate During the Class Period..... 10

3. Pool A Allocation 11

B. Instruments Not Directly Linked to an ISDAfix Benchmark Rate..... 11

1. Pool B.1..... 11

2. Pool B.2..... 16

3. Pool B.3..... 20

4. Pool B.4..... 21

IV. CALCULATING *PRO RATA* ADJUSTMENTS FOR DISTRIBUTION..... 21

A. Allocation of Net Settlement Fund Among Pools 21

B. *Pro Rata* Share Calculation 22

C. Alternative Minimum Payment..... 22

D. Distribution 22

E. Remaining Balance in the Net Settlement Fund 22

DEFINED TERMS

For purposes of the Plan of Distribution, the following terms are defined as follows:

“Authorized Claimant” means any Class Member who will be entitled to a distribution from the Net Settlement Fund pursuant to the Settlement Agreements and Plan of Distribution approved by the Court.

“Claimant” means a Person who submits a Claim Form.

“Claim Deficiency Notice” means the notice sent by the Claims Administrator to a Claimant whose Claim Form is deficient in one or more ways such as, for example, failure to provide required information or documentation.

“Claim Form” means the proof of claim and release form provided to or requested by members of the Settlement Class.

“Claims Administrator” means Epiq Systems Inc.

“Claims Bar Date” means the deadline established by the Court by which Class Members must submit Claim Forms to the Claims Administrator.

“Class Counsel” means Robbins Geller Rudman & Dowd LLP, Scott+Scott Attorneys at Law LLP, and Quinn Emanuel Urquhart & Sullivan, LLP.

“Class Member” means a Person who is a member of the Settlement Class and who has not timely and validly excluded himself, herself, or itself in accordance with the procedures approved by the Court.

“Class Plaintiffs” are Alaska Electrical Pension Fund; Genesee County Employees’ Retirement System; County of Montgomery, Pennsylvania; County of Washington, Pennsylvania; City of New Britain, Connecticut; Pennsylvania Turnpike Commission; Erste Abwicklungsanstalt; and Portigon AG.

“Court” means the United States District Court for the Southern District of New York.

“Defendants” means Settling Defendants and Non-Settling Defendants, collectively, and each of their respective subsidiaries, affiliates, divisions, predecessors, and successors including, but not limited to, ABN AMRO, Bear Stearns Companies, Inc., Lehman Brothers Holdings Inc., Merrill Lynch & Co., Inc., Countrywide Financial, Fortis, LaSalle Bank Corporation, Smith Barney, Wachovia, and Washington Mutual, Inc., and each of their respective subsidiaries, affiliates, and divisions.

“Economic Multiplier” means a factor that reflects the economic sensitivity of a transaction to ISDAfix rates, market swap rates, and relevant market interest rates relative to other transactions in the same Pool or Sub-group in the Plan of Distribution.

“Investment Vehicle” means any investment company or pooled investment fund, including, but not limited to, mutual fund families, exchange-traded funds, fund of funds and hedge funds, in which a Defendant has or may have a direct or indirect interest, or as to which its affiliates may act as an investment advisor, but of which a Defendant or its respective affiliates is not a majority owner or does not hold a majority beneficial interest.

“Litigation Multiplier” means a factor that reflects the relative degree of risk that claims arising out of a transaction of that type may have faced at trial relative to other transactions in the same Pool or Sub-group in the Plan of Distribution.

“ISDAfix Benchmark Rates” means any and all tenors of USD ISDAfix, including any and all USD ISDAfix rates and USD ISDAfix spreads.

“ISDAfix Instrument” means (a) any and all interest rate derivatives, including, but not limited to, any and all swaps, swap spreads, swap futures, and swaptions, denominated in USD or related to USD interest rates, and (b) any financial instrument, product, or transaction related in any way to any ISDAfix Benchmark Rates, including but not limited to, any and all instruments, products, or transactions that reference ISDAfix Benchmark Rates and any and all

instruments, products, or transactions that are relevant to the determination or calculation of ISDAfix Benchmark Rates.

“Net Settlement Fund” means the Settlement Fund less payment of attorneys’ and expenses in connection with prosecuting the Action, costs and expenses reasonably and actually incurred in connection with providing class notice and the administration of the settlement, taxes and tax expenses, and any other Court-approved fees and expenses.

“Non-Settling Defendants” means BNP Paribas; ICAP Capital Markets LLC; Morgan Stanley & Co. LLC; Nomura Securities International, Inc.; and Wells Fargo Bank, N.A.

“Person” means an individual or entity, and his, her, or its spouses, heirs, predecessors, successors, representatives, or assignees.

“Pool” or “Pools” mean the respective divisions in the Plan of Distribution across ISDAfix Instrument types.

“Settlement Agreements” means the Stipulation and Agreement of Settlement with Bank of America, N.A.; Stipulation and Agreement of Settlement with Barclays Bank PLC and Barclays Capital Inc.; Stipulation and Agreement of Settlement with Citigroup Inc.; Stipulation and Agreement of Settlement with Credit Suisse AG, New York Branch; Stipulation and Agreement of Settlement with Deutsche Bank AG; Stipulation and Agreement of Settlement with The Goldman Sachs Group, Inc.; Stipulation and Agreement of Settlement with HSBC Bank USA, N.A.; Stipulation and Amended Agreement of Settlement with JPMorgan Chase & Co.; Stipulation and Agreement of Settlement with The Royal Bank of Scotland; and the Stipulation and Agreement of Settlement with UBS AG.

“Settlement Class” means all Persons or entities who entered into, received or made payments on, terminated, transacted in, or held an ISDAfix Instrument during the Settlement Class Period. Excluded from the Settlement Class are Defendants and their employees, affiliates,

parents, subsidiaries, and co-conspirators, should any exist, whether or not named in the Amended Complaint, and the United States Government, and all of the Released Bank Parties (as defined in the Settlement Agreements), provided, however, that Investment Vehicles shall not be excluded from the definition of the Settlement Class.

“Settlement Class Period” means between January 1, 2006 and January 31, 2014, inclusive.

“Settlement Fund” means the \$408,500,000 in payments made pursuant to the Settlement Agreements by Settling Defendants and held in the escrow accounts established pursuant to the Settlement Agreements, including all monies held therein and interest earned thereon.

“Settling Defendants” means Bank of America N.A.; Barclays Bank PLC and Barclays Capital Inc.; Citigroup Inc.; Credit Suisse AG, New York Branch; Deutsche Bank AG; The Goldman Sachs Group, Inc.; HSBC Bank USA, N.A.; JPMorgan Chase & Co.; Royal Bank of Scotland PLC; and UBS AG.

“Transaction Claim Amount” means the amount of an Authorized Claimant’s claim before any *pro rata* adjustments are applied and is equal to the Transactional Notional Amount multiplied by the applicable Economic Multipliers and Litigation Multipliers, as described in §III, *infra*.

“Transaction Notional Amount” means the amount of money on which interest rate payments are based for a transaction.

Unless otherwise defined, all other capitalized terms have the same meaning as set forth in the Settlement Agreements.

I. THE NET SETTLEMENT FUND FOR DISTRIBUTION

Settling Defendants have entered into proposed Settlement Agreements with Plaintiffs that provide for a total payment of \$408,500,000 into the Settlement Fund. If the Settlement Agreements are approved, the Net Settlement Fund (the Settlement Fund less the fees and expenses of litigation and settlement administration, defined *supra*) will be distributed to all Authorized Claimants in accordance with the Plan of Distribution approved by the Court. No monies will revert to Settling Defendants if there is final approval of the Settlement Agreements by the Court.

II. ADMINISTRATIVE AND DISTRIBUTION PROCEDURES

The proceeds of the Net Settlement Fund will be paid to Authorized Claimants who submit valid Claim Forms by the Claims Bar Date. This section describes the administrative procedures that will apply to determine eligibility and the effect of Class Members submitting (or not submitting) Claim Forms. This section then discusses the procedures for distributing funds to Authorized Claimants.

A. Administrative Procedures

To be eligible to submit a Claim Form, a Claimant must be a member of the Settlement Class. For purposes of determining whether a Claimant is entitled to be treated as an Authorized Claimant, the following conditions apply:

1. Each Class Member wishing to receive proceeds from the Net Settlement Fund must submit a Claim Form, which, *inter alia*, releases all Released Claims against all Released Parties (as defined in the Settlement Agreements), is signed under penalty of perjury by an authorized Person, consents to the disclosure, waiver, and instruction paragraph contained in §IV-2 of the Claim Form, and is supported by such documents or proof as set out in the Claim Form.

2. Any Class Member who does not submit a Claim Form by the Claims Bar Date will not be entitled to receive any of the proceeds from the Net Settlement Fund, but will otherwise be bound by the terms of the Settlement Agreements, including the terms of the final judgments and orders of dismissal to be entered in the Action and the releases provided for therein, and will be enjoined from, and, upon final approval of the Settlement Agreements, barred from bringing any action against any of the Released Parties concerning the Released Claims. Lead Counsel shall have the discretion, but not the obligation, to accept late-submitted claims for processing by the Claims Administrator, so long as the distribution of the Net Settlement Fund to Authorized Claimants is not materially delayed

3. Each Claim Form must be submitted to and reviewed by the Claims Administrator, who will determine: (a) whether the Claimant is an eligible class member, (b) whether the Claim Form is in accordance with the Settlement Agreements and any applicable orders of the Court, and (c) the extent, if any, to which each claim will be allowed, subject to review by the Court.

4. Claim Forms that do not meet the submission requirements may be rejected. Prior to rejection of a Claim Form, the Claims Administrator will provide the Claimant with a Claim Deficiency Notice. The Claim Deficiency Notice will, in a timely fashion and in writing, notify all Claimants whose Claim Forms the Claims Administrator proposes to reject, in whole or in part, and set out the reason(s) therefore, and the Claimant will have an opportunity to respond and/or cure within 35 days of the date when the Claim Deficiency Notice was issued.

5. If a dispute concerning a Claimant's claim cannot be resolved, Class Counsel will thereafter present such disputes to the Court in Class Plaintiffs' motion for a distribution order.

B. Claimant’s Submission of Data

Claimants will be required to electronically submit data relating to their eligible transactions in ISDAfix Instruments using the template available on the Settlement Website (<https://www.isdafixantitrustsettlement.com>), as well as documentation of such transactions (as described in §III of the Claim Form).

C. Claims Procedures and Timing

On receipt and processing of Claimants’ data and records, the Claims Administrator will:

1. determine the appropriate Pool for each type of transaction, as described in §III, *infra*;
 2. determine if a Claim Deficiency Notice is required for any transaction;
- and
3. calculate the Claimant’s Transaction Claim Amount, as described in §III, *infra*.

Following receipt of a Claimant’s Claim Form, data, and records, the Claims Administrator will issue a “Confirmation of Claim Receipt” to the Claimant via an automated email response after the Claim Form is submitted on the Settlement Website.

III. CALCULATION OF TRANSACTION CLAIM AMOUNTS

The Plan of Distribution for eligible ISDAfix Instruments is divided into two pools, “Pool A” and “Pool B.” Pool A comprises transactions directly linked to an ISDAfix Benchmark Rate. Pool B comprises transactions where the cash flows of the instrument were not directly linked to an ISDAfix Benchmark Rate. Pool B is further divided into sub-groups that reflect differences in instrument type and how the instrument relates to the conduct alleged in the Action.

The Plan of Distribution assigns all transactions of ISDAfix Instruments that are part of the Settlement Class into one – and only one – Pool or Pool sub-group. If a transaction in an

ISDAfix Instrument is found to reasonably fit the definition of more than one Pool or sub-group, the transaction is assigned to the Pool or sub-group that is allocated the greatest portion of the Net Settlement Fund. Each transaction forms the basis for a claim only against the portion of the Net Settlement Fund allocated to the same Pool or sub-group to which the transaction is assigned. The relative allocation of the Net Settlement Fund among Pools and sub-groups is described in §IV, *infra*.

A. Pool A – Instruments Directly Linked to an ISDAfix Benchmark Rate

Pool A includes ISDAfix Instruments in which the cash flows of that instrument are directly linked to one or more ISDAfix Benchmark Rates. Pool A includes transactions in (a) cash-settled swaptions, and (b) ISDAfix Instruments with payments linked to ISDAfix during the Settlement Class Period. Transaction Claim Amounts in Pool A instruments are calculated as follows:

1. Cash-settled Swaptions

a. Cash-Settled Swaptions include the following:

i. Swaptions held by Claimant during the Settlement Class Period that were exercised and cash-settled; and

ii. Swaptions held by Claimant during the Settlement Class Period that were designated as cash-settled and were not exercised prior to expiration.

1. If the designation changed from cash-settled to physically-settled swaption over the life of the swaption, then the last reasonably ascertainable designation will be used to classify the method of settlement associated with the swaption. If the last reasonably ascertainable designation is a physically-settled swaption, the transaction will be assigned to Pool B.1. A swaption may be submitted as cash-settled or physically-settled, but not both, for distribution purposes.

b. From information submitted by Claimant, the Claimant’s

Transaction Notional Amount(s) is determined for each of the following 26 categories:

Relevant ISDAfix Benchmark Rate	Counterparty is a Defendant Bank	Counterparty is not a Defendant
1-year	[Category 1]	[Category 2]
2-year	[Category 3]	[Category 4]
3-year	[Category 5]	[Category 6]
4-year	[Category 7]	[Category 8]
5-year	[Category 9]	[Category 10]
6-year	[Category 11]	[Category 12]
7-year	[Category 13]	[Category 14]
8-year	[Category 15]	[Category 16]
9-year	[Category 17]	[Category 18]
10-year	[Category 19]	[Category 20]
15-year	[Category 21]	[Category 22]
20-year	[Category 23]	[Category 24]
30-year	[Category 25]	[Category 26]

c. For each category, the appended Table 1 is used to select the applicable Economic Multiplier, which reflects the average sensitivity of the cash-settlement value of a swaption to a given change in the ISDAfix Benchmark Rate.

d. The categorization of transactions by whether the counterparty is or is not a Defendant, as defined *supra*, is for the purpose of assigning the applicable Litigation Multiplier. For each category in which the counterparty is a Defendant, the Litigation Multiplier is 4.5. For each category in which the counterparty is not a Defendant, the Litigation Multiplier is 1.

e. Claimant’s Transaction Notional Amount for each category is multiplied by the category’s corresponding Economic Multiplier and Litigation Multiplier to obtain the Transaction Claim Amount.

$$\text{Transaction Claim Amount} = \text{Transaction Notional Amount} \times \text{Economic Multiplier} \times \text{Litigation Multiplier}$$

f. The Transaction Claim Amounts for all categories for which there is a claimed transaction are summed.

2. Other ISDAfix-linked Transactions with Payments Linked to an ISDAfix Benchmark Rate During the Class Period

a. From information submitted by Claimant, the Claimant’s Transaction Notional Amount(s) is determined for all Other ISDAfix-linked transactions with payments linked to an ISDAfix Benchmark Rate that were held during the Settlement Class Period for each of the following 13 categories:

Year	Counterparty is a Defendant	Counterparty is not a Defendant
2006	[Category 1a]	[Category 1b]
2007	[Category 2a]	[Category 2b]
2008	[Category 3a]	[Category 3b]
2009	[Category 4a]	[Category 4b]
2010	[Category 5a]	[Category 5b]
2011	[Category 6a]	[Category 6b]
2012	[Category 7a]	[Category 7b]
2013	[Category 8a]	[Category 8b]
2014	[Category 9a]	[Category 9b]
2015	[Category 10a]	[Category 10b]
2016	[Category 11a]	[Category 11b]
2017	[Category 12a]	[Category 12b]
2018	[Category 13a]	[Category 13b]

b. The categorization of transactions by whether the counterparty is or is not a Defendant, as defined *supra*, is for the purpose of assigning the applicable Litigation Multiplier. For each category in which the counterparty is a Defendant, the Litigation Multiplier is 4.5. For each category in which the counterparty is not a Defendant, the Litigation Multiplier is 1.

c. The Transaction Notional Amount is accounted for in each year payment was linked to an ISDAfix rate in that year. *For example:* for a Claimant with a \$100

million notional 5-year constant maturity swap with resets to an ISDAfix Benchmark Rate in years 2006 through 2010 with Citigroup as a counterparty, \$100 million is added to the Transactional Notional Amounts of Categories 1a, 2a, 3a, 4a, and 5a.

d. Claimant's Transaction Notional Amount for each category is multiplied by the transaction's corresponding Litigation Multiplier to obtain the Transaction Claim Amount.

$$\text{Transaction Claim Amount} = \text{Transaction Notional Amount} \times \text{Litigation Multiplier}$$

e. The Transaction Claim Amounts for all categories for which there is a claimed transaction are summed.

3. Pool A Allocation

The Transaction Claim Amounts for (a) cash-settled swaptions and (b) other ISDAfix-linked transactions with payments linked to an ISDAfix Benchmark Rate during the Class Period are summed for distribution *pro rata* from the Net Settlement Fund allocated to Pool A, which is described in §IV, *infra*.

B. Instruments Not Directly Linked to an ISDAfix Benchmark Rate

Pool B includes ISDAfix Instruments where the cash flows of that instrument were not directly linked to one or more ISDAfix Benchmark Rates.

1. Pool B.1

a. Fixed-for-float swaps that referenced LIBOR

i. From information submitted by Claimant, the Claimant's Transaction Notional Amount(s) for all fixed-for-float swaps that referenced LIBOR that were held during the Settlement Class Period is determined for each of the following 60 categories:

Category	Swap Tenor	Counterparty is a Defendant?
1	At most 1 year	Yes
2	At most 1 year	No
3	More than 1, at most 2 years	Yes
4	More than 1, at most 2 years	No
5	More than 2, at most 3 years	Yes
6	More than 2, at most 3 years	No
7	More than 3, at most 4 years	Yes
8	More than 3, at most 4 years	No
9	More than 4, at most 5 years	Yes
10	More than 4, at most 5 years	No
11	More than 5, at most 6 years	Yes
12	More than 5, at most 6 years	No
13	More than 6, at most 7 years	Yes
14	More than 6, at most 7 years	No
15	More than 7, at most 8 years	Yes
16	More than 7, at most 8 years	No
17	More than 8, at most 9 years	Yes
18	More than 8, at most 9 years	No
19	More than 9, at most 10 years	Yes
20	More than 9, at most 10 years	No
21	More than 10, at most 11 years	Yes
22	More than 10, at most 11 years	No
23	More than 11, at most 12 years	Yes
24	More than 11, at most 12 years	No
25	More than 12, at most 13 years	Yes
26	More than 12, at most 13 years	No
27	More than 13, at most 14 years	Yes
28	More than 13, at most 14 years	No
29	More than 14, at most 15 years	Yes
30	More than 14, at most 15 years	No
31	More than 15, at most 16 years	Yes
32	More than 15, at most 16 years	No
33	More than 16, at most 17 years	Yes
34	More than 16, at most 17 years	No
35	More than 17, at most 18 years	Yes
36	More than 17, at most 18 years	No
37	More than 18, at most 19 years	Yes
38	More than 18, at most 19 years	No
39	More than 19, at most 20 years	Yes
40	More than 19, at most 20 years	No
41	More than 20, at most 21 years	Yes
42	More than 20, at most 21 years	No
43	More than 21, at most 22 years	Yes

Category	Swap Tenor	Counterparty is a Defendant?
44	More than 21, at most 22 years	No
45	More than 22, at most 23 years	Yes
46	More than 22, at most 23 years	No
47	More than 23, at most 24 years	Yes
48	More than 23, at most 24 years	No
49	More than 24, at most 25 years	Yes
50	More than 24, at most 25 years	No
51	More than 25, at most 26 years	Yes
52	More than 25, at most 26 years	No
53	More than 26, at most 27 years	Yes
54	More than 26, at most 27 years	No
55	More than 27, at most 28 years	Yes
56	More than 27, at most 28 years	No
57	More than 28, at most 29 years	Yes
58	More than 28, at most 29 years	No
59	More than 29 years	Yes
60	More than 29 years	No

ii. The tenor range is used to select the applicable Economic Multiplier from the appended Table 2.

iii. For each category in which the counterparty is a Defendant, as defined *supra*, the Litigation Multiplier is 4.5. For each category in which the counterparty is not a Defendant, the Litigation Multiplier is 1.

iv. The Transaction Notional Amount for each category is multiplied by its corresponding Economic Multiplier and by its corresponding Litigation Multiplier to obtain the Transaction Claim Amount.

$$\text{Transaction Claim Amount} = \text{Transaction Notional Amount} \times \text{Economic Multiplier} \times \text{Litigation Multiplier}$$

v. The Transaction Claim Amounts for all categories for which there is a claimed transaction are summed.

b. Physically-settled swaptions

i. From information submitted by Claimant, the Claimant's Transaction Notional Amount(s) is determined for all physically-settled swaptions that were held during the Settlement Class Period for each of the following 60 categories where Swap Tenor refers to the tenor of the swap underlying the physically-settled swaption:

Category	Swap Tenor	Counterparty is a Defendant?
1	At most 1 year	Yes
2	At most 1 year	No
3	More than 1, at most 2 years	Yes
4	More than 1, at most 2 years	No
5	More than 2, at most 3 years	Yes
6	More than 2, at most 3 years	No
7	More than 3, at most 4 years	Yes
8	More than 3, at most 4 years	No
9	More than 4, at most 5 years	Yes
10	More than 4, at most 5 years	No
11	More than 5, at most 6 years	Yes
12	More than 5, at most 6 years	No
13	More than 6, at most 7 years	Yes
14	More than 6, at most 7 years	No
15	More than 7, at most 8 years	Yes
16	More than 7, at most 8 years	No
17	More than 8, at most 9 years	Yes
18	More than 8, at most 9 years	No
19	More than 9, at most 10 years	Yes
20	More than 9, at most 10 years	No
21	More than 10, at most 11 years	Yes
22	More than 10, at most 11 years	No
23	More than 11, at most 12 years	Yes
24	More than 11, at most 12 years	No
25	More than 12, at most 13 years	Yes
26	More than 12, at most 13 years	No
27	More than 13, at most 14 years	Yes
28	More than 13, at most 14 years	No
29	More than 14, at most 15 years	Yes
30	More than 14, at most 15 years	No
31	More than 15, at most 16 years	Yes
32	More than 15, at most 16 years	No
33	More than 16, at most 17 years	Yes

Category	Swap Tenor	Counterparty is a Defendant?
34	More than 16, at most 17 years	No
35	More than 17, at most 18 years	Yes
36	More than 17, at most 18 years	No
37	More than 18, at most 19 years	Yes
38	More than 18, at most 19 years	No
39	More than 19, at most 20 years	Yes
40	More than 19, at most 20 years	No
41	More than 20, at most 21 years	Yes
42	More than 20, at most 21 years	No
43	More than 21, at most 22 years	Yes
44	More than 21, at most 22 years	No
45	More than 22, at most 23 years	Yes
46	More than 22, at most 23 years	No
47	More than 23, at most 24 years	Yes
48	More than 23, at most 24 years	No
49	More than 24, at most 25 years	Yes
50	More than 24, at most 25 years	No
51	More than 25, at most 26 years	Yes
52	More than 25, at most 26 years	No
53	More than 26, at most 27 years	Yes
54	More than 26, at most 27 years	No
55	More than 27, at most 28 years	Yes
56	More than 27, at most 28 years	No
57	More than 28, at most 29 years	Yes
58	More than 28, at most 29 years	No
59	More than 29 years	Yes
60	More than 29 years	No

ii. The tenor range is used to select the applicable Economic Multiplier from the appended Table 2.

iii. For each category in which the counterparty is a Defendant, as defined *supra*, the Litigation Multiplier is 4.5. For each category in which the counterparty is not a Defendant, the Litigation Multiplier is 1.

iv. The Transaction Notional Amount for each category will be multiplied by its corresponding Economic Multiplier, its corresponding Litigation Multiplier, and a Swaption Adjustment Multiplier of 0.47 to obtain the Transaction Claim Amount. The

Swaption Adjustment Multiplier accounts for swaptions’ sensitivity to changes in market swap rates relative to swaps.

$$\text{Transaction Claim Amount} = \text{Transaction Notional Amount} \times \text{Economic Multiplier} \times \text{Litigation Multiplier} \times \text{Swaption Adjustment Multiplier}$$

v. The Transaction Claim Amounts for all categories for which there is a claimed transaction are summed.

c. Pool B.1 allocation

Claimant’s Transaction Claim Amounts for Fixed-for-float swaps the reference LIBOR and Physically-settled swaptions are summed for distribution *pro rata* from the Net Settlement Fund allocated to Pool B.1, which is described in §IV, *infra*.

2. Pool B.2

a. Treasury Bills, Treasury Notes, and Treasury Bonds

i. From information provided by Claimant, the volume in terms of Face Value of all Treasury securities that were held during the Settlement Class Period is identified for all of the following 30 annual categories in which a claim is made.

Category	Swap Tenor
1	Time to maturity was at most 1 year
2	Time to maturity was greater than 1 year, but less than or equal to 2 years
3	Time to maturity was greater than 2 years, but less than or equal to 3 years
4	Time to maturity was greater than 3 years, but less than or equal to 4 years
5	Time to maturity was greater than 4 years, but less than or equal to 5 years
6	Time to maturity was greater than 5 years, but less than or equal to 6 years
7	Time to maturity was greater than 6 years, but less than or equal to 7 years
8	Time to maturity was greater than 7 years, but less than or equal to 8 years
9	Time to maturity was greater than 8 years, but less than or equal to 9 years
10	Time to maturity was greater than 9 years, but less than or equal to 10 years
11	Time to maturity was greater than 10 years, but less than or equal to 11 years
12	Time to maturity was greater than 11 years, but less than or equal to 12 years

Category	Swap Tenor
13	Time to maturity was greater than 12 years, but less than or equal to 13 years
14	Time to maturity was greater than 13 years, but less than or equal to 14 years
15	Time to maturity was greater than 14 years, but less than or equal to 15 years
16	Time to maturity was greater than 15 years, but less than or equal to 16 years
17	Time to maturity was greater than 16 years, but less than or equal to 17 years
18	Time to maturity was greater than 17 years, but less than or equal to 18 years
19	Time to maturity was greater than 18 years, but less than or equal to 19 years
20	Time to maturity was greater than 19 years, but less than or equal to 20 years
21	Time to maturity was greater than 20 years, but less than or equal to 21 years
22	Time to maturity was greater than 21 years, but less than or equal to 22 years
23	Time to maturity was greater than 22 years, but less than or equal to 23 years
24	Time to maturity was greater than 23 years, but less than or equal to 24 years
25	Time to maturity was greater than 24 years, but less than or equal to 25 years
26	Time to maturity was greater than 25 years, but less than or equal to 26 years
27	Time to maturity was greater than 26 years, but less than or equal to 27 years
28	Time to maturity was greater than 27 years, but less than or equal to 28 years
29	Time to maturity was greater than 28 years, but less than or equal to 29 years
30	Time to maturity was greater than 29 years, but less than or equal to 30 years

ii. The time to maturity is calculated as of the date on which the Treasury security was purchased.

iii. The applicable Economic Multiplier from appended Table 3 is selected for each category for which there is a claimed transaction.

iv. The Face Value of all Treasury securities claimed in each category is multiplied by the applicable Economic Multiplier to obtain the Transaction Claim Amounts.

$$\text{Transaction Claim Amount} = \text{Face Value of Security} \times \text{Economic Multiplier}$$

v. The Transaction Claim Amounts for all categories for which there is a claimed transaction are summed.

b. Treasury Futures

i. From information provided by Claimant, the number of contracts (note: not Face Value equivalents) that were held during the Settlement Class Period is identified in each of the following six categories:

1. 2-year T-Note Futures
2. 3-year T-Note Futures
3. 5-Year T-Note Futures
4. 10-Year T-Note Futures
5. Classic T-Bond Futures
6. Ultra T-Bond Futures

Contract	Face Value	Category
2-year T-Note Futures	\$200,000	2
3-year T-Note Futures	\$200,000	3
5-year T-Note Futures	\$100,000	5
10-year T-Note Futures	\$100,000	10
Classic T-Bond Futures	\$100,000	25
Ultra T-Bond Futures	\$100,000	30

ii. For each contract, the applicable Economic Multiplier for the contract category is identified using appended Table 3.

iii. For each category, the number of contracts traded is multiplied by the Face Value of the contract (as given in the table above) and by the applicable Economic Multiplier to obtain the Transaction Claim Amounts.

$$\text{Transaction Claim Amount} = \text{Number of Contracts} \times \text{Face Value (from table)} \times \text{Economic Multiplier}$$

iv. The Transaction Claim Amounts for all categories for which there is a claimed transaction are summed.

c. Options on Treasury futures

i. From information provided by Claimant, the number of option contracts (note: not Face Value equivalents) held during the Settlement Class Period is identified in each of the following six categories corresponding to the type of Treasury Futures contract underlying the option:

1. 2-year T-Note Futures
2. 3-year T-Note Futures
3. 5-Year T-Note Futures
4. 10-Year T-Note Futures
5. Classic T-Bond Futures
6. Ultra T-Bond Futures

Contract	Face Value	Category
2-year T-Note Futures	\$200,000	2
3-year T-Note Futures	\$200,000	3
5-year T-Note Futures	\$100,000	5
10-year T-Note Futures	\$100,000	10
Classic T-Bond Futures	\$100,000	25
Ultra T-Bond Futures	\$100,000	30

ii. For each contract, the applicable Economic Multiplier for the contract category is identified using appended Table 3.

iii. For each category, the number of contracts traded is multiplied by the Face Value of the contract (as given in the table above), by the applicable Economic Multiplier, and by a Treasury Option Adjustment Factor of 0.22 to obtain the Transaction Claim Amounts. The Treasury Option Adjustment Factor accounts for an option on Treasury futures' sensitivity to changes in treasury yields relative to its underlying Treasury futures contract.

$$\text{Transaction Claim Amount} = \text{Number of Contracts} \times \text{Face Value (from table)} \times \text{Economic Multiplier} \times \text{Treasury Option Adjustment Factor}$$

iv. The Transaction Claim Amounts for all categories for which there is a claimed transaction are summed.

d. Pool B.2 allocation

Claimant’s Transaction Claim Amounts of Treasury bills, Treasury notes, Treasury bonds, Treasury futures, and options on Treasury futures are summed for distribution *pro rata* from the Net Settlement Fund allocated to Pool B.2, which is described in §IV, *infra*.

3. Pool B.3

a. Eurodollar futures

From information provided by Claimant, the number of Eurodollar future contracts (note: not notional equivalents) that were held during the Settlement Class Period is identified. This is the Transaction Claim Amount.

b. Options on Eurodollar futures

i. From information provided by Claimant, the number of Eurodollar futures option contracts (note: not notional equivalents) that were held during the Settlement Class Period is identified.

ii. The number of Eurodollar futures options contracts is multiplied by a Eurodollar Option Adjustment Factor of 0.13 to obtain the Transaction Claim Amount. The Eurodollar Option Adjustment Factor accounts for an option on Eurodollar futures’ sensitivity to changes in the underlying interest rate relative to Eurodollar futures.

$$\text{Transaction Claim Amount} = \text{Number of Eurodollar futures option contracts} \times \text{Eurodollar Option Adjustment Factor}$$

c. Pool B.3 allocation

Claimant's Transaction Claim Amounts for Eurodollar futures and options on Eurodollar futures are summed for distribution *pro rata* from the Net Settlement Fund allocated to Pool B.3, which is described in §IV, *infra*.

4. Pool B.4

From information provided by Claimant, the notional amount of contracts for all other interest rate derivatives not covered under Pool A or Pool B sub-groups B.1, B.2, or B.3 that were held during the Settlement Class Period is identified. This is the Transaction Claim Amount.

a. Pool B.4 allocation

The Transaction Claim Amount for all other interest rate derivatives is distributed *pro rata* from the Net Settlement Fund allocated to Pool B.3, which is described in §IV, *infra*.

IV. CALCULATING *PRO RATA* ADJUSTMENTS FOR DISTRIBUTION

After each Authorized Claimant's Transaction Claim Amounts are determined as described in §III, *supra*, and the Court approves the distribution order and all claim disputes are resolved, the Claims Administrator calculates each Authorized Claimant's share of the Net Settlement Fund as follows:

A. Allocation of Net Settlement Fund Among Pools

Each Pool and Pool sub-group's allocation of the Net Settlement Fund is as follows:

<u>Pool/Pool sub-group</u>	<u>Percentage of Net Settlement Fund Allocated</u>	<u>Pool/Pool sub-group</u>
A	45%	
B.1	40%	
B.2	6%	
B.3	6%	
B.4	3%	

B. Pro Rata Share Calculation

For each Pool and Pool sub-group, the Authorized Claimants’ *pro rata* share of the respective Pool’s allocation of the Net Settlement Fund, subject to Section C, *infra*, is as follows:

$$\text{Claimant's } pro\ rata\ \text{share of the Pool A or Pool B sub-group's allocation of the Net Settlement Fund} = \frac{\text{Claimant's Transaction Claim Amount in the Pool or Pool sub-group}}{\text{Total of All Claimants' Transaction Claim Amounts in the Pool or Pool sub-group}}$$

C. Alternative Minimum Payment

For each Pool and Pool sub-group, where it is reasonably determined that the cost of administering a claim would exceed the value of the claim under the Plan of Distribution, Class Counsel will direct the Claims Administrator to preserve the value of the Settlement Fund and make an alternative minimum payment to satisfy such claims. The alternative minimum payment will be a set amount for all such Authorized Claimants and will be based on the participation rate of the class in the settlement.

D. Distribution

Following the Effective Date and the Claims Administrator calculations of each Authorized Claimant’s *pro rata* share of the Net Settlement Fund or alternative minimum payment amount, the Claims Administrator shall distribute the Net Settlement Fund to Authorized Claimants pursuant to the Plan of Distribution approved by the Court.

E. Remaining Balance in the Net Settlement Fund

If there is any balance remaining in the Net Settlement Fund after a reasonable period of time after the initial date of distribution of the Net Settlement Fund, the Claims Administrator shall, if feasible, allocate such balance among Authorized Claimants in an equitable and

economic fashion. These redistributions shall be repeated until the remaining balance in the Net Settlement Fund is *de minimis*, and any such remaining balance shall be donated to an appropriate 501(c)(3) non-profit organization selected by Lead Counsel and approved by the Court.

Table 1: Cash-Settled Swaption Economic Multipliers

Relevant ISDAfix Rate	Multiplier
1	0.9858
2	1.9517
3	2.8940
4	3.8094
5	4.6955
6	5.5515
7	6.3776
8	7.1749
9	7.9448
10	8.6884
15	12.0620
20	14.9827
30	19.7236

Source: Bloomberg, L.P.

Table 2: Vanilla Swap Economic Multipliers

Tenor	Multiplier
At most 1 year	0.9858
More than 1, at most 2 years	1.9517
More than 2, at most 3 years	2.8940
More than 3, at most 4 years	3.8094
More than 4, at most 5 years	4.6955
More than 5, at most 6 years	5.5515
More than 6, at most 7 years	6.3776
More than 7, at most 8 years	7.1749
More than 8, at most 9 years	7.9448
More than 9, at most 10 years	8.6884
More than 10, at most 11 years	9.4073
More than 11, at most 12 years	10.1026
More than 12, at most 13 years	10.7760
More than 13, at most 14 years	11.4288
More than 14, at most 15 years	12.0620
More than 15, at most 16 years	12.6775
More than 16, at most 17 years	13.2765
More than 17, at most 18 years	13.8597
More than 18, at most 19 years	14.4282
More than 19, at most 20 years	14.9827
More than 20, at most 21 years	15.5218
More than 21, at most 22 years	16.0452
More than 22, at most 23 years	16.5535
More than 23, at most 24 years	17.0471
More than 24, at most 25 years	17.5264
More than 25, at most 26 years	17.9919
More than 26, at most 27 years	18.4440
More than 27, at most 28 years	18.8830
More than 28, at most 29 years	19.3094
More than 29 years	19.7236

Source: Bloomberg, L.P.

Table 3: Treasury Economic Multipliers

<u>Category</u>	<u>Multiplier</u>
1	0.9889
2	1.9591
3	2.9080
4	3.8225
5	4.6895
6	5.5262
7	6.3190
8	7.0845
9	7.8088
10	8.4907
11	9.1820
12	9.8451
13	10.4804
14	11.0881
15	11.6686
16	12.2222
17	12.7494
18	13.2505
19	13.7261
20	14.1766
21	14.6026
22	15.0046
23	15.3831
24	15.7387
25	16.0721
26	16.3838
27	16.6745
28	16.9448
29	17.1954
30	17.4269

Source: Bloomberg, L.P.