UNITED STATES DISTRICT COURT
SOUTHERN DISTRICT OF NEW YORK
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ALASKA ELECTRICAL PENSION FUND, *et al.*,

Plaintiffs,

v.

BANK OF AMERICA CORP. *et al.*,

Defendants.

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New York, N.Y.

14 Civ. 7126 (JMF)

May 30, 2018
3:30 p.m.

Before:

HON. JESSE M. FURMAN,

District Judge

APPEARANCES

QUINN EMANUEL URQUHART & SULLIVAN, LLP
Attorneys for Plaintiffs
BY: DANIEL BROCKETT
JEREMY ANDERSEN
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BY: JULIA KEARNS

(Case called)

THE DEPUTY CLERK: Counsel, please state your name for the record.

THE COURT: Don't all jump at once.

MR. BROCKETT: Good afternoon, your Honor. Daniel Brockett of Quinn Emanuel on behalf of the plaintiffs.

MR. ANDERSEN: Jeremy Andersen, Quinn Emanuel, also on behalf of plaintiffs.

MR. MITCHELL: David Mitchell, from Robbins, Geller, Rudman & Dowd on behalf of plaintiffs.

MS. KEARNS: Julia Kearns, Scott & Scott, on behalf of the plaintiffs.

MR. GREENWALD: And, Marc Greenwald also from Quinn Emanuel. Good afternoon, your Honor.

THE COURT: Good afternoon. Good to see you all. My understanding is that the defendants, no one wanted to sit at the table, you are all scared of me or something. But, is someone here from each of the defendants? I don't necessarily need to take appearances but just for the record, does anybody know the answer to that?

MR. ANDERSEN: Looks about right.

MR. GREENWALD: I did greet at least one person from each of the defendants when we came in.

THE COURT: There are certainly a lot of people here so I think it is a safe assumption.

Well, we are here for the fairness hearing, I'm not sure that's a proper name for it, in any event, in connection with the settlement of this matter with respect to 10 of the defendants. I did put out two orders, one yesterday and one earlier today. I apologize for the last minute nature of both them with just a series of things that I wanted you to address. I think if, unless you have a better idea, my inclination would be to sort of address the issues relating to the settlement itself first and then to turn, at some point, and discuss issues relating to the fee application.

So, with that order in mind, and maybe taking the order that I issued earlier today as the starting point, if you want to address those things or I could pose the questions to you Mr. Brockett and we can proceed that way?

MR. BROCKETT: Yes.

THE COURT: Whatever you think is easiest.

MR. BROCKETT: Thank you, your Honor.

Yes. I will address each of the questions that the Court raised in its orders yesterday, first as they pertain to final approval of the settlements. But before I get to those may I just make two quick points about the settlement here?

First, I think it does merit emphasis again that not a single objection has been filed to any aspect of the settlement, and the opt-outs about which I am going to give a report are *de minimis*. So we have a record where not a single

class member has objected to the monetary component of the settlement, the nonmonetary component of the settlement, the plan of distribution, the scope of the releases, or any other term. And the essence of objections is a powerful testament to the fairness and adequacy of the settlement. This is particularly true given that hedge funds and other sophisticated institutions make up a significant portion of the class so I just want to put that point on record.

The second point I wanted to state is that the settlement amount of $408 million here represents approximately 28 to 59 percent of what we currently estimate the plaintiff class could have recovered had we gone to trial and this is just the trial demand. The actual recovery at trial could have been a lot lower given the many risks that we face in this case. So, this type of recovery in a class action is an outstanding recovery for the class and it far exceeds what plaintiff classes recover in the majority of class actions. So, I just wanted to address those two points.

Now, with respect to the Court's questions, let me take up the questions that came in today's order which largely go to the question of the underlying settlement. So, the first question, the Court asks for us to explain the meaning of certain concepts in the plan of distribution. First the notion of --

THE COURT: Let me clarify it was less, and maybe this

was my fault, it was less to explain the meaning. I think I get the meaning of them so much as to explain to me how you came up with the actual numbers. So, I understand the theory behind it, I looked at the Fiore declaration which is I think was to explain it but Mr. Fiore didn't explain how he came up with the particular multipliers that were used, either the 4.5 figure for the litigation multiplier or the different economic multipliers that are used. I certainly understand what he is getting at and the purpose of it.

MR. BROCKETT: Okay. Let me see if I can satisfy you and, if not, we have Dr. Fiore here.

The economic multiplier is basically --

THE COURT: I didn't mean to deprive him of his Ph.D. I apologize. Go ahead.

MR. BROCKETT: Well, he is here and is happy to talk if it is necessary for the Court to understand.

But, the economic multiplier is basically a formula, it is a mathematic formula that Dr. Fiore came up with in an effort to account for the fact that different instruments here have different sensitivities to movements and interest rates, and so we wanted to measure those sensitivities and to have an adjustment in the plan so that we don't overcompensate certain instruments and undercompensate others. And so, how did we come up with this? They looked at real world data from Bloomberg, okay, to see how movements in interest rate impact

the value of these instruments. So, it is based upon real world data. Having looked at how movements in interest rates impact the value of these data they were able to come up with a mathematical formula that reflects the economic multiplier. Now, can I explain to you how and exactly why a certain number was used as opposed to another? No. I'm sorry, I can't do that. Dr. Fiore could do that, though. But, I can tell you it was formulaic and it was simply based upon observations of how the instruments change in value based upon changes in interest rate in the real world. So, if there is a one basis point change, for example, in a fixed-rate instrument, they looked at how that one basis point change impacted a 30-year swap, how that one basis change impacted a one-year swap. And they made an adjustment which was a mathematical formula to account for that.

THE COURT: All right. I think it might pay for me to hear from Dr. Fiore. I want to understand, I guess, how those formulae were arrived at.

MR. BROCKETT: Right.

THE COURT: I have spent a good portion of the last couple months reading issues relating to this case and reports relating to this case and Dr. Pirrong's reports and so forth, so I would certainly understand the complexity involved here. I want to make sure that I have a little better understanding of how the numbers were ultimately arrived at and whether it is

more straightforward, for example, than the artificiality ribbons and the like that Dr. Pirrong used.

MR. BROCKETT: Perhaps we should run through these questions.

THE COURT: Sure.

MR. BROCKETT: Maybe I can satisfy you on some and there may be others where we can bring Dr. Fiore up as well.

The litigation multiplier, that was based solely on counsel's judgment. Essentially we determined that claims that are based on privity, transactions that were entered into directly with the defendants have a much greater strength in litigation than claims that are non-privity. And so that was a counsel judgment and we basically set this up so that 90 percent of pools A and B1 are going to go to privity-based transactions and the other 10 percent to non-privity. That was our judgment. Okay?

THE COURT: All right.

MR. BROCKETT: The swaption adjustment multiplier. So, what this is is swaptions are options on interest rate swaps and so an option is less sensitive to movements in interest rate than the underlying spot trade. In other words the underlying option that the swaption reflects. And so, what we did was we looked at defendant's data for swaptions and we came up with an average relative sensitivity of the option versus the underlying spot trade. This is called a Black 76

model that lexicon applied here. But, the idea was to come up with an average number which reflected the different sensitivities between the option and the underlying trade. Okay? The Black 76 model, that came up with exactly what the adjustment would be in this case. Again, I think this might be one for Dr. Fiore to explain, the Black 76 model and how it was applied here.

THE COURT: All right.

MR. BROCKETT: Treasury option adjustment factor. That's a very similar concept here so it is the same concept as before. If you have an option on a treasury future, the option itself has less sensitivity to interest rate changes than the underlying treasury future. Again, Dr. Fiore applied the Black 76 model to data that we obtained from the exchange and, again, came up with an average that we could apply here to calculate the treasury adjustment factor. So, it is the same concept as the swaption adjustment but this has to do with treasury options versus the underlying treasury futures contract.

The Euro dollar adjustment factor, very same concept as well. Here we have an option on a Euro dollar future. That option is less sensitive to interest rate movement than the underlying Euro dollar future itself. To adjust for this we applied the Black 76 model to data from the Euro dollar exchange so that's from the CME, and through that method we

calculated the average which became the Euro dollar adjustment factor. So, again, Dr. Fiore can explain more detail.

Now, moving to your Honor's second question, the relationship, if any, between the plan of distribution on the one hand and the methodology and opinions of Craig Pirrong.

So, Dr. Pirrong's concept of a permanent impact is embedded in our plan of distribution insofar as we are allowing everyone who traded an ISDAfix instrument during the class period to submit a claim. We are not attempting to limit those who can submit a claim to those who traded at or around the 11:00 a.m. window. So the fundamental, the rock bottom principal of Dr. Pirrong's permanent impact concept is embedded, baked into the plan of distribution. Now, we did not create an artificiality ribbon of the kind that Dr. Pirrong created for the class certificate model because it would have declared class cert, class members, winners and losers, based only on a preliminary list of manipulation events. So, we only have a preliminary list of manipulation days. Had we built an artificiality ribbon, that artificiality ribbon would have declared winners and losers and that could have sparked objections because who a winner and who was a loser could very well change on a full set of manipulation days. So, we decided it was better to pay claims based on straight notional which does not bias one class member over another in any respect. Okay?

So, I think that answers the question of the relationship between the plan of distribution and Dr. Pirrong's methodology of why we did what we did.

THE COURT: One feature of the question embedded at the end of it was, as I understood it, one criticism of Dr. Pirrong's analysis was his use of treasury and Euro dollar futures as controls, and the theory behind a control is that it is not necessarily or it would not be affected by the manipulation alleged by the plaintiffs in this case. Right? So, it seems a little bit intentioned to both treat it as a control but also essentially included it in the plan of allocution -- sorry, plan of distribution here on the theory that it's affected even if it is affected significantly less and therefore weighted much less than the distribution plan.

MR. BROCKETT: Right. It is a fair question and let me respond to it. I meant to respond to it.

So, what Dr. Pirrong would say is that economists use controls all the time that are imperfect. There are controls that are imperfect but they still add value, so Dr. Pirrong would say that you can use a treasury and Euro dollar future as a control even though -- even though those instruments were, in some respects, impacted by the manipulation. And he would tell you that economists do this all the time and they add value to a study and to a model, even as imperfect as they may be.

So, that is why the Euro dollar futures and the

treasuries can be both an imperfect control; at the same time they can also be instruments that were impacted, to some extent, by the manipulation and be instruments and a part of the settlement class, but we do realize that claims based on these instruments are further removed from the wrongdoing which is why they are being allocated less money than plain vanilla swaps, swaptions, and other instruments that are directly linked to ISDAfix.

THE COURT: Very good, and that is a good segue into the third question which is essentially the relationship between those transactions and ISDAfix instruments. I guess the question is is it any transaction in treasuries, in treasury futures would be rewarded under this?

MR. BROCKETT: Yes.

So, what happened is that the basis for including Euro dollar futures and treasuries in the settlement is, first of, all the defendants insisted that the release cover these instruments. Okay? That's natural. I would expect the defendants to insist on that they be included. At the same time they are also, under our own theory, they were impacted by the wrongdoing to some extent. Okay? And so, there is a rational basis for including Euro dollar futures and treasuries within the release, within the distribution pool.

Now, the Court also asks are these instruments ISDAfix instruments under the settlement agreement. And they are. The

settlement agreement talks about, among other things, ISDAfix instruments being any and all instruments that are relevant to the determination or calculation of ISDAfix benchmark rates. Well, treasuries are part of how ISDAfix is calculated and Euro dollar futures are also used in the calculation of the one-year ISDAfix. So, treasuries and Euro dollar futures are ISDAfix instruments for purposes of the settlement agreement and also they were part of the defined ISDAfix instruments in the notice that went to class members. Okay? So, I think that that is why they're being included here and that is the relationship between them and the definition of an ISDAfix instrument under the settlement agreement.

THE COURT: So, you raise the question of the notice that went to putative or potential class members. Is it clear, do you think it was clear from that notice that treasuries were within the scope of it and would that not have -- I mean 58,000 I think is the number of notice packages, or somewhere in that neighborhood, that were sent out. I would think that the number of persons or entities that engaged in transactions involving just treasuries to take an example would have been vastly higher than that. What say to you that?

MR. BROCKETT: Well, we certainly did a very comprehensive job at trying to identify every institution that would have traded a treasury instrument or to have traded Euro dollar futures that could be impacted by the settlement and so

I have no doubt that all potential class members or substantial class members received notice that Euro dollar futures and treasuries are part of the settlement here for sure. Yes.

THE COURT: I think your colleague may have had something he wanted to share with you but I will leave that to you.

MR. BROCKETT: My colleague, Mr. Andersen, reminds me that the notice specifically references treasuries and Euro dollar futures and puts class members on notice that these instruments are part of the settlement pool.

THE COURT: All right. Very good. Why don't you turn to no. 4 then.

MR. BROCKETT: Yes.

No. 4 I believe asks about the relative market shares. This was, I think, a point we made in connection with the UBS and the HSBC settlement. So, we had market share information early on in this case from a study done by Greenwich Associates which is a consulting firm. We also had Compass Lexicon calculate their own estimates of market share. What I can tell you put in the record from Greenwich is as follows: The only year I have -- and this is a market defined as interest rate derivatives, interest rate derivatives market, so it would include certainly swaptions and other ISDAfix-linked instruments as well as plain old swaps and other instruments defined as interest rate derivatives. But, in 2012, according

to Greenwich Associates, Bank of America had market share of 8.7 percent, JP Morgan had market share of 11.6 percent, Deutsche Bank had market share of 7.5 percent, Citigroup 8.9 percent, Barclays 4.8 percent, Goldman Sachs 6.9 percent, RBS 7 percent, and then UBS 2.6 percent, and HSBC 5 percent. So, the point we were making in the brief with this is that HSBC and UBS are substantially smaller by market share to all of the other settling banks with the exception of Barclays, okay? And then, of course, the distinction between Barclays and these banks was that Barclays was a daily manipulator, the Barclays traders were daily manipulators of ISDAfix whereas we found very little, if any evidence, to suggest that the traders for UBS and HSBC were engaged in the same conduct.

THE COURT: Granted, UBS and HSBC are the lowest numbers of those you just read off to me but HSBC is almost twice the size of UBS. Can you explain why they're both then the same settlement values?

MR. BROCKETT: Yes; because it wasn't solely market share driven, it was based principally upon chats and evidence suggesting that these banks were engaged in the core activity that the complaint was about. And, with respect to HSBC, we found virtually nothing. With respect to UBS, we had some chats that were incriminating. But, HSBC was largely clean and that's the reason why their number was equivalent to UBS'. And, I would also say, they negotiated together, they insisted

on negotiating together, and they did so using Layn Phillips, mediator, and I think that also, in part, accounts for why the numbers were the same.

THE COURT: Very good.

Then, the last item on today's order is essentially just whether you should be required to submit data concerning the claims rates and the like.

MR. BROCKETT: Sure. Of course. We have no issue with submitting this data when it becomes available. I think my only comment here was that the Court has enough information today to approve the settlement and we would be concerned if there was going to be a deferral of the decision to approve the settlements until all of this information has been provided. But, certainly, providing the information is no problem. This is typically provided in a motion for approval of the distribution. Once all the claims have been in and the claims administrator works its magic, we typically make a motion for distribution of the settlement fund and we would provide the Court at that time all of this information. But the settlements themselves are approved months if not years ago before we get to that point.

THE COURT: All right. I didn't mean to suggest that I saw that as a reason to defer the question of approval. I meant is there any reason not to require to you disclose it in the interest of transparency down the road.

MR. BROCKETT: No reason whatsoever and of course we would be happy to provide it.

THE COURT: So why don't you assume, assuming I do approve it, then make sure that in whatever final motion for distribution you do include that information, other information concerning the claims rates and distributions and the like.

Maybe on the order from yesterday, I think all of them relate to fees other than maybe the last question concerning the opt-outs. Do you want to maybe address that and perhaps I will hear from Dr. Fiore before we turn to the question of fees?

MR. BROCKETT: Yes. I mean, I have good news on the fees, your Honor.

So, the first question --

THE COURT: You don't want them?

MR. BROCKETT: No. I didn't say that. I think I have a good answer to that.

The first question the Court raises is whether the motion for attorneys fees should be deferred to the end.

THE COURT: My suggestion was that you address the opt-out question, item no. 7 on that order and then we get to Dr. Fiore. But, maybe you want to share the good news and not keep me in suspense?

MR. BROCKETT: I guess I am too eager to share the good news here. Opt-out report, yes.

So, opt-outs included the following: The Biton family, that was a handwritten opt-out. They provided no transaction data. The claimant seemed to be upset about things President Obama did and the claims didn't seem to have any connection to this case whatsoever. That was the Biton family.

So, China Bank. We had received an opt-out from China Bank but that request has been withdrawn. So, the request for exclusion from China Bank has been withdrawn.

The Chicago Cubs. We spoke to their in-house counsel. This is, I would call it policy-driven opt-out. They just opt out of all class actions as a matter of practice. I do not expect any suit to be filed. Certainly no suit has been filed at this point. The Chicago Cubs only had two relevant trades and I expect that they will opt out but they will not hire separate counsel and bring a claim.

Qantas Airways submitted a request for exclusion but the only trades that they attached were not ISDAfix instruments trades but were FX trades -- foreign exchange trades. So, we had a question initially as to whether they were even a class member so we did look into to our own records and we can't find one interest rate swap transaction involving Qantas Airways and we have no reason to believe that they will hire separate counsel and bring a claim. Again, this appears to be or looks like a policy-driven opt-out as well.

So, the next one is Métropole Europe. They have not

hired outside counsel. They have no intention to file a separate case. They submitted some swap agreements in French so we couldn't fully understand, but they do look like they have some qualifying trades but they are very few in number and we do not expect to see a separate action and there certainly is no one filed at this point in time.

Pas-De-Calais Habitat. Again, they have not hired outside counsel. We do not find qualifying trades for this entity in our database. This appears to be a policy-based opt-out as well. They don't have outside counsel and we do not expect to see a separate action filed.

And, finally, the Commonwealth Bank of Australia. This one, they do have about 1,100 trades but that's still a *de minimis* number given that there are millions of interest rate swap transactions that are part of the class. We have no insight into why the Commonwealth Bank of Australia has opted out, however they have not hired outside counsel, we do not expect them to file a separate action.

I think that's it for the opt-out report.

THE COURT: All right.

Do you want to share the good news and then I will turn to Dr. Fiore?

MR. BROCKETT: Yes.

What I was going to say is that your first question here raises the issue of whether the attorneys fees should be

deferred until the end of the case, at which time the Court would have a more complete view of the total hours and expenses incurred over the course of the litigation. And I have spoken to the other lead counsel and we are willing to defer the fee application. We would not be withdrawing it, we are filing it, we will keep the same fee motion on file. We were simply deferring resolution of it until the conclusion of the case and I think that moots, pretty much, all the other questions the Court had about the fee other than the opt-out report which I have already given.

If there is any other question the Court would like me to answer here I'm happy to do so, but I think it moots or defers, defers until later -- some of these issues are going to exist but I don't see a reason to argue them today if we are going to defer the fee petition.

THE COURT: I agree. I think that makes sense. I think that is good news. I think it probably would have been the result anyway but it makes it easier. Why don't we defer consideration of those issues then and my intuition is that down the road there will be a supplemental submission and you can probably, to the extent that you haven't already, address these questions or issues in that supplemental submission and that may get us a long way to where we need to get on that.

So, shall I hear from Dr. Fiore?

DR. FIORE: Good afternoon, your Honor.

THE COURT: My apologies.

MR. BROCKETT: Do you want him to take the stand and be sworn?

THE COURT: No, I don't think so. If he could just help me understand the root of the particular numbers and the formulas that he used, that would be sufficient I think.

DR. FIORE: Very good.

So, for example, so the basic idea of an economic multiplier is that we have a certain number of instruments in each pool and we want the number to reflect the relative sensitivity of a manipulation or change in interest rates on the values, the values of the various instruments. So, that's the idea by hind the economic multiplier. So, we have a series of tables in the plan so, for example, if we turn to cash settled swaption economic multipliers right table 1. So, this basically is, reflects the idea that a cash-settled swaption linked to a, say, five-year ISDAfix has a lower sensitivity to a cash settled swaption with, say, a 30-year tenor. So, the reason being that we have -- so, a five-year swaption will have, typically have semi-annual payments out to the five years, right? So, what we did for these economic multipliers was we said let's assume that there is a one basis point increase in the fixed rates. So, floating rate stays constant, fixed rates goes up so that's due to manipulation. So, we said what is the effect on the value of the cash settlement? So, we

say you will get one basis point increase in all of the payments out to say, five years if you have a five year tenor, and what you do with that you, to get to a particular value you have to discount all of the payments back to the present. So what we did was use a variety of discount factors based on fixed or float discount rates taken from Bloomberg and those discount factors allow us to say if we have a particular payment in the future, what is that worth today. And that allows us to then add up all the series of payments that they would have gotten and allow us to say what the value was today. So, for example, if you look at a five-year cash settled swaption with a five year tenor, he we have a multiplier of 4.69 because that is the value of one basis point increase -- for every basis point of increase in the fixed rate, the value increases by 4.69 basis points. And the same thing with a 30-year tenor, there is a lot more payments, and so when you discount all of those payments back to the present you get a multiplier of 19.

So, it's a very common and very standard way of calculating the values of future payments.

THE COURT: And then between that and the other pools, if you will, the swap multipliers, the treasury multipliers, is that a similar analysis? I mean obviously it's --

DR. FIORE: Yes. So, that's a similar analysis, especially for treasuries. So, if you assume that, say the

coupon rate would have been higher by a certain, amount how does that translate into value today. And it was a similar formula that gives us the treasury values except say we use treasury yields and treasury discount factors to discount back to the present.

THE COURT: So, to simplify it, it is basically a means of obtaining the net present value of a particular transaction or instrument?

DR. FIORE: Exactly.

THE COURT: I take it it sounds like it is a fairly standard way of measuring that.

DR. FIORE: Yes.

THE COURT: If you were to sell one of these instruments is it the kind of analysis that would go into the valuation of it for purposes of a sale of it?

DR. FIORE: That's exactly right.

THE COURT: Okay.

And what about the Black 76 model?

DR. FIORE: So, the Black 76 model --

THE COURT: Why is it called that, first of all.

DR. FIORE: It was developed by Fisher Black in 1976. It is a variation of the Black-Scholes model. So, the Black-Scholes model tells you, given a particular stock with certain characteristics what is the value of an option on that stock. And so instead of -- so, that's Black-Scholes, that's

one model. Black 76 is a variant of it which is for futures contracts and we applied that for all of these future contracts, futures contracts at issue here. And basically you can use that Black 76 model to, say -- basically it is a measure, you can use it to measure the relative sensitivity of the option relative to the underlying instrument.

So, for a swaption, for example, the underlying instrument is a fixed or float swap so a swaption is an option on that fixed or float swap. So, what we want to know is when the fixed rate changes, the fix or float swap is going to have a particular sensitivity to that and then we want to know what is the sensitivity of an option on that fixed or float swap and the sensitivity of an option on that fixed or float swap is going to be less than that, than the sensitivity on that fixed or float swap itself and the Black model allows us to do that.

So, the issue with -- obviously -- so, each option will have its own sensitivity depending how far in the money or out of the money it is. So an option that is very far in the money is going to have the sensitivity that looks a lot like that fixed or float swap and an option that is very far out of the money is going to have almost zero sensitivity. So, what we did is we looked at the, to not burden class members with submitting all the details of their transactions we looked at what is the typical sensitivity of a swaption to its underlying fixed to float rate -- underlying fixed to float interest rate

swap given in the data that we got from defendants and then we applied that to all swaptions that are submitted.

THE COURT: How do you define the typical in that context?

DR. FIORE: It is the average. So, we looked at all the swaptions in the database and you say look at the Black 76 model to say what is that sensitivity of that particular option or swaption to its underlying interest rate swap and then you take an average across all of them to figure out what is the average sensitivity.

THE COURT: Gotcha.

And the Black 76 model is accepted in the field?

DR. FIORE: Yes. Yes.

THE COURT: All right.

DR. FIORE: It is the, along with the Black-Scholes model it is the benchmark for option pricing.

THE COURT: Benchmark is a loaded term here.

All right. Anything else that any of you wants to say, anyone in the back who wishes to be heard at this time?

MR. BROCKETT: Happy to answer any further questions. I have no further presentation to make.

THE COURT: No. I think you have covered the questions that I had that we need to address today and the good news is that I am prepared to give you my ruling on the motion for approval of the settlements themselves so I will proceed to

that now.

On May 11th, 2016, December 19th, 2016, and July 12th, 2017, I preliminarily approved the settlements with a total of 10 defendants in this matter and preliminarily certified a class including, to the extent relevant here, all persons or entities who entered into, received, or made payments on terminated, transacted in, or held an ISDAfix instrument defined in the relevant papers during the period from January 1st, 2006 to January 31st, 2014 inclusive. And you can look at docket no. 228 paragraphs 2 and 3, for example, for that; also docket nos. 337 and 492.

On October 24, 2017, I approved a plan of notice and preliminarily approved a plan of distribution. See docket no. 521. On March 30th, 2018, lead plaintiffs and lead counsel filed motions for final approval of the class action settlements and for an award of attorneys fees and expenses. See docket nos. 601 and 613. The motions are unopposed. Additionally, as Mr. Brocket emphasized, there have been no objections to the class action settlement and only six requests for exclusion.

Upon review of plaintiff's motion papers, the motion for final approval of the class action settlement is granted. As an initial matter, I find that the notice provided with notice packages mailed to over 58,000 potential settlement class members, summary notice published between January 19th

and 22nd, 2018 in various publications, and the maintenance of a settlement website, among other things, satisfies the requirements of both Rule 23(e)(1) and the due process clause. I also find that the proposed settlement class meets all of the requirements of Rule 23(a) and satisfies the requirements of Rule 23(b)(3) substantially for the reasons stated in plaintiff's first preliminary approval motion. See docket no. 221 at 20 to 24. I repeat that that has no bearing on my adjudication of the still pending motions for class certification with respect to claims asserted against the non-settling defendants.

Finally, I find that the settlement itself is fair, reasonable, and adequate. Rule 23(e)(2) requires as a precondition to approval of a settlement that would bind class members that the Court find, after conducting a hearing, that the settlement is "fair, reasonable and adequate." In conducting the review mandated by that rule I have a duty to "make a considered and detailed assessment of the reasonableness of proposed settlements." Weinberger v. Kendrick, 698 F.2d 61, 82 (2d Cir. 1982). Generally, as part of that inquiry, a District Court must "consider many factors including the complexity of the litigation, comparison of the proposed settlement with the likely result of litigation, experience of class counsel, scope of discovery preceding settlement and the ability of the defendant to satisfy a

greater judgment." In Re: Drexel Burnham Lambert Group, 960 F.2d 285, 292 (2d Cir. 1992) citing City of Detroit v. Grinnell, 495 F.2d 448, 463 (2d Cir. 1974); see also, Charron v. Wiener, 731 F.3d 241, 247 (2d Cir. 2013) observing that Courts within the Second Circuit evaluate the substantive fairness of a class action settlement using the so-called Grinnell factors.

Here, virtually all if not all of those factors call for approval as in any complex antitrust case and suffice it to say I think this is on the complex end of the spectrum. Plaintiffs faced considerable risks in proceeding all the way to judgment. That risk was exacerbated by the complexity of the sophisticated financial instruments involved in this case, the nature and size of the derivatives market, and the number and resources of the defendants. While I largely denied second and third rounds of defendant's motions to dismiss with respect to the antitrust claims, had the case proceeded to final judgment there is no guarantee that plaintiffs would have satisfied their burdens of proving the existence of an antitrust conspiracy, injury, causation and damages. That is confirmed, or my conclusions on that score are reinforced by the fact that in the pending class certification and related Daubert motions in the ongoing litigation against the not settling defendants, nearly every element of both Rule 23 and plaintiff's theories of impact and causation have been

contested and, suffice it to say, my engagement with those motion papers, the many hundreds if not thousands of pages of them, certainly gives me a firm basis on which to conclude that the matters here are complicated and plaintiff's success was by no means guaranteed with respect to the settling defendants.

Second, although the parties didn't engage in formal discovery before the first order of preliminarily approving settlement, plaintiffs did litigate two Rule 12(b)(6) motions and engage experts early on to assess the range of each settling defendants' exposure to liability. That is enough for plaintiffs to have had an adequate, quote unquote, appreciation of the merits of the case before negotiating. Morris v. Affinity Health Plan, 859 F.Supp.2d 611, 620 (S.D.N.Y. 2012). Moreover, since the settlements' preliminary approval, plaintiffs have obtained discovery for both settling and non-settling defendants and engaged in motion practice against the non-settling defendants allowing plaintiffs and counsel to check and confirm the value of the settlements.

The results of the settlements speak for themselves. Plaintiffs obtained $408.5 million in settlement proceeds representing, as Mr. Brockett stressed, 28 to 59 percent of the expected trial demand, albeit perhaps not with the possibility of trebling, and plaintiffs obtained additional value on top of the $408.5 million in the form of confirmatory discovery and cooperation which has informed and assisted plaintiffs' ongoing

litigation with respect to the non-settling defendants. I don't think we discussed whether and to what extent one can put a monetary value on that, and cooperation and confirmatory discovery, but suffice to say it does increase the value of the settlement beyond the 408 number.

Additionally, the class is more than capably represented by Quinn Emanuel, Robbins Geller and Scott & Scott which have substantial experience in securities class actions and, having read many pages of your submissions, I can certainly vouch and confirm that you are highly qualified counsel in this matter. And, as I noted, no class member has objected to the settlement and only six have opted out. A pretty extraordinary response particularly given the sophisticated nature of the class members in this case. See, for example, In Re: Credit Default Swaps Antitrust Litigation, 2016 WL 2731524 at page 8 (S.D.N.Y. April 26, 2016).

Finally, the settlement resulted from arm's length and hard-fought negotiations between highly-experienced counsel. The involvement of Judge Phillips in meditating between lead counsel and at least some of the settling defendants which helped lead to the settlements with HSBC and UBS, at a minimum, provides additional confirmation of the reasonableness of the settlement.

In the final analysis, I find that only one Grinnell factor ultimately weighs against approval, or arguably does,

and that is the ability of the defendants to withstand a greater judgment as there is little doubt here that defendants -- some of the world's largest and most successful banks -- could withstand greater judgments. But, in litigation of this nature, that factor does not weigh heavily in the balance. See, for example, In Re: Veeco Instruments, Inc. Securities Litigation, 2007 WL 4115809 at page 14, (S.D.N.Y. November 7, 2007), and that is particularly so given the substantial non-monetary benefits that plaintiffs obtained from the settling defendants. See In Re: Pressure Sensitive label Stock Antitrust Litigation, 584 F.Supp.2d 697, 702, (M.D. Pa, 2008).

Finally, although it may be the closest question that I am presented with, I find that the plan of distribution is reasonable and rational. In doing so, I recognize that in cases of this sort, "the apportionment of a settlement can never be tailored to the rights of each plaintiff with mathematical precision." In Re: PaineWebber Ltd. Partnerships Litigation, 171 F.R.D. 104, 133 (S.D.N.Y. 1997). Indeed, doing so would undermine one of the principal goals of a plan of distribution which is, 'the equitable and timely distribution of a settlement fund without burdening the process in a way that will unduly waste the fund." That is, Credit Default Swaps Litigation, 2016 WL 2731524 at page 9. Balancing those considerations, a Court "need only meet the standards by which

the settlement is scrutinized, namely it must be fair and adequate. A plan need only have a reasonable, rational basis, particularly if recommended by experienced and competent class counsel." That is from the same page.

Measured against those standards, the plan of distribution here passes muster. It is, of course, recommended by experienced and competent class counsel aided by a well-credentialed expert in the field, and I thank Dr. Fiore for his assistance in helping me understand the basis for the formulas that were used. There, obviously again, have been no objections even though the class members are sophisticated parties and I am persuaded that the division of the class into pools and using the relevant multipliers to account for the relative strengths and weaknesses of each pool's claims is fair and adequate and a rational and reasonable way to approach the matter given the totality of the circumstances. See, for example, In Re: WorldCom, Inc. Securities Litigation, 388 F.Supp.2d 319, 343 (S.D.N.Y 2005) "settlement proceeds may be allocated according to the strengths and weaknesses of the various claims possessed by class members." The plan would certainly or might not suffice if this were the damages phase of a trial as the contrast with the expert report submitted by Dr. Pirrong would suggest. But, given the extreme complexity and practical limitations of this case, given the standards that apply at this stage of the case, I find that it is a

reasonable and rational way to distribute the settlement fund. Accordingly, I approve the plan of distribution.

So, with that, I grant the motion for approval of the settlements. I will defer judgment with respect to the motion for attorneys fees. I am happy to leave it open-ended and, just on the theory that you have some interest in moving forward with that when the time comes, leave it to you to tell me when you think it would be appropriate. I should also say that I'm open to the idea that an award of attorneys fees in part or payment of some or all expenses in part would be appropriate. That is to say that we could approach it on some interim basis if things carry on with respect to the remaining claims in this case. But, I will leave that to you to raise with me in a timely fashion. Maybe the thing to do is to submit a letter or letter motion to me proposing how you think we should proceed at the relevant time and assuming that I agree, we can go from there.

Does that make sense?

MR. BROCKETT: Very good. Yes.

THE COURT: You did submit proposed final judgments and orders with respect to each of the settling defendants. Did you submit those in Word format or just in pdf format to orders and judgments? Does anyone know?

MR. BROCKETT: I believe we just submitted pdfs, your Honor.

THE COURT: If you don't mind, later today perhaps -- I don't think they'll be docketed today given the time of day it is, but if you can submit them by e-mail to my chambers in Word format so it makes things easier in the event I want to make any changes to them?

MR. BROCKETT: Okay.

THE COURT: But, with that, I congratulate everybody here. This is certainly a very complicated matter and I commend you all on your efforts to arrive at today's result, and I do think that it provides substantial benefits to the class and for that reason I am pleased to approve and grant the motion for approval.

Anything else?

MR. BROCKETT: Nothing from the plaintiffs, your Honor.

THE COURT: All right. In that case, I will step down from the bench to let you all clear out. I do have another matter so I would ask you to get out as fast as you can.

With that, congratulations and thank you.

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