Neutral Citation Number: [2016] EWHC 2699 (Comm)

Case No: 2014 FOLIO 1006

IN THE HIGH COURT OF JUSTICE
QUEEN'S BENCH DIVISION
COMMERCIAL COURT

Royal Courts of Justice, Rolls Building
Fetter Lane, London, EC4A 1NL

Date: 28/10/2016

Before:

MR JUSTICE BLAIR

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Between:

LEHMAN BROTHERS INTERNATIONAL (EUROPE) (an unlimited company incorporated under the law of England and Wales) (IN ADMINISTRATION)	**Claimant**
- and -	
EXXONMOBIL FINANCIAL SERVICES BV	**Defendant**

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Mr RHODRI DAVIES Q.C. and **Mr RICHARD MOTT** (instructed by **Travers Smith LLP**) for the **Claimant**

Mr DANIEL TOLEDANO Q.C. and **Mr CONALL PATTON** (instructed by **Norton Rose Fulbright LLP**) for the **Defendant**

Hearing dates: 18th – 21st and 28th July 2016

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Approved Judgment

I direct that pursuant to CPR PD 39A para 6.1 no official shorthand note shall be taken of this Judgment and that copies of this version as handed down may be treated as authentic.

....

MR JUSTICE BLAIR

Mr Justice Blair:

1. This is a dispute between Lehman Brothers International (Europe) ("LBIE"), which was the principal European trading company in the Lehman Brothers group until its failure in September 2008, and ExxonMobil Financial Services BV ("EMFS") which is a financial services arm of the ExxonMobil oil industry group based in the Netherlands.

2. When LBIE went into administration on 15 September 2008, there was an outstanding sale and repurchase ("repo") transaction between the parties under which EMFS had, in effect, lent US$250m to LBIE, and LBIE had, in effect, provided EMFS with collateral in the form of a diversified portfolio of securities consisting of equities and bonds.

3. The repo was entered into under the standard form Global Master Repurchase Agreement ("GMRA") (2000 version). The GMRA is used internationally for such transactions, the current 2011 version being published by the Securities Industry and Financial Markets Association (SIFMA) and the International Capital Markets Association (ICMA).

4. Most of the securities were sold by EMFS on 17/18 September 2008, though some were not sold, and were valued a few days later. The dispute is as to the balance of the account. In cash terms, LBIE says that EMFS owes it US$13,938,198, whereas EMFS says that LBIE owes it US$8,605,108.

5. The dispute raises questions of some complexity as to the construction of the termination provisions in the GMRA 2000 and how these provisions are to be applied in practice, and has also raised issues as to how the securities are to be valued. The issues are agreed between the parties.

6. In summary, EMFS's case is that it validly exercised the Default Valuation Notice procedure in the GMRA. Under this procedure, it valued those securities which had been sold at the sale price, those for which a quotation was obtained (all bonds) at the quoted price, and ascribed a valuation to the remaining securities (also all bonds) for which it was not possible to obtain either a sale or a quotation.

7. In summary, LBIE's case is that EMFS did not validly exercise the Default Valuation Notice procedure in the GMRA. It says that the Default Valuation Notice came after business hours, went to the wrong fax number, and (in respect of the non-US securities) having regard to the "Appropriate Markets" provisions in the agreement, came after the "Default Valuation Time". In consequence the "fair market value" provisions in the GMRA apply.

8. The timing points depend on a prior issue as to when the Default Notice was served, LBIE saying that this happened on 15 September 2008, EMFS saying it happened on 16 September 2008.

9. Finally, there are disputes between the parties as to the valuation of the securities in the event that LBIE is correct in disputing the validity of EMFS's exercise of the Default Valuation Notice procedure in the GMRA. This was the subject of expert evidence.

The proceedings

10. There are few factual disputes between the parties, and the trial was short. Most of the parties' submissions were produced in writing, with some additional submissions provided after closings at the court's request.

11. Two factual witnesses gave evidence. LBIE called Ms Ruth MacLennan, who had been a lawyer with the company at the material time. She gave evidence via a video link from Perth, Australia. EMFS called Mr Kris Sanders, who in September 2008 was the company's Front Office Supervisor with oversight of the dealing room, market research and cash flow forecasting. There are some criticisms of each them made by the parties in their closing submissions, but in the court's estimation, both were good witnesses.

12. As to expert valuation evidence, LBIE's equities expert was Mr Sam Ruiz, a former senior trader with extensive experience in trading equities at major banks. LBIE's bonds expert was Ms Thu-Uyen Nguyen with extensive past experience in trading fixed income securities. EMFS called Dr David Ellis as its expert on both equities and bonds. While he does not have recent trading experience, he has extensive academic and practical consultative experience.

13. Each side strongly criticises the other's valuation witnesses. Whilst they were fluent witnesses, and tried to do their best to assist the court, there is in my view some substance to the criticisms that have been made of them particularly on the following points.

14. It is common ground that there has been a significant change in LBIE's case on the valuation of the equities. LBIE had pleaded a methodology involving a number of days (a "hedging period") to sell down EMFS's holding in each security, so as to minimise the market impact of selling a large holding on a single day. When he came to write his report, Dr Ellis adopted the same approach in his alternative methodology, making adjustments to LBIE's inputs to reflect his own views on valuation.

15. Mr Ruiz however adopted a different approach, considering that the closing price on the primary exchange is all that is needed to value equities, subject to a market impact adjustment to reflect the fact that if the securities had actually been sold in the closing auction at the end of the day, then those sales would have impacted the closing prices.

16. In its written opening submissions, LBIE said in this regard that it "has seen the error of its ways, while EMFS persists in its errors". However, this was not a convincing stance to take—all that had happened was that LBIE had changed its valuation methodology. One of the issues in the case is the application of the "rationality" test to a party's exercise of a contractual discretion. It was put to Mr Ruiz in cross-examination that it could not be said that "no sane person" would have adopted an approach which had previously been adopted by LBIE itself, but he would not agree. Whether or not that is an accurate statement of the "rationality" test, I agree with EMFS that such an extreme position reflected adversely on his overall credibility.

17. Ms Nguyen was the author of an earlier report by her consulting firm produced around February 2014. This report identified a "lower bound" valuation for the bonds that was more favourable to EMFS, but Ms Nguyen did not mention it in her reports

in these proceedings. As EMFS says, nothing had changed to alter the position in the meantime. She said that the lower bound figures identified in 2014 did "not produce a reasonable result", but the fact is that she had put them forward at that time. In cross-examination, she said that it was the "lower bound of the admissible valuations that I could have marked my book without being challenged". As EMFS says, it is therefore hard to see how they could be disregarded, and again, though she was generally a good witness, I consider that this reflected adversely on her overall credibility.

18. The witness who came in for the fiercest attack was Dr Ellis. As regards the alternative methodology he adopts in his reports, one of the adjustments he makes to that originally pleaded by LBIE is to assume that on each day of the "hedging period" a volume equal to 10% as opposed to 20% of the Average Daily Volume (ADV) in the security concerned would be sold. Shortly before trial, LBIE's solicitors asked for his calculations, and found that, in the case of any holding over 10% ADV, Dr Ellis had calculated the point to which the price would have fallen (on his assumptions) at the end of the hedging period and applied that price to the entire holding, including those parts of the holding that could have been sold within the 10% ADV limit on the first day and any other days before the end of the hedging period.

19. The effect is that the entire holding is valued as if it had been sold in one block at the level to which the price is projected to have fallen at the time at which the last share in the holding would have been sold had the holding been sold steadily at 10% ADV per day. To take the holding in a company called Assured Guaranty (which is admittedly the most extreme case), had Dr Ellis applied his approach in the manner which might have been expected, i.e. by assuming sales of up to 10% ADV on each day at the price projected to apply on that day, his discount would be reduced by US$786,816 (this is based on his "Method 2", which assumes no sales on 22 September 2008).

20. EMFS says that the request for Dr Ellis' underlying calculations should not have been left as late as it was, and that his evidence was corrected by his supplementary report of 20 July 2016 produced during the trial. But the fact is that (albeit I accept unintentionally) his report was misleading as to what he had actually done, as he readily accepted. Also, his figures had to be changed, all of which reflected adversely on his overall credibility.

21. I do not however accept LBIE's submission that Dr Ellis' evidence cannot carry any weight. It is not suggested that there is any universally accepted method of valuing stocks or bonds, and despite the shortcomings in his evidence (and there are other points identified by LBIE) he at least showed a degree of flexibility in his approach. For the reasons just explained, so far as this case is concerned, the court cannot unreservedly accept the valuation evidence of either party.

<u>The facts</u>

22. The facts are mainly not disputed and I find them as follows.

23. EMFS forms part of the ExxonMobil oil and gas group of companies. It is a limited liability company incorporated in the Netherlands for the purpose of engaging in financial activity.

24. On 9 January 2008, LBIE and EMFS entered into the GMRA for the purpose of entering into repo transactions.

25. The scale of the Lehman's dependence on repo funding in the period running up to its failure has been widely documented, and nothing more need be said here. On the other hand, this was EMFS's first experience of repo transactions.

26. In anticipation of the GMRA, on 7 December 2007 LBIE, EMFS and JPMorgan Chase Bank, N.A. ("JP Morgan" or the "bank") entered into a Collateral Management Repo Agreement, whereby the bank agreed to provide certain collateral management services in respect of the securities transferred to EMFS by LBIE under the GMRA.

27. The first schedule of the Collateral Management Repo Agreement provided a specification for collateral which would be eligible under the GMRA. Equities were required to be members of at least one major index and individual holdings were subject to concentration limits including a maximum of 75% of 20 days' average daily traded volume (ADV). Similarly, limitations also applied to eligible bonds.

28. Early in 2008, the parties entered into what, in substance, represents the repo transaction in issue in this case. It provided for EMFS to buy a portfolio of securities from LBIE for a Purchase Price of US$250 million, subject to LBIE's obligation to repurchase them (or equivalent securities) 7 days later.

29. It is important to note the disparate nature of the portfolio. It consisted of 181 debt and equity securities, in the form of 163 stocks and 18 bonds from a range of issuers. The stocks were listed on a range of markets in Japan, Australia, Europe and North America, each of course in a different time zone.

30. Over the following months, the parties rolled the transaction over by entering into a new repo each week on largely identical terms.

31. The last rollover is evidenced by a Confirmation dated 5 September 2008. This provided that on 9 September 2008 EMFS would purchase the securities, subject to their repurchase on 16 September 2008. The Repurchase Price payable by LBIE would involve applying a Pricing Rate (similar to interest) of 2.49% p.a. to the Purchase Price of US$250 million.

32. However by 12 September 2008, the extent of Lehman's problems were known in the market. That day EMFS informed LBIE that it would not be rolling over the repo. By Sunday 14 September 2008, EMFS was considering internally the GMRA default process.

15 September 2008

33. On Monday, 15 September 2008, Lehman Brothers collapsed. By order of Henderson J, the appointment of Joint Administrators of LBIE took effect from 7.56 am that day.

34. Early that morning, there was a call between EMFS and someone who worked in the finance division of LBIE's treasury team who said that LBIE would not be able to return the cash advanced by EMFS on 16 September 2008. He confirmed that EMFS should follow the default procedure.

35. By a fax transmission to the fax number ending -2044 (being the fax number specified in Annex 1 of the GMRA for documentation issues) sent to LBIE about 9.22 am London time that morning, EMFS notified LBIE as follows:

> "Re: Default notice following the occurrence of the Event of Default under the TBMA / ISMA Global Master Repurchase Agreement dated January 9, 2008
>
> With immediate effect, [EMFS] hereby serves [LBIE] a default notice as per the [GMRA].
>
> This default notice follows the occurrence of an Event of Default set out in section 10(a) of the [GMRA]. As a result, the repurchase date for all transactions effected under the [GMRA] becomes immediately due.
>
> Further, given the nature of the Event of Default and in line with the Collateral Management Repo Agreement …, please be advised that EMFS has
>
> > (a) as per Section 16(A) of the Agreement, notified the Agent of the occurrence of the Event of Default under the [GMRA]; and
> >
> > (b) instructed the Agent to immediately withhold (and suspend any movement of) any securities on the Collateral Accounts used for the purposes of the transactions under the [GMRA].
> >
> > …"

36. By this point in time, a queue of people had arrived at LBIE's courier desk with such notices, and Ms MacLennan said she was kept busy signing receipts. A large number of notices also started arriving by fax.

37. After taking external legal advice, EMFS decided to prepare a second communication, which stated as follows:

> "We refer to the Default Notice we sent you this morning. With this letter we confirm that the Default Notice is given following the appointment of joint administrators in respect of Lehman Brothers International (Europe) which gives rise to an Act of Insolvency under paragraph 2(a)(iii) of the [GMRA] and which is mentioned as an Event of Default under paragraph 10(a)(iii).
>
> …"

38. During the afternoon and evening of Monday, 15 September 2008, EMFS attempted to send this second communication by fax to the -2044 fax number, but these attempts were unsuccessful, probably because LBIE's fax machine was busy.

16 September 2008

39. At 9.41 am London time on Tuesday, 16 September 2008, EMFS sent the second communication to LBIE by email using the two email addresses specified in Annex 1 of the GMRA.

40. EMFS argues that it was the second communication which constitutes the "Default Notice" for the purposes of the GMRA. If correct, this pushes the timing of the procedure for serving the Default Valuation Notice back a day, supporting its case in relation to that notice.

41. LBIE argues that the communication of 15 September 2008 was a valid Default Notice, and the time for giving the Default Valuation Notice runs from that day.

42. LBIE also submits that the second communication did not constitute a valid Default Notice because it was served by email, which LBIE says is not a permitted method of service for contractual notices under the GMRA.

43. To return to the narrative, having agreed the relevant action points the previous day, on 16 September 2008 EMFS signed a Transition Management Agreement with JP Morgan (which as explained was the collateral agent) under which the latter would act on a best execution basis as EMFS's transition agent to liquidate the portfolio.

44. That afternoon, JP Morgan provided EMFS with a "pre-trade estimate" divided into sections for equities and bonds including information as to how long it estimated it would take to liquidate the portfolio and what it expected to realise. It was agreed that JP Morgan would charge a commission on securities sold of 8 basis points (i.e. 0.08% of the sale proceeds).

45. Discussions took place later that day in which JP Morgan provided explanations of the pre-trade estimate. There was discussion as to whether the bank might buy the whole of the portfolio for its own account (a "block sale"). However, it became clear that the bank could not acquire the bonds and that any quote to acquire the equities would involve a substantial discount. Ultimately, the bank did not provide a quote, saying that the discount would be "too large to be acceptable" to EMFS.

46. Later that day, the bank circulated a revised pre-trade analysis which provided for a more "aggressive" selling strategy:

> "Basically we've pushed the aggressiveness as far as I think it will be possible to achieve (it's hard to estimate how much the market can stand), and hopefully we've got a relatively realistic representation in this analysis. Basically, by increasing the aggression of the trading it looks like it might be possible to complete in 2 days with I estimate around 95% completion after the first day. In reality, I think one of the names may go over to a third day."

47. EMFS agreed this strategy. Mr Sanders told the bank that EMFS was keen to prepare the Default Valuation Notice under the provisions of the GMRA on the basis of all the securities having been sold, which was entirely understandable.

17-18 September 2008

48. On Wednesday, 17 September 2008, JP Morgan started trading the portfolio. EMFS says, and I accept, that the sales proceeds achieved turned out to be significantly lower both for equities and bonds than the pre-trade estimates.

49. The bank reported to EMFS that there was little interest in the bonds because so many other market participants were seeking to exit their own positions, which again seems entirely probable. The dilemma was said to arise from the need to be seen to be in the market trying to sell, but without appearing over-eager so as to drive down the price.

50. As regards the equities, by about the middle of the day London time on Thursday, 18 September 2008, all but two of the United States equities, all of the Australian and Japanese equities, and just under a third of the European equities, had been sold. (They were mostly sold by the end of the day.)

51. However, only a few of the bonds had been sold. During a call at 1.15pm CET, the bank said:

> "Unfortunately as I am sure you've heard from the news headlines there is not a lot of interest in buying fixed income, oh sorry financial instruments and we didn't manage to find any completions or any trades on any of the American names so we will have to be going back into the market again today. Hopefully there is a little bit more interest today."

52. It was said that "everyone has these positions that they need to get out of because of the Lehman situation", and that "screen prices are often higher than the actual trade price", and that they were "trading down in the region of 5-10% probably", though the discounts were "very, very issue specific … very, very instrument specific".

53. Later that evening, the bank circulated a consolidated economics report that detailed the trades that had taken place, and confirmed they would not "fire sale" the bonds. Internal EMFS emails express concern that it was "tight" whether EMFS would be able to realise US$251 million, and reiterated that JP Morgan needed to obtain good prices for the bonds.

19 September 2008

54. On Friday, 19 September 2008, JP Morgan sold all but three of the remainder of the equities. The problems with selling the bonds were discussed with EMFS, the bank saying that the discount against screen prices needed to achieve a sale was "very difficult" to predict and could range from 1-40%, with discounts in the range 5-30% being observed.

55. At 10.24 am CET, EMFS decided to instruct the bank to trade at a maximum discount against screen prices of 5%. Mr Sanders said that the effect of this instruction was that JP Morgan had a mandate to sell, if the price was within the 5% range, but that if they came upon a lower price, they would tell EMFS and seek fresh instructions.

56. EMFS says, and I accept, that this was because selling at larger discounts would have imperilled EMFS'S ability to recover what it was owed by LBIE—at this time, it

would have been a reasonable assumption that repayment would be dependent on such recovery.

57. By now it was apparent that for the purposes of the default valuation procedure under the GMRA, EMFS would not be able to rely (as had been hoped) on actual sale prices for the whole of the portfolio. During a call with the bank at 1.06pm CET on 19 September 2008, when it was again made clear that the bank would not itself be prepared to acquire the bond portfolio, Mr Sanders instructed it to source bids for the unsold securities and to give thought to how they might be valued.

58. At 3.40pm CET on 19 September 2008, EMFS instructed the bank to discontinue bond trading until further notice, though data was requested on bids. EMFS say that this was because of the lack of expressions of interest in the remaining bonds. However, I accept LBIE's submission that it is also clear from the contemporary documents that senior management hoped that "the huge potential bailout being considered by the US government" could restore order to the market.

59. During a further call at 5.08pm CET on 19 September 2008, the bank said that, despite attempting a "full price discovery" on all the remaining bonds, it had been impossible even to get a quote from anyone in the market for some of them, and that it was "very difficult" to come up with a price for those bonds in those circumstances. I am satisfied that this is entirely consistent with the state of the market at this traumatic time.

22 September 2008

60. On Monday, 22 September 2008, EMFS discussed with the bank obtaining bids for the remaining bonds, and in the alternative valuing them. Mr Sanders asked to see whether "firm market levels" (i.e. firm bids at which trades could be executed) could be obtained for the unsold securities. It was understood by both parties that the Default Valuation Notice had to be served by close of business that day.

61. A call took place at 4.09pm CET, which involved the "whole team", certainly on the side of EMFS. By now what was understood to be the deadline for serving the Default Valuation Notice was approaching, and the discussion was as to the bonds, the equities having been sold. The bank said in effect that screen prices on Bloomberg were misleading, since trades could not be executed at those prices. Such bids as were obtained were from a single party.

62. Mr Sanders discussed the discount he was proposing to apply to the unsold bonds for which there were no bids. He explained that the median discount for the bids as obtained for some of the other bonds as compared to the Bloomberg prices (eliminating the effect of the MBIA bond which had a discount from screen to bid of 53%) was 15%.

63. By now, EMFS's senior trader had himself attempted to source quotations from other banks for the unsold bonds without success. Asked in cross-examination about the 40% discount that was in the event applied in the Default Valuation Notice, Mr Sanders said:

> "…we were trying to get bids through our own dealing room, through our pension fund group in the US. We were trying to get quotes from RBS and from Barclays, and only after that, it was very clear to us that nobody, in addition to what JPM already mentioned, was interested to pay anything for it at all".

64. In the light of this, EMFS prepared the Default Valuation Notice ("DVN") for sending to LBIE. The DVN attached three appendices which classified the securities by reference to the sub-paragraphs of paragraph 10(e)(i) of the GMRA:

(1) Appendix 1 identified the 163 equities (the "A1 equities") and 6 bonds (the "A1 bonds") that had been sold (together, the "A1 securities"), and valued them at their sale prices. If the DVN was in time, it is common ground that these values cannot be impugned by LBIE.

(2) Appendix 2 identified 7 bonds that had not been sold, but for which JP Morgan had obtained a bid quotation (which it is not in dispute the bank "refreshed" on 22 September 2008) (the "A2 bonds") and valued them at those quoted prices. EMFS accepts that the DVN is not compliant in this respect, because only one bid quotation was stated, whereas paragraph 10(e)(i)(B) of the GMRA required two.

(3) Appendix 3 identified 5 bonds which JP Morgan had been unable to sell or obtain any bids for (the "A3 bonds") and stated EMFS'S opinion of their value, which involved reducing observed screen prices by 40%. This valuation is challenged by LBIE whether or not the DVN was otherwise valid.

65. Taking account of JP Morgan's commission of 8 basis points and an estimate of the legal fees and internal costs incurred/to be incurred by EMFS, the net shortfall claimed in the DVN was US$9,631,571.18. EMFS says (fairly in my view) that this was a relatively modest shortfall on the US$250m repo, given the very unusual circumstances.

66. By a fax transmission commencing at 5.54pm BST, EMFS sent the DVN to LBIE. The transmission time is shown as 8 minutes and 20 seconds, from which it is to be inferred that the DVN would have been received in full at 6.02pm London time.

67. Attempts by EMFS to send the DVN to the fax machine ending -2044 were unsuccessful, probably because of the volume of faxes with which that machine was contending at the time.

68. The case of EMFS is that it validly served the DVN, and that it was received by LBIE before close of business for the purposes of the GMRA, which EMFS says is to be taken as 7 pm, and that the notice was otherwise valid.

69. LBIE's case is that close of business for this purpose is to be taken as 5 pm and so the notice was late. It was also, LBIE says, sent to the wrong fax machine. Further (in respect of the non-US securities), having regard to the "Appropriate Markets" provisions in the agreement, LBIE's case is that the notice came after the "Default Valuation Time". For these reasons, it says that the notice was invalid, and in consequence the "fair market value" provisions in the GMRA apply.

70. To return to the narrative, EMFS sent a further copy of the DVN to LBIE by email, again using the email addresses specified in Annex 1 of the GMRA. Although EMFS believed until recently that this email was sent at 6.30pm London time, on 7 July 2016 EMFS's solicitors very properly drew attention to the fact that it now appeared that the email had been sent at 7.30 pm London time, so came after the 7 pm close of business cut-off that EMFS is contending for.

Subsequent events

71. On 25 September 2008, EMFS notified LBIE of certain corrections to the DVN which reduced the shortfall said to be owed to US$8,607,324.94.

72. On 1 September 2010, EMFS lodged a proof of debt in the administration of LBIE for the sterling equivalent of the shortfall (£4,798,642.44). No payment has been made to EMFS.

73. On 24 April 2014, LBIE's solicitors notified EMFS that a balance of US$14,888,403.33 was due to LBIE.

74. Negotiations between the parties did not result in a settlement (contrary to what I am told happened in most of these cases), and these proceedings were begun by LBIE on 21 August 2014, close to the expiry of the limitation period.

75. If EMFS is determined by the court to be a creditor of LBIE, I am told that as a result of the success of the administration in collecting assets and resolving over 2,000 other claims, the administration will be able to meet a claim by EMFS, with payments of statutory interest and potentially currency conversion losses.

<u>The issues</u>

76. I summarise the parties' cases in the introductory section below. Their cases break down into numerous issues which were placed before the court for decision.

77. These issues are contained in a list of issues agreed between the parties, and in summary form are as follows:

(1) **Issue 1:** whether the communication of 15 September 2008 or 16 September 2008 was a Default Notice.

(2) **Issue 2**: whether the Default Valuation Notice (DVN) was validly served to the -4034 fax machine.

(3) **Issue 3**: whether LBIE waived any objection to service of the DVN to the -4034 fax machine.

(4) **Issue 4**: time of effective receipt of the DVN.

(5) **Issue 5**: whether the DVN was validly served by email.

(6) **Issue 6**: whether paragraph 14(b) of the GMRA deems the DVN as received at the opening of business on 23 September 2008.

(7) **Issue 7**: whether it was open to EMFS to determine a single Appropriate Market.

(8) **Issue 8**: whether the DVN conveyed a determination of a global Appropriate Market.

(9) **Issue 9**: if the DVN conveyed no determination of Appropriate Market, what are the consequences.

(10) **Issue 10**: what Appropriate Market should be determined.

(11) **Issue 11**: when did close of business in the Appropriate Market occur.

(12) **Issue 12**: was the DVN served before the Default Valuation Time.

(13) **Issue 13**: if EMFS'S valuation of the A3 bonds in the DVN was invalid, what are the consequences.

(14) **Issue 14**: was EMFS'S valuation of the A3 bonds in the DVN valid.

(15) **Issue 15**: if EMFS'S valuation of the A3 bonds was invalid, what valuation should have been given under paragraph 10(e)(i)(C).

(16) **Issue 16**: what is the correct approach to valuation under paragraph 10(e)(ii).

(17) **Issue 17(a)**: would EMFS validly have relied on the actual sale prices for the A1 equities.

(18) **Issue 17(b)**: if the answer to Issue 17(a) is no, how would EMFS validly have valued the A1 equities.

(19) **Issue 18(a)**: would EMFS validly have relied on the actual sale prices for the A1 bonds.

(20) **Issue 18(b)**: if the answer to Issue 18(a) is no, how would EMFS validly have valued the A1 bonds.

(21) **Issue 19(a)**: would EMFS validly have adopted the bid quotations obtained by JPMS as the value of the A2 bonds.

(22) **Issue 19(b)**: if the answer to Issue 19(a) above is no, how would EMFS validly have valued the A2 bonds.

(23) **Issue 20(a)**: if the DVN was invalid, would EMFS validly have adopted the values for the A3 bonds stated in the DVN.

(24) **Issue 20(b)**: if the answer to Issue 20(a) above is no, how would EMFS validly have valued the A3 bonds.

(25) **Issue 21**: what net sum is payable and to whom (for consideration post-judgment).

(26) **Issue 22**: interest on any net sum payable (for consideration post-judgment).

(27) **Issue 23**: is EMFS entitled to legal expenses and compensation for wasted management time (for consideration post-judgment).

Introduction to the discussion of the issues

78. The issues are of some complexity, and this section of the judgment seeks to put them into their commercial context.

79. After LBIE went into administration on 15 September 2008, EMFS along with other creditors served a Default Notice, thereby constituting the appointment of the administrators as an Event of Default.

80. EMFS was seriously exposed under its US$250m repo, and the security it held in the form of the portfolio of securities had to be realised under pressure of time and during conditions of severe market dislocation. EMFS engaged the transition management arm of a leading investment bank, (JP Morgan), to liquidate the portfolio on a best execution basis. It is not in dispute that the bank acted with due skill and care, and by the end of the week, about 86% of the securities, including all the equities, had been sold.

81. As explained further elsewhere in this judgment, part of the time pressure arose from the terms of the GMRA. In summary, under the terms of the agreement the "Default Market Value" of repo securities can be ascertained by one of two routes.

82. The first route is time-limited, in the sense that the notice has to be given within a window. Under paragraph 10(e)(i) of the GMRA 2000, the non-Defaulting Party (here, EMFS) can give a Default Valuation Notice (DVN) in the period between the occurrence of the Event of Default and the Default Valuation Time. The Default Valuation Time is defined by paragraph 10(d)(ii) as "the close of business in the Appropriate Market on the fifth dealing day after the day on which that Event of Default occurs…". This seems to have been taken by EMFS to mean that, where the Event of Default was on Monday, 15 September 2008, the window would close on Monday, 22 September 2008.

83. Under the first route, the value of the securities is based on (A) the net proceeds of sale for securities that have been sold, or (B) the average of quotations received for other securities (where at least two quotations have been obtained) or (C) in respect of securities outside these categories, the non-defaulting party's "reasonable opinion" of the amount which represents their "fair market value".

84. EMFS set out to follow this route. The DVN was sent to LBIE in London on the fifth dealing day after 15 September 2008, that is to say on 22 September 2008. No objection is taken by LBIE to the form of the notice. Appendices 1, 2 and 3 correspond with sub-paragraphs (A), (B) and (C) as prescribed in paragraph 10(e)(i) of the GMRA. The form of the notice is summarised in paragraph 64 above. It seems that the notice was not challenged by LBIE until October 2013.

85. Clearly LBIE (or the administrators) was also concerned to follow the contractual requirements. Nevertheless, EMFS says with force that the valuation based on the price at which the securities were actually sold (that is in respect of the A1 securities) is on the face of it sensible — the sales are not criticised in terms of timing or price or

otherwise. EMFS accepts that an objection arises in respect of the A2 bonds because only one quotation was received as opposed to the contractually required two quotations. However, by the end of the trial it was clear that realistically this carries little weight since second quotes were not obtainable given the exceptional market conditions.

86. The other objection concerns the 40% discount applied by EMFS to the A3 securities for which no quote could be obtained. EMFS justifies it on the basis that it was left holding the bonds in an unpredictable market, but LBIE says a discount of this order cannot be justified. This raises a genuine (and relatively straightforward) issue on valuation, as opposed to one which arises because of the way the notice was served.

87. LBIE's case is that the entire notice is invalid. This is said to follow from (i) the need for service by fax to the correct fax number, and/or (ii) the assertion that the DVN would not have come to the attention of "a responsible employee" until the following morning, and/or (iii) LBIE's case that "close of business" for these purposes was 5 pm in London whereas the notice did not arrive until about 6 pm. Consequently (LBIE argues) the DVN was either never validly served, or is to be treated as served on the following morning, 23 September 2008.

88. If the court rejects its case on these points, LBIE has a further point, and the one which was largely argued in pre-action correspondence. This turns on the effect of the phrase in paragraph 10(d)(ii) which defines when the window closes: "… the close of business in the Appropriate Market on the fifth dealing day after the day on which that Event of Default occurs…".

89. It became clear at the beginning of the trial that LBIE's case is that, given the range of securities in the portfolio, if EMFS wished validly to pursue the first route, either a number of Default Valuation Notices would have had to be given, or if a single notice was given it had to be given, not by Monday, 22 September, as was assumed by EMFS at the time, but by 5 pm on Friday, 19 September 2008. LBIE says that the result is that (if otherwise valid) the DVN was only given in time in respect of the North American securities, because in respect of those securities only, service in London at 6 pm on 22 September 2008 came before the close of business in North America, and so was within the window.

90. The result of these objections, LBIE says, is that the paragraph 10(e)(i) route to valuation is not open to EMFS either in whole or in part. Instead, all the securities fall to be valued under the second route. This route applies if the non-Defaulting Party does not give a Default Valuation Notice within the window. In such a case the GMRA provides that the value of the portfolio is ascertained at the Default Valuation Time (DVT) under paragraph 10(e)(ii) of the GMRA—this refers the issue to a definition of "Net Value" in paragraph 10(d)(ii).

91. In effect therefore, on LBIE's case, the whole valuation question is revisited, including in respect of the A1 securities, though these had already been sold by the time of the notice. The valuation of the portfolio is the subject of the expert valuation evidence which is largely in dispute.

92. As to EMFS, if its case on the first route is rejected, it relies on the wording of the "Net Value" definition, which ascribes a value to securities in "the amount which, in

the reasonable opinion of the non-Defaulting Party, represents their fair market value". EMFS contends that it would have been reasonable to value the securities on the same basis as in the Default Valuation Notice it sent, including valuing the securities that were sold at the actual sale price. LBIE says that this would have been irrational not least because the market moved over the following couple of days between sale and the DVT.

93. There are issues wrapped up in these issues, not all of which need to be identified in this introductory section. A major dispute is whether it was open to EMFS to designate a single, global market as the "Appropriate Market" for all of the equities and bonds. EMFS contends that it was, and that the result is that the Default Valuation Notice could be served up to the close of any market in the world, and so was in time. LBIE denies that this is permissible under the GMRA, and contends that the Appropriate Market has to be ascertained by reference to individual securities.

94. If LBIE is wrong about this, a further point arises on the wording of clause 10(d)(i) of the GMRA, by which Appropriate Market means, "… in relation to Securities of any description, the market which is the most appropriate market for Securities of that description, as determined by the non-Defaulting Party". The issue is as to the Appropriate Market that EMFS *would* have determined.

95. EMFS contends that insofar as it did not actually do so, it would have determined a single Appropriate Market, and that would have been the global market, alternatively the US market.

96. If that contention fails, EMFS accepts that the Appropriate Markets are as pleaded by LBIE.

97. In the course of the proceedings, EMFS raised what was a new point on the Default Notice. As explained above, the communication which EMFS sent LBIE on 15 September 2008 says that it is a "Default Notice", but EMFS's case is that it was invalid as such because it did not contain a statement identifying an Event of Default, nor a statement that such event was to be treated as an Event of Default.

98. The result, EMFS says, is that the Default Notice was not served until a second communication was sent on 16 September 2008, so that "the close of business in the Appropriate Market on the fifth dealing day after the day on which that Event of Default occurs…" was 23 September, not 22 September 2008. Since the Default Valuation Notice was given on 22 September it would be in time, and the only substantial issue remaining on this basis would go to the valuation of the Appendix 2/3 securities.

99. LBIE rejects this argument, maintaining that the communication sent on 15 September 2008 was a valid Default Notice so as to set time running.

100. Finally, there is a body of disputed valuation evidence to consider. The court is not asked to carry out a security-by-security valuation or to calculate values for any securities. After oral closings, at the court's request, the parties submitted a document agreeing high-level points of principle which each party asks the court to decide, summarising each party's case on those points. The court's intention in making this

request was to make dealing with the complex valuation issues raised by the parties a manageable exercise within the short compass of this trial.

Applicable legal principles

101. Both sides accept the accuracy of the legal definition of a repo that I gave in *Första AP-Fonden v Bank of New York Mellon* [2013] EWHC 3127 (Comm) at [290]:

> "In simple terms, a repo is a transaction in which one party sells an asset (such as fixed-income securities) to another party at one price, and commits to repurchase the asset at a different price in the future. Although a repo is structured legally as a sale and repurchase of the securities, it behaves economically like a secured loan, with the securities acting as collateral (see e.g. *DCC Holdings (UK) Ltd v Revenue and Customs Commissioners* [2011] 1 W.L.R. 44, SC ; *In the Matter of Lehman Brothers International (Europe) (in Administration)* [2010] EWHC 2914 (Ch) at [79], Briggs J; and the definition in Directive 2002/47/EC of 6 June 2002 on financial collateral arrangements, Art 2)."

102. The market is a substantial one. LBIE cites statistics to the effect that as at December 2014, the International Capital Markets Association which co-publishes the Global Master Repurchase Agreement (GMRA) identified that the 67 European institutions which replied to its 2014 European repo market survey held over €5.5 trillion in outstanding repos, documented under the 1995, 2000 and 2011 editions of the GMRA. In this instance, the parties used the 2000 GMRA.

103. In interpreting widely used standard form financial contracts of this kind, the court has regard among other things to the need for predictability, recognising the diverse circumstances of the very large number of individual transactions in which the contracts are used. Contractual certainty is particularly important in this type of situation (see *Lomas v JFB Firth Rixson* [2010] EWHC 3372 (Ch) at [53]; *Lehman Brothers Finance SA v SAL Oppenheim* [2014] EWHC 2627 (Comm) at [25(iii)]; and more generally *Rainy Sky SA v Kookmin Bank* [2011] UKSC 50 at [21]; *Arnold v Britton* [2015] AC 1619 at [17]).

The Default Notice: Issue 1

104. Paragraph 10(a)(vi) of the GMRA provides that the following is an Event of Default:

> "an Act of Insolvency occurs with respect to Seller or Buyer and … the non-Defaulting Party serves a Default Notice on the Defaulting Party;"

105. The appointment of the administrators over LBIE on 15 September 2008 was an Act of Insolvency (see the definition at paragraph 2(a)(v)). But unlike e.g the appointment of a liquidator, the appointment of an administrator is not in itself an Event of Default. A Default Notice must be served by the non-Defaulting Party.

106. "Default Notice" is defined in paragraph 2(l) of the GMRA as:

> "a written notice served by the non-Defaulting Party on the Defaulting Party under paragraph 10 stating that an event shall be treated as an Event of Default for the purposes of this Agreement;"

107. The text of the letter sent by EMFS by fax to LBIE at about 9.22 am London time on the morning of 15 September 2018 is set out above. As noted, the heading of the document is, "Default notice following the occurrence of the Event of Default under the [GMRA] dated January 9, 2008".

The parties' contentions

108. EMFS submits that:

(1) On the true construction of paragraph 2(l) of the GMRA, there must be a written notice which contains an express statement that "an event" shall be treated as an Event of Default. This means that the notice will have to state what that event is.

(2) This requirement reflects the fact that paragraph 10(a) makes the service of a Default Notice a precondition to the occurrence of an Event of Default: the non-Defaulting Party is not obliged to treat an Act of Insolvency (for example) as an Event of Default, but has the option to do so.

(3) This requirement also serves the commercial purpose of enabling the recipient to evaluate whether the event in question is one that potentially qualifies as an Event of Default, and thus to assess whether the purported Default Notice is a valid one (*Laminates Acquisition Co v BTR Australia Ltd* [2004] 1 All ER (Comm) 737 at [29]).

(4) It is clear that EMFS's doubts about the validity of the notice were contemporaneous, which is why it prepared and sent the second communication specifying that it was the appointment of joint administrators of LBIE that constituted an Event of Default under the GMRA.

(5) It is irrelevant that a Default Notice may have to be given urgently, because the definition is clear and simple.

(6) EMFS's case is consonant with authority, see the statement at §17.15 of *Lewison on The Interpretation of Contracts* (6th Ed) that "An option to terminate is construed in the same manner as any other option, and accordingly any condition must be strictly complied with" (see also *Mannai Investment Co Ltd v Eagle Star Life Assurance Ltd* [1997] AC 749 at 768).

(7) That a repudiatory breach may be accepted without any form of notice tells one nothing about how to construe an express contractual power which depends on the service of written notice. The latter, unlike the former, is governed by the requirement for strict compliance.

(8) There is no relevant distinction between the definition of Default Notice and the requirements for a "Special Default Notice" under paragraph 14(c) of the GMRA.

(9) The recipient (who may wish to challenge the declaration of an Event of Default) is also entitled to know precisely where he stands on receipt of the notice. An informative Default Notice will serve this purpose, while an uninformative one is a recipe for confusion and uncertainty.

109. As to whether the letter of 15 September 2008 complied with the definition, EMFS submits that:

(1) It contains no statement identifying any relevant "event" nor any statement that such event is to be "treated" as an Event of Default. It does not, therefore, constitute a Default Notice.

(2) Although the recipient would understand that EMFS intended the letter to be a Default Notice, the label used is not conclusive: what matters is whether, in substance, the document falls within the contractual definition, which it does not.

(3) The words "given the nature of the Event of Default" do not point to the appointment of administrators, and it is not enough to hint at an event. The event must be stated for the definition to be satisfied.

(4) *Mannai* is consistent with this, because the lease in question did not impose any formal requirements as to what a notice should state. The notice stated the wrong date, and the court was prepared to overlook the error because the notice left the landlord in no reasonable doubt that the right to determine the lease was being exercised.

(5) This and other cases do not in any way detract from the need for strict compliance where the contract does prescribe a formal requirement for a valid notice (*Mannai* at [776]), or where the case is one where it is an indispensable condition that the notice should contain specific information (see e.g. *Burman v Mount Cook Land* [2002] Ch 256).

(6) The GMRA, like the statute in *Burman*, but unlike the lease in *Mannai*, requires the Default Notice to "state" certain things, and the letter of 15 September does not.

110. LBIE submits that:

(1) EMFS seeks to read into the definition of "Default Notice" a requirement to "identify an event", which is not contained in the express words of the clause.

(2) The emphasis of the wording is on the treatment of an event as (i.e. the designation of) an Event of Default, not on the "event" is which is being so treated.

(3) Since the letter conveyed clearly to LBIE what the Event of Default was said to be, EMFS has to contend that the word "stating" does not merely require a

certain meaning to be conveyed to the recipient of the notice, but that it requires a certain matter to be specified expressly in the notice itself.

(4) Authorities such as *Mannai Investment Co Ltd v Eagle Star Life Assurance Ltd* [1997] AC 749 and *Rennie v Westbury Homes (Holdings) Ltd* [2007] 2 P. & C.R. 12 establish that (i) contractual notices must be construed against the relevant factual background, with the focus on the meaning that the notice conveys rather than the matters expressly stated in the notice, and (ii) it is formalism to suggest that a notice which conveys the required meaning is invalid because it does not use a particular verbal formula.

(5) EMFS is obliged to contend that the requirements it is seeking to imply into the definition of "Default Notice" are "indispensable conditions", within the meaning of that phrase in *Mannai* at p.767.

(6) EMFS accepts that, when it says that the mandatory requirement it contends for is an "indispensable condition", it means a condition of the "blue paper/pink paper" kind referred to in *Mannai*.

(7) Commercial lawyers are familiar with "indispensable conditions" in the context of notices, but usually in respect of some easily verifiable requirement (as in Lord Hoffmann's blue paper/pink paper example). But an "indispensable condition" that a notice expressly specifies something is rare, because if the notice succeeds in conveying the required meaning, there can be no sensible reason for an additional requirement that a specific (and no other) form of words be used.

(8) The GMRA does not say that a Default Notice has to "identify" any particular facts relied on. It requires that a qualifying event shall have occurred and that the non-Defaulting Party shall have served a Default Notice which states that that is the case. There is not a requirement to specify the facts relied upon. On EMFS's case, the definition would have to say:

> "a written notice ... under paragraph 10 [identifying the facts relied upon as constituting a potential Event of Default and] stating that [such facts] an event shall be treated as an Event of Default for the purposes of this Agreement."

(9) Acceptance of a repudiatory breach of contract need not take any particular form (*Chitty on Contracts* (32nd ed), [24-13]). Furthermore, a termination can be justified by a good reason even if no reason or a bad reason has been given at the time (*Chitty*, [24-13]). Those being the common law rules, it cannot be necessary to read such unnecessary complications into the GMRA.

(10) As to commercial purpose, if the alleged Defaulting Party did not believe it had defaulted it would doubtless seek further information immediately.

(11) There is no obvious reason why a Defaulting Party is entitled to precise details of its default; the common law has never felt it appropriate to impose such an entitlement; and the GMRA does not provide for any express contractual

machinery by which a Defaulting Party can challenge the designation of an Event of Default.

(12) Support is to be found in paragraph 14(c) of the GMRA which deals with the requirements for a "Special Default Notice" when a counterparty cannot be served by the prescribed methods. A Special Default Notice is defined as one which "specifies the relevant event referred to in paragraph 10(a) which has occurred". EMFS is seeking to read in words which are present in the definition of a Special Default Notice but which are not present in the definition of an ordinary Default Notice.

(13) EMFS's construction creates a trap for those seeking to serve Default Notices, often in circumstances of considerable commercial pressure when a potential default has occurred and it is necessary to take swift action. If it is to be essential to the validity of a valid notice under paragraph 10(a) that it should specify facts, that requirement should be spelled out plainly in the contract so that the users of the GMRA can understand it without the need for specialised legal advice.

(14) EMFS's approach opens up an unnecessary area of complication. If the notice has to specify the facts relied upon as an Event of Default, then there will inevitably be cases where the wrong facts, or slightly wrong facts, are specified. The result will be to create uncertainty.

(15) LBIE relies on *Rennie v Westbury Homes (Holdings) Ltd* [2007] 2 P. & C.R. 12 at [21], and on appeal at [2007] EWCA Civ 1401 [15]. This is not a case of "indispensable conditions". The definition of a "Default Notice" as one stating that an event shall be treated as an Event of Default simply describes what it is that the notice must convey to the recipient. Here, there can be no doubt that the 15 September 2008 letter conveys to the reader that EMFS wished to treat an event as an Event of Default (e.g. *Savings Bank of the Russian Federation v Refco Securities LLC* [2006] EWHC 857).

(16) As to whether the letter of 15 September 2008 complied with the definition, if EMFS submits that the notice had to use the exact form of words used by the definition, then there was never a valid Default Notice since neither the 15 September nor the 16 September 2008 letter uses that form of words. If EMFS means that the 15 September letter failed to communicate that EMFS was seeking to declare an Event of Default that is unsustainable, because the content of the letter makes it plain that this was what EMFS was trying to do.

<u>Discussion and conclusion</u>

111. Termination clauses in financial contracts such as the GMRA are not subject to any particular rules of construction. (Contrast for example, break clauses in leases, as explained in *Mannai Investment Co Ltd v Eagle Star Life Assurance Ltd* [1997] AC 749, and notices to exercise options in leases, which may fail for technical reasons as in *Friends Life Ltd v Siemens Hearing Instruments Ltd* [2014] EWCA Civ 382.)

112. There is good reason for this. Financial contracts like the GMRA are standard form contracts drafted under the auspices of industry associations such as the International

Capital Markets Association, and reflect the perceived needs of users. Further, the form of the contracts evolves in the light of experience, as with the GMRA in its three versions, 1995, 2000 and 2011. The terms are carefully drafted to reach particular outcomes. In the case of termination notices, requirements of more or less formality can readily be imposed. Those responsible for drafting the terms are well aware of the competing considerations—for example the desirability of clarity, but also the realities of use under time pressure—and are in the best position to balance them for the type of transaction concerned.

113. In legal terms, the principles applicable to contractual termination notices in general are equally apt to apply to such notices in financial contracts of this kind. These principles are summarised in *Lewison on The Interpretation of Contracts* (6^{th} Ed) at §17.16:

> "Where a contract contains a termination clause no particular formality is necessary (unless the contract so provides) to exercise the right. Any communication which clearly conveys that the right is being exercised will suffice. Nevertheless in interpreting a termination clause the court must still adopt a commercially sensible interpretation. In determining whether a termination clause has been validly exercised, there must be substantive compliance with the contractual provisions, and any notice exercising the right to terminate must be in sufficiently clear terms to communicate to the recipient clearly the decision to exercise the contractual right to terminate. It is, however, a question of interpretation of the contract whether each and every specific requirement is an indispensable condition which renders termination ineffective in the absence of full compliance. But any interpretation needs to be tempered by reference to commercial common sense."

114. EMFS says (fairly in my view) that the issue begins and ends with the definition of Default Notice in paragraph 2(l) of the GMRA. It points in particular to the words "…*stating* that *an event* shall be treated as an Event of Default …" (italics added). It follows, EMFS contends, there must be a written notice which contains an express statement that "an event" shall be treated as an Event of Default. This means that the notice will have to state what that event is. It points out that ten separate Events of Default are listed in paragraph 10(a), of which an Act of Insolvency is one.

115. LBIE's answer is that the GMRA does not say that a Default Notice has to "identify" any particular facts relied on. Paragraph 10 simply requires that a qualifying event shall have occurred and that the non-Defaulting Party shall have served a Default Notice which states that that is the case. The definition of a Default Notice at paragraph 2(l) refers to "a written notice ... under paragraph 10 stating that an event shall be treated as an Event of Default for the purposes of this Agreement" but that is not a requirement to specify the facts relied upon.

116. The issue is, as EMFS says, a short one. I broadly accept LBIE's case as to construction. In accordance with the contractual definition of Default Notice, the notice has to state that *an* event is being treated as an Event of Default, but it does not have to identify the specific event. The notice must clearly convey to the recipient that

the non-Defaulting Party is treating an event as an Event of Default for the purposes of the agreement, but no particular form of words is prescribed. This construction is in accordance with the approach taken in *Rennie v Westbury Homes (Holdings) Ltd* [2007] 2 P. & C.R. 12 at [12], and on appeal at [2007] EWCA Civ 1401 at [15].

117. I agree with LBIE that this construction is also supported by the different language used in paragraph 14(c) of the GMRA.

(1) This provides for the giving of a "Special Default Notice" where the non-Defaulting Party has made all practicable efforts to serve a Default Notice by one of the methods specified in the agreement but has been unable to do so.

(2) A Special Default Notice by paragraph 14(c)(aa) is one which "*specifies* the relevant event referred to in paragraph 10(a) which has occurred" (italics added).

(3) Similarly, paragraph 14(c)(dd) refers to "the event *specified* in accordance with sub-paragraph (aa) above..." (italics added).

118. EMFS contends there is no relevant distinction for present purposes between the definition of "Default Notice" and the requirements for a "Special Default Notice". Though expressed in different words, the meaning is the same: the relevant event must be stated, and there must be a statement that it shall be treated as an Event of Default.

119. I do not accept this contention. The different language is clearly intended to have a different effect in the particular context. A Special Default Notice is one which "specifies the relevant event referred to in paragraph 10(a) which has occurred", but no such requirement subsists in the case of a Default Notice.

120. None of the points raised by EMFS displace this conclusion. The "Default Notice" sent by EMFS on 15 September 2008 was therefore valid as a written notice under paragraph 10 of the GMRA.

121. If contrary to this view, it was necessary for a valid Default Notice to convey to the recipient the identity of the event relied upon, I am satisfied that given the background knowledge available to both parties on 15 September 2008, the letter of 15 September 2008 plainly conveyed that EMFS was relying on the appointment of administrators to LBIE, just as it conveyed that EMFS wished to treat the event as an Event of Default. There really cannot have been any doubt about it. See in this regard *Savings Bank of the Russian Federation v Refco Securities LLC* [2006] EWHC 857 at [27], *Vivergo Fuels Ltd v Redhall Engineering Solutions Ltd* [2013] EWHC 4030 (TCC) at [420].

122. In these circumstances, I need not deal with LBIE's contention that the further communication sent by to LBIE by email on the morning of 16 September 2008 was (at least taken by itself) not compliant with the contractual requirements. Nor need I deal with LBIE's case as to waiver and estoppel.

123. There is one other point on which I would comment. As a matter of fact, the further communication of 16 September 2008 was sent by email because the fax machine identified in Annex 1 of the agreement for the purposes of sending notices was busy.

124. LBIE contends that email is not a valid method of serving a contractual notice under paragraph 14 of the GMRA.

125. If I had had to decide the point, I would not have accepted this contention. Under paragraph 14(b)(v), notices are effective if sent by "electronic messaging system". As used in the GMRA 2000, there is no reason why this phrase should not include email (see e.g. Firth, *Derivatives Law and Practice*, §19-064, fn. 2 in the context of the phrase "electronic system" in paragraph 2(xx)). It may be noted that an amendment has been introduced into the 2011 version of the GMRA which expressly contemplates the delivery of notices by email.

126. A different conclusion was reached in the context of a 1992 ISDA Master Agreement in *Greenclose Ltd v National Westminster Bank PLC* [2014] EWHC 1156 (Ch). However, standard financial contracts of this kind may or may not permit the giving of notices by email—it depends on their terms. In that regard, there is a point of distinction between the agreement in *Greenclose* and the GMRA. Annex 1 of the GMRA sets out addresses for notices and includes email addresses—the email sent by EMFS on 16 September 2008 was directed accordingly. By contrast, the Schedule to the ISDA Master Agreement in *Greenclose*, which like Annex 1 to the GMRA was required to contain the contact details for service of notices, did not specify any email addresses (see [125]). There would be no reason for including email addresses in Annex 1 of the GMRA if notices could not validly be sent by email, and in my view they could be.

<u>The Default Valuation Notice issues: Issues 2 to 6</u>

127. There are three substantive issues raised by LBIE under this head, which are said to have the effect of invalidating the Default Valuation Notice entirely. Each raises points of some significance on the standard form agreement. They go to alleged non-compliance as regards service of the Default Valuation Notice, or the time when such service took effect. If it took effect on 23 September 2008, then (because of my finding that the Default Notice was given on 15 September 2008) it is not in dispute that this is after the Default Valuation Time in respect of all the securities (including the North American securities), and so the DVN would fall outside the window.

(1) The faxed DVN went to a different fax machine

128. Paragraph 14(a) of the GMRA provides so far as relevant that "any notice or other communication to be given under this Agreement- ... (iii) shall be sent to the party to whom it is to be given at the address or number, or in accordance with the electronic messaging details set out in Annex I hereto".

129. As regards faxes, Annex 1 specifies the fax number ending -2044.

130. The facts are set out above. On the afternoon of 22 September 2008, efforts by EMFS to send the Default Valuation Notice to the fax machine ending -2044 were unsuccessful, probably because of the volume of faxes with which that machine was

contending at the time. It was however successfully sent to another fax machine at the same office ending in -4034, from which, as it happens, LBIE had sent a letter on 18 September 2008 acknowledging receipt of the Default Notice.

131. However LBIE says that the sending of the notice to the specified number is a mandatory requirement, and that the fact that the notice was sent to a different number is dispositive of the validity of the DVN in its entirety. It was submitted that service would be bad even if a LBIE employee had been told to stand beside the fax machine to receive incoming notices because the stipulated number was engaged, or even if the machine with the specified number was broken.

132. In response, EMFS relies on paragraph 14(b) of the GMRA, which goes on to deal with the time at which the notice "shall be effective":

(1) Paragraph 14(b)(iii) provides that a faxed notice is effective "when the transmission is received by a responsible employee of the recipient in legible form". It follows, EMFS submits, that, in the case of a fax, actual receipt is the touchstone for effective service.

(2) The point of the provision in paragraph 14(a)(iii) that a notice "shall be sent" to the recipient using the details contained in Annex 1 of the GMRA is that using the Annex 1 contact details was the most likely means of ensuring that a notice would actually be received by LBIE: *Yates Building Co v RJ Pulleyn & Sons* [1976] 1 EGLR 157 at 158. It makes no commercial sense to construe paragraph 14(a)(iii) as meaning that, where different contact details are used and actual receipt is achieved, the notice should be ignored.

133. Notwithstanding the practical problems that it may entail, I think that LBIE is correct to say that to be effective under the provisions of paragraph 14 of the GMRA, a faxed notice must be sent to the number set out in Annex 1 (as to the ISDA Master Agreement, see *Henderson on Derivatives* (2nd Ed), §17.12 at page 864). As LBIE says, paragraph 14(b)(iii) is concerned with the time when the notice is effective, but does not obviate the requirement to send it to the specified number. This follows from the words "*shall* be sent" in paragraph 14(a)(iii). The practical problems are to a degree addressed in paragraph 14(c) of the GMRA, which provides for the situation where the non-Defaulting Party has made all practicable efforts to serve a Default Notice by one of the methods specified in the agreement but has been unable to do so. Then a different method can be used.

134. Equally, as EMFS says, and is not disputed, the requirement can be waived. Indeed, one might expect it to be waived where a fax is sent to another machine in the same office because the contractually specified machine is busy.

135. Here, the notice was sent on 22 September 2008, and it was received and logged by LBIE in the usual way. No point was taken that it was invalid as having gone to the wrong fax machine then or subsequently. It is important to note that LBIE's Particulars of Claim served in December 2014 are premised on the effectual service of the notice, because it is pleaded that "LBIE accepts the validity of the Default Market Values stated in the Default Valuation Notice for the North American Securities".

136. LBIE says that it did not realise that the fax went to the other number because the notice and fax cover sheet referred to the -2044 number: the position only emerged on a review of EMFS's disclosure containing the fax transmission sheet. The point was then pleaded by Amended Particulars of Claim in May 2015.

137. That may be so, but it was in my view far too late to take the point then, some six and a half years after the fax was sent. If a point as to the fax number that a notice is sent to is to be taken, it should be taken promptly. It was not taken for the very good practical reason that the fax was duly received and logged, and no one thought to challenge it. I agree with EMFS that on these facts LBIE waived the requirement for the DVN to be served at the fax number specified in Annex 1 of the GMRA. It did so either by inaction over time, or alternatively by its pleading based on the premise that the DVN was served by a valid method on 22 September 2008.

(2) When the fax was received by a responsible employee of LBIE

138. On the basis that the DVN was validly served by fax, the next issues concern the date on which it is to be treated as having been given. The issues are whether LBIE is right to say that the DVN sent on 22 September 2008 was received (for the purposes of the GMRA) on the next day because either:

(1) It was only on the next day that the fax reached a responsible employee of LBIE in accordance with 14(b)(iii); or

(2) The fax was received after close of business in London, so that, under the proviso to 14(b), it is to be treated as having been received the next day.

139. This section of the judgment deals with the first of these points. The second is dealt with in the next section.

140. Dealing with when notices are effective, paragraph 14(b)(iii) of the GMRA provides:

> "Subject to sub-paragraph (c) below, any such notice or other communication shall be effective –
> ...
> (iii) if sent by facsimile transmission, at the time when the transmission is received by a responsible employee of the recipient in legible form (it being agreed that the burden of proving receipt will be on the sender and will not be met by a transmission report generated by the sender's facsimile machine); ..."

141. This was the subject of evidence from Ms MacLennan. Though she suggested in her witness statement that she believed it likely that the fax would have been retrieved on the morning of 23 September 2008, not surprisingly given the number of notices that were coming in that this time, and the time that has gone by since all this happened, she accepted in cross-examination that she had no personal knowledge as to this particular fax.

142. The evidence is that the fax machine which received the fax from EMFS was on the same floor as Ms MacLennan's group, the Capital Markets Contracts Legal group

(CMCL) albeit within the area of the Compliance group. The CMCL group were largely keeping their contracted hours despite having no assurance that that they would be paid. The commitment of that group, in my opinion, enabled a semblance of order in very difficult circumstances to continue, and in particular as regards the receipt and logging of the notices that were pouring in.

143. LBIE submits that the court should find that the DVN was only received by a responsible employee on the morning of 23 September 2008, but this is based on Ms MacLennan's belief, and she has no personal knowledge.

144. In fact, the evidence supports the opposite conclusion. Ms MacLennan accepted that the fax machines being used by the CMCL personnel included the -4034 machine. She was working, and she thought that probably a majority of the CMCL team were working, which was a large team. She understandably had no recollection of how late she worked on 22 September 2008, but given the conscientious response of the group, and the volume of material to be processed, I agree with EMFS that it is inherently improbable that she or her team would have been clocking off promptly at 6pm. It is much more likely that they would have worked until later, particularly taking account of the fact that in contractual terms this was a significant day in respect of GMRA repo contracts as being the fifth dealing day after the company went into administration.

145. Paragraph 14(b)(iii) provides that the burden of proving receipt of the fax is on the sender. This is clearly the civil law "balance of probabilities" burden of proof. I am satisfied that the faxed notice was received by a responsible employee of LBIE when or shortly after it arrived at 6.02 pm on 22 September 2008.

146. That being so, I need not deal with EMFS's contentions that on the true construction of the provision, it was sufficient if the fax was in legible form, and that in any event LBIE cannot rely on its failure to ensure that the fax was properly received if in fact it was not (*The Brimnes* [1975] QB 939 at 966-7).

(3) Whether the notice was received after close of business

147. As noted, paragraph 14(b) of the GMRA which provides for the time when notices are effective has a proviso. Where it applies, this pushes the deemed time of receipt back to the opening of the next business day by providing an exception by which:

> "any notice or communication which is received, or delivery of which is attempted, after close of business on the date of receipt or attempted delivery or on a day which is not a day on which commercial banks are open for business in the place where that notice or other communication is to be given shall be treated as given at the opening of business on the next following day which is such a day."

148. The Default Valuation Notice was received by fax at 6.02 pm on 22 September 2008 at the place where under the contract the notice had to be given, namely LBIE's London offices. The question is therefore whether close of business in London was earlier than 6.02 pm. LBIE contends that close of business in London is 5.00 pm. EMFS contends that it is 7.00 pm.

149. The reference to "commercial banks" in the proviso to paragraph 14(b) applies to the situation in which a notice is served "on a day which is not a day on which commercial banks are open for business in the place where that notice … is to be given". LBIE says that nonetheless the reference to commercial banks "gives colour" to the concept of close of business, and EMFS says that close of business in fact refers to close of business for commercial banks in London, which was originally the position taken by LBIE itself.

150. LBIE submits that in construing the term "close of business", commercial sense leans towards an earlier rather than a later time. I do not accept that. As EMFS says, from its perspective as the non-Defaulting Party, a later time makes commercial sense, and this submission begs the question for decision.

151. LBIE submits that if a reasonable person was asked at what time close of business occurred in London, 5.00 pm (at the latest) is the obvious answer, and that accordingly, "5.00 pm is the candidate to beat". I do not accept that either. In the context of financial business of the kind at issue in this case, repo financing extended by an oil major to an international investment bank, a reasonable person might be surprised to hear that business closes at 5 pm. In fact, it does not, and I do not understand this to be in dispute.

152. In my opinion, the term "close of business" on a particular day or date is a useful term which is used in many different contexts, including court orders. The present context is as to the time of receipt of notices in a standard form financial contract. Where the intent of such a contract is to impose a definite cut-off time in this regard, it can do so expressly. So on LBIE's case, the proviso could have referred to a communication "received after 5 pm on the date of receipt". The fact that the contract does not state a time, and uses the term "close of business" instead, gives a useful flexibility, and should deter arguments based on the precise time of receipt, which may make little commercial sense.

153. I accept EMFS's submission that the onus is on LBIE, as the party alleging that the DVN arrived too late, to establish when close of business occurred, and that it has not adduced any admissible evidence on when that point in time occurs. That is sufficient to decide the point in favour of EMFS.

154. So far as the issue is as to close of business for "commercial banks" in London, LBIE submits that this "points towards what might be called normal business hours, such as are worked by ordinary businesses and High Street banks, rather than the more all-consuming hours worked by investment bankers, commercial lawyers and the like. This is, therefore, a further pointer towards 5.00 pm (if not earlier)".

155. Again, I do not accept this. Though there was a working definition from the Financial Times Lexicon put before the court, the term "commercial banks" does not have any particular meaning in English law. Though explaining their personal experience, LBIE's experts (understandably) did not give evidence on the subject. The only evidence came from Dr Ellis, who said that though this is a necessarily rough approximation, in the modern world commercial banks close at about 7 pm. Whilst making it clear that this is a finding of fact limited to this case, I see no reason not to accept his evidence, and I do so.

156. It follows that I am satisfied that the notice was received by LBIE before close of business on 22 September 2008, and is not to be treated as given at the opening of business on 23 September 2008.

Determination of the "Appropriate Market": Issues 7-12

Introduction

157. These issues go to whether the Default Valuation Notice was given within the contractual window, which (as I have held) opened on 15 September 2008 when the Default Notice was given. Reference is made to what is said above in the introduction to the discussion of the issues.

158. Specifically, the issues concern when the window closed. The notice was received at 6.02 pm London time on 22 September 2008, which LBIE accepts was in time for the North American securities, because the time difference means that the markets there closed later in the day. However, LBIE says that the notice was not served in time for the *non*-North American securities, which account for the considerable majority.

159. EMFS says that the notice was given in time for all the securities, but if not, it accepts LBIE's determination of the Appropriate Market by reference to the individual securities.

160. The first question is whether it was open to EMFS to determine a single Appropriate Market, that is "the global market" alternatively "the US market", for all the equities and bonds. This is Issue 7, and LBIE says the answer is no. It depends on the construction of the contractual provisions as to "Appropriate Market" in the light of the expert evidence.

161. If the answer is no, it is common ground that LBIE's security by security analysis applies.

162. If LBIE is not right about Issue 7, then, after Issue 8 (whether, on its true construction, the Default Valuation Notice conveyed a determination of the "global market" and that was permissible) and Issue 9(a) (LBIE's case for an objective determination), there come the issues as to the Appropriate Market or Markets that EMFS *would have* determined if it had complied with the terms of the GMRA (Issues 9(b) and 10).

163. The remaining issues under this head are as to what Appropriate Market should be determined (Issue 10), and when close of business in the Appropriate Market occurred, and whether the DVN was given before the DVT (Issues 11 and 12).

164. In relation to the "*would have*" issue, at the court's request the parties provided further written submissions after oral closings, which I have taken fully into account.

The parties' cases and their consequences

165. In determining the *actual* deadline for the service of the DVN, it is common ground that account has to be taken of the provisions as to "Appropriate Market" together with paragraph 14(b) of the GMRA which deals with the time at which notices are effective at the place of service. The latter provisions have been identified above.

166. LBIE accepts that the consequence of its case that the Appropriate Market has to be ascertained on a security by security basis is that the actual deadline for giving the DVN (taking account of paragraph 14) depends upon the time zones in the Appropriate Market together with that in the place where the DVN is to be given (London).

167. Where, as here, multiple securities in different time zones are comprised in the repo, working out the deadline on this basis becomes complicated. I need not go into the details, which were set out in LBIE's closing submissions. But to take a particular example which was raised at trial, LBIE says that if the Appropriate Market is in Japan (which is 9 hours ahead of London) and the place for service is in London, then close of business in the market will be (on LBIE's case) 3.00 pm in Japan, which is 6.00 am in London. LBIE says that as 6.00 am in London is not during working hours, the notice would need to be served in London before the close of business in London on the previous working day, which, in this case was the previous Friday, that is 19 September 2008.

168. I do not necessarily accept this analysis, which involves the concept of opening as well as close of business (and as a matter of detail, the time difference between London and Tokyo in September is 8 not 9 hours). But the analysis was not specifically challenged by EMFS, which did however rely on the complexity as supporting its own case. It says that LBIE's construction is unworkable.

169. LBIE responds that a non-Defaulting Party can give more than one DVN so that, for example, securities sold in Japan could be the subject of a first DVN and securities sold in the United States could be the subject of a second DVN, provided that both were served before the deadline of close of business in London.

170. On the other hand, LBIE was asked during the trial whether in fact it ever received more than one DVN. No clear answer was given, and it is a reasonable inference that it did not.

171. EMFS's contention is that it was open to it under the GMRA to determine a single "Appropriate Market" for the securities, being the global market, alternatively the US market. On this approach, it says that the complexities attendant on LBIE's case are avoided.

172. LBIE responds that even on EMFS's case the 'Global Market' and the US Market both close at 7.00 pm in New York. As that is midnight in London, it is by that time too late to serve a DVN in London so that the DVN must be served at least 5 hours earlier (assuming, as EMFS contends, a 7.00pm close of business in London), i.e. before 2.00pm in New York.

173. In short, EMFS's response is that though a few hours may be shaved off the available time, this is not comparable to the complexity inherent in LBIE's construction.

174. I need not decide the detailed points raised. The key point, to stay with the example of Japanese securities, is that if LBIE is correct that Appropriate Market has to be determined security by security, then the Default Valuation Notice given at 6.02 pm London time on 22 September 2008 fell well outside the window in respect of those securities. This is not in dispute.

175. It is sufficient to say that in my view, the exercise of giving a Default Valuation Notice is relatively straightforward on EMFS's construction. There can be no question, however, that in the case of a portfolio of the diverse nature involved in this case, LBIE's construction gives rise to a relatively complicated exercise to ascertain the deadline (or deadlines) for giving the notice.

176. EMFS says that the conclusion "that the DVN (or at least the first of multiple DVNs) needed to have reached LBIE by 5pm on Friday, 19 September 2008 … would come as an unwelcome and potentially calamitous shock to any reasonable industry user of the GMRA, conscious of being afforded 'five dealing days' to lodge the DVN". It says that LBIE's analysis is barely workable, and that where the analysis of commercial contracts leads to a conclusion that flouts business common sense, the analysis must be made to yield to business common sense.

177. My view is as follows. Clearly the court will seek to avoid a conclusion that "flouts business common sense". Nevertheless, ultimately the question is one of construing the contract, and applying the terms.

178. There is some indication that timing issues on this aspect of GRMA 2000 have been recognised and addressed by those responsible for its drafting. The Guidance Notes for use with the Global Master Repurchase Agreement (2011 version) state that:

> "The procedure for the calculation of the close-out amount has been amended in the 2011 Version, amongst other things, to provide more flexibility to the non-defaulting party as to the default valuation time. The non-defaulting party calculates the close-out amount by reference to an actual sale or purchase price or, if the non-defaulting party chooses, the market value of the securities, in either case at any time "on or about the Early Termination Date" (as opposed to the requirement under the 2000 Version that this be during the five dealing days following the occurrence of the Event of Default)."

This however was not the subject of comment by the parties, and no more need be said.

The contractual provisions

179. Paragraph 10(e)(i) of the GMRA defines the time window for giving a Default Valuation Notice:

> "If between the occurrence of the relevant Event of Default and the Default Valuation Time the non-Defaulting Party gives to the Defaulting Party a written notice (a "Default Valuation Notice") which – …".

The requirements as in (A), (B), and (C) are then set out as summarised above. (No issue arises as to the form of the DVN.)

180. Paragraph 10(d)(ii) provides that:

> "the "Default Valuation Time" means, in relation to an Event of Default, the close of business in the Appropriate Market on the fifth dealing day after the day on which the Event of Default occurs ...".

181. Paragraph 10(d)(i) provides that:

> "the "Appropriate Market" means, in relation to Securities of any description, the market which is the most appropriate market for Securities of that description, as determined by the non-Defaulting Party".

182. The words "as determined by the non-Defaulting Party" give that party a discretion, and an issue arises as to how this applies in present circumstances.

<u>Whether it was open to EMFS to determine a single Appropriate Market: Issue 7</u>

183. In its closing submissions, EMFS took the questions in a somewhat different order than in the agreed list of issues, but I do not think it made any practical difference. I shall stick to the order in the list.

The expert evidence as to "global market" and the parties' cases in this respect

184. Each party's case on the "global market" in equities and bonds was largely based on their expert evidence, which as developed by the parties in their submissions was as follows.

185. Among other things, Dr Ellis (EMFS's expert) pointed out that listed equities are often not confined to a single stock exchange, with cross-listing on multiple exchanges. An investment bank such as JP Morgan, when instructed to liquidate a portfolio, will apply a best execution policy that assesses the trading opportunities on primary, secondary and OTC markets.

186. A point of particular importance in this context, Dr Ellis said, concerns the volumes of equities traded off-exchange, in over-the-counter ("OTC") markets. The significance of OTC markets is that they have no firm opening or closing times, with trading possible whenever willing participants are available, globally and on a 24-hour basis.

187. EMFS submits that the question, however, is not whether a factual finding of a global market can be made, but whether a non-Defaulting Party like EMFS could rationally form the view that the Appropriate Market for the portfolio was a global one.

188. EMFS says that no-one suggests that traders in practice regularly engage in the exercise said to be mandated by the GMRA of making a determination of the "most appropriate market" for a given set of securities. The fact that Mr Ruiz may not have come across a determination of a global "Appropriate Market" is therefore a factor which carries no real weight.

189. EMFS says that the equities could be traded across the globe via a range of primary and secondary exchanges, as well as OTC: 132 could be traded in North America, 131 in Europe, 58 in Asia Pacific and 3 in South America. Thus, 35 equities were cross-listed or eligible for trading in three world regions and 91 in two world regions, with

only 37 listed in just a single region. 137 of the securities were listed or eligible for trading in between two and seven countries. Only 26 securities were confined to a single country.

190. It would have been impractical, EMFS says, to determine an Appropriate Market separately for each security, e.g. because some securities were issued by a company in country A, listed in country B (and possibly cross-listed in country C and D) and the securities may have been held in custody in country E, quite apart from the fact that the security may have been denominated in the currency of country F.

191. As to bonds, EMFS points to common ground between the experts that bonds traded mainly OTC, where there is a single, 24-hour global market, subject only to country-specific restrictions. As Ms Nguyen stated, "a bond could, in theory, trade at any time or in any place, subject to regulatory requirements". The existence of a market does not necessarily presuppose a uniform level of liquidity, but merely the possibility of trading. The characteristics of many of the bonds were international, so that it is beside the point that Ms Nguyen never encountered the concept of a global market during her career in banks.

192. EMFS says that Ms Nguyen "ducks" the need to identify an actual market in bonds in favour of classifying the world by reference to broad time zones. She adopts complex evaluation with five factors. She never convincingly explained why it should be assumed that a particular country will be the most appropriate market for a bond, in circumstances where she herself acknowledges that (leaving aside specific legal restrictions) bonds can be bought and sold anywhere in the world.

193. As with Mr Ruiz, there was no suggestion in either of Ms Nguyen's reports that she had ever had to make a determination of Appropriate Market for the purposes of the GMRA.

194. For similar reasons, EMFS says that a determination of a US Appropriate Market would also have been permissible for the equities. About a third of the equities had their primary exchange in the USA, while approximately two-thirds of the remainder had an exchange open in the USA or were traded in OTC marketplaces in the USA. The remaining 39 equities could, in principle, have been traded OTC in the USA.

195. Mr Ruiz says the concept of a "*market*" in the definition of Appropriate Market must mean an exchange. EMFS says that though he says that a participant in the equities market would typically use a price on the primary exchange to value an equity, this assumes that the non-Defaulting Party will be a "seasoned user of Bloomberg". But not all parties to the GMRA will be investment bankers.

196. Mr Ruiz' analysis of Appropriate Market, EMFS says, in fact calls for the exercise of judgment in various ways, and gives rise to an exercise of considerable complexity on which different parties would have reached different outcomes.

197. EMFS says that a portfolio trade was a legitimate possibility (albeit not one which JP Morgan was prepared to agree to on its own account) and would likely have been in the US and have been denominated and settled in US dollars.

198. As to bonds, EMFS says that for factual reasons it is agreed that it is unnecessary for the court to make any finding on whether the US was an Appropriate Market.

199. EMFS invites the court to reject LBIE's approach to Appropriate Market as unworkable, but it is sufficient for the court to hold that a rational person could permissibly have adopted a simpler and more practical approach.

200. Turning to LBIE's case, it relies on Mr Ruiz's evidence that he has never encountered or heard of the concept of the "global market". Likewise, Ms Nguyen said that the concept of a "global market" for bonds is generally nonsensical.

201. LBIE says that in the Joint Memorandum, Dr Ellis appeared to be rowing back from his position, saying "This does not mean that there is an official, regulated "global market". Rather the exchange linkages, technology developments and new venues ... form what is effectively a global market".

202. LBIE says that the lack of reality in Dr Ellis's "Global Market" case was demonstrated by the absence of any pricing produced by EMFS from the Global Market or produced at the time when the "Global Market" is said to close.

203. LBIE relies on that Dr Ellis's reliance on OTC trading as demonstrating the existence of a "global market" in equities was suspect. The mere existence of OTC trading does not support his proposition. Also, his figures for the levels of OTC trading did not support his position.

204. He was "forced to accept in cross-examination that despite the number and volume of his exhibits, he had not produced a single page referring to the "Global Market". Mr Sanders was forced to accept that there was not a single reference in the chronological bundles where he, JP Morgan or anyone else had referred to the idea of a "Global Market"".

205. As to EMFS's alternative case, for the vast majority of the securities, there were higher levels of liquidity in markets other than the United States, and for many of them, there was almost no liquidity in the United States. 31 of the 163 Outstanding Equities had no listing at all in "North America". For three of the bonds, their sale in the United States was actually prohibited during their primary market period.

Discussion of and conclusion on the "global market" issue

(i) Discussion

206. The issue the court has to decide is a specific one, namely whether the "global market" if there is one falls within the GMRA paragraph 10(d)(i) definition of "the "Appropriate Market"". This term "means, in relation to Securities of any description, the market which is the most appropriate market for Securities of that description, as determined by the non-Defaulting Party".

207. EMFS contends that the definition of Appropriate Market is deliberately non-prescriptive. Not only does it leave the choice of market to the innocent party, it also affords a wide discretion as to how, in the case of a portfolio of securities, the securities are classified: an Appropriate Market is to be determined for "Securities of

any description". It is thus for EMFS to decide, when assigning an Appropriate Market, whether to group the securities together on the basis of a fairly high-level description – e.g. simply grouping them collectively as equities or bonds – or on the basis of a much more granular description.

208. EMFS contends that the word "description" in the GMRA, upon which LBIE places much weight, is not a term of art. Where the GMRA seeks to encapsulate the concept of a security that represents the fungible equivalent of another security, the label it uses is the word "equivalent", which is defined at para 2(t) of the GMRA. Accordingly, if the GMRA had been intended to provide that a separate Appropriate Market had to be designated for each individual security or its fungible equivalent, the definition of Appropriate Market would simply have required the identification of the most appropriate market "for each Security or its equivalent".

209. However, EMFS submits, not only does the definition of Appropriate Market refer to "Securities", in the plural presupposing that an Appropriate Market can be established on a collective basis for a group of securities, but it uses deliberately broad-textured language ("of any description"). The broad language used is fitting for the nature of the exercise that is required. It is not an exercise whereby the court must decide a single right or wrong answer. Rather, the definition of Appropriate Market ensures certainty by allocating the decision to EMFS.

210. It was thus for EMFS to decide whether to make a designation for the portfolio as a whole, to do so for sub-groups of securities, or to descend to the level of finding an Appropriate Market for each individual security in turn. EMFS's determination was constrained by considerations of good faith and rationality. However, there would be nothing irrational when confronted with a portfolio of 181 securities in circumstances of extreme market stress, and in a context of some urgency as a result of the clock ticking on the five dealing days, about seeking to simplify the exercise as much as possible. On the contrary, it would be entirely rational to avoid a multiplicity of different DVTs, with the attendant risk of confusion, by taking a fairly high level approach to the question of Appropriate Market. This would also maximise the time for service of the DVN, which is self-evidently in the non-Defaulting Party's rational commercial interests. EMFS contends that it was certainly within its discretion to choose one Appropriate Market for the equities and one for the bonds.

211. There were discussions at the time, ultimately abortive, about EMFS selling the equities to JP Morgan. If that was a possibility, it is hard to see (EMFS says) how it could have been impermissible for EMFS also to determine the Appropriate Market on a broadly portfolio-wide basis.

212. Moreover, there was no evidence of any description that any of the many counterparties around the world faced with the failure of Lehmans did anything other than serve a single DVN. This is not surprising, where paragraph 10(e)(i) refers to the non-Defaulting Party serving "a written notice (a 'Default Valuation Notice')", i.e. in the singular. The provision goes on to identify a limited scenario where the non-Defaulting Party may serve more than one DVN which does not apply here. There is no suggestion anywhere else in paragraph 10(e)(i) that multiple DVNs may be served.

213. Even if it is nevertheless assumed that multiple DVNs might be permissible outside that narrow situation, EMFS says that a non-Defaulting Party is likely to have quite

enough on its plate during the five dealing day window than to contemplate serving a succession of different DVNs.

214. EMFS submits that LBIE's asserted need to identify a separate Appropriate Market for each of the 181 securities becomes all the more unsustainable when the difficult and diffuse nature of the exercise proposed by LBIE (to be carried out within the five dealing day window) is understood. (This has been described above.)

215. On its part, LBIE submits that its case is a simple one. In general each equity has a primary exchange and each bond has a home market, depending on its issuer, currency and so on. The time at which each exchange and market closes is well known and closing prices markets are easily obtainable. In consequence it is straightforward to determine for each security the time of close of business in the Appropriate Market for the purposes of paragraph 10(d)(ii), and in respect of bonds, who are market makers or regular dealers in the Appropriate Market and therefore qualified to provide quotations for the purposes of paragraph 10(e)(i)(B), and market prices as at close of business in the Appropriate Market in order to arrive at a valuation at the time of close of business in that market for the purposes of paragraph 10(e)(ii).

216. LBIE submits that paragraph 10(d) of the GMRA plainly envisages that the most appropriate market will be determined individually for each security of a particular description. That is consistent with the normal understanding of a description of a security, which involves identifying the issuer, terms, rights, and other familiar details.

217. LBIE submits that it is fundamental to the workings of a repo agreement under the GMRA that on the repurchase the original buyer is not obliged to return the actual securities which it purchased, but must return securities which are identical to those which it purchased. This requirement of fungibility is essential to the character of a repo. The concept of the "*description*" of a security is used in the GMRA to give effect to this fundamental need for securities to be fungible at the most detailed level.

218. Thus, by paragraph 2(t), "Securities" are "equivalent to" other Securities for the purposes of this Agreement if they are: (i) of the same issuer, (ii) part of the same issue, and (iii) <u>of an identical type, nominal value, description</u> and (except where otherwise stated) amount as those other Securities..." (emphasis added).

219. LBIE says that it is a consequence of these obligations that in the event of a default the non-Defaulting Party can quantify its loss by selling or obtaining quotations for Securities which are fungible with the Equivalent Securities. The word "description" is used in the GMRA to refer to the various detailed and precise identifying characteristics of a particular security.

220. It follows, LBIE says, that it is not possible under paragraph 10(d)(i) to determine the most appropriate market on a portfolio basis, or by classifying securities into extremely high level groupings such as "equities" and "bonds". Paragraph 10 like the GMRA overall works on a security-by-security basis. Any other approach results in securities being valued at times and in markets which are not appropriate to them.

221. Although it is correct for EMFS to say that the GMRA provided that EMFS was to make the relevant determination, LBIE submits that the scope of that discretion is to be ascertained by the wording of the GMRA. EMFS was obliged to determine, for securities of a particular description, "the most appropriate market" for securities of that description. Neither of EMFS's claimed determinations that the most appropriate market for all the securities were the global market or the US market can be valid under the GMRA.

(ii) Conclusion

222. As regards the evidence, I do not accept LBIE's dismissive view of Dr Ellis' opinion. Of course Mr Ruiz and Ms Nguyen are right to point to the absence of closing times, and the like, in the case of a "global market" as opposed, for example, to a domestic stock exchange, as well as to the absence of a single global regulator, and other matters.

223. But I consider that Dr Ellis was justified in drawing attention to the exchange linkages, technological developments, and new venues (he mentioned ECNs, that is electronic communications networks, and so-called "dark pools"), as well as OTC trading, and other instruments such as depositary receipts that enable trading away from exchanges. Although it is not possible or necessary to reach any conclusions as to the proportion of equity trading that takes place on an OTC basis, I am satisfied that it is substantial. All the bonds were traded on an OTC basis. Further, the possibility existed of disposing of the entire portfolio to a single buyer on what the experts referred to as a "risk" bid or price. Such a price may well be (as LBIE points out) based on pricing on primary exchanges, but from the seller's perspective it is a single deal.

224. I accept therefore that it is meaningful to speak in a general sense of a global market in securities. However, this in itself is a conclusion of limited scope, because the question for decision is one of construction of a specific agreement.

225. EMFS says that the court should take account of the practical inconvenience of LBIE's position as regards the practical task of giving a Default Valuation Notice in what may be adverse commercial circumstances. There is much force in these points, as the discussion above shows. On the other hand, they should not be exaggerated. As LBIE says, JP Morgan had no difficulty in identifying the markets for the disposal of the securities within a matter of hours of being instructed.

226. I have sympathy with EMFS's complaint that LBIE has propounded its case on Appropriate Market with the sole purpose of showing that the Default Valuation Notice was late though most of the securities had already been sold. But as explained below, the term has an important application in the GMRA 2000 where the non-Defaulting Party wishes to rely on quotations to determine the Default Market Value of securities. In any event, the court cannot tailor its construction of the terms of a standard agreement to meet what on these facts may seem to be a hard case.

227. The issue is whether, on a true construction of the GMRA, it was open to EMFS to determine a single Appropriate Market for all the securities, being the "global", alternatively the US market, or whether LBIE is correct to say that under the GMRA, the Appropriate Market must be ascertained on a security by security basis.

228. In support of its submission that a "global market" can fall within paragraph 10(d)(i) of the GMRA, EMFS emphasises the reference to "Securities of <u>any</u> description" as being deliberately non-prescriptive.

229. However, I agree with LBIE that this takes these words out of context. Appropriate Market in relation to securities of <u>any</u> description, is defined as meaning the market which is the most appropriate market for securities of <u>that</u> description. It is the reference to securities of <u>that</u> description that plainly in my view contemplates an exercise on a security by security, rather than a global, basis.

230. This construction is supported by the fact that the obligation of the purchaser under a repo agreement in GMRA form is not to return the actual securities which it purchased, but equivalent securities. By paragraph 2(t), securities are "equivalent to" other securities if they are of the same issuer, part of the same issue, and of an identical type, nominal value, <u>description</u> and amount as those other securities.

231. Further, the paragraph 10(d)(i) definition does not refer to an appropriate market, or even the appropriate market, but stipulates the <u>most</u> appropriate market for securities of that description.

232. The significance of this can be shown as follows. Although the defined term "Appropriate Market" arises in this case in the context of the deadline for serving a DVN, it has another (and important) role in the GMRA. Paragraph 10(e)(i)(B) permits the non-Defaulting Party to rely on quotations to determine the Default Market Value of securities. It requires:

> "… quotations in respect of Securities of the relevant description from two or more market makers or regular dealers in the <u>Appropriate Market</u> in a commercially reasonable size (as determined by the non-Defaulting Party) …" (emphasis added)

233. The purpose, as LBIE says, is clearly to promote a proper determination of the Default Market Value by requiring that quotations are received from broker-dealers and the like in the market which is most appropriate for the securities in question. That clearly means the individual securities, not the portfolio on a global basis. This applies equally to bonds as to equities.

234. So while I agree with EMFS that it is meaningful to speak of a "global market" in securities in a general sense, it cannot in my view be a "market" for the purposes of paragraph 10(d)(i) of the GMRA.

235. Similarly, at least on the evidence before the court in this case, I am satisfied that the US market cannot be the Appropriate Market for the non-North American securities. LBIE made its case good in that regard by reference to the strikingly small percentages in a comparison between (a) the total volume of each Outstanding Equity traded in the United States over the 5 trading days from 16-22 September 2008, taken from Bloomberg, with (b) the aggregate of that United States volume and the volume traded on the primary exchange identified by LBIE. For three of the bonds, their sale in the United States was prohibited during their primary market period.

236. I further agree with LBIE that this view gains support from the fact that JP Morgan dealt with sales of the securities in regional markets on a security by security basis, as shown by the pre-trade analysis sent by the bank on 16 September 2008, and subsequently. The course of the sale process shows that the securities were divided up into particular regions for sale purposes. The existence of the "Country" column in the DVN demonstrates a similar approach. The volume of information provided in the DVN on a security by security basis confirms this.

237. As to EMFS's submissions based on a sale of the whole portfolio, such a sale could (I consider) found a determination of Default Market Value under paragraph 10(e)(i)(A) of the GMRA. However, I agree with LBIE that it does not shed light on the construction of the term "Appropriate Market", since such a sale is not a sale in a market.

238. EMFS points out that paragraph 10(e)(ii) refers to the giving of <u>a</u> Default Valuation Notice, i.e. in the singular, whereas LBIE accepts that its construction may mean (as explained above) that more than one DVN may needs to be given. However, the use of the singular in this context does not rule out the giving of more than one notice, if that is the course the non-Defaulting Party decides to take.

239. I have taken account of the other points made by EMFS detailed above, particularly the significance of OTC markets and the fact that there are primary and secondary exchanges for many securities. These points may be valid in themselves, but do not in my view affect the basic point of construction.

240. It is common ground that if LBIE is correct in its argument on Issue 7 that the GMRA requires a security-by-security determination of the most appropriate market then no further issues as to Appropriate Markets arise: specifically, Issues 8-10 do not arise: this is stated in the Agreed List of Issues.

241. The reason for this is that, if LBIE is right on Issue 7, any determination not made on a security-by-security basis would be invalid as not in accordance with the contractual framework. The question whether a determination of the global market or the US market for all the securities would be "rational", does not arise on this basis, and I would not have upheld a case that a determination could be "rational" if it was impermissible under the contractual provisions. (The contractual discretion issue also arises in connection with the ascertainment of the Net Value of the securities, and is dealt with in that context below, including discussion of the *Socimer* case, and other authority.)

242. It follows that I accept LBIE's case that the DVN was served in time in respect of the North American securities, but was not served in time for the non-North American securities. (This is subject to my conclusion as regards the UK and Irish securities, where the timing may work out differently.)

243. Though they do not arise on my findings, I shall express my conclusions on Issues 8-10 so far as these are not covered above, since they were subject of some argument.

<u>Did the DVN convey a determination of a global Appropriate Market? Issue 8</u>

244. EMFS accepts that Mr Sanders and his colleagues did not think in September 2008 about choosing an Appropriate Market for the securities: but says that the question would be whether EMFS had communicated its determination as to the Appropriate Market to LBIE, and this would fall to be ascertained objectively.

245. EMFS contends that, on a proper construction, the DVN would have conveyed to the reasonable reader a selection of a global market, both for bonds and for equities:

(1) Although the DVN did not expressly state an Appropriate Market, it falls to be construed against the backdrop of paragraph 10 of the GMRA, which contemplated that the non-Defaulting Party would determine one.

(2) In Appendix I of the DVN, the penultimate column (headed "country"), which lists the location of the head office of the issuers of the securities, spans the globe, from Australia, to Japan, Europe and the USA. The reader would have been struck by the range and diversity of countries with which the securities in the portfolio were connected.

(3) The A1 equities were traded or capable of being traded both OTC and on a wide variety of different primary and secondary exchanges worldwide, while bonds can generally be traded anywhere in the world (subject to country-specific restrictions).

(4) Accordingly, if a single Appropriate Market were to be determined for the equity portfolio and the bond portfolio respectively, the natural determination would have been a global market for each; and the terms of the DVN did not suggest that EMFS had made a different determination.

(5) This conclusion also serves to promote the prospect of the DVN being valid, by enabling it to be served up to close of business anywhere in the world; and a saving construction of an instrument is generally to be preferred (*Lewison* §7.16).

246. LBIE submits that:

(1) The DVN makes no reference to any determination of the Appropriate Markets (or to the concept of the "Appropriate Market" at all), or to the "Global Market". Indeed, EMFS does not appear to contend positively that it did, merely pleading that the DVN did not suggest a determination other than the "Global Market".

(2) A reader of the DVN would therefore conclude that no determination of the Appropriate Markets had been made. Alternatively, if that is wrong, he would conclude that the "Country" column was intended to set out the Appropriate Market (a conclusion which LBIE contends for on its alternative case, but which EMFS does not accept).

(3) The "Global Market" does not exist in a relevant sense. Therefore, a reasonable reader would not have deduced from the DVN that EMFS had selected it. Further, the reasonable reader is to be taken to have known that

certain of the Outstanding Securities were prohibited from sale in the United States in their primary market period.

247. I accept LBIE's case in this regard. It is plain that the DVN did not convey a determination of a "global" Appropriate Market. Indeed, I think that the reverse is true.

248. This conclusion is consistent with how these points developed over the course of the dispute. Neither the global market point nor the US market point was raised at the outset. When EMFS first expressed its position on this issue in a letter of 6 January 2014, it said (understandably but wrongly) that the Default Valuation Time was intended to apply to the securities in the aggregate, and was not divisible according to the markets in which individual securities might be traded. On 11 June 2014, its solicitors said that EMFS had determined the Default Valuation Time by reference to close of business in the United States. EMFS's primary case on the "Global Market" only appeared when it served its Defence in February 2015.

<u>Consequences of no determination of Appropriate Market: Issue 9</u>

249. The points that I need determine are factual ones. Mr Sanders says that, if asked, he would have chosen a global market for both the equities and for the bonds. In response to the fact that JP Morgan had put the portfolio into "depots" which reflected different exchanges and therefore different markets, Mr Sanders said that these exchanges were relevant only to the settlement of the securities, and did not prevent there being a single global market for the purposes of selling the securities.

250. I do not accept his evidence that the exchanges were relevant only to settlement. I agree with LBIE that the standard settlement instructions (SSIs) prepared by EMFS at JP Morgan's request proceeded on a security-by-security basis, using both ISIN and SEDOL numbers to identify the particular security as well as the position size. As LBIE says, this approach is the opposite of a portfolio-wide approach to the securities. The SSIs were divided up into 18 separate country "markets", in each of which a local bank account of JP Morgan was authorised to receive the proceeds of the sale in local currency before remitting it back to EMFS's US dollar account with JP Morgan in London, thereby demonstrating that the bank intended to sell the securities in the currency of that particular market and, it can further be inferred, on an exchange within that particular market.

251. Also, good witness though Mr Sanders in general was, had he considered the question of Appropriate Market in September 2008, I find that he would not have assigned a global Appropriate Market to the portfolio of equities and the portfolio of bonds. That would not have reflected his experience over the previous few days, in which under a conventional liquidation exercise carried out by JP Morgan in consultation with EMFS, the securities were being sold into particular markets. For the same reason, had he been told that a global market was not allowed, I find that he would not in the alternative have determined a US market.

<u>What appropriate markets would EMFS have determined? Issue 10</u>

252. In the event that it is held that the DVN did not convey a determination of a global Appropriate Market, or that Mr Sanders would not have made such a determination in

September 2008, or that such a determination would have been impermissible (and I have decided each of these points against EMFS), its alternative case is that it would have made a determination of a US Appropriate Market.

253. For the reasons set out above, this alternative case also fails.

254. EMFS accepts that if the court concludes that EMFS would not in fact have determined a global or US market, or that a selection of such markets would have been impermissible, then the only alternative is to adopt LBIE's case as to what market would have been selected for the securities on a security-by-security analysis.

255. I record that EMFS stated in closing that as regards the bonds, it is unnecessary for the court to make any finding on whether a US Appropriate Market would have been permissible. This is because in respect of the 6 A1 bonds, LBIE says that 2 of them were North American bonds and, as regards the remaining 4, 2 were restricted from sale in the US. The quantum of the 2 remaining A1 bonds is immaterial in the context of the case as a whole (and LBIE's valuation is more favourable to EMFS than the actual sales proceeds). In respect of the A2 bonds, it is accepted by EMFS that the DVN was invalid, and so the question of Appropriate Market is not engaged. In respect of the A3 bonds, LBIE treats these all as North American bonds in any event.

<u>When did close of business in the Appropriate Markets occur? Issue 11</u>

256. This raises another timing point. The dispute is as to what "close of business" means for the purposes of paragraph 10(d)(ii) of the GMRA, which as noted provides that "the "Default Valuation Time" means, in relation to an Event of Default, the close of business in the Appropriate Market on the fifth dealing day after the day on which that Event of Default occurs...".

257. LBIE contends that "close of business" means the close of business for dealing. EMFS contends that it means the close of business "for financial institutions generally".

258. LBIE's contention is that:

(1) The GMRA refers to close of business "in the Appropriate Market", which is naturally a reference to the time regarded as close of business in that market, not a general concept of "close of business for financial institutions generally".

(2) The day on which "close of business" will occur is described by the GMRA as the "fifth dealing day", implying that the close of business is the close of business for dealing.

(3) LBIE's case makes commercial sense, because the Default Valuation Time is the time at which, under paragraph 10(e)(ii), the securities fall to be valued. According to Mr Ruiz, the concepts of "close of business" and "close of business prices" are well established in the financial markets. If close of business means "close of business for dealing" in the Appropriate Market, the non-Defaulting Party can, rapidly and simply take the relevant close price of each security at that time; for example, for equity securities, the close price is published and available upon close of dealing, and it is this close price which

is used across the financial world in respect of financial indices, margin calculations, derivatives, etc.

(4) By contrast, on EMFS's case, a non-Defaulting Party is obliged to value the securities at "the close of business for financial institutions generally". However, neither prices nor liquidity are easily available at that time. Indeed, it is at least uncertain as to when the "close of business for financial institutions generally" occurs, whereas LBIE has been able to specify the closing time for all of the relevant equity markets.

259. If LBIE is correct that "close of business" in paragraph 10(d)(ii) means "close of business for dealing", EMFS accepts that the relevant times are as specified by LBIE.

260. EMFS contends that:

(1) LBIE's case is not as simple as it claims. Mr Ruiz has proven unable to find a closing time for markets specified as "US OTC" and his approach departs in certain other respects from LBIE's pleaded case.

(2) The ordinary and natural meaning of the words refers to close of all forms of business. True it is that the DVT occurs on the "fifth dealing day" but this merely indicates that non-dealing days, such as weekends, are left out of account and does not require an artificially narrow meaning to be given to the expression "close of business".

(3) The difference this makes is that financial institutions close for business rather later than the end of trading: As explained above, this does not happen in London until about 7pm. Thus, even on LBIE's case as to Appropriate Market, the DVN would have been valid, not only for the North American securities, but also for the 4 equities and 1 bond for which the UK or Ireland is said by LBIE to have been the Appropriate Market. (In financial terms, EMFS says that this would move the net balance US$970,000 in EMFS' favour.)

261. My conclusion is as follows. I accept the submission of EMFS that LBIE's approach does not in fact result in clarity as to timing, which is said to be its main virtue. Further, I refer to what I said above as to the meaning of the term "close of business" where the words appear in paragraph 14 of the GMRA. The same points are applicable here. As a matter of construction, the reference in the definition of "Default Valuation Time" to "the fifth dealing day" does not qualify the meaning of "close of business" on that day.

262. On a plain reading of the words used, I prefer the case of EMFS in this regard. There is no reason to construe "close of business in the Appropriate Market" as meaning "close of business *for dealing* in the Appropriate Market". On that basis, so far as I am aware, the position as regards the UK and Irish securities is not in dispute.

Was the DVN served in time? Issue 12

263. It follows from the above that the DVN was given in time for the North American Securities, and the 4 equities and 1 bond for which the UK or Ireland is said by LBIE

to have been the Appropriate Market (it has not been suggested by EMFS that any other securities fall to be dealt with in the same way).

Valuation issues

Introduction

264. Though potentially difficult valuation issues arise, the parties' time estimate was insufficient to allow for valuation to be properly covered in closings. In any case, the parties do not ask the court to carry out a security-by-security valuation or to calculate values for any securities. Instead, the parties have agreed a document submitted after closings the purpose of which is to identify high-level points of principle which each party asks the court to decide. The valuation issues are dealt with in this judgment on that basis.

265. The agreed valuation document re-orders the issues to put them into a more logical sequence.

The approach to valuation: Issue 16

For the purposes of paragraph 10(e)(ii) of the GMRA:

(a) Should the Securities be ascribed a fair market value in accordance with the opinion which EMFS (acting rationally) would have formed and/or would have been entitled to form, had EMFS conducted the valuation exercise required by paragraph 10(e)(ii) of the GMRA (as contended by EMFS)?

(b) Should the Securities be ascribed their objectively reasonable fair market value (as contended by LBIE on its primary case)?

266. The issue arises on the premise that (as I have held) the Default Valuation Notice was not valid in respect of some or all of the securities. Paragraph 10(e)(ii) of the GMRA provides that if "by the Default Valuation Time the non-Defaulting Party has not given a Default Valuation Notice, the Default Market Value of the … [securities] shall be an amount equal to their Net Value at the Default Valuation Time". Because as previously explained, EMFS did not conduct this valuation exercise, the question is how it should be done for the purposes of this case:

(1) EMFS says that the securities should be ascribed a fair market value in accordance with the opinion which EMFS (acting rationally) would have formed had it conducted the valuation exercise required by paragraph 10(e)(ii) of the GMRA.

(2) LBIE's primary case is that the securities should be ascribed their objectively reasonable fair market value.

267. The issue arises in this way because paragraph 10(e)(ii) refers the issue to the "Net Value" definition in paragraph 10(d)(iv), which ascribes a value to the securities in "the amount which, *in the reasonable opinion* of the non-Defaulting Party, represents their fair market value" (italics added).

268. In full, "Net Value" means:

> "...at any time, in relation to any Deliverable Securities or Receivable Securities, the amount which, in the reasonable opinion of the non-Defaulting Party, represents their fair market value, having regard to such pricing sources and methods (which may include, without limitation, available prices for Securities with similar maturities, terms and credit characteristics as the relevant Equivalent Securities or Equivalent Margin Securities) as the non-Defaulting Party considers appropriate, less, in the case of Receivable Securities, or plus, in the case of Deliverable Securities, all Transaction Costs which would be incurred in connection with the purchase or sale of such Securities"

269. LBIE's case is that the securities should be ascribed their objectively reasonable fair market value, and that this is an exercise which the court should carry out.

270. LBIE's alternative case is that the securities should be ascribed a fair market value in accordance with the opinion which EMFS (acting rationally) would have formed had it conducted the valuation exercise required by paragraph 10(e)(ii) of the GMRA in September 2008. This in effect the same as the case of EMFS as set out under (1) above.

271. Both parties' cases were elaborated in submissions made at the court's request after the hearing as to what has been described as the "counterfactual", that is, what EMFS would have done at the time had LBIE rejected its Default Valuation Notice on grounds that it was late.

272. The question is as to the effect to be given to a contractual discretion. In cases of the present kind, where the decision arises under a contractual term which gives one of the parties a discretion as to valuation, it is agreed that the leading authority is *Socimer International Bank Ltd v Standard Bank London Ltd* [2008] EWCA Civ 116.

273. In that case, a forward sales transaction agreement required a bank to carry out a valuation of a portfolio at the date of termination, but gave it a discretion as to valuation. Mistaking the nature of its obligations, the bank did not conduct the valuation, and the question was as to the consequences of this failure. As Rix LJ pointed out at [60]:

> "When a contract allocates only to one party a power to make decisions under the contract which may have an effect on both parties, at least two questions arise. One is, what if any are the limitations on the decision-maker's freedom of decision? The other is, what is to happen if the contractual power was not in fact exercised at the time when the relevant party was obliged to make a decision?"

274. These are two distinct questions. The first goes to the bounds of the discretion. The second goes to the correct approach to be applied by the court if the discretion is for some reason not exercised, and the issue is as to the legal consequences. The questions do not necessarily both arise, though they did in *Socimer* and do in the present case.

275. As regards the first question, applying authorities such as *Abu Dhabi National Tanker Co v Product Star Shipping Ltd* [1993] 1 Lloyd's Rep 397 at 404 (Leggatt LJ), Rix LJ said at [66] that:

> "… a decision-maker's discretion will be limited, as a matter of necessary implication, by concepts of honesty, good faith, and genuineness, and the need for the absence of arbitrariness, capriciousness, perversity and irrationality. The concern is that the discretion should not be abused."

276. An example of the application of this principle is found in *Fondazione Enasarco v Lehman Brothers Finance S.A.* [2015] EWHC 1307 (Ch), in which the test of rationality was applied in the context of the 1992 ISDA Master Agreement. Under that agreement, the obligation of the non-defaulting party is "reasonably" to determine its total losses and costs. Unlike in *Socimer*, the determination had been carried out, and the challenge (which failed) was as to the validity of the determination. David Richards J said at [53]:

> "… the relevant authorities now quite clearly establish that in considering whether the non-defaulting party has "reasonably determined" its Loss, that party is not required to comply with some objective standard of care as in a claim for negligence, but, expressing it negatively, must not arrive at a determination which no reasonable non-defaulting party could come to. It is essentially a test of rationality, of the type developed in the quite different context of public law duties in *Associated Provincial Picture Houses Ltd v Wednesbury Corporation* [1948] 1 KB 223: see *Australian & New Zealand Banking Group Ltd v Societe Generale* [2000] 1 All ER (Comm) 682, *Peregrine Fixed Income Ltd v Robinson Department Store Public Co Ltd* [2000] CLC 1328."

277. What is meant by "rationality" in these circumstances? In *Hayes v Willoughby* [2013] 1 WLR 935, the issue was as to the meaning of "purpose" in the tort of harassment. The distinction between "rationality" and "reasonableness" was explained by Lord Sumption at [14], and the same distinction is essentially applicable in the present case:

> "Rationality is not the same as reasonableness. Reasonableness is an external, objective standard applied to the outcome of a person's thoughts or intentions. The question is whether a notional hypothetically reasonable person in his position would have engaged in the relevant conduct for the purpose of preventing or detecting crime. A test of rationality, by comparison, applies a minimum objective standard to the relevant person's mental processes. It imports a requirement of good faith, a requirement that there should be some logical connection between the evidence and the ostensible reasons for the decision, and (which will usually amount to the same thing) an absence of arbitrariness, of capriciousness or of reasoning so outrageous in its defiance of logic as to be perverse."

278. Contrary to LBIE's case, therefore, the court does not seek to establish an "objectively reasonable" fair market value to the securities. The court applies a rationality test to the discretionary decision. As was said in a different context, the application of an objective test would largely deprive the counterparty of the benefit of the discretion which the contract gives it (*Mercuria Energy Trading PTE Ltd v Citibank NA* [2015] EWHC 1481 (Comm), Phillips J, at [120]).

279. In the present case, there was no decision, and the court is concerned with the "counterfactual". The process was explained in *WestLB AG v Nomura Bank International plc* [2012] EWCA Civ 495, which was also a financial case in which the decision maker ought to have, but did not, conduct a valuation exercise. At [58], Rix LJ said:

> "… in the present case the decision maker is not the court, with or without expert or other evidence to assist it: the decision maker, with an absolute discretion, is Nomura (whether Nomura International or Nomura Bank). In circumstances where it ought to have, but has not conducted a valid valuation exercise, the question, as the judge rightly put to himself, is how would Nomura have decided the matter, on or at least as at 30 September 2008, had it made a valid determination, honestly and rationally: *Socimer* at [65]-[66]."

280. Accordingly, I accept EMFS's submission that the securities should be ascribed a fair market value in accordance with the opinion which EMFS (acting rationally) would have formed had it conducted the valuation exercise required by paragraph 10(e)(ii) of the GMRA. This is largely a question of fact.

281. The present case illustrates another bound to the discretionary decision. As well as being rational, the decision has to be one which is permissible under the contract. The extent of a contractual discretion depends on its terms, and the test of rationality applies within those terms (see e.g. *Braganza v BP Shipping Ltd* [2015] 1 WLR 1661 at [32], Baroness Hale, and at [54], Lord Hodge).

282. This point arises in connection with the "Appropriate Market" issue (see above). LBIE raises it in connection with the Net Value issue as well. In *Socimer*, the relevant clause said that value "shall be determined on the date of termination by the Seller" (see at [10]). LBIE also points to the use of the words "in its sole and absolute discretion" earlier in the clause, and the fact that the agreement provided for the issue of a "binding save for manifest error" certificate. LBIE says that the court appears to have contrasted the "wide discretion" in the *Socimer* agreement with that in an earlier version of the GMRA (see [117]). Based on this, LBIE submits that the valuation standard is more precisely stated in the GMRA than that in the *Socimer* case, and is capable of objective application. Since the exercise was not done by EMFS, the logical solution is for the court to determine how fair market value should be arrived at.

283. I do not think that this submission is correct. Although the GMRA, unlike the contract in *Socimer*, spells out in paragraph 10(d)(iv) in some detail how the determination is to be made, the provision emphasises rather than restricts the scope of the discretion. As EMFS says, the terms of the earlier version of the GMRA are

not the same as those applicable in this case, and nothing is to be derived from this. (LBIE cites a statement that I made in *Forsta v Bank of New York Mellon* (ibid) at [298] as to the valuation discretion under the GMRA, but that involved the suggestion by an expert witness that the counterparty had a discretion not to conduct a good faith valuation at all, and was not directed at the issue under discussion here.)

284. There was some debate between the parties in their post-hearing submissions as to how the test is to be applied, but in view of my factual conclusions below it is not necessary to go into the detail. It is sufficient to say that the test is one of rationality, applied in a commercial manner in accordance with the authority set out above.

285. LBIE did however submit that *Braganza*, ibid, is authority for the proposition that both limbs of the public law *Wednesbury* test (*Associated Provincial Picture Houses Ltd v Wednesbury Corpn* [1948] 1 KB 223) apply to the contractual discretion exercisable in this case, and thus that it is necessary, under the first limb of *Wednesbury* (which focuses on the decision-making process) for the contractual decision-maker not to leave out of account matters which it ought to take into account or to take into account matters which it ought to leave out of account.

286. However, as EMFS says, in *Braganza* at [32], Baroness Hale (for the majority) expressly left open the question of the extent to which procedural judicial review objections could arise in commercial contracts, stressing the employment context of the case. See to similar effect the observations of Lord Hodge, with whom Lord Kerr agreed at [54] and [55]. At [57], Lord Hodge said that the question in *Braganza* was whether a state of fact existed (i.e. the cause of death), which was the kind of question that courts were in a better position to review, as compared with questions like the grant of a performance-related bonus where there was “little scope for intensive scrutiny of the decision-making process”.

287. The contractual discretion in the present case is given to a commercial party to a contract with another commercial party on the wholesale financial markets where the decision is as to the valuation of securities in the case of default. The decision is one which can be (and may need to be) taken without delay, and in which the non-Defaulting Party is entitled to have regard to its own commercial interests. In this kind of situation, I do not agree with LBIE that *Braganza* requires the kind of analysis of the decision-making process that would be appropriate in the public law context. But it makes no difference to the result in the present case.

288. A final point is that LBIE says that there is no legal basis for a case that the securities should be valued in accordance with an opinion which EMFS “would have been entitled to form” (as distinct from “would have” formed). I do not understand EMFS to be arguing this point now.

289. Issue 16 is concerned with the point of principle. How it works out on the parties’ respective cases is explained in full under the relevant issues below, but in summary:

(1) LBIE’s case is that EMFS would have valued the equities in accordance with LBIE’s expert valuation evidence because it says that accords both with the contractual requirements and with the advice which EMFS would have received from JP Morgan had it asked.

(2) EMFS's case is that the value which (acting rationally) it would have ascribed to the securities had it conducted a paragraph 10(e)(ii) valuation in September 2008 is in accordance with its actual valuation, alternatively, with the lowest permissible figure as ascertained by reference to its expert valuation evidence.

The Appendix I Equities

Is EMFS entitled to say that it would validly have adopted under paragraph 10(e)(ii) the prices at which the Appendix I Equities had been sold? Issue 17(a)

290. As explained above, Appendix 1 of the Default Valuation Notice which EMFS sent to LBIE on Monday, 22 September 2008 identified the 163 equities that had been sold, and valued them at their sale prices. The sale had mainly happened on the previous Thursday.

291. LBIE says that this cannot form the basis of the exercise required by paragraph 10(e)(ii), because it is not compliant with the GMRA to value the securities at a date or time other than the Default Valuation Time, and previous sales of identical securities by the non-Defaulting Party have no special status in the exercise, being no more relevant than previous trades by third parties in the same securities. In point of fact, LBIE says, the market had risen since the previous week. Accordingly, it is irrational and indefensible to use prices obtained in the previous week as market prices for the purpose of valuing liquid traded equities at close of business on Monday 22 September 2008. EMFS is, therefore, not entitled to say that it would validly have adopted under paragraph 10(e)(ii) the prices at which the A1 equities had been sold.

292. EMFS contends that it would validly have adopted under paragraph 10(e)(ii) the prices at which the A1 equities had sold. It was Mr Sanders' unchallenged evidence that this is what he would have done. This would have been entirely rational in the circumstances prevailing in September 2008. Market conditions were stressed and involved huge uncertainty, particularly since the equity portfolio was weighted towards the financial sector. There had been a "drastic drop off in trading" on 22 September 2008 and a "drastic increase in the range of volatilities". This meant that equities could not simply be valued by adopting the screen prices on 22 September 2008. Models did not perform well in distressed market conditions, and EMFS would have had to value the portfolio *ex ante* and to factor in the risk of adverse price movements over the time period needed to liquidate the portfolio. Rather than speculate about the size of the discount to be applied to screen prices, engage in the complexities inherent in a modelled approach, and to take upon itself the risks inherent in such an exercise, it would have been entirely rational for EMFS to ground its valuation in concrete data, being the recent sale prices realised by it for those very securities.

293. My conclusion is as follows. I accept the attraction of EMFS's approach, not least since it avoids a windfall for either party. However, whilst the actual sale price on a day within the window provides an unimpeachable method of valuation if the Default Valuation Notice is given within the window (see above), where this does not happen, the exercise is one of ascertaining the fair market value of the securities at the Default Valuation Time. The parties are agreed that the Default Valuation Time was the close of business on the fifth dealing day, which is 22 September 2008. The fair market value of the securities on this day cannot be ascertained by reference to sale prices on

an earlier day, for the straightforward reason that they may be different. Whilst I accept that the markets were stressed in the aftermath of the Lehman collapse, the evidence is that the situation was not such as to render the contractual provisions unworkable in this respect. I do not accept therefore that it would be either contractually permissible or rational to take the actual sale price.

If EMFS is unable to rely upon the sold prices, should the closing prices at the Default Valuation Time be adjusted (i) by a market impact adjustment of 58 bps as Mr Ruiz says and LBIE contends or (ii) by an adjustment according to Dr Ellis's Method 2 as EMFS contends? Issue 17(b)

The parties' methodologies

294. LBIE's case based on Mr Ruiz's valuation methodology is that for most purposes, the closing price on the primary exchange on the correct day is all that is needed or used to value an equity holding. These are the prices which are widely published as the closing prices, which make up the many indices which depend on equity prices and which market participants use to value their books.

295. LBIE accepts that in determining the fair market value of the equities it is appropriate to make a market impact adjustment to the published closing prices to reflect the fact that if the securities had actually been sold in the closing auction which occurs at the end of the day on equity markets, those sales would have (very slightly it says) impacted the closing prices. Mr Ruiz considers that there would have been no issue as to whether those equities could have been sold in the closing auction on 22 September. He calculates the market impact adjustment using a methodology which he says is standard in the equities market and which (a) assigns an equity to one of four geographic zones, (b) calculates the proportion of the ADV the position size represented, (c) allocates those proportions to industry standard liquidity bands, and (d) assigns a market impact adjustment to each liquidity band.

296. This results he says in a market impact adjustment of 58 bps (0.58%). LBIE submits that Mr Ruiz's approach is both the only reasonable approach before the court and the approach which JP Morgan would have recommended if they had been asked for advice by EMFS.

297. EMFS's case is based on the valuation methodology of Dr Ellis. This assumes that no more than a pre-determined percentage of the Average Daily Volume of trading in a particular equity ("ADV%") would be sold each day, reflecting the fact that the higher the ADV% represented by a holding of a security, the greater the market impact of selling it and the more unpredictable the size of the market impact becomes.

298. Dr Ellis has assumed that in the stressed market conditions of September 2008, 10% of ADV can be sold each day with zero market impact. On the basis of this assumption, he has calculated the number of days it will take (a "hedging period") to sell down EMFS'S holding in each security, so as to minimise the market impact of selling a large holding on a single day. The "flipside" is that, while the market impact is managed, there is an increased opportunity cost (which reflects the risk that the price of the security will change between the time when the security is valued and the

time when the security is sold) because of the greater time taken to liquidate the portfolio. The outcome of the methodology is an overall liquidity discount that can be applied to the closing screen prices for the securities.

299. Dr Ellis offered a "Method 1" which assumed sales starting on 22 September 2008, and a "Method 2" which assumed sales starting on 23 September 2008, on the basis that it would be too late to sell on 22 September at whatever price might have been achieved at the closing auction on that day. He regards Method 2 as the most reasonable approach, and as corrected by him during trial that is the case advanced by EMFS.

300. As corrected by him during trial, "Method 2" values the equities at US$185,598,181, which closely compares with the actual sales proceeds of US$186,315,103, though LBIE says that this confluence is because of the rise in the market over the intervening period.

301. According to LBIE, if Dr Ellis's methodology is accepted, the only plausible course would be to accept his Method 1 (which uses closing prices on 22 September 2008) and to adjust his 10% ADV assumption to a more reasonable (but still, it says, implausible) 20% ADV. The result then is about US$400,000 below Mr Ruiz's figure of US$201,818,374.

The parties' contentions

302. LBIE has two "threshold objections". It says that EMFS would not in September 2008 have acted upon advice from Dr Ellis or upon his Methods. EMFS has advanced no evidence that it would have commissioned an expert report such as Dr Ellis's report. Mr Sanders accepted that EMFS would have asked JP Morgan for advice for which, LBIE says, Mr Ruiz's evidence is a good proxy. Further, LBIE submits that the court cannot place any reliance on Dr Ellis's evidence, and particularly so in respect of the equities, in which he has no experience. Accordingly, it says, Dr Ellis's Methods must be disregarded and Mr Ruiz's valuation accepted.

303. Without prejudice to those points, LBIE says that the closing prices at the Default Valuation Time should be adjusted by a market impact adjustment of 58 bps as Mr Ruiz says and, conversely, should not be adjusted according to Dr Ellis's Method 2 or his Method 1.

304. Mr Ruiz has taken the closing prices at the Default Valuation Time and made what LBIE says is a "conservative adjustment" of 58 bps for the market impact of selling the portfolio if it had been sold at that time. Because he assumes a sale of the equities into the closing auction at that time, Mr Ruiz does not need to factor in opportunity cost. This approach replicates the value which would have been obtained if EMFS had instructed JP Morgan to sell the portfolio at close of business on the fifth trading day. It is therefore precisely targeted at the exercise mandated by the GMRA of producing a fair market value for the portfolio at the Default Valuation Time.

305. Dr Ellis's methods do not produce a fair market value at the Default Valuation Time, as required by the contract, because, in the case of Method 2, all the pricing is taken from projected prices the following day or later and, in the case of Method 1, part of the pricing is taken from such later projected prices. Neither method is a valuation at

the Default Valuation Time, and instead constitute projected outcomes of a liquidation strategy for the portfolio.

306. As a liquidation strategy, LBIE submits that both methods are perverse and irrational. They are not conservative in approach. By assuming that sales are made at a very slow rate, they manufacture enormous opportunity costs (2.3% or 230 bps even on corrected Method 1). They achieve this result by ignoring the trade-off between market impact and opportunity cost which in any trading strategy is the epitome of irrationality.

307. Dr Ellis's methods make no allowance for market impact cost at all. His assumption of sales restricted to a maximum of 10% ADV per day, LBIE says, flies in the face of the strategy advised by JP Morgan which adopted a fast rather than a slow rate of sales, and resulted in sales of 96% of the portfolio within one trading day.

308. Dr Ellis's corrected Method 2 produces a discount to market prices at the Default Valuation Time on the relevant date of 8.6%, amounting to over US$ 17 million. This is an extraordinary and unrealistic discount, LBIE says, to apply to heavily traded liquid securities. The discount is plainly irrational, and a Method which produces such a discount cannot be rational.

309. In summary, LBIE says, "Dr Ellis's methods are neither fish nor fowl: they do not produce a determination of "*fair market value*" <u>at</u> the Default Valuation time and as liquidation strategies they are unrealistic, perverse and irrational".

310. LBIE says that the court should not infer that JP Morgan would have given the same advice as Dr Ellis. If EMFS wished to rely on evidence about that, it was for EMFS to adduce the evidence. Because Mr Ruiz has lengthy experience as a market practitioner, his evidence can be accepted as a proxy for the advice that another market practitioner such as JP Morgan would have given if asked for a conservative valuation at the Default Valuation Time.

311. LBIE therefore asks the Court to find that Mr Ruiz's proposed adjustment should be accepted and Dr Ellis's should be rejected. The answer to the "would have" question is that EMFS would have asked JP Morgan for advice and their advice would have corresponded to that given by Mr Ruiz. LBIE does not have to show, as EMFS suggests, that Mr Ruiz's approach is the only rational approach. The court should adopt it because it is the only rational approach the parties have put before the court.

312. EMFS contends that it would have been rational to apply a discount to account for market liquidity, calculated by assuming the sale of the equities over the course of a hedging period whereby no more than a certain percentage of ADV is sold per day. Such an approach reduces the market impact but increases opportunity cost. Given that this approach previously represented LBIE's pleaded case as to "the methodology that a trader would use", LBIE cannot be heard to denounce it as irrational.

313. EMFS says that Dr Ellis' inputs are not irrational. As to the assumption of 10% ADV being sold per day, LBIE had previously pleaded a sale of 20% ADV per day. In closing, LBIE described the difference between 10% and 20% ADV as a "minor adjustment".

314. EMFS says that Dr Ellis' assumption on his Method 2 that trading would not begin until the next dealing day is logically unimpeachable. If the market has closed for business, it will not be possible to sell any securities until the next day, or, at least, that would be a serious risk.

315. Contrary to LBIE's case, the fact that the GMRA requires the securities to be valued at the DVT, not sold at the DVT, means that it is permissible to take into account, when valuing the equities at the DVT, the fact that it will not be possible to sell them until the next day and that prices may have moved in the meantime.

316. Dr Ellis has not ignored the trade-off between market impact and opportunity cost, but has chosen a method cautious on market impact in order to arrive at a more conservative valuation, protecting EMFS from risk.

317. LBIE's case conflates (a) EMFS'S sales strategy in September 2008, when it was concerned to extract as much cash as quickly as possible from the collateral and (b) its valuation methodology, on the assumption that it has not filed a valid DVN. The latter would involve a cautious and conservative approach, designed to avoid EMFS being left bearing any risk.

318. EMFS disputes LBIE's case that the only rational approach is that of Mr Ruiz. The assumption of a sale of the whole portfolio in a single closing auction on 22 September 2008 is not one that is required by the GMRA, which recognises that a range of methods and sources can be used, or one that would arise in the real world. It involves ignoring Mr Ruiz' own rule of thumb against selling securities with an ADV% in excess of 50% in the closing auction. Moreover, there is good reason to believe that a sale of the whole portfolio in the closing auction would be infeasible.

319. LBIE's case that Mr Ruiz' approach is the only rational one is also undermined by the fact that his market impact figures are non-forensic, based on no standard text or independent source, guidance or commentary. They were also not adjustments he would have used as a trader, since he would then have used a software called WebBench to which he no longer had access. There is plainly room for reasonable disagreement about the size of the market adjustment to be applied, with greater unpredictability about the market adjustment as ADV% increased and as a result of market conditions in September 2008.

320. EMFS says that Mr Ruiz' overall adjustment of just 0.58% to closing prices on 22 September 2008 cannot be said to be the only rational view. LBIE accepts that JP Morgan's discount for buying the whole portfolio would have been at the very least more than 150 basis points.

321. LBIE's criticism based on Dr Ellis's lack of experience as an equities market trader makes sense only on the mistaken premise that the non-Defaulting Party is required to have the experience of an equity trader or use an equity trader's advice for valuation. This is not a requirement under the GMRA and it is obvious that had EMFS asked Dr Ellis or someone of comparable experience or expertise to advise it on valuing the portfolio, that would have been rational and therefore within EMFS'S discretion.

322. In summary, EMFS says that the court should find that it would have determined the Net Value in accordance with Dr Ellis' lower bound valuation of the equities.

323. As to LBIE's suggestion that EMFS seeks to advance a new case to the effect that it would have obtained advice from JP Morgan which would have been to the same effect as the evidence of Dr Ellis, it is LBIE that has put forward a new case as to what EMFS would have done in September 2008. EMFS does not accept the premise that Mr Sanders would have asked JP Morgan to undertake a valuation of the equities. It was not for EMFS to adduce evidence, because no case had been advanced by either party on the pleadings to the effect that JP Morgan would have been asked for a valuation. LBIE has adduced no evidence of fact to make good its new case.

324. However, EMFS says that there are compelling reasons why the court should conclude, if it decides that the correct question is as to what advice JP Morgan would have given, that a conservative valuation would have reflected Dr Ellis' lower bound valuation.

Conclusion

325. LBIE's "threshold objections" go partly to its attack on the credibility of Dr Ellis, and its submission that the court must in the circumstances accept the evidence of Mr Ruiz. As stated elsewhere, I do not accept this proposition. It is correct that he does not have the expertise of Mr Ruiz in share trading. But as EMFS says, the non-Defaulting Party may not be an equity trader, and there is no requirement under the GMRA that an equity trader's advice must be used for valuation.

326. It is useful to begin with the hypothetical situation against which the court must answer the question raised in Issue 17(b). In fact, the Default Valuation Notice given by EMFS on 22 September 2008 relied on the actual sale prices of the equities achieved by JP Morgan a few days earlier. There is no dispute that the sale was properly carried out, or that in the wake of the Lehman Brothers collapse, EMFS had to look to the collateral to recover its repo loan of USD$250m.

327. In point of fact, there was no objection to the notice by LBIE for some years, but the hypothetical is on the basis that LBIE did object at the time on the ground that the notice was late (by hours, rather than days or weeks, but nevertheless late), and that the hypothetical objection was (as I have held) justified in the case of the non-US securities. On that basis, the question is what EMFS *would* have done, acting within the contract, and the confines of rationality, if the objection had been taken at the time.

328. The commercial effect of LBIE's case is that hypothetical sale proceeds (slightly adjusted for market impact) remain the basis for the valuation, but that the date is moved forward to a hypothetical sale a few days after the sales that actually happened, so that LBIE in effect gets the benefit of the rise of the market in the meantime. LBIE says that this approach replicates the value which would have been obtained if EMFS had instructed JP Morgan to sell the portfolio at close of business on the fifth trading day: "It is therefore precisely targeted at the exercise mandated by the GMRA of producing a fair market value for the portfolio at the Default Valuation Time".

329. I do not think that the analogy with the sale by JP Morgan is correct. In the stressed conditions following the collapse of Lehman Brothers, EMFS was anxious to sell the securities as quickly as possible. But in the hypothetical circumstance that LBIE

rejected its valuation based on such sale, there is no necessary reason to impose a valuation based on an immediate sale on the fifth trading day. By rejecting the valuation based on the actual sale proceeds, LBIE necessarily opens the question up. As EMFS submits, its valid concern in such circumstances would have been to minimise the risk to itself, and this would not restrict it to any particular method.

330. In support of LBIE's case, there is no dispute that in general terms, Mr Ruiz's methodology provides a proper basis for valuation, or that it is standard market practice to value equities (and especially liquid equities) by reference to their published closing prices on the relevant valuation day. Further, his expertise in the field is not in doubt.

331. But it has not been suggested that this is the only basis for ascertaining the "fair market value" of shares. This is reinforced by the terms of GMRA. Under the contract, the exercise in determining the "fair market value" is a broad one. The non-Defaulting Party is entitled to have regard to such pricing sources and methods, which may include without limitation available prices for securities with similar maturities, terms and credit characteristics, as it considers appropriate.

332. Nor is there any dispute that EMFS would have been fully entitled to value these securities on a conservative basis. LBIE says that Mr Ruiz's valuation is conservative, but the market impact adjustment he makes to the closing prices is 58 bps, or 0.58%, which the evidence suggests is minimal (JP Morgan's discount for buying the whole portfolio would have been more than 150 bps, though this proposal was not pursued).

333. As to the hypothetical facts, it seems to me that the debate between the parties as to whether EMFS would have taken advice from JP Morgan, or experts such as Mr Ruiz, or Dr Ellis, is inconclusive. I do not accept the threshold criticism made by LBIE that "EMFS has advanced no evidence that it would have commissioned an expert report such as Dr Ellis's report". By the nature of the exercise the parties put to the court, the choice incorporated in Issue 17(b) is between two methodologies, and inevitably so.

334. Only tentative findings are possible. Upon the raising of the hypothetical objection, EMFS would no doubt have taken advice. However, if that advice had come from JP Morgan, as LBIE says it would, I do not accept that Mr Ruiz's evidence is a "good proxy" for its content. On the evidence in the case as a whole, I consider that EMFS would more likely have been told that there are various ways of calculating the "fair market value" of equities within the ambit of the relevant provisions of the GMRA.

335. As EMFS says, it would not have been asking JP Morgan how to liquidate the portfolio as aggressively as possible, as was done in the previous week, but would have been seeking advice on valuation in circumstances where it would have had to proceed on the basis that any repayment might only ever come from the collateral.

336. As a matter of commercial sense, I agree with EMFS that it would have adopted the lowest legitimate valuation, provided that it was within the terms of the contract, and the confines of rationality. I have ruled out a valuation based on the actual sale price of the equities, which is what EMFS would undoubtedly have wished to do. The

question for the court is between the valuation of Mr Ruiz incorporating a market impact adjustment of 58 bps, or that of Dr Ellis's corrected Method 2.

337. As to the terms of the contract, LBIE argues in the post-hearing agreed summary of valuation issues that Dr Ellis's approach is not a valuation, but a liquidation strategy. I do not think that this point was raised in quite this form before. In any case, I reject it. Both experts use a notional liquidation of the securities to arrive at a valuation. The difference is that Mr Ruiz assumes liquidation of all the securities in the relevant closing auction on the fifth trading day, whereas Dr Ellis assumes a liquidation over a period of days.

338. Although (as stated) Mr Ruiz's methodology is in principle a proper one, he has to include a market impact adjustment. In other words, he does not suggest that closing prices alone can determine the issue. I accept the submission of EMFS that his adjustment of 58 bps is non-forensic, in the sense that it is not based on any stated standard, textbook, etc., and so involves a degree of subjectivity.

339. There may also be force in the question that EMFS raises as to the feasibility of a sale of this portfolio within a single closing auction. The sale of the shares in a single day was not achieved by JP Morgan.

340. In this regard, LBIE points out that over 85% of the equities by value was constituted by positions of particular equities which represented less than 25% of the ADV of those equities on the relevant exchange, and the weighted average of the ADV was 13.5%. As against that, EMFS says that the weighted average was higher than the average share of daily volume traded in the closing auction for certain markets, e.g. 4.2% (Japan) and 4.5% (US). Further, it is not in dispute that five of the equities had a % ADV higher than 50%, which Mr Ruiz himself would not have sought to sell in a single batch.

341. These points show that Mr Ruiz's valuation methodology is not necessarily a straightforward analogue for what could in fact have happened at the time, had the DVN been rejected.

342. It is common ground that, when valuing equities, a trade-off must be struck between market impact and opportunity cost—or more simply, the depression of the price produced by a substantial sale as against the risk of a drop in prices over the so called "hedging period". The main criticism of Dr Ellis is that his projected sale over a period gives rise to excessive opportunity cost. However, I agree with EMFS that under the "fair market value" provisions of the GMRA, the appropriate balance is and should be a matter for the non-Defaulting Party.

343. Further, there is nothing inherently unreasonable in the approach to valuation adopted by Dr Ellis. The striking thing about the case in this respect is that LBIE relied on the same approach, until its case was amended to reflect Mr Ruiz's evidence. As EMFS says, given that this approach previously represented LBIE's pleaded case as to "the methodology that a trader would use", LBIE cannot be heard to describe it as irrational. This, in my view, makes LBIE's case a difficult one on this point.

344. What Dr Ellis has done is to adjust the inputs, particularly lowering the notional daily sale to 10% from 20%, and commencing the exercise for Method 2 on 23 September

2016. Objection is taken to these adjustments on the basis that he ignores the required trade-off between market impact and opportunity cost to produce a discount to market prices at the Default Valuation Time on the relevant date of 8.6%. I accept that the discount is substantial, but the adjustments are not in themselves unreasonable. The result is close to the amount actually received for the shares, even if this reflects (as LBIE says) a rise in the market in the meantime. Neither the adjustment, nor the outcome, can be described as irrational. Nor, in my view, is commencing the calculation on 23 as opposed to 22 September 2008.

345. I do not therefore answer the "would have" question in favour of LBIE. I agree with EMFS that in the hypothetical situation posited, it would, and would have been entitled to, determine the Net Value in accordance with Dr Ellis's lower bound valuation of the equities.

<u>The Appendix 3 Bonds</u>

<u>On the true construction of paragraph 10(e)(i)(C) of the GMRA, in order to be valid and effective, did a non-Defaulting Party's determination of Net Value have merely to be a determination which was not arbitrary, capricious or irrational (as contended by EMFS), or did it in addition have to be an objectively reasonable determination (as contended by LBIE on its primary case)? Issue 13(a)</u>

346. See above under Issue 16.

<u>Was EMFS'S determination of the Net Value of the A3 bonds in the DVN valid? Issue 14</u>

347. The facts as regards the valuation of the A3 bonds in the DVN are set out above. In summary, in respect of the five bonds for which JP Morgan had been unable to obtain any bids, EMFS valued them by reducing observed screen prices by 40%.

348. LBIE contends that the 40% discount was unreasonable and irrational:

(1) EMFS did not test the market at discounts even approaching the 40% level, and therefore cannot support that level of discount by reference to JP Morgan's failure to sell or receive bids for the bonds during the short period in which it tried to do so.

(2) EMFS itself recognised that a 40% discount was "definitely not reasonable", and the 40% discount should be compared with Mr Sanders's calculation of a median discount on the A2 bonds of 15%.

(3) The 40% discount was arrived at without taking into account the intrinsic characteristics of the bonds, although EMFS recognised in the context of its own internal valuation that these characteristics were a relevant consideration.

(4) Dr Ellis's "cross check" shows that EMFS's value for the Converium bond falls below his range with his value for the Lockheed Martin bond barely above it. When Dr Ellis's calculation is adjusted by removing the intra-day adjustment (but retaining his 40% discount), both these bonds as valued by EMFS are below his range.

(5) The presentation for EMFS's Credit Committee on 26 September 2008 calculated the "Current Market Value" of the A3 bonds by applying only a 20% discount to their screen price.

(6) Ms Nguyen's evidence was that she has never encountered a discount of this level being applied to bonds of the quality of these bonds.

(7) Testing the arguments by reference to the individual bonds, applying a 40% discount to a Statoil or Converium bond cannot be a rational approach.

(8) The "Bonds Schedule" that was put to Dr Ellis demonstrates that EMFS's prices for the A3 bonds were outliers by comparison to independent pricing references.

349. EMFS contends that its valuation of the A3 bonds in the DVN was rational.

(1) JP Morgan had been unable to find a buyer for the A3 bonds. It had also been unable to elicit any firm bids for them.

(2) The lack of bids strongly indicated that the A3 bonds were particularly illiquid or distressed.

(3) JP Morgan had said that discounts against screen prices could be as high as 40%. The bank also said that it was "very difficult to establish a price", given that no-one could be persuaded to make a bid.

(4) On 22 September 2008, JP Morgan said it was "impossible for us to say" whether the prices were 0 or 100, and that EMFS'S task was unenviable.

(5) EMFS did know that, where JP Morgan had sold securities, it had done so for less than the pre-trade estimate. Moreover, the quotations obtained for the A2 bonds had been much lower than screen prices, with a mean average discount of 19.57% (14% excluding the distressed MBIA bond) and a median discount of 15%. Given that the A3 bonds were more illiquid than the A2 bonds and generally had lower credit ratings, a higher discount was plainly justified.

(6) Even bonds issued by apparently creditworthy issuers like Statoil had not been traded since July 2007. In a market with high expectations of future volatility, and when EMFS was not required to assume any risk of an adverse movement in prices, a discount of 40% was an entirely reasonable one for these illiquid bonds.

(7) It is immaterial that EMFS had not wanted to sell the bonds at a 40% discount, since its concern was to recover the US$250m from the collateral, which a sale at a 40% discount would prevent (on what LBIE accepted to be the reasonable assumption at the time that any shortfall might not be recoverable from the LBIE estate).

(8) By holding the bonds in the hope of the market recovering in the future, EMFS would be assuming risk, with a consequent change in the "time horizon".

(9) It is immaterial that EMFS had not tested the market at a 40% discount. Not only is this not how bond trading works, but EMFS had no obligation to test the market at any particular discount: the definition of Net Value permitted EMFS to take into account such pricing sources and methods as it thought appropriate.

350. My conclusions are as follows. Both sides rely on conversations between JP Morgan and EMFS in the relevant week, i.e. up to 22 September. The bank was not asked for a valuation of the A3 bonds on that day, and as EMFS says, it said that it did not envy the task that EMFS had to perform.

351. However, whilst it is correct (as EMFS says) that on the morning of 19 September 2008 the bank mentioned a 40% discount, what was said was that the discount was "very, very issue specific"—i.e., dependent on the bond in question. The context of the remark was that the bank "had seen instruments trading anywhere from sort of a 10 to a 30% discount".

352. Shortly afterwards, the transcript shows that Mr Ahsmann (EMFS's Financial Operations Manager and, LBIE says, Mr Sanders' senior) saying, "Big question is what is reasonable and 40% is definitely not reasonable". It is correct as EMFS points out that this view was expressed during the liquidation process as distinct from the valuation process, but in my view it must have some relevance to valuation as well.

353. EMFS instructed the bank not to sell the remaining bonds at more than a 5% discount, but that afternoon the bank was instructed to discontinue trading. EMFS say that this was because of the lack of expressions of interest in the remaining bonds. However, I accept LBIE's submission that it is also clear from the contemporary documents that senior management hoped that "the huge potential bailout being considered by the US government" could restore order to the market—the bailout is a reference to TARP (the Troubled Asset Relief Program).

354. On the afternoon of 22 September 2008, Mr Sanders says that the valuation of the bonds was "heavily debated", and lists the factors that led to the 40% discount being applied. These were in effect the same points as EMFS relies on as set out above. He says that that the bonds were unsellable, and "were in that sense toxic".

355. In this regard, though I am not asked to consider the bonds individually, two in particular have been cited by LBIE. Converium Holdings was part of the Berkshire Hathaway Group, which Mr Sanders agreed was possibly on a par with ExxonMobil (which is of course a prime name) itself. Statoilhydro (Statoil) is a Norwegian company, part owned by the Norwegian government, and rightly described as "quasi-sovereign" by Ms Nguyen. EMFS itself acknowledges that Statoil and Converium "might be expected to be creditworthy", but this understates the position.

356. Whilst the evidence suggests that a 40% discount might be applied to toxic assets, it cannot in my view be right to describe bonds of this quality as in any sense "toxic".

357. EMFS says that the bonds were illiquid, and Dr Ellis demonstrated that in the case of Statoil in which there were only 14 trades between January 2007 and 22 September 2008, the last being on 17 July 2007.

358. However, as LBIE says, Dr Ellis did not suggest that these bonds were thought to be distressed or requiring substantial discounts at that time. I agree that this evidence as to liquidity simply establishes that these bonds changed hands very rarely.

359. EMFS place strong reliance on the fact that JP Morgan had been unable to find a buyer for the A3 bonds, and had also been unable to elicit any firm bids for them. I agree that this is an important point.

360. However, there is a limit to how far the point goes. As LBIE says, EMFS did not test the market at discounts even approaching the 40% level. I have set out the facts above. EMFS says this is immaterial, and not how the bond market works. I do not agree with this. On the evidence, it is not all unlikely that buyers could have been found at discounts considerably less than 40%, given the quality of some of the paper. So whilst it is an important factor, I agree with LBIE that JP Morgan's failure to sell or receive bids for the bonds is not conclusive.

361. The valuation of the A2 bonds showed a median discount of 15%, and EMFS says that given that the A3 bonds were more illiquid and generally had lower credit ratings, a higher discount was justified. In fact, in my view the credit ratings are not particularly insightful: for example, MBIA was rated as A- by S&P, but it is not in dispute that it was distressed. Nevertheless, I would accept EMFS's general proposition, but nearly not to the extent of justifying a 40% discount applied to each of the A3 bonds including Statoil and Converium.

362. There is another significant factual matter. On 26 September 2008, so the Friday of the same week in which the DVN was given, the Credit Committee of EMFS met. The situation with Lehman Brothers was of course on the agenda. The committee received a presentation as to the "residual positions"—that is, the bonds which JP Morgan had been unable to sell.

363. The presentation showed in different columns the "Bloomberg Market Value" (the screen prices of the bonds), and the "Current Market Value". The latter showed only a 20% discount on the A3 bonds, not a 40% discount. Mr Sanders suggested that, despite the heading, this was simply trying to show the committee that there was "hope" that the money would be recovered. I do not accept that, and agree with LBIE that EMFS's Credit Committee was unlikely to be marking its books on a "hope" basis: if anything, it would be seeking to value the bonds as conservatively as was acceptable. Nor do I accept Mr Sanders' suggestion that it was a mistake.

364. This is an internal, effectively contemporaneous valuation of the bonds, and I am satisfied that it shows the value that EMFS in fact ascribed to the bonds at the time.

365. It is correct, of course, that the test of rationality gives considerable leeway to the non-Defaulting Party. But it is nevertheless an important boundary, and if crossed, the other creditors wrongly lose out. Taken with the other evidence, I agree with LBIE that the current market value ascribed by EMFS to the A3 bonds on 26 September 2008 shows that the 40% discount in the DVN of 22 September cannot be justified on a rational basis.

If EMFS'S determination of the Net Value of the A3 bonds in the DVN was invalid, should they now be valued under paragraph 10(e)(ii) (as contended by LBIE) or under paragraph 10(e)(i)(C) (as contended by EMFS)? Issue: 13(b)/15

366. This issue only arises in respect of the A3 bonds if the court concludes that the DVN was served validly and on time, as it has as regards these bonds (which LBIE treats as North American securities).

367. If the court finds that the DVN was served validly and on time, and also concludes that LBIE is correct to contend that EMFS's 40% discount to the A3 bonds was invalid as being irrational, as it has, then LBIE's case is that the A3 bonds fall to be valued as at the Default Valuation Time, 22 September 2008, and not earlier on 16 September 2008.

368. LBIE's case is that the GMRA provides that if a DVN is not served in time, the valuation is carried out at the Default Valuation Time. There is no warrant for adopting a different approach if a DVN was served, but was invalid in whole or in relevant part.

369. EMFS contends that, if the DVN was in principle valid because it was served in time and by a proper method, but the court concludes that EMFS's valuation of the A3 bonds in the DVN was invalid, then the court would have to consider what permissible Net Value EMFS would have given to the A3 bonds in the DVN, had it carried out a compliant valuation under paragraph 10(e)(i)(C) of the GMRA (and not under paragraph 10(e)(ii)). The practical significance of this is that any valuation under paragraph 10(e)(i)(C) would take place as at 16 September 2008 rather than 22 or 23 September 2008.

370. This point is taken by EMFS because on Dr Ellis' figures, the A3 bonds were worth slightly less on 16 September 2008 than on 22 or 23 September 2008. It is not a good point for the reason given by LBIE. On the court's findings, no valid notice was given in respect of the A3 bonds within the contractual window, so that they fall to be valued under paragraph 10(e)(ii) at the Default Valuation Time.

If the DVN was not valid and effective in respect of some or all of the A3 bonds, is EMFS entitled to say that it would validly have adopted under paragraph 10(e)(ii) of the GMRA the prices set out in Appendix 3 to the DVN, ie a discount of 40% to screen prices? Issue 20(a)

371. The answer is in substance the same as under Issue 14 above.

Issue 20(b): Assuming that EMFS is not entitled to say that it would validly have adopted the prices set out in Appendix 3 to the DVN, then should the valuation approach adopted be the discounted cash flow model of Dr Ellis or the observable price based model of Ms Nguyen?

372. Ms Nguyen's methodology starts from the observable price and makes adjustments for execution risk (where the observable price is not a traded price) and for the size of the position and for volatility (adopting whichever is the larger of these two adjustments). EMFS has a number of criticisms of her approach, including that as regards size and volatility discounts she applied only the higher of the two, and that she applied an undifferentiated liquidity discount of 5% (save for 5.67% for Lockheed

Martin) against screen prices right across the A1, A2 and A3 bonds despite their very different characteristics.

373. Dr Ellis carried out a Discounted Cash Flow (DCF) analysis of the bonds. LBIE does not, and could not, take issue with that approach in itself, but it does take issue with the two adjustments which Dr Ellis added to it, namely his "intra-day volatility" discount, and his additional discount for liquidity which he set at 40% for his low valuation and 15% for his high valuation. LBIE says that the liquidity discount of 40% is simply copied from what EMFS did. It objects that this discount did not take account of the inherent characteristics of the bonds, and cannot therefore cannot be adopted wholesale into a DCF calculation which is aimed precisely at putting a value on the inherent characteristics of the bonds.

374. This is essentially the "would have" issue as it applies to the A3 bonds. In this regard, I refer to my conclusions under Issue 14 above. I refer particularly to the facts as to the meeting of the Credit Committee of EMFS on 26 September 2008, and the presentation as to the "Current Market Value" showing a 20% discount on the Appendix 3 bonds, not the 40% discount which it has sought to maintain. As stated earlier, this is an internal, effectively contemporaneous valuation of the bonds, and I am satisfied that it shows the value that EMFS in fact ascribed to the bonds at the time.

375. I would not accept Dr Ellis's 40% liquidity discount in respect of the A3 bonds. I agree with LBIE that this is an attempt to transpose EMFS's case into his valuation, without substantial validation.

376. My preliminary view, however, is that it is the EMFS valuation of 26 September 2008 which provides the best answer to the "would have" issue as it applies to the A3 bonds. I have expressed it as a preliminary view, because I am conscious that it does not adopt either alternative offered under Issue 20(b). I would ask the parties to consider this against the findings of the court as a whole. On this basis, they should be able to resolve this issue without further findings from the court.

<u>The Appendix 2 Bonds</u>

<u>Issue 19(a): Is EMFS entitled to say that it would validly have adopted under paragraph 10(e)(ii) of the GMRA the prices at which a bid was received for the Appendix 2 bonds?</u>

377. Although LBIE maintains its submission that EMFS could not validly adopt the bid prices for the Appendix 2 bonds, it accepts that EMFS has "an apparently more defensible case in respect of these bonds". This is because the factual case of EMFS (which I accept) is that only one quotation could be obtained by JP Morgan for these bonds, and this was "refreshed" by JPMS on 22 September 2008, so was current on that day.

378. That being so, I accept EMFS's case based on the evidence of Mr Sanders that it would validly have adopted the quotations obtained by JP Morgan for the A2 bonds for the purposes of a valuation under paragraph 10(e)(ii). EMFS says, and I accept, that he would have had no reason to doubt that the quotations accurately reflected the price at which the A2 bonds would trade on 22 September 2008.

379. In these circumstances, there is no need to deal further with Issue 19(b) as to the valuation methodologies in respect of the Appendix 2 bonds, nor did the parties do so in the Agreed Document.

The Appendix I Bonds

Issue 18(a): Is EMFS entitled to say that it would validly have adopted under paragraph 10(e)(ii) the prices at which the Appendix 1 bonds had been sold?

380. LBIE is content for this issue to be answered "yes", in accordance with EMFS's case. It does so because Ms Nguyen's valuations of the Appendix 1 bonds are lower than the actual sale prices. (Issue 18(b), which deals with alternative valuations will then not arise.)

381. I record that LBIE adds that, "If LBIE's case is accepted in relation to the Appendix II and Appendix III Bonds then, in order to be consistent, LBIE is willing to adopt Ms Nguyen's conservative valuations of the Appendix I Bonds, which are lower than the sale prices, but it is not necessary for the Court to make any finding in this respect."

Other issues

382. Since it is common ground that the court is being asked to determine only the high-level points of principle on valuation, the net principal sum payable will be a matter for consideration after judgment. The parties will doubtless be able to agree this.

383. Issues as to interest and legal expenses will also be a matter for consideration after judgment.

Conclusion

384. As the parties no doubt anticipate, on the large number of issues placed before the court some points have been decided in favour of one party, and some in favour of the other. It is not practical or necessary to list all of these.

385. However, it may be helpful to indicate the result on some of the main points (making clear that nothing in the summary alters in any way the actual conclusions as expressed above). I accept LBIE's case as to the validity of the 15 September 2008 Default Notice. I accept EMFS's case that the Default Valuation Notice was validly served, save as to the Default Valuation Time. On the latter point, I accept LBIE's case that it was not open to EMFS to determine a single Appropriate Market, ie a Global Market or the US Market for all of the securities. However, I accept EMFS's case as to the close of business in this regard.

386. As regards valuation, and to the extent set out above, I accept EMFS's case that the valuation needed to be rational, not objectively reasonable. I accept EMFS's alternative case as to the A1 equities, and its case as to the A2 bonds. I accept LBIE's case as to the A3 bonds to the extent that EMFS's 22 September 2008 valuation was invalid.

387. Once the parties have had a chance to consider this judgment, consequential matters may arise. I am grateful to the parties for their assistance.