NOTICE OF FILING

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File Title:	ACN 117 641 004 PTY LTD (IN LIQUIDATION) (IN ITS CAPACITY AS TRUSTEE OF THE VALE CASH MANAGEMENT FUND) & ANOR v S&P GLOBAL, INC. (A COMPANY INCORPORATED IN NEW YORK) & ANOR
Registry:	NEW SOUTH WALES REGISTRY - FEDERAL COURT OF AUSTRALIA

Registrar

Important Information

This Notice has been inserted as the first page of the document which has been accepted for electronic filing. It is now taken to be part of that document for the purposes of the proceeding in the Court and contains important information for all parties to that proceeding. It must be included in the document served on each of those parties.

The date of the filing of the document is determined pursuant to the Court's Rules.

Filed pursuant to Order 1(b) of the Orders of Lee J dated 25 July 2023

Form 17
Rule 8.05(1)(a)

FURTHER AMENDED STATEMENT OF CLAIM

No. NSD 881 of 2020

IN THE FEDERAL COURT OF AUSTRALIA
DISTRICT REGISTRY: NEW SOUTH WALES
GENERAL DIVISION

BETWEEN

A.C.N. 117 641 004 PTY LTD (IN LIQUIDATION)
(IN ITS CAPACITY AS TRUSTEE OF THE VALE CASH MANAGEMENT FUND)
First Applicant

CITY OF COCKBURN A.B.N 27 471 341 209
Second Applicant

and

S&P GLOBAL, INC.
(A COMPANY INCORPORATED IN NEW YORK)
First Respondent

STANDARD & POOR'S INTERNATIONAL, LLC
(A COMPANY INCORPORATED IN DELAWARE)
Second Respondent

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I. INTRODUCTORY SECTIONS

1. PARTIES

(A) The Applicants

1. The First Applicant, ACN 117 641 004 Pty Ltd (in liquidation), formerly Vale Cash Management Fund Pty Ltd (**Vale**):

    1.1 is and was, at all material times, a company incorporated pursuant to the *Corporations Act 2001* (Cth) (**Corporations Act**) with a registered office in Perth, Western Australia;

    1.2 is and was, at all material times, the trustee of the ~~was operating as a~~ cash management fund for certain clients of Oakvale Capital Limited known as the Vale Cash Management Fund (the **Fund**);

    1.3 is and was a corporation able to sue and be sued~~.~~;

    1.4 brings this claim in its capacity as trustee of the Fund.

2. On 25 June 2020, the Supreme Court of Western Australia appointed Andrew Heard as the liquidator of Vale, pursuant to orders made in proceedings CIV:1484/2020.

3. The Second Applicant, City of Cockburn is and was at all material times:

    3.1 a local government under the *Local Government Act 1995* (WA); and

    3.2 a corporation able to sue and be sued.

(B) The Group Members

4. Each of the First and Second Applicants (the **Applicants**) brings these proceedings as a representative party pursuant to Part IVA of the *Federal Court of Australia Act 1976* (Cth) (**FCA Act**).

5. The Applicants and the group members to whom these proceedings relate (**Group Members**) are persons who:

    5.1 acquired interests in one or more collateralised debt obligations (**CDOs**) or constant proportion debt obligations (**CPDOs**) assigned credit ratings AAA, AA+, AA or AA- ~~higher~~ by the Respondents using:

(a) CDO Evaluator 2.4.3 on or after 19 December 2005; and/or

(b) CDO Evaluator 3.0, 3.1 or 3.2; and/or

(c) CPDO Evaluator

(together, the **Claim CDOs**); ~~and~~

5.2 acquired their interests in the Claim CDOs by reason of the publication or dissemination of the ratings for those products in Australia; and

5.3 have suffered loss or damage by reason of their acquisition of interests in the Claim CDOs, ~~conduct of the Respondents pleaded herein,~~ excluding loss or damage caused by the acquisition of any of the products identified in Schedule 1.

(C) The Respondents

6. The First Respondent:

6.1 is and was at all material times a company duly incorporated in New York, United States of America;

6.2 is and was at all material times capable of being sued;

6.3 was formerly named McGraw-Hill Financial, Inc., and before that McGraw-Hill Companies, Inc.

7. The Second Defendant is and was at all material times:

7.1 a company duly incorporated in Delaware, United States of America;

7.2 a wholly owned subsidiary of the First Defendant;

7.3 capable of being sued.

8. At all material times, "Standard & Poor's Ratings Services" (now known as "S&P Global Ratings") was described as "a division of the McGraw-Hill Companies".

9. Unless otherwise indicated, the First and Second Respondents and Standard & Poor's Rating Services are hereafter referred to as "**S&P**".

10. At all material times, S&P carried on business throughout the world as a credit rating agency (**CRA**), *inter alia*, publishing credit ratings and research reports concerning financial products and was a leading source in Australia and throughout the world for credit ratings, indices, investment research, risk evaluation and data.

II. THE APPLICANT AND GROUP MEMBERS CLAIMS

2. COLLATERALISED DEBT OBLIGATIONS

11. A ~~collateralised debt obligation (**CDO**)~~CDO is a structured credit product. Two types of CDOs are known as "cashflow CDOs" and "synthetic CDOs" (**SCDOs**). ~~derivative through which investors purchase the right to receive interest and principal payments from a special purpose vehicle. Their entitlement to receive such payments depends upon the performance of a number of underlying debt securities and investors therefore bear some risk in relation to defaults on those underlying debt securities.~~

12. A CDO involves an investor purchasing rights from a special purpose vehicle. In some but not all cases, those rights will include the right to receive interest and principal payments from the special purpose vehicle.

13. An investor's entitlement to receive such payments depends upon the performance of a number of underlying debt securities and investors therefore bear some risk in relation to defaults on those underlying debt securities.

14. The organisation that creates and structures a CDO, typically an investment bank, is called the **arranger** of that CDO.

(A) Cashflow CDOs

15. A **cashflow CDO** is usually issued by ~~consists of~~ a bankruptcy-remote special purpose vehicle (**SPV** or **issuer**). Investors will pay money to the issuer. In return, the issuer will issue notes to investors (**noteholders**) that contain certain rights. ~~that issues different **tranches** of securities (also called **notes**) to investors (**noteholders**) and uses the proceeds of the note issue to purchase a portfolio of debt securities (**collateral**).~~

16. The notes issued by an issuer will generally be divided into tranches by the issuer. The tranches will generally have different rights attached to them, including a right to be paid in preference to other tranches.

17. As a general matter, the senior tranches will have a right to be paid in priority to the junior or equity tranches (also known as "subordinated notes" or "income notes").

18. Accordingly, notes making up the senior tranches generally hold higher ratings, while the junior tranche notes will hold lower ratings. The equity tranche bears the first risk of loss and is generally unrated.

19. The issuer will use a portion of the funds contributed by investors to purchase the collateral underlying the CDO. The collateral is made up of a pool of securities or assets, usually debt instruments. In some cases, the assets making up the collateral may have been transferred to the issuer prior to the notes being issued.

20. The collateral underlying a CDO generates cashflows. Those cashflows ~~which~~ are used to pay noteholders generally in sequential order from the senior tranches to the junior or equity tranches. This is referred to as the **cashflow waterfall**. ~~in sequential order from most senior to most junior tranche ("**cashflow waterfall**").~~

~~The most junior tranche is called the **equity tranche** (also known as "subordinated notes" or "income notes").~~

21. Where a particular note involves the payment of interest, the cashflows generated by the collateral are used in part to pay scheduled payments of interest to noteholders, which is also called the **coupon.** ~~For the noteholders in all tranches except the equity tranche, the cashflows generated by the collateral are used to pay a stated, regularly scheduled payment of interest, called a **coupon**~~.

22. The payment of the principal is subject to prescribed principal repayments outlined in the terms of the transaction documents. ~~The principal is typically repaid at maturity, subject to prescribed principal prepayment events in the transaction documents.~~

23. Investors in the equity tranche will often ~~do~~ not receive a ~~stated~~ coupon but will ~~rather~~, subject to the terms of the transaction documents, instead receive a distribution of excess income once the CDO has paid all the noteholders in the more senior tranches their stated coupons and discharged any other liabilities.

24. The primary ~~principal~~ risk for investors in a cashflow CDO is that ~~one or more of~~ the defaults (and/or credit events) in the underlying assets or ~~debt~~ securities ~~which~~ that make up the collateral ~~default (or suffer a credit event)~~ are greater and faster than expected. This may impact on the ability of the issuer of the CDO to pay noteholders

which means those securities stop paying their cashflows in full. This is called "**credit risk**".

25. If a credit event occurs in the collateral, this may impact the ability of the issuer of the CDO to pay noteholders their return, and ultimately, to repay their principal in accordance with the terms of the transaction. ~~there is less collateral to generate cashflows to pay the noteholders their return and, ultimately, to repay their principal.~~

26. Principal is repaid to investors in sequential order – with senior tranches having priority over the junior or equity tranches. ~~Losses from credit events in the reference entities are borne by the noteholders in reverse sequential order, from the most junior to the most senior tranche.~~ Investors in senior tranches only suffer loss if the next most junior tranche has been wiped out.

27. To compensate for the increased risk associated with being in a more junior tranche, the more junior the tranche, the higher the rate of return (or **yield**), with the equity tranche typically expecting the highest rate of return over the life of the CDO (assuming defaults do not exceed a certain level) and the most senior tranche typically expecting the lowest rate of return.

28. Thus, each tranche of a CDO represents a different level of risk and reward associated with the collateral. In a typical structure, the more senior a tranche, the less credit risk it has but also the lower the yield received by noteholders. The more junior a tranche, the more credit risk but the higher yield in return for that risk.

29. The point at which an investor in a particular tranche of a CDO begins to experience loss as a result of credit events in the collateral is known as the **attachment point** of the tranche. That is the proportion of the total value of the portfolio of assets that make up the collateral (**total principal**) that must default before investors in that tranche bear any loss of principal. It is also called the **subordination** of the tranche.

30. The **detachment point** is the proportion of the total principal that must default before the noteholders in a given tranche bear an entire loss of principal (that is, before the tranche is "**wiped out**").

31. Accordingly, the attachment and detachment points delineate the tranche.

32. All cashflow CDOs are **full capital structure** CDOs.

33. This means that:

33.1 the total face value of the notes issued to investors is usually equal to the total principal;

33.2 the attachment point of one tranche corresponds to the detachment point of the next most junior tranche; and

33.3 all tranches usually must be sold to investors in order for the CDO to be economically viable, and thus be issued.

(B) Synthetic CDOs

34. SCDOs are a form of CDO in which investors do not obtain any direct or indirect interest in the underlying debt securities that make up the collateral but the underlying debt securities determine the performance of the CDO~~, for the reasons explained in paragraphs 29-39 below.~~

35. SCDOs generally involve the issuer obtaining credit exposure to the obligations of reference entities through the use of credit derivatives. ~~SCDOs use credit derivatives to achieve the same credit risk transfer as cashflow CDOs, without physically transferring the assets to the SPV.~~

36. The credit derivative typically used is a credit default swap (**CDS**). Unlike cashflow CDOs, investors in SCDOs do not obtain any legal or equitable interest in the underlying reference entities or the obligations of those reference entities.

37. A CDS is a contract between two swap counterparties, known as the **protection buyer** and the **protection seller**. The protection buyer makes fixed periodic payments to the protection seller (**protection premium**) in return for the protection seller indemnifying the buyer in the event one or more specified reference entities default. The payment required to be made by the protection seller in the event of such default is known as the protection payment (**protection payment**).

38. As such, under a CDS, the protection seller effectively sells credit protection to the protection buyer, in return for the protection premium. A credit default swap has the effect of transferring the credit exposure to the reference entities (together, the **reference portfolio**) from the protection buyer to the protection seller.

39. In a typical SCDO structure:

39.1 the SPV enters into one or more CDSs on a reference portfolio of assets, made up of specified reference entities; ~~debt securities as the protection seller.~~

39.2 the SPV will be the protection seller, and therefore agrees to make a protection payment to the protection buyer in return for the payment by the protection buyer of protection premium, in accordance with the terms of the CDS Agreement;

39.3 the precise circumstance in which the protection payment will be required to be made will depend upon the terms of the CDS Agreement, but will typically be where one or more credit events occur in respect of the reference entities;

39.4 the issuer will use part of the funds paid by investors for the notes in the SCDO as cash collateral or to acquire other risk-free or near risk-free assets to be used as collateral. The issuer will typically be required to realise part or all of the collateral in order to make protection payments under the CDS; and

39.5 the issuer will usually enter into an interest rate or total return swap with the CDS counterparty in respect of the interest earned on the collateral and receives regular payments from the counterparty (comprising protection premiums under the CDS and a floating rate payment under the swap) which it may use to pay coupons and distributions to investors.

~~The amount of protection sold in relation to the reference entities is usually equal to the face value of all notes issued in the SCDO.~~

~~The SPV uses funds raised by the notes issue as cash collateral or to buy other safe collateral (such as government or corporate bonds), in an amount equal to that raised by the notes issue, and thus the protection sold (SCDO collateral).~~

~~The SPV receives protection premiums from the CDS and interest from the SCDO collateral, which it uses to pay coupons and distributions to investors.~~

~~As in a cashflow CDO, the main risk in a SCDO is that one of more of the reference entities defaults (credit risk).~~

~~If one of the reference entities defaults, this activates the SPV's obligation to make a protection payment and the SPV must sell some of the SCDO collateral to do so.~~

~~This reduces the amount of funds available to pay a return to noteholders, as there is less SCDO collateral to generate interest and also the SPV will receive less protection premiums because one or more of the reference entities has defaulted. There is also less SCDO collateral to use to repay noteholders their principal and distributions upon maturity of the notes.~~

40. The effect of the structure outlined above is that the SPV (as the protection seller) sells credit protection to the protection buyer, thereby assuming credit exposure to the reference entities from the protection buyer in return for the payment of the protection premium.

41. As a result, the main risks to investors in an SCDO are similar to the risks to investors in a cashflow CDO as described in paragraph 24 above. That is, the primary risk is that defaults in the underlying assets or securities that make up the reference portfolio will be greater than expected.

42. The point at which an investor in a particular tranche of an SCDO begins to experience principal loss because of a credit event in the reference entities is known as the **attachment point** of the tranche. The **detachment point** is the proportion of the total principal loss due to credit events in the reference entities at which investors in a given tranche bear an entire loss of principal. Accordingly, the attachment and detachment points delineate the tranche in an SCDO.

43. Paragraphs 24 – 31 ~~19 – 26~~ above apply to SCDOs.

44. SCDOs were often issued in a single-tranche structure, although some SCDOs were issued with a full capital structure.

~~SCDOs can be issued with a full capital structure or a single-tranche structure.~~

(C) CDO asset types

45. The collateral assets ~~that form the collateral~~ in cashflow CDOs and the obligations of ~~or the~~ reference entities in SCDOs are usually debt securities, such as corporate loans or bonds, government bonds or asset-backed securities (**ABS**).

(i) ABS CDOs

46. An ABS is generally a financial security backed by a ~~an asset or~~ pool of assets, in some cases ~~typically~~ loans or accounts receivables ~~originated~~ by banks, specialty finance companies or other credit providers.

47. The term ABS encompasses any type of investment that is backed by a pool of debt, including mortgage-backed securities (**MBS**), which in turn can be divided into residential MBS (**RMBS**) and commercial MBS (**CMBS**), as well as small business loans (**SBLs**), home equity loans (**HEL**), student loans, auto loans, or any other debt (such as aircraft leases).

48. An **ABS cashflow CDO** is a CDO whose collateral is primarily made up of ABS. An ABS cashflow CDO is typically made up of many different types of ABS. It may also have a few non-ABS assets in the portfolio, such as corporate loans or other CDOs.

(ii) Corporate CDOs

49. A **corporate CDO** is a CDO which primarily invests in debt securities issued by corporates.

50. A cashflow CDO which primarily invests in loans to corporates is called a **collateralised loan obligation** (**CLO**).

51. ~~There are also SCDOs that invest primarily in CDSs on corporate bonds, which will hereafter be referred to as corporate SCDOs.~~ Corporate SCDOs invested primarily in CDS on corporate debt instruments, including corporate loans as well as bonds.

(iii) CDO squared

52. A **CDO squared** is ~~a CDO of a CDO – that is, a CDO~~ generally a CDO whose portfolio of collateral assets or reference entities ~~are primarily~~ includes the tranches of other CDOs (and sometimes some ABS). The underlying assets of a CDO squared transaction could also be a mixture of CDO tranches and ABS.

53. A CDO that is a reference entity in a CDO squared will be hereafter referred to as a **Referenced CDO**.

(D) Credit ratings of CDOs

54. Typically, each tranche in a CDO except the equity tranche is ~~assigned a credit rating~~ rated by a CRA ~~to indicate its credit risk~~. The equity tranche is typically not rated.

55. ~~In addition, each of t~~The debt securities that make ~~making~~ up the collateral of a cashflow CDO or the reference entities of a SCDO (other than in CDO tranches in a synthetic CDO squared ~~including any Referenced CDOs~~) are commonly, but not always, assigned a credit rating. ~~will have a credit rating to indicate its credit risk.~~

56. CDOs were sometimes described by reference to the type of collateral held by the CDO transaction, including by reference to the credit quality of the collateral pool. For example:

    56.1 ABS CDOs collateralised primarily by assets rated A or above were sometimes referred to as "high grade" by market participants; and

    56.2 ABS CDOs collateralised primarily by assets rated in the range between A and BB were sometimes referred to as "mezzanine" by market participants.

(E) Constant Proportion Debt Obligations (CPDOs)

57. A CPDO is a complex structured credit product that has features similar to a SCDO.

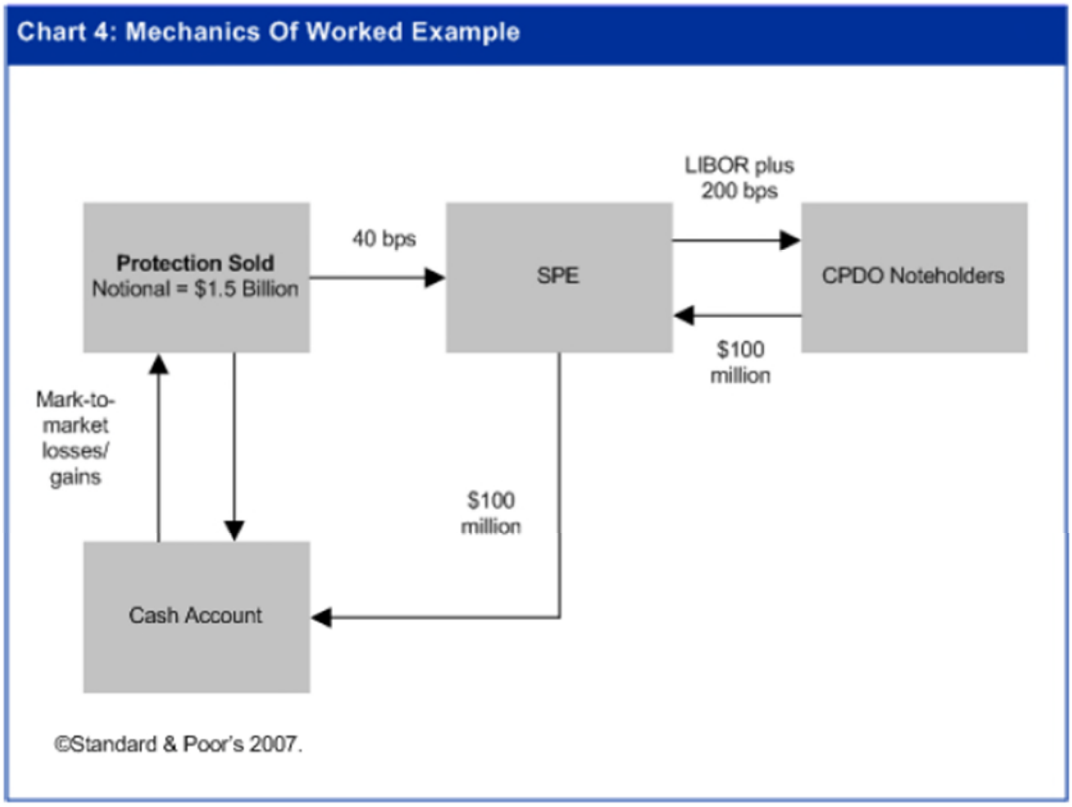
58. A CPDO operates as follows:

    58.1 an investor purchases notes issued by a special purpose vehicle in return for timely coupon and principal payments, with the coupon payments being at a spread above the London Inter-Bank Offered Rate (**LIBOR**);

    58.2 the special purpose vehicle places the issuance proceeds (minus any upfront fee) into a risk-free cash account; and

    58.3 to meet the promised liabilities and cover fees, expenses and potential losses, the special purpose vehicle takes leveraged exposure to a synthetic portfolio by entering into a CDS referencing indices of corporate names. This is known as the "risky exposure".

59. The mechanics of a CPDO are illustrated in the following diagram published by the Respondents:



60. The mechanics of a CPDO structure involve the concept of "leverage" which is the ratio of the risky exposure to the amount of the rated liabilities. This leverage changes over time as both the size of the risky exposure increases or decreases according to how well it is performing and the amount of liabilities decreases as they are paid down.

61. In every time step, a CPDO structure compares the target bond price, which is the present value of the remaining coupon and principal of the note, and the current net asset value (**NAV**) of the portfolio, which incorporates the cash account and the market value of the synthetic portfolio.

62. In CPDO structures, negative performance leads to an increase in the notional exposure (subject to a maximum leverage cap). The intent is to allow any negative performance to be cured by increasing the income from the risky asset to rebuild the portfolio's NAV.

63. A CPDO's performance is governed by a set of rules that determine when it will "cash in", "cash out" or fail to redeem part at term:

    63.1 Should the target bond price and the NAV be equal, the transaction will "cash in" and the risky exposure will be reduced to zero. From that point onwards, the

NAV is invested at the risk-free rate with coupons and fees being paid until maturity.

63.2 Should the transaction suffer losses causing the NAV to drop below a defined threshold (for example, 10% of the notional value of the issued debt) then the CPDO will "cash out". The CPDO will unwind and the investor will receive the remaining proceeds.

63.3 Should neither an early "cash in" nor "cash out" occur during the life of the CPDO, then the CPDO's cash inflows would have funded all coupon payments on term without "cash out" but may not be sufficient to pay back part. In this event, the CPDO would fail on its obligations and the investor would not receive the return of their principal.

64. The CPDO structure takes leveraged exposure to a risky asset by selling protection on indices or individual names.

65. Most CPDO transactions involve investment-grade "on-the-run" corporate indices, typically Dow Jones CDX and iTraxx Europe. The composition of these indices rolls on a six-month basis to the most liquid investment-grade names, which have an average rating of between A- and BBB+. This is intended to limit the credit risk to a six-month window.

66. The performance of a CPDO is driven by factors that affect the NAV, primarily credit losses and changes in credit spreads:

66.1 Credit losses occur when a name in the referenced indices suffers a credit event. When this occurs, the special purpose vehicle is required to make payments under its CDS contracts which reduces the NAV.

66.2 Widening or tightening of credit spreads changes the mark-to-market value of the synthetic portfolio and therefore the CPDO's NAV. There will also be an income effect, as the structure re-contracts at the new rate which will increase or decrease the leveraged return and therefore the CPDO's ability to make timely payments of principal and coupons.

67. The organisation that creates and structures a CPDO, typically an investment bank, is called the arranger of that CPDO.

(F) Transaction documents

68. CDOs and CPDOs were structured through a series of **transaction documents**, which included:

68.1 documents establishing the SPV;

68.2 documents issued by the SPV which contain the terms and conditions of the issue of notes to the noteholders, typically including ~~at least~~ an offering memorandum or offering circular; and

68.3 in certain cases, documents relating to an interest rate swap and portfolio management agreements or provisions.

~~53.3 documents confirming the CRA's assignment of the credit ratings to the rated tranches.~~

69. The transaction documents for a SCDO or CPDO included the documents listed in the paragraph above and also:

69.1 the documents constituting the terms of the CDS agreement;

69.2 documents through which any security interest was granted to the CDS counterparty, and programme level documentation incorporated by reference. ~~protection buyer over the CDO collateral held by the SPV.~~

~~**PARTICULARS**~~

~~*In relation to Part 2 above, the Applicants rely on:*~~

~~*A. S&P's technical documents, including the CDO Criteria Document and CDOE Technical Document (as defined in paragraph 100 below); and*~~

~~*B. the terms of the transaction documents for those of the Vale CDOs that it has in its possession.*~~

~~*Further particulars of the structure of CDOs may be provided after discovery and with expert evidence.*~~

70. The transaction documents for a CDO or CPDO included documents confirming the CRA's assignment of the credit ratings to the rated tranches or product.

PARTICULARS

In relation to Part 2 above, the Applicants rely on:

A. *S&P's technical documents, including the CDO Criteria Document and CDOE Technical Document (as defined in paragraph 100 ~~81~~ below); and*

B. *the terms of the transaction documents for those of the Vale CDOs that it has in its possession.*

Further particulars of the structure of CDOs may be provided after discovery and with expert evidence.

3. S&P'S CREDIT RATINGS OF THE CLAIM CDOS

71. The Applicants and Group Members invested in the CDOs and CPDOs assigned initial credit ratings of AAA, AA+, AA or AA- by S&P. ~~the Defendants.~~

PARTICULARS

Further particulars of the Claim CDOs acquired by the First and Second Applicants are referred to in Schedule 4, Schedule 5 and Part 12 ~~11~~ respectively. Particulars of the CDOs acquired by Group Members will provided following the trial of the common issues.

72. S&P assigned credit ratings to the Claim CDOs using:

72.1 CDO Evaluator 2.4.3; or

72.2 CDO Evaluator 3.0, 3.1 or 3.2; or

72.3 CPDO Evaluator,

(the **Ratings**).

73. ~~In addition,~~ S&P also assigned ratings to some of the debt securities that made up the collateral or reference portfolio of ~~each~~ some of the Claim CDOs.

74. In respect of the Claim CDOs, S&P caused or permitted or authorised a ratings letter in respect of each of the Ratings assigned by them to be sent to the arranger which constituted authority to the arranger to disseminate the assigned Ratings on the terms set out in the ratings letter. S&P were aware that arrangers were likely to communicate assigned ratings to potential investors as permitted by the terms of the relevant ratings letter.

75. ~~In respect of the Claim CDOs~~ S&P were aware that arrangers were also likely to ~~to be~~ publish~~ed~~ or disseminate~~d~~ the ratings letter in Australia to the public and/or to other

interested parties, including investors and the ~~potential investors in the Claim CDOs, including the~~ Applicants.

76. S&P also caused or permitted their ratings of the Claim CDOs to be published or disseminated by:

76.1 issuing documents known as a "New Issue Report" or "Media Release" concerning the CDO and S&P's rating of its tranches, or a "Presale Report" on the CDO and S&P's "preliminary rating"; and

76.2 publishing the ratings through "RatingsDirect", which formed part of S&P's "Global Credit Portal". That portal was a web-based credit analysis system available through S&P's website. S&P's website was accessible by investors and potential investors in Claim CDOs in Australia.

PARTICULARS

A. It was S&P's practice to publish all its CDO and CPDO credit ratings (other than those expressly agreed to be "private" ratings) by way of:

a. On the date of issue of the CDO or CPDO, a ratings letter addressed to the arranger and/or issuer of the CDO or CPDO confirming the ratings of its tranches and authorising dissemination of the ratings to "interested parties";

b. typically, on or around the date of issue of the CDO or CPDO, a "New Issue Report" and/or a "Media Release" on the CDO or CPDO and S&P's ratings ~~of its tranches~~; and/or

c. in some cases, before the CDO or CPDO was issued, a "Presale Report" on the CDO or CPDO and the "preliminary ratings" S&P had assigned to the CDO or CPDO.

B. S&P's publications about its ratings processes and its public ratings were generally made available through RatingsDirect, part of S&P's "Global Credit Portal", S&P's web-based credit analysis system, and at www.ratingsdirect.com and through S&P's website, www.standardandpoors.com.

C. By reason of the above, S&P knew, or ought to have known that the arranger and/or issuer (or other recipient of the ratings letter) would disseminate the ratings to interested parties such as investors and potential investors in the CDO or CPDO, or investors in CDOs referencing the CDO, in Australia.

*D. S&P had an office and ratings analysts based in Australia, and specifically targeted arrangers, issuers and investors in Australia as part of its business plan for its CDO ratings business: see S&P's "CDO Strategic Plan" (5 January 2006) (**CDO Strategic Plan**), pp. 17, 20.*

E. The dates on which the Ratings were first published by S&P will be provided following discovery.

F. Further particulars may be provided with the Applicants' evidence.

4. MEANING OF S&P'S RATINGS

(A) Ratings generally

77. A credit rating is a forward-looking statement of opinion by the issuer ~~of the rating~~ as to the relevant product's creditworthiness at the time the opinion is issued, affirmed or updated by a rating agency. ~~that is, its ability to meet its financial commitments (i.e. not default).~~

78. The purpose of a credit rating is to provide investors with independent information by persons expert in assessing the creditworthiness of an investment so that, by a simple system of letters, an investor can know and compare the creditworthiness of products.

79. Credit rating agencies (including S&P) specialise in evaluating credit risk and publish credit ratings. Credit rating agencies are sometimes referred to as **CRAs**. ~~The experts who publish credit ratings are called credit rating agencies or **CRAs**.~~

(B) S&P's credit ratings

80. A credit rating issued by ~~An~~ S&P ~~credit rating~~ for a CDO~~s~~ or CPDO:

80.1 was a forward looking statement of opinion about the likelihood of the "first dollar" of loss of a rated security and did not address the amount that may be recovered in a post-default scenario; and

80.2 ~~tranche~~ purported to represent S&P's assessment of the probability of that tranche defaulting, that is, failing to pay interest as scheduled during the term of the product and/or to repay principal in full on maturity.

~~An S&P CDO credit rating was a "first dollar loss" rating, which meant it only addressed the likelihood of default, and not the amount money that may be recovered in a post-default scenario.~~

81. For long-term credit ratings, S&P used a letter rating system to communicate an opinion as to the relative level of credit risk of the rated product. S&P had ~~nine~~ ten credit rating categories which, in order from most to least creditworthy, were as follows: AAA, AA, A, BBB, BB, B, CCC, CC, ~~and~~ C and SD or D.

82. Each of S&P's credit ratings from AA to CC ~~except AAA~~ could be modified by a "+" or "-" to indicate the relative ~~creditworthiness~~ standing of the product within that rating category.

83. Ratings of BBB- or above were generally referred to as "investment grade". Ratings of BB+ or below were generally referred to as "non-investment grade" or "speculative grade".

84. Unless expressly specified as a point-in-time rating, a credit rating from S&P conveyed its "current" or "forward-looking" opinion as to the creditworthiness of the CDO throughout its life.

85. With the exception of point-in-time ratings, w~~W~~hen it assigned a rating to a CDO, S&P monitored the performance of CDOs and other market developments that might affect S&P's view of the credit risk of any CDO to which they had assigned a rating, ~~undertook to monitor the CDO throughout its life and upgrade or downgrade its rating as appropriate This~~ which was called ~~rating~~ **surveillance**.

(C) Rating Representations

86. In assigning a credit rating to a tranche of a CDO or a CPDO, S&P intended to, and did, communicate and represent to recipients of the rating, including the arranger and/or issuer, investors or potential investors in the CDO, ~~or~~ CDOs referencing that CDO, or CPDO, the following:

86.1 when it assigned an "AAA" rating to a CDO tranche or CPDO:

(a) S&P had concluded that, at that time, the likelihood of payment of interest, as defined in the relevant transaction documents, and ultimate repayment of principal, in a timely manner ~~the capacity of the tranche to pay coupons to each of the noteholders and the principal amount at the end of the term of the CDO~~ was extremely strong;

(b) S&P had concluded that the tranche should be able to withstand an extreme level of stress and still pay coupons to each of the noteholders and the principal amount at the end of the term of the CDO,

86.2 when it assigned an "AA" rating to a CDO tranche or CPDO;

(a) S&P had concluded that, at that time, the likelihood of payment of interest, as defined in the relevant transaction documents, and ultimate repayment of principal, in a timely manner ~~the capacity of the tranche to pay coupons to each of the noteholders and the principal amount at the end of the term of the CDO~~ was very strong;

(b) S&P had concluded that the tranche should be able to withstand a severe level of stress and still pay coupons to each of the noteholders and the principal amount at the end of the term of the CDO,

86.3 when it assigned a credit rating to any CDO tranche or CPDO:

(a) the rating assigned represented S&P's true, current and independent opinion as to the creditworthiness of the relevant tranche or product;

(b) the rating could be relied on by investors in making investment decisions;

(c) S&P's assessment of the creditworthiness of the tranche or product was based on reasonable grounds; and

(d) in assessing the creditworthiness of the tranche of the CDO or the CPDO and assigning the rating, S&P had exercised reasonable care and skill,

(together, the **Rating Representations**).

PARTICULARS

Those representations were part express and part implied, in particular by:

- *the use of the letter system, which was defined or explained by S&P in various publications, and also had a generally understood meaning within the market at the time;*
- *S&P's status as an expert credit rating agency and NRSRO: see paragraphs 88-90 ~~71-74~~ below.*

As to the meanings conveyed by the letter system see, for example:

A. Standard & Poor's, "Corporate Ratings Criteria" (2001), pp. 3-4, 7-8.

B. Standard & Poor's, "An Introduction to CDOs and Standard & Poor's Global CDO Ratings" (8 October 2003), p. 5.

C. *Kai Gilkes & Norbert Jobst, Standard & Poor's, "Credit Risk Analysis and Structured Finance Ratings: Quantitative Methods" (22 July 2004), pp. 4-5, where the Great Depression is referred to as a "AAA" event.*

D. *Email from Frank Lu (S&P) to Samy Beji (Calyon) dated 20 September 2006, attaching Standard & Poor's, "Corporate Ratings Criteria" (2006), pp. 8, 11-12.*

E. *Standard & Poor's, Global Credit Portal – RatingsDirect, "General Criteria: Understanding Standard & Poor's Ratings Definitions" (3 June 2009), see especially pp. 12-18. On pp. 15 and 16 ~~pp. 12-13 and p. 16~~, where the Great Depression is listed as a "AAA" event.*

F. *The Applicants will adduce expert evidence that the market at the time understood S&P's ratings in this way.*

G. *Further or alternatively, S&P was aware that the market understood its ratings to convey the above quantitative and qualitative representations by virtue of its experience as a CRA (see paragraphs 88-90~~71-74~~).*

87. For the reasons explained in paragraphs 84 and 85 ~~67~~, each of the Rating Representations was a continuous representation that continued until the rating was withdrawn by S&P.

5. S&P'S RATING EXPERTISE

88. During the relevant period, S&P held itself out as the world's foremost provider of independent credit ratings.

PARTICULARS

S&P repeatedly described itself as such in publications it published during the relevant period including, for example, Annual Reports published by the First Respondent for 2003-2008, amongst others.

89. In the period from 2004 to 2007, S&P assigned ratings to many hundreds of CDOs with a combined value in the billions of dollars and had the highest share of the market for CDO ratings between July 2004 and March 2006. ~~At the time when S&P rated CDOs using CDO Evaluator version 3.0, 3.1 and 3.2, S&P had the highest share of the market for CDO credit ratings and had rated many hundreds of CDOs with a combined value in the billions of dollars.~~

PARTICULARS

See, for example:

A. *CDO Strategic Plan (January 2006), pp. 4, 22.*

B. *The global CDO market penetration figures in the "Activity Reports" provided to Joanne Rose on 20 July 2004 and 27 March 2006.*

90. S&P ~~was~~ at all material times~~:~~

90.1 was designated by the U.S. Securities and Exchange Commission as a nationally recognised statistical rating organisation (**NRSRO**) which utilised statistical science in formulating credit ratings opinions and as such was an expert in that field and in relation to the subject matter of CDO ratings; and

90.2 employed highly skilled quantitative analysts who were experts in the fields of statistical science and the use of such science in credit ratings analysis, including CDO ratings.

6. S&P'S RATING PROCESS

(A) Use of CDO Evaluator

91. In order to assign credit ratings to CDOs, S&P used a computerised quantitative simulation model, known as **CDO Evaluator** or **CDOE**.

92. CDOE was considered within S&P and externally to be "a backbone to the CDO rating process" and its output was required for a CDO deal rated by S&P.

PARTICULARS

CDO Strategic Plan, p. 33.

The CDO Strategic Plan was prepared by and distributed internally within S&P CDO ratings team to various persons. Amongst others, Kai Gilkes, Patrice Jordan, Richard Gugliada, Perry Inglis and Joanne Rose were each responsible for reviewing the document and adding input – see:

A. *Email from Ram Ranganath to William Cox, Richard Gugliada and others on 2 December 2005 attaching a draft of the CDO Strategic Plan dated 1 December 2005 (**Draft CDO Strategic Plan**), which notes that it is to be reviewed by Patrice Jordan and her team, that Kai Gilkes has "provided valuable input to the document" and that the "plan was to meet up with Guido [Gugliada] next week to get his input".*

B. *Email to Bruce Hamann to Stephen Anderberg, Tom Gillis, Kai Gilkes, David Tesher, Elwyn Wong, Patrice Jordan, Curt Moulton and others (12 January 2006).*

C. *Email from Hiromi Saito to Toshihiro Matuso (12 January 2006), forwarding email from Fabienne Michaux to others (12 January 2006).*

D. *Email from Bruce Hamann to March Anthonisen, Richard Gugliada and others (12 January 2006) forwarding email chain between Ram Ranganath, Patrice Jordan, Kai Gilkes and others "attaching the final version of the CDO Strategy Document that was submitted to Joanne Rose, Patrice Jordan and the CDO Leadership team including Perry Inglis and Fab Micheaux". The email also notes that the document includes contributions from Kai Gilkes and QCOE.*

E. *Email from Brenda Shaw on behalf of Patrice Jordan to Henry Albulescu, Kai Gilkes, Perry Inglis and others dated 12 December 2005, attaching memorandum from Patrice Jordan to Joanne Rose with subject "Global CDO Activity Report", which says at p. 22 that an "advanced version of the CDO Strategic Plan was reviewed with Pat Jordan" and "the CDO Leadership Team will review the strategy document".*

93. The output of CDOE was the sole, or alternatively the primary, determinant of the ratings assigned by S&P to CDOs.

94. S&P used CDOE to model the credit risk of a CDO's collateral or reference portfolio.

95. CDOE simulated portfolio default rates or loss rates for a pool of assets or reference obligations underlying a CDO. Those portfolio default rates or loss rates were used by the Respondents in their assessment of the creditworthiness of CDOs.

96. ~~CDOE was also used as the basis of~~ S&P also maintained a monitoring or surveillance tool called "CDO Monitor", the program that was made available to collateral or asset managers in managing the portfolio of cashflow CDOs. The "CDO Monitor" program was based on CDO Evaluator.

97. CDOE was used by S&P to undertake surveillance on a CDO after it had been issued, and determine whether or not to upgrade, lower or maintain its credit rating based on events that had occurred since its issue.

PARTICULARS

"Criteria for Rating Synthetic CDO Transactions" published 12 September 2003, p. 55.

~~*A. CDO Criteria Document, pp. 24, 30, 48.*~~

~~*B. CDO Strategic Plan, p. 46.*~~

(B) Development of CDO Evaluator

98. CDOE was first developed by S&P in about 2001 and updated from time to time thereafter. Relevantly:

98.1 CDOE version 2.4.3 (**CDOE 2.4.3 or E2.4.3**) was released on 2 December 2004 ~~sometime before 17 June 2005~~;

98.2 CDOE version 3.0 (**E3.0**) was released on 19 December 2005;

98.3 CDOE version 3.1 (**E3.1**) was released on 4 April 2006 ~~sometime before 10 May 2006~~;

98.4 CDOE version 3.2 (**E3.2**) was released on 19 June 2006,

(CDOE versions 3.0 - 3.2 together, **CDOE 3** or **E3**).

PARTICULARS

A. "Timeline" dated 18 February 2005, marked "[~~D~~draft 1] Privileged and Confidential for Internal Use Only".

B. Email from Perry Inglis to Patrice Jordan and Andrea Bryan, cc'ing Kai Gilkes, Mei-Lee Da Silva, Simon Collingridge, Stephen Anderberg and Tom Gillis dated 17 June 2005.

C. CDOE Technical Document dated 19 December 2005.

D. Email from Bob Watson to Katherine Roome, Richard Gugliada and others dated 11 May 2006 re "RE: CDOE Releases", attaching powerpoint presentation entitled "CDO Evaluator Version 3.1.ppt".

*E. S&P publication "Standard & Poor's Modifies Structured Finance Default Assumptions in CDO Evaluator" published 19 June 2006 (**E3.2 Document**).*

99. ~~To the best of the Applicants' knowledge, a~~ Although E3 was released on 19 December 2005, it was not used to rate cashflow CDOs until on or around 1 January 2007. During that period, S&P continued to use E2.4.3 to rate cashflow CDOs.

PARTICULARS

S&P, "S&P Launches Latest Version of CDO Evaluator Modelling Tool" dated 19 December 2006 said: "E3.0 will not be used for cash CDOs until early 2006. At that time an announcement will be made and a separate transition process will occur. Broadly speaking, the combined effect of E3.0 and new cash flow criteria is likely to be neutral for cash CDOs containing leveraged loans and highly rated corporate bonds or

ABS. However, transactions containing high proportions of high-yield corporate bonds may be negatively affected."

However, S&P, "CDO Spotlight: Update to General Cash Flow Analytics Criteria for CDO Securitizations" dated 17 October 2006, p. 1 said: "The goal is to apply the methodology highlighted below together with Standard & Poor's CDO Evaluator Version 3.2 (E3.2) for transactions closing after Jan. 1, 2007".

100. S&P purported to describe the operation of CDOE in a series of technical documents it published to the world including:

100.1 "Global Cash Flow and Synthetic CDO Criteria" published 21 March 2002 (**CDO Criteria Document**), in which it represented (at page 1) that "[t]he global rating methodology and criteria used in rating cashflow and synthetic CDOs are presented in this publication";

100.2 "CDO Evaluator Version 3.0: Technical Document" published 19 December 2005 (**CDOE Technical Document**), in which it represented (at page 1) that it "describes the theory, assumptions, and computational methods used by the CDO Evaluator version 3.0 to simulate the portfolio loss distribution, which allows determination of the various portfolio risk measures we use in the CDO ratings process.";

100.3 "Criteria for Rating Synthetic CDO Transactions" published 12 September 2003;

100.4 "Global Methodology for CDOs of Equity and Credit Default Swaps" published 17 February 2004;

100.5 "CDO Spotlight: Counterparty Risk in Structured Finance Transactions" published 7 March 2005;

100.6 "Version 3.0 – CDO Evaluator Handbook" dated January 2006,

(the **Rating Methodology Publications**).

PARTICULARS

S&P published the technical documents, including the CDO Criteria Document and CDOE Technical Document, online on its website and also through its "Global Credit Portal".

101. At a high level, CDOE operated as described in paragraphs 102-147 ~~83-126~~ below.

(C) Monte Carlo simulation

102. CDOE used a Monte Carlo simulation to estimate a distribution of portfolio losses (or SLRs) for a CDO's collateral or reference portfolio. ~~determine the credit risk of a CDO~~

103. A Monte Carlo simulation:

103.1 is a statistical technique that can be used to estimate the likelihood of various outcomes by running many multiple trial runs;

103.2 involves simulating outcomes dependent on one or more variables by applying random values within set parameters for those variables; and

103.3 by simulating a very large number of (potentially hundreds of thousands) of independent trials using random variables for modelled variables, derives a probability distribution of the output results.

~~A Monte Carlo simulation is a mathematical technique used to model the probability of certain events occurring.~~

~~To run a Monte Carlo simulation, it is first necessary to identify the key variables that bear on the event and the range of values those variables could possibly bear.~~

~~Then, in the Monte Carlo simulation, a random value is selected for each of the key variables and the model is run using this random value.~~

~~The model can be run thousands of times to generate a probability distribution of the event occurring.~~

104. CDOE used a Monte Carlo simulation to estimate:

104.1 the likelihood of credit events (defaults) occurring in the collateral or reference portfolio for a CDO;

104.2 the amount of defaults (as a proportion of the total portfolio) that a tranche of a CDO must be able to withstand in order to achieve a given credit rating (the **scenario default rate** or **SDR** for each tranche); and

104.3 the level of loss (as a proportion of the total portfolio, or a dollar figure) that a tranche of ~~the~~ a SCDO must be able to withstand in order to achieve a given credit rating (the **scenario loss rate** or **SLR** for each tranche).

105. The estimate of the distribution of defaults in each portfolio of assets derived from the Monte Carlo simulation in CDO Evaluator was dependent, inter alia, on:

105.1 an estimate of the default rate of each individual asset in the portfolio; and

105.2 an estimate of the asset correlation between the obligors in the portfolio.

~~The first step was to assess the number of credit events likely to be experienced among the reference entities in the period to maturity of the CDO.~~

~~This had two components:~~

~~an assessment of the probability of a reference entity defaulting individually; and~~

~~an assessment of the likelihood of events occurring in which more than one of the reference entities jointly default.~~

(D) ~~Asset~~ Default tables

106. The default rate assumptions for individual assets in an asset portfolio were determined by reference to **default tables** (also known as **asset tables** or **credit curves**) for assets of a certain type, credit rating and maturity.

107. The default tables used in CDO Evaluator were published in documents made available by the respondents, including in Appendix 1 to the CDOE Technical Document.

108. CDO Evaluator assigned a default rate to each asset in the asset portfolio based on its asset class, credit rating and maturity as set out in the relevant default table.

109. Versions of CDO Evaluator preceding the release of E3.0:

109.1 used a single default table for corporate and CDO asset classes, derived from data relating to corporate defaults between 1981 and 1997 (the **Corporate Default Table**);

109.2 used a separate default table for ABS assets (the **ABS Default Table**), which did not vary with maturity, with all ABS assets assumed to have a 7 year weighted average life reflecting the results of ABS default studies.

110. With the introduction of E3.0:

110.1 the Corporate Default Table was updated;

110.2 the ABS Default Table was updated;

110.3 a separate default table for CDOs was created.

111. For E3.2, there was a revised ABS Default Table.

~~The first of those two components was determined by reference to probabilities of default (**PDs**) identified in tables for assets of a certain type, credit rating and maturity (**asset tables** or **credit curves**).~~

~~Using the asset tables, each debt security in the collateral or reference portfolio of a given CDO was assigned a PD based on its asset class, credit rating and term.~~

~~Before E3:~~

~~the corporate asset table (**Corporate Table**) was used to provide the PDs for any corporate securities or CDOs that comprised the reference entities of a CDO; and~~

~~there were separate PDs for ABS portfolio assets (**ABS Table**) which were all assumed to have a seven-year weighted average life, meaning the PDs did not change based on maturity.~~

~~In E3.0:~~

~~a revised Corporate Table was used to provide the PDs for corporate reference entities in CDOs;~~

~~a revised ABS Table (which now had PDs which changed with maturity) was used to provide the PDs for ABS reference entities in CDOs; and~~

~~a new table, described as "CDO tranches – credit curves and rating quantiles" (**CDO Table**), was used to provide the PDs for any CDOs referenced in another CDO.~~

~~For E3.2, S&P developed and used a revised ABS Table.~~

112. S&P represented that the figures in the ~~asset-~~default tables were the PDs for those assets.

PARTICULARS

See, for example:

A. *CDO Criteria Document, pp. 7, 9.*

B. *CDOE Technical Document, Appendix III.*

C. *S&P CDO Group "Special Report – New Benchmarks Overcome Shortcomings of Traditional CDO Evaluations" (September 2001), p. 2.*

D. *Standard & Poor's, "An Introduction to CDOs and Standard & Poor's Global CDO Ratings" (8 October 2003), p. 7.*

113. S&P represented in its ~~technical documents~~ Rating Methodology Publications that:

113.1 the ~~asset-~~default tables used in CDOE were derived from historical data about ratings transitions and defaults;

113.2 before E3, given the relative paucity of default data, S&P used corporate default rates as proxies for the long-term default behaviour of ABS;

113.3 the Corporate Table updated in E3.0 was derived from S&P's "CreditPro" database, which contained data collected by S&P about historical ratings transitions and defaults for rated firms (corporates) between 1981-2003;

113.4 the ABS default rates in the ABS Table in E3.0 (also used in E3.1) were determined using a transition matrix that was based on the average historical ABS transition matrix, with certain qualitative adjustments;

113.5 the revised ABS Table in E3.2 incorporated an extensive analysis of actual default data for RMBS, ABS, CMBS and CDOs, and market feedback after S&P's release of E3.

PARTICULARS

A. *CDO Criteria Document, pp. 40, 41, 44-45, 50.*

B. *CDOE Technical Document, pp. 2, 5-6.*

C. *E3.2 Document, p. 8.*

(E) Gaussian copula

114. The second component referred to in paragraph 105 ~~90~~ above was determined by:

114.1 a choice or an assumption of a probability distribution, known as a "copula", to be used in the Monte Carlo simulation; and

114.2 the parameterisation or inputs into that copula.

115. A copula is a mathematical concept used in statistics that describes the dependence structure between a random set of variables.

~~The random variables generate a vector of uniform variables, and the copula describes the likelihood of the uniforms jointly taking certain values.~~

116. The copula was used in CDO Evaluator to simulate multiple assets in the collateral or reference portfolio jointly defaulting or not defaulting.

~~In a CDO modelling context, a copula is used to model the probability of multiple reference entities jointly defaulting and the time to default~~

117. The particular copula used by S&P in CDO Evaluator was the Gaussian copula.

118. The Gaussian copula assumes a normal distribution of random events.

(F) Correlation assumptions

119. The inputs or parameters for the Gaussian copula were called the "correlation assumptions" or the "correlation matrix".

120. Correlation in structured finance:

120.1 refers to the joint behaviour of a pair of obligors;

120.2 is an estimate of the likelihood that two obligors within a portfolio may behave in the same or a similar way;

120.3 is usually expressed as a percentage or a number between 0 and 1 (for example, 10% or 0.1, which means that the two obligors would act in the same way 10% of the time, or one in ten times).

121. ~~The correlation assumptions are a set of assumptions about the likelihood of two obligors of a specific asset class acting in a similar way (that is, in correlation), namely, defaulting or not defaulting~~ The greater the correlation between obligors in the portfolio the greater the likelihood of assets behaving in the same way, including defaulting or not defaulting together.

~~The correlation assumptions were expressed as a percentage or amount out of 1; for example, 10% or 0.1, which means that the two obligors would act in the same way 10% of the time, or one in ten times.~~

122. Correlation is likely to be higher among reference entities that operate in the same geographic region and the same industry.

123. Correlation is likely to be lower among reference entities that are idiosyncratic, particularly reference entities located in different geographic regions and or different industries.

124. At all material times, S&P was aware:

124.1 of the matters referred to in paragraph 120 to 123 above;

124.2 that correlation had an effect on the level of SDRs for a portfolio.

125. Correlation between obligor pairs, of its nature, is not capable of direct observation. It requires estimation from empirical data and can only be estimated within a broad range.

126. The dependency model in CDO Evaluator estimated the correlation between different obligors in the portfolio using a **correlation assumption** for each obligor pair in the portfolio based on asset type, industry sector and region.

127. The correlation assumptions used in CDO Evaluator included different values for:

127.1 **intra-sector** correlation: the tendency for two obligors within the same sector (industry) and same region, to behave in the same way;

127.2 **inter-sector** correlation: the tendency that two obligors in different sectors but within the same region behave in the same way;

127.3 **inter-region** correlation: the tendency that two obligors in different sectors and different regions behave in the same way.

~~There were up to three correlation assumptions used in CDOE:~~

~~**Intra-sector** or **same sector/same region**: the probability that two obligors within the same sector (industry) and same region, will default at the same time;~~

~~**Inter-sector** or **different sector/same region**: the probability that two obligors in different sectors but within the same region will default at the same time; and~~

~~**Inter-region** or **different sector/different region**: the probability that two obligors in different sectors and different regions will default at the same time.~~

128. Each pair of assets in a CDO's collateral or reference portfolio was assigned one of the correlation assumptions based on their asset type, and whether they were in the same or different sectors and regions.

129. The correlation assumptions used in E2.4.3 and E3 for corporate and ABS obligors were as follows:

129.1 E2.4.3:

(a) corporate obligors: intra-sector between 0% and 30%; inter-sector 0%;

(b) ABS obligors: intra-sector 10%; inter-sector 0%.

~~(c) There was no inter-region assumption for corporates or ABS.~~

129.2 E3:

(a) corporate obligors: ~~intra-sector 15%; inter-sector 5%; inter-region 0%.~~

	Inter-sector	Intra-sector
Within country	5%	15%
Within region	5%	0% - local 15% - regional 15% - global
Between regions	0%	0% - local

		0% - regional 15% - global

(b) ABS obligors: ~~intra-sector 30%; inter-sector 10%; inter-region 0%.~~

	Inter-sector	Intra-sector
Within country	10%	30%
Within region	10%	20%
Between regions	0%	0%

~~Each pair of assets in a CDO's collateral or reference portfolio was assigned one of the correlation assumptions based on their asset type, and whether they were in the same or different sectors and regions.~~

130. The default tables and correlation assumptions were used in the Monte Carlo simulation in CDO Evaluator as follows:

130.1 each trial in the Monte Carlo simulation estimated the default time of each asset in the portfolio, based on (*inter alia*) the estimated default rate of the obligor determined from the relevant default table and the correlation assumptions for the obligors in the portfolio;

130.2 if the simulated default time occurred before maturity of the asset, the asset was considered to default;

130.3 CDO Evaluator would typically run several hundreds of thousands of independent trials in the Monte Carlo simulation;

130.4 through running a Monte Carlo simulation, CDO Evaluator estimated a distribution of defaults in the asset portfolio and a set of SDRs for the portfolio at each credit rating level.

~~Once the PDs and the correlation assumptions for the underlying reference entities were entered into the copula, it randomly generated a default time for each reference entity.~~

~~The default time was then compared to the CDO's maturity to determine whether the entity defaulted in the life of the CDO.~~

~~Using the Monte Carlo simulation, that process was undertaken thousands of times.~~

~~This allowed CDOE to estimate:~~

~~115.3 the total number of defaults likely to occur in the collateral or reference portfolio during the CDO's life; and~~

~~115.2 the distribution of those defaults across the tranches, that is, the SDR for each tranche~~

(G) Recovery rates

131. ~~Then, t~~The portfolio losses were modelled by combining the default rates referred to in ~~the above~~ paragraph 130 above and the reference entity recovery rates.

132. The **recovery rate** of an instrument is the amount to be received on a defaulted obligation or the amount by which the credit protection payment is reduced following a default. This is usually expressed as a percentage of the face value of the instrument. ~~it is expected to be worth after it defaults, for example, 20% or 40% of its face value.~~

133. Some CDO transactions had fixed recovery rates, meaning that they promise to pay out a certain amount, lower than their face value, in the event of default. If that is the case, those values were entered into CDOE. Where this was so, the rate was agreed between the parties to the transaction and that rate was used as an input in CDOE.

134. Where the deal did not specify a recovery rate, S&P used its own assumptions as to recovery rates (which were published in the CDO Criteria Document and CDOE Technical Document and otherwise described in the Ratings Methodology Publications) in the simulation.

135. The recovery rates were used in CDOE as part of the process to estimate portfolio losses and, for synthetic CDOs, a distribution of losses in the reference portfolio and set of scenario loss rates for each rating level.

~~Using the recovery rates for the reference entities, CDOE could generate:~~

~~120.5 the total losses likely to be experienced by the portfolio; and~~

~~120.6 the distribution of those losses across the tranches.~~

(H) CDO quantiles

136. CDOE included a **quantile table**, also referred to as the CDO Table, that identified the part of the loss distribution and amount of credit enhancement that was necessary to achieve a given level of rating.

137. To be assigned a certain rating by CDOE, a tranche of a given maturity had to default less than a certain percentage of runs in the Monte Carlo simulation (**rating quantile** or **rating cut-off point**).

138. Before E3, S&P used the PDs in the Corporate Table to provide the rating quantiles for all CDOs, including corporate CDOs, ABS CDOs and CDO squareds.

139. ~~However, as explained further in Part 9 below, f~~For E3, S&P developed and used the new CDO Table, which had different and higher PDs that than the Corporate Table or the ABS Table, to provide the rating cut-points for all CDOs regardless of the nature of the assets they held or referenced.

140. For a CDO of a given maturity, the Monte Carlo simulation in CDOE would generate the SLR for a tranche of a given rating by selecting the level (quantile) of loss that the tranche had to be able to withstand defaults less than the PD for that rating level in the asset table then in use for CDOs.

141. S&P would not assign a rating to a given tranche of a CDO ~~unless would only achieve a given credit rating~~ if the simulated SLR ~~its attachment point~~ was at or above the SLR for that credit rating.

142. Thus, the SLR generated by CDOE determined where the attachment and detachment points of each tranche must be placed to obtain certain ratings.

PARTICULARS

In relation to Part 6 above, the Applicants rely on technical documents published by S&P, including the CDO Criteria Document and CDOE Technical Document.

Further particulars may be provided with the Applicants' expert evidence.

(I) Use of CPDO Evaluator

143. In 2006, S&P developed a model for modelling CPDOs (**CPDO Evaluator** or **CPDOE)** that was used in 2006 and thereafter to rate CPDOs.

144. From around March 2007, CPDOE was made available to arrangers.

145. S&P described the operation of CPDOE in "Structured Finance CDO Spotlight, Criteria, Quantitative Modelling Approach to Rating Index CPDO Structures" (**CPDO Quantitative Modelling Document**), which was published alongside the public release of "CPDO Evaluator" on or around 22 March 2007.

146. CPDOE:

146.1 used a Monte Carlo framework to model CPDO structures;

146.2 calculated credit losses on the underlying portfolio of the CPDO using the Gaussian copula framework and corporate correlation assumptions used in E3;

146.3 calculated the number of paths in which a "cash in" or "cash out" occurred for the CPDO, with a failed path being a path in which a "cash out" event occurred or coupon and principal cannot be paid in full;

146.4 determined the rating for the CPDO by comparing the number of failed paths with the default probability by rating and tenor for CDO liabilities, being the quantiles provided for in the CDO Table.

PARTICULARS

CPDO Quantitative Modelling Document, pp. 11-20.

147. S&P used and released multiple versions of CPDOE. All versions, including the versions used prior to the public release in March 2007, operated as set out in paragraph 146 above and used the quantiles in the CDO Table to determine the cut-point for rating CPDOs.

148. The output of CPDOE was the sole, or alternatively the primary, determinant of the rating assigned by S&P to a CPDO.

7. USE OF CDOE AND CPDOE TO STRUCTURE AND MARKET CDOS AND CPDOS

(A) Availability of CDOE and CPDOE

149. During the relevant period, ~~S&P made~~ CDOE and (from April 2007) CPDOE were available for download ~~online~~from S&P's website. ~~It was~~CDOE was licensed, and available free of charge, to the public. CPDOE was licensed, and available free of charge, to the public, or alternatively licensed to market participants in the credit derivatives industry. ~~under a licensing agreement to market participants in the credit derivatives industry.~~

150. By December 2005, there were about 3,000 users of CDOE and "~~[t]~~The demographics of the users ~~[were]~~ included issuers, arrangers (including non-rating clients) and investors~~"~~.

PARTICULARS

A. Draft CDO Strategic Plan, p. 41.

151. S&P also made available to market participants in the credit derivatives industry its technical documents describing its credit rating methodology, including the CDO Criteria Document, ~~and~~ CDOE Technical Document and the CPDO Quantitative Modelling Document. S&P published documents explaining changes and updates to its ratings methodology from time to time.

PARTICULARS

A. Paragraph 145 and ~~T~~the particulars to paragraph 100 ~~81~~ are repeated.

B. S&P also provided users of E3 with a "CDO Evaluator Handbook" (January 2006), which explained how to use E3.

152. As S&P published its credit ratings to the world, arrangers and other participants in the structured credit industry were also able to ascertain and utilise S&P's ratings assigned to credit instruments that may be used as the collateral or reference entities for CDOs or CPDOs.

PARTICULARS

The particulars to paragraph 76 ~~58~~ are repeated.

153. The ~~publication~~ availability of CDOE and (from March 2007) CPDOE and the publication of S&P's technical documents and its credit ratings enabled arrangers to design and structure CDOs and CPDOs to achieve certain ratings.

154. Arrangers of CDOs and (from March 2007) CPDOs (typically, investment banks or hedge funds) could use CDO Evaluator or CPDOE to derive an indicative rating for a CDO comprised of a given portfolio of collateral assets or reference entities or an index CPDO comprised of a given index CDS respectively.

155. ~~CDO a~~Arrangers~~, which were typically investment banks or hedge funds,~~ received profits from arranging CDOs or CPDOs in the form of various fees including servicing fees, administration fees and hedging fees. In addition, CDO arrangers often used CDOs and/or CPDOs to transfer risk off their own books.

156. For these reasons, it was in the interest of arrangers to design CDOs and CPDOs that were attractive to investors ("economic") and so generated the maximum profits and/or shifted the maximum risk for themselves.

(B) Structuring of CDOs using CDOE

157. The credit rating of a rated tranche or product was a key determinant of its coupon, in that there was an expectation in the CDO and CPDO market at the time that a tranche of a CDO or a CPDO of a certain asset class and a certain rating would provide at or around a certain rate of coupon, usually measured in basis points above the reference rate.

158. To make a CDO economic, it was necessary to:

158.1 ~~135.7~~ sell the maximum amount of notes possible with the lowest coupon rate possible, so there was enough cashflow to make investment by noteholders in the lower tranches and the equity tranche worthwhile. If the arrangers were not able to sell a sufficient amount of notes in the senior tranches for a low coupon rate, then the lower tranches would not have a high enough yield to attract investors;

158.2 ~~135.8~~ to achieve this, it was necessary to design CDOs where the senior tranches had the lowest attachment points possible that were consistent with the highest credit rating possible, so the maximum amount of notes could be sold that paid the lowest coupon rate possible.

159. The arrangers achieved this by using CDOE to “reverse engineer” CDO structures that would generate the desired credit ratings and desired cashflow waterfalls.

160. This involved using CDOE to generate the SLRs and credit ratings for each tranche, and in turn using that information to determine where to place the attachment points for each tranche to achieve the desired ratings. The arranger would then calculate the coupon rate for each tranche of the CDO having regard to the credit rating.

(C) Structuring CPDOs using CPDOE

161. In 2007, CPDOs were relatively new products.

162. To make CPDOs attractive to potential investors, arrangers sought to structure the CPDOs so that they are higher coupon than CDOs with an equivalent rating.

163. From no late than March 2007, the arrangers achieved this by using CPDOE to "reverse engineer" CPDO structures that would generate the desired credit ratings.

(D) Interactions between arrangers and S&P

164. It was common for arrangers to assess a proposed CDO or CPDO transaction with CDOE or (from March 2007) CPDOE before seeking a rating from S&P. The arrangers commonly informed S&P of the results they had obtained by analysing a proposed CDO or CPDO transaction and the rating they were seeking to achieve.

~~In the event the outcome was not satisfactory to the CDOE arranger from a profit perspective, the process was repeated with different inputs in order to achieve the desired, economic CDO transaction structure.~~

~~As CDOE and S&P's technical documents were available for CDO arrangers to use online, it was the typical practice of arrangers to begin this process in advance of submitting the transaction to S&P for S&P to confirm the credit ratings~~.

~~When they first retained S&P, arrangers would typically inform S&P of the "desired rating" and provide the results of their own CDOE runs.~~

~~Once retained, S&P would during the course of the rating process engage in communications with the arrangers concerning the results of S&P's modelling, in order to allow the arranger to, if necessary, make amendments to the reference entities or other features of the CDO to enable the CDO tranches to receive the desired credit ratings.~~

165. S&P would commonly communicate with the arranger about the proposed CDO or CPDO transaction and its structural features in the course of the rating process.

166. From time to time, arrangers proposed amendments to the proposed CDO or CPDO transactions during the rating process, including to provide additional credit enhancement.

167. Prior to the CDO's or CPDO's issuance, the transaction documents for the CDO or CPDO would be prepared by the arranger based on the expected S&P credit ratings and cashflow waterfalls as generated by the CDOE or CPDO model runs.

168. The transaction documents could not be released from escrow, and the issuance of a CPDO or each tranche of the CDO could not occur, unless and until S&P confirmed the credit rating for the CPDO or each tranche of the CDO, usually on the date of issue of the CDO or CPDO.

PARTICULARS

See, e.g. CDO Criteria Document, especially p. 2~~43~~ noting "[t]ypically, for the transaction to become effective the ratings of the transaction must be affirmed". See also pp. 3, 15-16, 37.

169. ~~Despite this, It~~ It was usual practice for CDO and CPDO arrangers and dealers to market notes in CDOs and CPDOs to potential investors before the issue date, including by communicating the following (amongst other things):

169.1 for CDOs

(a) ~~114.9~~ the assets or type of assets that make up the collateral or reference portfolio and their credit ratings (including "buckets" of asset types and ratings or target portfolios in circumstances where not all of the collateral or reference entities had been chosen);

(b) ~~144.10~~ the tranches of the CDO and their sizes;

(c) ~~144.11~~ the expected credit ratings of the senior tranches of the CDO and which CRA would be ~~providing~~ issuing those ratings;

(d) ~~144.12~~ the coupon rate to be paid by the senior tranches;

(e) ~~144.13~~ the arranger's cashflow modelling, including of the expected yield to the equity tranche in different scenarios, which was based on the attachment points and credit ratings generated by CDOE;

~~the price of the notes~~

169.2 for CPDOs:

(a) the index CDS that the CPDO would be exposed to;

(b) the size of the CPDO;

(c) the expected credit rating of the CPDO; and

(d) the coupon rate to be paid by the CPDO.

PARTICULARS

For new issue CDOs or CPDOs, this information was typically provided to potential investors by way of investor presentations, marketing materials, term sheets and draft transaction documents, as well as by other communications from the arranger or dealer.

For CDOs or CPDOs sold on the secondary market, this information was typically provided to potential investors by way of investor presentations, marketing materials, term sheets, transaction documents, trustee reports and other communications from the arranger or dealer.

170. The price of ~~the~~ CDO or CPDO notes was chiefly a function of the credit risk of the notes (as indicated by their credit rating and that of the collateral or reference entities) compared to their coupon.

171. ~~The~~ It was common for investors or potential investors ~~would~~ to use the information provided in the marketing materials to assess the risk and reward of the transaction, and to determine whether or not to purchase notes in the CDO or CPDO.

172. It was ~~usual~~ common practice for investors to enter agreements to purchase notes in CDOs or CPDOs on the basis of the above information before S&P's credit ratings were confirmed and the CDO or CPDO issued on the issue date.

PARTICULARS

In relation to Part 7, in addition to the particulars given in relation to certain specific paragraphs, see generally the documents in ***Schedule 2****.*

The matters above will also be the subject of expert evidence.

8. S&P'S BUSINESS MODEL

(A) S&P's business objectives

173. By reason of the matters in Part 7 above, S&P had been "at the center of the CDO market since its inception" and S&P (and its model CDOE) were an "essential part" of the process for structuring and marketing CDOs.

PARTICULARS

See, for example:

A. *CDO Strategic Plan, p. 22.*

B. *See similarly, Draft CDO Strategic Plan, p. 24.*

C. *"S&P's Joanne Rose On The Lessons Learned About – And the Future Of – Structured Finance" dated 1 November 2007: "confidence in our opinions is critical to the market. … What we provide to the markets is a mutually agreeable convergence point. Individual investors and issuers may not completely agree with our opinions, but they agree that these opinions are a good place to start the discussion. When the credibility of the ratings is in doubt, the market has no central starting point, value comes into question, and trading stops. … Standard & Poor's is an essential part of the world's financial infrastructure and has played a leading role for more than 140 years in providing investors with the independent benchmarks they need to feel more confident about their investment and financial decisions."*

D. *The transaction documents for CDOs, including those for the Vale CDOs are filled with references to the CRAs and ratings. CRA confirmation and sign-off is required for the issuance and throughout the life of the CDO.*

174. In the period from at least 2001, through to at least the time when each of the credit ratings was assigned to the Vale CDOs, S&P derived substantial revenue and profits from the sale of its credit ratings for CDOs to arrangers and issuers of CDOs and this was an important source of revenue for S&P's business.

175. At all material times, S&P's strategic plan and business objective was to "maximi[ze] market share, revenue and profitability from rating CDO transactions."

PARTICULARS

A. *CDO Strategic Plan, recording that "[t]he primary focus of Standard & Poor's CDO group has been and will continue to be, maximizing market penetration, revenue and profitability from rating CDO transactions", p. 8.*

B. *S&P Presentation, "Financial Objectives And Goals" (February 2005) recording S&P's business objective to maintain its leadership position across all asset classes, p. 2.*

C. *"S&P Global Strategy Document" (10 May 2006) recording "the more CDOs we rate the greater demand for additional CDO ratings", p. 4.*

176. This included the strategic business objectives to:

176.1 ~~151.16~~ maintain and increase demand for S&P's credit ratings among arrangers and issuers as well as investors who used S&P's ratings; and

176.2 ~~151.17~~ maintain and increase its share of the market for CDO ratings, over and above its principal competitor CRAs, Moody's and Fitch.

PARTICULARS

See, for example, CDO Strategic Plan, pp. 8, 22, 24-25, 38.

177. S&P was similarly concerned to maintain its market share, revenue, and profitability from rating CPDO transactions, and in late 2006 and early 2007 was concerned that it was losing market share to Moody's.

PARTICULARS

A. *Email from Patrice Jordan to Joanne Rose, Henry Carrier and Brenda Shaw dated 19 December 2006, attaching memorandum from Patrice Jordan to Joanne Rose with subject "Global CDO Activity Report December 2006" at pages 1, 4, 6.*

B. *Email from Perry Inglis on 22 January 2007 which stated that:*

> *"In the meantime, we have been dropped from: Calyon step-up transaction already traded, managed trades being marketed by Barcap, Lehman, DB and JP Morgan. We have been keeping all of these arrangers waiting for over 6 weeks for any level of feedback and have totally failed to keep to one deadline communicated to us by the quant group. Arrangers looking to our feedback on step-up structures that I predict will give up on us this week include: ABN, BofA, BNP, UBS and Barcap.*
>
> *The damage to our franchise in this area cannot be underestimated. I believe you are both aware that the credit derivatives market is a one rating market. We have been highly successful in this area based on our responsiveness and consistency of approach. Our reputation is now seriously at risk and is in effect in tatters. I expect the repercussions of this to feed through to all areas of our synthetic business – effectively handing our market share and revenues to Moody's and Fitch on a plate. This situation is also highly demoralising for the likes of Katrien, Lapo and Cian who have all been instrumental in building up our*

franchise over the past few years and who now have to try and avoid dealing with clients as we have very little progress to report to them"

C. *Email from Perry Inglis to Katrien van Acoleyen and Lapo Guadagnuolo dated 22 March 2007, attaching memorandum from Patrice Jordan to Joanne Rose with subject "Global CDO Activity Report" dated 20 March 2007, attaching memorandum from Patrice Jordan to Joanne Rose with subject "Global CDO Activity Report December 2006" at pages 1, 5, 20, 22.*

(B) Relationships with Arrangers and Issuers

~~At all relevant times, S&P had an "issuer pays" system, whereby the issuer or arranger of the CDO (rather than investors) paid S&P for its credit ratings.~~

178. S&P was engaged to perform the rating analysis of a CDO or CPDO in exchange for payment of fees by the arranger, issuer or sponsor. This is referred to at times as an issuer pays model.

179. S&P was aware that demand for its credit ratings was driven by arrangers and issuers of CDO transactions and in late 2006 onward also by CPDO transactions.

PARTICULARS

CDO Strategic Plan, pp. 8, 14.

180. The arrangers and issuers of CDO and CPDO transactions were, among others, S&P's customers. Arrangers would usually make the decision as to which rating agency or agencies to engage to issue ratings on the CDOs and CPDOs they were arranging.

181. S&P knew that ~~arrangers and dealers would usually make the decision as to which CRA to use and that~~ arrangers would go with the agencies that were able to:

181.1 ~~154.17~~ meet their transaction schedule;

181.2 ~~154.18~~ use criteria which provide them with "favorable economics" for the transaction.

PARTICULARS

A. *CDO Strategic Plan, p. 25.*

B. *The particulars to paragraphs 149 (A) to 172 ~~127 to 147~~ are repeated.*

182. At all material times, S&P's objective was to continue to be the one CRA with the largest share of the market for credit ratings for CDO and CPDO transactions by:

182.1 ~~155.19~~ meeting the needs of the "players" in the market (being arrangers and dealers) including by using criteria which ~~provide~~ provided them with "favourable economics" for the transaction;

182.2 ~~155.20~~ building relationships with the arrangers and dealers who structured CDO transactions, which S&P recognised was a major factor driving the success of its business.

PARTICULARS

CDO Strategic Plan, p. 25.

183. At all material times, S&P was aware that while its CDO business held the market leadership position for CDO ratings in 2002-2005, competition for new deal ratings had significantly increased and had created an "analytics arms race" of fierce competition, principally among Fitch, Moody's and S&P.

PARTICULARS

A. *CDO Strategic Plan, pp. 6, 73.*

B. *See also, email from Richard Gugliada to Scott Gale, Patrice Jordan and others dated 18 August 2004, which says "SFLT is aware of the competitive threats that Moody's is taking in CDOs and has authorized us to take certain actions."*

184. S&P knew that E2.4.3 had given it an advantage over its competitors Moody's and Fitch in the competition for ratings business because it assigned higher ratings to CDO tranches with lower attachment points compared to its competitors.

PARTICULARS

A. *"CDO Group CVM Activity Report December 2004" circulated by Elwyn Wong to Richard Gugliada and others, which says "S&P's widely reported dominant share of rated synthetic trades is frequently attributed to the correlation assumptions employed."*

B. *Email from Jennifer Roden to Perry Inglis dated 14 April 2005, attaching "Impact Analysis of Changes to the CDO Evaluator Assumptions".*

C. *"Impact Analysis for U.S. Cash Flow Transactions" 2005, with hand annotations that it was "latest presentation from Kai & team" and dated 15 April 2005.*

185. S&P was aware that its ratings criteria would "directly impact the economics" of any CDO transaction it was retained to rate in the ways described in Part 7 above, including that:

185.1 CDOE was used by arrangers to structure CDO transactions, that is, it was used to generate the attachment points and ratings of the CDO tranches, which in turn was used to determine the coupon rates and cashflow waterfall;

185.2 (from March 2007) CPDOE was used by arrangers to structure CPDO transactions, that is, it was used to structure the CPDO to allow for the highest coupon payments during the life of the CPDO while maintaining the desired ratings;

185.3 notes in CDO tranches and CPDOs were marketed to investors, and investors entered agreements to purchase those notes, on the basis of the attachment points, expected S&P ratings and cashflow waterfalls generated using CDOE or CPDOE before S&P finally assigned the rating;

185.4 whether or not the transaction went ahead was dependent on S&P confirming the ratings.

PARTICULARS

*A. The Applicants rely on the documents in **Schedule 2**.*

B. See in particular, CDO Strategic Plan (January 2006), p. 25.

C. S&P made CDOE, its CPDO model, and ~~its~~the CDOE and (from March 2007) CPDOE technical documents available to market participants in the structured credit industry.

D. As at December 2005, S&P knew it had about 3,000 users of CDOE and "[t]he demographics of the users [were] issuers, arrangers (including non-rating clients) and investors": Draft CDO Strategic Plan, p. 41.

E. S&P often issued "preliminary ratings" before the final ratings were issued to assist with the marketing to investors prior to issuance of the CDO or CPDO.

F. Further, S&P was aware of the standard industry practice described in Part 7 by virtue of its experience and expertise as a CRA.

*G. In addition, all S&P employees who worked in its CDO ratings business would have known of the practice in Part 7 by reason of C, E and F and their familiarity with S&P's technical documents listed in **Schedule 2**.*

186. S&P encouraged arrangers to use CDOE and its CPDO model in the manner described in Part 7.

PARTICULARS

A. *S&P made CDOE, its CPDO model, and its CDOE and CPDOE technical documents available online.*

B. *S&P included references to CDOE being used for those purposes in its public technical documents referred to in the particulars to paragraphs 149 to 172 ~~127 to 147~~.*

C. *The practice in particular A must have been evident to all employees who worked in S&P's CDO and CPDO ratings business, given that it was a central part of S&P's business model and referred to in many publications.*

187. This is because S&P considered that providing its analytical tools such as CDOE and CPDOE to arrangers who in turn provide them with ratings revenue is a "mutually advantageous practice" and "increase[d] the chances that S&P will rate the transaction" (and thus derive rating fees).

PARTICULARS

CDO Strategic Plan, p. 25. See also, p. 24: "S&P's relationship with [arrangers] is a critical component to the ongoing success of our CDO business. Close relationship [sic] with this group yields a number of advantages: [including] [a]bility to be included on the transaction as early as possible in the transaction process, especially when working on new, innovative transactions to provide us with the ability to work with the arrangers in getting the transaction executed."

188. By reason of the matters pleaded in paragraphs 178-187 ~~152-160~~ above, S&P knew that the arrangers of CDOs and CPDOs relied on the integrity and reliability of CDOE and ~~its outputs~~ (from March 2007) CPDOE in order to be able to structure the CDOs and CPDOs and market them to investors in the way described in Part 7.

PARTICULARS

A. The particulars to paragraphs 178-187 ~~152-160~~ are repeated.

B. Further, in the CDO Strategic Plan, S&P recognised *that the CDO team would "be able to capitalize on the impressive global investors interest in CDOs by exhibiting first-rate quantitative models and analytical rigour" (p. 3) and that "Customers are seeking tools to meet their advanced quantitative analytical needs –and to help with execution risk" (p. 6). See also, pp. 25, 35.*

C. *Further particulars may be provided with the Applicants' evidence.*

(C) Targeting of investors

189. S&P knew arrangers' decisions as to which rating agency or agencies to engage could be influenced or directed by the preferences of investors.

190. S&P knew that:

190.1 credit ratings assisted some investors in forming a view about the credit risk of an investment; and

190.2 some investors had investment guidelines that required credit ratings for products they invested in.

191. S&P knew that investors relied on credit ratings because:

191.1 investors needed ratings to interpret and identify the credit risks of the financial instruments being offered by the dealers, issuers and arrangers of CDOs and CPDOs; and/or

191.2 ratings were commonly required under the investment guidelines of many investors.

PARTICULARS

A. CDO Strategic Plan, pp. 8, 23-24.

B. See similarly, Draft CDO Strategic Plan, pp. 23, 24, 26.

C. CDO Criteria Document, p. 1.

D. "S&P's Joanne Rose On The Lessons Learned About – And the Future Of – Structured Finance" dated 1 November 2007.

E. Standard & Poor's, "An Introduction to CDOs and Standard & Poor's Global CDO Ratings" dated 8 October 2003, p. 5: "In Standard & Poor's view, the best predictor of a company's creditworthiness is a Standard & Poor's long-term issuer credit rating." and p. 8~~7~~: "One relatively good way of comparing the risk of different CDO classes of notes is to compare Standard & Poor's ratings on the notes. This is indicative of risk within a given transaction and across different transactions."

F. Standard & Poor's, Structured Finance, Commentary, "The Fundamentals of Structured Finance Ratings" dated 23 August 2007, which says "For a securitization market to develop, investors must be able to compare the risks of the various tranches being offered in the market. As we have seen, securitization works by providing buyers of risk with the risk they seek. But how can they know this complex structured finance tranche carries a level of credit risk with which they are comfortable? / By providing an objective and independent assessment and a universal scoring system that allows like for like comparison of credit risk, rating agencies assist in this process." (p. 3)

G. Further, it is the very nature of a rating that it be relied on by investors or potential investors as an indication of the credit risk of the product or entity to which it refers.

H. This would have been evident to S&P Ratings personnel who worked in structured credit by reason of G and by reason of their familiarity with S&P's publications particularised above.

192. S&P knew that CDOE and its outputs, including attachment points and credit ratings, were used by investors "looking to understand the strengths and weaknesses of a specific CDO transaction" and that "[f]undamentally, investors and counterparties rely on S&P for review of the transaction, and for S&P to identify the credit risk (ratings) associated with the tranches they intend to purchase".

193. S&P considered that investors in CDOs and CPDOs were:

193.1 ~~164.3~~ the ultimate drivers of demand for its credit ratings;

193.2 ~~164.4~~ its customers;

193.3 ~~164.5~~ a critical influence on S&P's primary ratings business for CDOs;

193.4 ~~164.6~~ a fundamental revenue driver for ratings, representing 70% of the driving force behind the growth in S&P's CDO ratings business.

194. S&P considered that reliance by investors on credit ratings as a translator and explanation of credit risk ensured that rating agencies continued to play a critical role in the market for CDOs.

195. S&P recognised that to the extent investors placed a higher value on S&P credit ratings, as compared to those of other agencies, such investors played a key role in ensuring that S&P continued its high ratings penetration and leading position in the ratings market.

196. For that reason, S&P's CDO group targeted, as a business objective, investors in CDOs as part of its "education, publishing and marketing efforts".

197. The purpose of such efforts was to maintain and increase the number of buyers that require credit ratings for CDO and CPDO transactions they purchase.

PARTICULARS

A. For paragraphs 193-197 ~~*164-168*~~ *above, see CDO Strategic Plan, pp. 8, 24-25, 32.*

B. See similarly, Draft CDO Strategic Plan, pp. 27-28, 39.

C. *See also, Standard & Poor's, "Corporate Ratings Criteria" (2001), p. 3, which states that "Standard & Poor's recognition as a rating agency ultimately depends on investors' willingness to accept its judgment".*

198. S&P knew that:

198.1 the CDOs which it rated may be used as collateral or reference entities for other CDOs, such as CDO squareds;

198.2 the credit ratings and/or weighted average credit ratings of the reference entities in a CDO were relevant to the arranger's structuring of the CDO and were used by investors in assessing the risks of investing in a CDO.

PARTICULARS

See, for example:

A. *CDOE Technical Document, pp. 12-14.*

B. *Standard & Poor's Structured Finance, "Drill-Down Approach for Synthetic CDO Squared Transactions" (10 December 2003).*

C. *CDO Criteria Document, pp. 17, 20.*

D. *Standard & Poor's, "An Introduction to CDOs and Standard & Poor's Global CDO Ratings" (8 October 2003), p. 8.*

E. *S&P was also aware of those things by virtue of its experience and expertise as a CRA (as to which, see paragraphs 88-90 ~~71-74~~).*

F. *Further, this must have been evident to all employees who worked in S&P's CDO ratings business, by reason of their familiarity with S&P's ratings process and/or the documents referred to in particulars A-D.*

199. S&P knew that the CDOs and CPDOs it rated were sometimes traded on the secondary market and knew that transferees of CDO or CPDO notes were also relying on its credit ratings of CDOs and/or CPDOs.

PARTICULARS

See, for example:

A. *CDO Criteria Document, pp. 12, 19.*

B. *CDO Strategic Plan, p. 13.*

C. *Unless specified to the contrary, S&P's ratings were public ratings that it would publish online and the issuer/arranger could provide to interested parties: see paragraph 74 ~~58~~ above.*

D. *Unless specified to the contrary, S&P's ratings were forward-looking, continuous ratings which S&P kept under surveillance using CDOE and took "ratings action" when it considered appropriate: see paragraph 84 ~~67~~.*

9. INDEPENDENCE REPRESENTATION

200. At all material times, S&P represented and held out to the public, including investors and potential investors in CDOs and CPDOs, that its process for rating CDOs and CPDOs and the credit ratings generated by that process were objective, independent, uninfluenced by any conflicts of interest that might compromise S&P's analytical judgment and reflected S&P's true current opinion regarding the credit risks that the CDOs or CPDOs posed to investors (the **Independence Representation**).

PARTICULARS

Such a representation was made by S&P expressly in a number of different documents, including, for example:

A. *CDO Criteria Document, p. 1: "The goal is to provide investors with clear, transparent and appropriate methodology for looking at these transactions, and for assessing the risk associated with each instrument."*

B. *Standard & Poor's, Structured Finance Ratings, "Criteria for Rating Synthetic CDO Transactions", p. 2: "This report was reproduced from Standard & Poor's RatingsDirect, the premier source of real-time, Web-based credit ratings and research from an organization that has been a leader in objective credit analysis for more than 140 years."*

C. *S&P's Code of Practices and Procedures, published on its website since 2004, represented that it was S&P's mission to provide objective, independent and rigorous analytical information to the market place and that S&P conducted ratings processes in a manner that ensured the integrity and independence of its ratings process.*

D. *S&P's Code of Conduct, published on its website since 2005, represented that S&P conducted its rating process in a manner that ensured that the integrity and independence of such process were not compromised by conflicts of interest or other undue influences.*

E. *S&P's "Understanding Fixed Interest, A Guide for Investors" (July 2005), notes that "[a]nalytic services provided by Standard & Poor's Ratings Services are the result of separate activities designed to preserve the independence and objectivity of ratings opinions." (p. 38) A similar footer appeared on many other S&P publications during the relevant period.*

F. *"Standard & Poor's Weighs In On The U.S. Subprime Mortgage Market" dated 5 April 2007" has the same footer.*

Further, such a representation was made impliedly by S&P's conduct of holding itself out as, and acting as, a CRA and a NRSRO designated by the SEC.

201. The Independence Representation was intended to and did create a perception and understanding among likely recipients of S&P's ratings (including the Applicants) that its credit ratings were objective, independent, uninfluenced by any conflicts of interest that might compromise S&P's analytical judgment and reflected S&P's true current opinion regarding the credit risks that the CDOs or CPDOs posed to investors.

PARTICULARS

S&P's purpose is to be inferred from the nature of the statements made and the context in which they were made.

The context includes the facts that:

A. *S&P's business model for rating structured financial products depended on potential investors requiring banks and financial institutions to obtain ratings from internationally recognised CRAs such as S&P;*

B. *The reason that the issuer/arranger of CDOs obtained the credit ratings from S&P was because:*

   a. *many potential investors in CDOs would not have the resources, time or expertise to assess creditworthiness for themselves or to second-guess the rating of a structured financial product; and*

   b. *many institutional investors could only invest in products with an investment grade rating, or with a particular investment grade rating;*

C. *The existence and requirements/needs of such investors in relation to their investment decisions was the reason for S&P being able to earn money by providing ratings services;*

D. *S&P's business model depended on investors holding the belief that an S&P rating was the best independent evidence of the risk of loss on an investment;*

E. *In the market in which S&P operated, potential users of its credit ratings would be unlikely or less likely to rely on S&P credit ratings if they believed that S&P's ratings were influenced by business considerations and its relationships with issuers and arrangers with the potential that S&P's ratings did not reflect its true opinion as to the creditworthiness of the financial instrument being rated.*

S&P was aware of those facts by virtue of its experience and expertise as a CRA (as to which, see paragraphs 88-90 ~~71-74~~).

The Applicants further rely on the admissions made by S&P in its Memorandum in Support of the Defendants' Motion to Dismiss the Complaint dated 22 April

2013 filed by the First Respondent (McGraw-Hill Companies, Inc) and Standard & Poor's Financial Services LLC in United States of America v McGraw-Hill Companies, Inc and Standard & Poor's Financial Services LLC (Case No. CV13-779) (Dismissal Memorandum), and says that in the Dismissal Memorandum the First Respondent stated, in response to an allegation that S&P described itself as "the world's leading provider of independent opinions and analysis on the debt and equity markets" and "the world's foremost provider of independent credit ratings, indices, risk evaluation and investment research", that those statements were "non-actionable puffery" (at page 7 of that document). The Merriam-Webster dictionary defines "puffery" as "exaggerated commendation especially for promotional purposes" (emphasis added).

202. S&P's purposes in making the Independence Representation were to:

202.1 cause investors to rely on S&P's credit ratings, over and above those of its competitors;

202.2 develop and enhance S&P's reputation among arrangers, issuers and investors as the world's leading or foremost provider of independent credit ratings; and

202.3 thereby, maintain or increase demand for S&P's ratings for the purposes of maintaining or increasing its market share.

PARTICULARS

Paragraphs 174-176 ~~149-151~~ and 191-197 ~~162-168~~, and their particulars, are repeated.

203. The Rating Representations and Independence Representation together will be referred to as the **S&P Representations**.

10. ERRORS IN CDOE

(A) Background to update to CDOE

204. At all material times, S&P maintained a database of corporate ratings transitions and defaults since 1981, known as the **CreditPro** database.

205. The CreditPro Database contained ratings transitions and defaults for a number of rated corporate entities across geographies, regions, industries and sectors.

206. The versions of CDOE prior to E3:

206.1 used what S&P described as an "idealised" corporate default table to determine the estimated probabilities of default of corporate assets in a collateral or reference portfolio;

206.2 used pairwise correlation assumptions of:

(a) 30% for corporate assets in the same industry sector and 0% for corporate assets in different industry sectors; and

(b) 30% for ABS in the same ABS sector and 10% for ABS in different ABS sectors;

206.3 applied adjustment or "stress" factors to the SDRs generated for a portfolio.

207. In 2004 and 2005, S&P undertook a process of updating CDOE to arrive at what would become E3.

208. The updates to CDOE that were contemplated by S&P at this time included:

208.1 increasing functionality to allow S&P to rate new types of CDOs entering the market;

208.2 updating the "idealised" Corporate Default Table to take into account more recent corporate default and transition data in the CreditPro Database;

208.3 removing the adjustment or "stress" factors; and

208.4 updating the correlation assumptions.

209. While E3 was in the process of development, S&P continued to use CDOE 2.4.3 until on or about 19 December 2005 for SCDOs.

(B) Delay in the Development of E3

210. S&P took almost a year to develop and release E3 for use on fully synthetic SCDO transactions.

211. S&P took more than one additional year to release E3 (specifically, E3.2) for use on cashflow CDOs.

PARTICULARS

E3 was released for use on fully synthetic SCDOs on 19 December 2005, but, to the best of the Applicant's knowledge, it was not released for use on cashflow CDOs until on or around 1 January 2007: see paragraph 99 and its particulars.

212. The delay in developing and releasing E3 for use was caused by:

212.1 S&P's consideration of the fact that some of the CDOs it had previously (and recently) rated could not achieve the same credit ratings using the version of E3 in development in 2004 and 2005 (the "beta" version);

212.2 S&P's consideration of the potential impact that E3 would have on its ability to provide arrangers and issuers with "favorable economics" for the transactions S&P was asked to rate;

212.3 S&P's consideration of the potential impact that E3 would have on its ratings business;

212.4 S&P's attempts to refine the model inputs for E3 so it would not negatively affect its ratings business by requiring downgrades of existing ratings or by reducing the competitive advantage it had enjoyed by using E2.4.3.

PARTICULARS

*The Applicants rely on the documents and communications listed in **Schedule 3**.*

213. The end result of the process of developing E3 in light of the considerations set out above was that the S&P knew that its ratings model was affected by five errors, as pleaded in Sections (C) to (G) below (the **Errors**).

(C) Error 1: Correlation Assumptions

214. By no later than late 2004, S&P began a process of updating the correlation assumptions in CDOE (including the 0% inter-sector correlation assumption) (the **CDOE 2.4.3 Correlation Assumptions**) considering the historical data then available to it from its CreditPro database.

215. In 2004 and 2005, S&P's quantitative analytics team reviewed the historical transition and default data for rated firms in the CreditPro Database, amongst other factors, for the purpose of producing revised estimates of the correlation of corporate obligors for use in E3.

216. The measurements referred to in paragraphs 214 and 215 demonstrated that:

216.1 the continued use of an assumption of 0% inter-sector correlation for corporate obligors was unjustified;

216.2 average historical correlation for corporate obligors in different sectors was about 6% or 7.5%; and

216.3 average historical correlation for corporate obligors in the same sector was about 18%.

(**Measured Correlation**).

PARTICULARS

A. *Email from Norbert Jobst to Michael Drexler, and others, dated 4 August 2004, which stated that "THE NUMBERS WE GET FROM OUR HISTORIC ANALYSIS ARE 7/16 … HOWEVER, WITH A 7 (OR 7.5), ALL SENIOR RATINGS WOULD SEE A TREMENDOUS INCREASE IN SUBORDINATION".*

B. *Email from Michael Drexler to Norbert Jobst, and others, dated 4 August 2004, which stated that "Yes, I realize that a strict interpretation of the data will lead us to more like a 7/20 correlation assumptions which seems to be quite onerous. Exactly how onerous this is, however, and what the 'business targets' are is still a matter of debate with the exectutive* [sic] *committee.*"

C. *Email from Kai Gilkes to Michael Drexler, Perry Inglis and Kenneth Cheng dated 20 August 2004, which stated that "7.5/20 is not far from the numbers we get using the default correlation estimation approach employed by Risk Solutions".*

D. *S&P memorandum from Sten Bergman and Ed Sargsyan to CDO Management dated 2 September 2004, "Findings and recommendations", which stated that "Inter-industry and intra-industry asset correlations were estimated from the 1981 to 2003 historical default data and found to be respectively approximately 0.079 and 0.197."*

E. *Email from Kai Gilkes to Michael Drexler, Perry Inglis, Andrea Bryan, Elwyn Wong, Lapo Guadagnuolo and Norbert Jobst dated 16 February 2005, which calculated inter-sector correlation of 6%.*

F. *Email from Kai Gilkes to Perry Inglis, Managing Director, Structured Finance Ratings and others dated 16 February 2005, which noted that inter/intra-sector asset correlation is approximately 6%/18%.*

G. *S&P presentation prepared by Kai Gilkes for the Analytical Policy Board (APB), "Updating CDO Evaluator" dated 17 February 2005, p. 9 states" "Our findings are that the average asset correlation within a sector is*

approx.. 18%, and the average correlation between sectors is approx. 6%".

H. *Email from Perry Inglis to Patrice Jordan dated 18 February 2005, which said "I have no analytical argument with Kai – 6/18 correlation assumptions are clearly more correct from an observed standpoint than 3/18".*

I. *S&P document, "Evolution of CDO Credit & Cash Flow Modelling Methodologies", p. 3. States "The corporate transition and default data over the period 1981 to 2003 has also been used to create new estimates of the intra-industry and inter-industry correlation assumptions. The results indicate that the average inter-industry correlation is significantly higher than zero, and is closer to 5-9%. The average intra-industry correlation is significantly lower than 30%, and is closer to 15-20%".*

J. *Email from Bob Watson to Norbert Jobst and Kai Gilkes dated 5 July 2005, which observed that "between sectors, within region-corporate correlation is 6%."*

K. *S&P Presentation prepared by Kai Gilkes, "Updating CDO Evaluator" dated 5 April 2005, p. 7. Versions of the presentation were sent by Michael Drexler (to Stephen Anderberg on 20 April 2005) and Norbert Jobst (to Valerie Blair on 9 June 2005).*

L. *Email from Kai Gilkes to Pat Jordon, Perry Inglis, Andrew Bryan, David Tesher and Nik Hakee attaching document "Impact of E3 on Synthetic CDOs November 2005". That document, p. 1, states that intra-industry correlation of 15-20% and inter-industry correlation of 5-7% are "the ranges supported by the data analysis.". An earlier version of this document with the same text was also sent to Norbert Jobst and Michael Drexler.*

217. S&P did not, at any time prior to the release of E3, carry out any separate measurements with respect to inter-region correlation between obligor pairs.

PARTICULARS

A. *Email from Kai Gilkes to Lapo Guadagnuolo, Bob Watson, Aymeric Chauve, Katrien Van Acoleyen and Perry Inglis dated 2 December 2005, which stated that "[t]he inter correlation has not been estimated using local, regional, global classifications, as this is not possible with the data available".*

B. *Email from Kai Gilkes to Norbert Jobst and Emmanuel Blind (SGCIB) dated 9 January 2006, which stated that "The 5% inter-industry correlation applies regardless of whether different sectors are local, regional or global, and can therefore be considered as an average correlation across all types of sectors".*

218. S&P did not use the Measured Correlation to create the corporate correlation assumptions used in E3.

219. S&P instead used the corporate correlation assumptions pleaded at paragraph 129.2 above, including:

219.1 5% for inter-industry, intra-region correlation;

219.2 15% for intra-industry, intra-region correlation; and

219.3 0% for inter-region correlation (other for than corporate obligors in the same sector that had been classified by S&P as "global" industries),

(the **CDOE 3 Correlation Assumptions**).

PARTICULARS

A. CDOE Technical Document, Appendix III.

220. The CDOE 2.4.3 Correlation Assumption of 0% inter-industry correlation (which includes both intra and inter-region correlation) and the CDOE 3 Correlation Assumptions for both inter-industry and intra-industry correlation (including inter-region correlation):

220.1 were inconsistent with, and materially lower than, the Measured Correlation; and

220.2 were not supported by any other measurement of correlation carried out by S&P prior to the release of CDOE.

PARTICULARS

A. S&P's measurements provided a range of correlation figures using particular measurement techniques. The inter- and intra-industry CDOE 3 Correlation Assumptions were either outside of those measured rangers or at the lower end of those measurements, such that they did not represent an average of the correlation observed form the historical data.

B. Further, none of those measurements supported an inter-sector or inter-region correlation assumption of 0%.

C. Further particulars may be provided after the service of expert evidence.

221. Further, the use of a 0% inter-region correlation assumption meant that:

221.1 the 5% and 15% inter- and intra-industry correlation assumptions were not applied to corporate obligors in different regions (other than corporate obligors in the same sector that had been classified by S&P as "global" industries);

221.2 E3 assumed that there was no correlation between most corporate obligors in different regions; and

221.3 E3 could not simulate a dual region or global crisis, except by chance, which would be highly unlikely.

222. S&P was aware of each of the matters pleaded in paragraphs 214 to 221.

PARTICULARS

*A. In respect of paragraphs 214 to 220, the Applicants refer to and repeat the particulars to those paragraphs. The Applicants further rely on the documents particularised in **Schedule 3**, particulars P, R, V, X, Z, MM and WW.*

B. In respect of paragraph 221, S&P's knowledge of those matters can be inferred from the experience and expertise of the employees working on the development of E3, and their familiarity with S&P's own ratings process.

223. Despite the knowledge pleaded in paragraph 222 above, S&P chose to use the CDOE 3 Correlation Assumptions rather than correlation assumptions supported by the Measured Correlation because:

223.1 it had identified that the use of correlation assumptions in line with the Measured Correlation would result in high SLRs for many deals; and

223.2 the use of correlation assumptions in line with the Measured Correlation would require ratings downgrades and/or higher credit enhancement, which would cause S&P to lose business.

PARTICULARS

A. Email from Patrice Jordan to Kai Gilkes dated 9 March 2006, forwarding email from Kai Gilkes to Norbert Jobst, Perry Inglis, Patrice Jordan and others dated 3 March 2006.

B. Email from Kai Gilkes to Tom Gillis dated 22 December 2005.

C. Email from Kai Gilkes to Norbert Jobst and Michael Drexler dated 6 July 2005, attaching a document entitled "Impact of E3 on Synthetic CDOs July 2005". In the cover email, Gilkes notes he is "proposing to dial down inter-correlation to 5% and reduce the 'B' default rates".

*D. See also, **Schedule 3**, particulars P, R, V, X, Z, MM and WW.*

224. Further, when E3 was released, S&P:

224.1 did not disclose the Measured Correlation; and

224.2 falsely represented that the CDOE 3 Correlation Assumptions were based on or consistent with the correlation it had measured from its CreditPro database.

PARTICULARS

A. The CDOE 3 Technical Document purported to summarise how S&P had analysed correlation and then stated, at p. 9, "The average intra-industry and inter-industry correlations across the entire datasets were then used to create the assumptions used in CDO Evaluator. These assumptions are contained in 'Appendix III'".

225. S&P knew that the representation referred to in paragraph 224 was false or was recklessly indifferent to the truth of that representation.

PARTICULARS

A. The particulars to paragraph 222 are repeated.

226. In the premises:

226.1 S&P used corporate correlation assumptions in E2.4.3 and E3 that were lower than, and not supported by, the historical data available to it; and

226.2 by no later than December 2005 S&P knew or was recklessly indifferent as to the same.

(D) Error 2: The CDO Table

227. For versions of CDO Evaluator prior to E3, the corporate default probabilities in the corporate Default Table and the ratings quantiles in the quantile table were the same.

228. The use of the same or similar SLRs for CDOs as the underlying assets in E2.4.3 reflected that:

228.1 the risk of corporate CDOs defaulting was determined primarily by the risk of corporate bonds of the reference entities defaulting;

228.2 CDOs referencing corporates "should default like corporates" and that had been a "central tenet" of S&P's CDO analysis until the release of E3;

PARTICULARS

A. *Email from Michael Drexler to Kai Gilkes, Perry Inglis, Andrea Bryan, Elwyn Wong, Lapo Guadagnuolo and Norbert Jobst dated 16 February 2005. In their responses, none of the recipients of that email disagreed with the views expressed in Mr Drexler's email.*

B. *See also, emails about response of French regulator to release of E3 between Alain Carron, Claire Robert, Kai Gilkes, Perry Inglis, Lapo Guadagnuolo and others on 4 and 12 January 2006.*

228.3 ABS securities derive their performance largely from the asset pools that collateralize them;

PARTICULARS

CDO Criteria Document, p. 41.

228.4 CDOs were relatively new products and there was accordingly limited performance data for CDOs (including corporate and ABS CDOs), particularly in extreme or severe stress events, as opposed to the data available in respect of corporate obligors; and

PARTICULARS

A. *CDOs had only been around since 1988: CDO Strategic Plan, p. 110.*

B. *CDOE Technical Document, pp. 6, 10.*

C. *Email from Stephen McCabe to Kai Gilkes, Norbert Jobst and others dated 25 November 2004, questioning whether S&P intends to refine ABS correlation or default rates "despite the lack of default data for ABS".*

D. *S&P Presentation prepared by Kai Gilkes, "Updating CDO Evaluator APB Presentation" dated 17 February 2005, noting that historical transition and default data was "still somewhat limited" for asset-backed securities.*

E. *Email from Mike Drexler to Perry Inglis, Kai Gilkes, Norbert Jobst and others dated 16 February 2005, which noted that "By decoupling the asset PDs from the liability PDs, there ceases to be any rationale for the construction of the liability PD table at all".*

F. *Email from Kai Gilkes to Cian Chandler and others dated 3 March 2006, noting that S&P did not have sufficient CDO performance data to create a CDO table that accurately reflects this data.*

G. *Email from Kai Gilkes to Perry Inglis, Patrice Jordan, Norbert Jobst and others dated 3 March 2006, in which Gilkes said that moving to a separate CDO quantile table was "premature" because S&P did not have sufficient performance data.*

H. *The Applicants also rely on S&P's admissions in its Defences in Federal Court proceedings NSD 1018/2014, 1020/2014 and 957/2015 that "it had less CDO performance data than corporate performance data".*

228.5 the data that was available indicated that CDOs were more volatile than corporates and ABS CDOs were more volatile than ABS.

PARTICULARS

A. *CDO Criteria Document, p. 12: "CDO transactions have potentially greater rating volatility relative to traditional ABS because their performance is susceptible to more variables" and p. 45 "CDOs are more like finance companies than asset pools and have the inherent risks of highly levered, actively managed products. The fact that the CDO may only manage ABS assets, in and of itself does not liken these vehicles to a structured ABS portfolio."*

B. *Email from Patrice Jordan to Kai Gilkes dated 9 March 2006, forwarding email from Kai Gilkes to Norbert Jobst, Perry Inglis, Patrice Jordan and others dated 3 March 2006, which states that "our (limited) experience" was that "CDO ratings tend to be more volatile than corporates in periods of stress (due to leverage)".*

C. *S&P Presentation prepared by Kai Gilkes, "A Tour of CDO Evaluator V3" presented at the London CDO Conference dated 13 March 2006, which said "CDO tranches … [h]istorically ratings have been more volatile than corporates, but there is insufficient data to be conclusive."*

229. For E3, S&P created a new quantile table for CDOs (the CDO Table) that was materially different to the new Corporate Table developed based on its analysis of historical data.

230. The SLRs or quantiles used in the CDO Table:

230.1 were higher than the SLRs used in the Corporate Table and ABS Table;

230.2 did not reflect the risk that a relevant tranche of a CDO would default based on the nature of the assets held or referenced;

230.3 were not based on any review or analysis by S&P of historical data or any rational analysis of the likely performance of CDOs in the future; and/or

230.4 were not calibrated by reference to historical data reflecting the level of defaults in periods of economic stress to ensure that each CDO being rated could be expected to survive economic stress scenarios commensurate with the rating produced through the model.

231. The SLRs used in the CDO Table were instead determined by multiplying the SLRs in the Corporate Table, without regard to the nature of the assets held or referenced by the CDO, such that:

231.1 the SLR for a CDO to be rated "AAA" was 200% of the SLR required for a corporate obligor;

231.2 the SLR for a CDO to be rated "AA" was 170% of the SLR for a corporate obligor.

PARTICULARS

A. Email from Kai Gilkes dated 3 March 2006.

B. Presentation from Stephen McCabe and Katrien van Acoleyen titled "Whats inside the CDO evaluator Version 3.0", p. 27.

232. The effect of the use of the new CDO Table was that:

232.1 CDO tranches rated using E3 were able to achieve higher ratings than they would if the Corporate Table (or ABS Table) had been used; and

232.2 most CDO tranches rated using E3 would receive the same ratings as they would have received if they had been rated using CDOE 2.4.3, thereby avoiding ratings downgrades or the need for higher credit enhancement.

PARTICULARS

The SLRs in the CDO Table were set at levels that enabled the CDO tranche to fail a high number of simulations in the Monte Carlo simulation and still achieve a high rating. For example, an AAA rated tranche with a maturity of 8 years was able to attain an AAA rating even if it failed 405 of 100,000 runs of CDOE.

See, further, for example, email from Patrice Jordan to Kai Gilkes dated 9 March 2006, forwarding email from Kai Gilkes to Norbert Jobst, Perry Inglis, Patrice Jordan and others dated 3 March 2006, which states that they had three possible choices for the "CDO liability table", which were (i) leave it unchanged, (ii) change it to the new corporate table, (iii) create a new table, and the problem with (ii) was that it led to very high SLRs for most deals and would have required many downgrades which "left us with (iii)".

233. Further, the CDO Table did not reflect S&P's true opinion as to the creditworthiness of CDO tranches or CPDOs rated "AAA" or "AA" but was instead calibrated to:

233.1 neutralise or reduce the negative impact of using CDOE 3 Correlation Assumptions versus the 0% assumption in CDOE 2.4.3;

233.2 avoid S&P losing deals because ratings criteria in E3 were more stringent than its predecessor;

233.3 avoid having to downgrade existing deals rated using CDOE 2.4.3 and thereby avoid the associated reputational damage that such downgrades would have caused S&P to sustain; and/or

233.4 avoid S&P losing deals because the ratings criteria of its competitors were more lenient.

PARTICULARS

*See the internal S&P documents and communications in **Schedule 3**, in particular, particulars A, B, C, D, E, F, G, H, K, L, O, Q, R, S, T, V, W, X, KK, LL, MM, WW and JJJ.*

Further, it can be inferred that S&P did not calibrate the CDO Table by reference to an external "credit view" because:

A. *as at December 2005, it did not have sufficient data regarding the performance of CDOs in periods of extreme or severe stress;*

B. *at the date of this pleading, S&P has not offered any reasonable or rational explanation as to how the figures in the CDO Table were derived or explaining the empirical basis for its choice of those figures, despite the development of that table being the subject of pleaded allegations in this proceedings and prior proceedings (including in Clurname Pty Ltd v McGraw-Hill Financial, Inc. (Federal Court proceeding no. NSD 957 of 2015) (**Clurname proceedings**)).*

234. By reason of the matters pleaded in paragraphs 227 to 233 above, the CDO Table used in E3 had no reasonable or rational basis.

PARTICULARS

The figures used in the CDO Table were unreasonable and irrational as they were not based on any rational consideration of S&P's historical data or the likelihood of the rated tranches of CDOs defaulting.

Further particulars may be provided after the service of expert evidence.

235. S&P was aware that the CDO Table had no reasonable or rational basis.

PARTICULARS

A. *S&P's awareness can be inferred from the process by which the CDO Table was developed, as pleaded further at paragraph 236 below.*

B. *Further, S&P employed experts in quantitative analytics and structured finance, with experience rating CDOs. The unreasonableness and irrationality of using a quantile table developed in the manner pleaded above would have been obvious to people with such expertise and experience.*

C. *Further particulars may be provided after the service of expert evidence.*

236. Despite being aware of the matters pleaded above, S&P decided to create and utilise the CDO Table in E3 as a result of the discussions particularised in **Schedule 3** and primarily on the basis of business considerations, in particular:

236.1 to neutralise or reduce the negative impact of using the 5% corporate inter-sector correlation assumption in E3 versus the 0% assumption in E2.4.3;

236.2 to avoid S&P losing deals because ratings criteria in E3 were more stringent than its predecessor;

236.3 to avoid having to downgrade existing deals rated using E2.4.3 and thereby avoid the associated reputational damage that such downgrades would have caused S&P to sustain; and/or

236.4 to avoid S&P losing deals because the ratings criteria of its competitors were more lenient.

PARTICULARS

*See the internal S&P documents and communications in **Schedule 3**, in particular, particulars A, B, C, D, E, F, G, H, K, L, O, Q, R, S, T, V, W, X, KK, LL, MM, WW and JJJ.*

237. S&P decided to utilise the CDO Table in CPDOE to assign ratings to CPDOs.

238. The decision to use the CDO Table to assign ratings to CPDOs was made:

238.1 with knowledge that the CDO Table had no reasonable or rational basis and was based primarily on business considerations, as pleaded at paragraphs 235 and 236 above;

238.2 without any further analysis of the suitability of the CDO Table for CPDO transactions;

238.3 without any further review or analysis by S&P of historical data or any rational analysis of the likely performance of CPDOs in the future; and/or

238.4 without any further calibration by reference to historical data reflecting the level of defaults in periods of economic stress to ensure that each CPDO being rated could be expected to survive economic stress scenarios commensurate with the rating produced through the model.

PARTICULARS

A. The particulars to paragraphs 235 and 236 are repeated.

B. The Applicants also rely upon the CPDO Quantitative Modelling Document which states, at p. 20, that the "frequency [of failed paths] has to be commensurate with the default probability of a CDO liability (see "CDO Evaluator 3.0: Technical Document") with the same rating as the issued debt…"

239. In the premises:

239.1 the CDO Table had no reasonable or rational basis or justification;

239.2 by no later than December 2005 S&P knew or was recklessly indifferent as to the same; and

239.3 S&P used the CDO Table to assign ratings to CDOs and CPDOs despite its awareness or reckless indifference to those matters.

(E) Error 2A: ABS Table

240. By no later than November 2005, S&P had decided to update the ABS Table in E3 to reflect the greater quantity of historical performance data available to it concerning ABS defaults.

PARTICULARS

A. Email from Kai Gilkes to Joanne Rose on 15 July 2005 [SAP.001.0001.4046] attaching a document titled "Impact of E3 on Synthetic CDOs July 2005" [SAP.001.0001.4048] which on page 1 noted "For ABS, a full default table has been created, with slightly lower PDs than the new corporate table", and on page 2 noted a positive impact for CDO of ABS with IG Assets with the proposed E3.0 default tables.

B. Email from Kai Gilkes to Tom Gillis, Susan Barnes and others (copying Pat Jordan) dated 2 November 2005 [SSP.001.022.0959], stating that the proposed changes in E3 "led naturally to the need for some

modifications to the default table currently being used for SF assets" including "[s]ome adjustments to the levels of the table to reflect the greater quantity of historical performance data".

241. By no later than 23 November 2005, S&P had completed its analysis of the available historical data that demonstrated that:

241.1 ABS default rates were trending upwards slightly and approaching corporate default rates in some cases; and

241.2 testing default rates for ABS of at least 60% and 80% of the corresponding default rates in the new Corporate Table, for investment grade and non-investment grade products respectively, would produce SDRs that were broadly consistent with historical data.

PARTICULARS

A. *Email from Kai Gilkes to Tom Gillis, Susan Barnes and others (copying Pat Jordan) dated 2 November 2005 [SSP.001.022.0959], stating, in relation to the proposed changes in E3, "[s]o far, we have been testing 60% at investment grade and 80% at non-investment grade. This achieves both (1) and (2) above, while producing default rates broadly consistent with historical data". In the same email, Kai Gilkes noted that ABS default rates were trending upwards slightly and approaching corporate default rates in some cases. The email also attaches a spreadsheet [SSP.001.022.0961] setting out "proposed corporate and SF default rates".*

B. *Email from Kai Gilkes to Belinda Ghetti, Andrew Smith and Michael Moriarty (copying David Tesher and Eduard Sargsyan) dated 23 November 2005 [SSP.001.020.0565], referring to further testing performed and proposing updated ABS default rates of 60% of the Corporate Table for AAA/AA, 70% for A/BBB and 80% for NIG.*

C. *Email from Kai Gilkes to Norbert Jobst, Bob Watson and Lapo Guadagnuolo dated 18 November 2005 [SSP.001.020.0566], attaching the draft Technical Document for E3 [SSP.001.020.0567] referring to ABS default rates that are between 60% and 80% of the corresponding default rates for rated firms.*

242. S&P did not adopt the ABS default rates supported by its analysis of historical data in the ABS Table used in E3.

PARTICULARS

A. *At a meeting of the CDO Evaluator Steering Committee on 5 December 2006 attended by Kai Gilkes, Perry Inglis, Pat Jordan, Andrea Bryan, Bob Watson (and others) [SAP.001.095.2264], the ABS default rates were discussed and it was decided to defer the release of E3 from 9*

December 2005 to allow "the time needed to settle the new ABS default tables".

B. *At a further meeting between David Tesher, Kai Gilkes, Tom Gillis and Andrea Bryan on 6 December 2005 [SAP.001.0002.3802] it was decided to use the lower default rates pleaded in paragraph 243.*

243. In E3.0 and E3.1, S&P instead used ABS default rates in the ABS Table that were:

243.1 not supported by its analysis of historical data; and

243.2 approximately 55% and 75% of the corresponding default rates in the Corporate Default Table for investment-grade (BBB- or above) and non-investment-grade (BB+ or below) respectively, for maturities between five and seven years.

PARTICULARS

A. *The decision to use default rates of 55% and 75% of the Corporate Table was made at a meeting on or about 6 December 2005 attended by David Tesher, Kai Gilkes, Tom Gillis and Andrea Bryan on 6 December 2005, as recorded in the minutes of that meeting [SAP.001.0002.3802] and emails from Kai Gilkes following the decision [SAP.009.003.0462].*

B. *The credit curves adopted for corporates and ABS in E.0 and E.1 are reproduced in Appendix I to the CDOE Technical Document. For example, an ABS rated BBB- at 7 years had a default rate of 4.09 which was 55% of the corresponding corporate default rate of 7.434.*

244. The decision to use the default rates pleaded in paragraph 243 instead of default rates pleaded in paragraph 241 above was made:

244.1 with knowledge that the rates adopted were not supported by its analysis of historical data; and

244.2 to seek to avoid deals rated using E3 being assigned a lower rating and/or requiring more credit enhancement to achieve the desired rating as compared to deals rated using E2.4.3.

PARTICULARS

S&P's knowledge and intent can be inferred from:

A. *S&P's knowledge of the default rates supported by historical data, as pleaded and particularised at paragraph 241 above.*

B. *Emails between Kai Gilkes and Andrea Bryan dated 6 December 2005 [SSP.001.024.3312], modelling the default rates "to equalize the E3*

ABS pds back to E2.4.3, all else being equal". In this email chain, Kai Gilkes refers to 55% as the "breakeven ratio for 7-year BBB assets and 7-yr liabilities".

C. *Minutes of the meeting between David Tesher, Kai Gilkes, Tom Gillis and Andrea Bryan on 6 December 2005 [SAP.001.0002.3802], which record 55% as resulting in "neutrality for assets" greater than or equal to BBB.*

245. When it released E3 on 19 December 2005, S&P represented that the ABS Table used in E3 was:

245.1 conservative; and

245.2 based on the Corporate Table due to a paucity of data on ABS defaults.

PARTICULARS

A. *CDOE Technical Document, p. 6.*

246. The representations pleaded in paragraph 245 were false by reason of the matters pleaded in paragraphs 241 to 244.

247. Following the release of E3, S&P identified that, contrary to its intent as pleaded in paragraph 244.2 above, E3 produced higher SDRs for ABS CDOs referencing BBB and/or BBB- rated pools than had previously been generated by E2.4.3, meaning that those CDOs required more credit enhancement to achieve the ratings previously assigned using E2.4.3.

PARTICULARS

A. *Email chain between Kai Gilkes and David Tesher (copying Perry Inglis and Andrea Bryan) dated 21 December 2005* [MGH.001.003.8130], *particulars at paragraph 244 above.*

248. To address the matter pleaded in paragraph 247, S&P amended the default rates in the ABS Table for the next release of E3 (being E3.2) on 19 June 2006 (the **Amended ABS Table**), by making:

248.1 small upward adjustments to default rates for ABS rated BBB or higher; and

248.2 material downward adjustments to default rates for ABS rated BBB- or lower.

PARTICULARS

A. *S&P publication titled 'Standard & Poor's Modifies Structured Finance Default Assumptions in CDO Evaluator' dated 19 June 2006 (**CDOE 3.2***

Publication) [SSP.001.022.5502], *p. 3. These changes are further explained in an internal document provided to Pat Jordan on 24 May 2006 [SSP.001.022.9197].*

B. *The changes in the Amended ABS Table included:*

a. *increasing default rates from AAA to BBB rated ABS from 55% of the Corporate Table to 60% to 80% of the Corporate Table;*

b. *reducing default rates for BBB- rated ABS (being the assets identified by S&P as being problematic as pleaded in paragraph 246 above) from 4.09 (being 55% of the Corporate Table) to 3.0 (being approximately 40.353% of the Corporate Table); and*

c. *reducing default rates for non-investment-grade ABS (BB+ and lower) from 75% of the Corporate Table to around 60% to 66% of the Corporate Table.*

C. *Further particulars may be provided following the service of expert evidence.*

249. The default rates used in the Amended ABS Table:

249.1 were not supported by S&P's analysis of historical data;

249.2 had no other reasonable or rational basis.

PARTICULARS

A. *The Applicants refer to and repeat the particulars to paragraphs 241 to 244 above.*

B. *The Applicants also rely on the S&P internal presentation 'A New Approach to Estimating ABS PDs' [MGH.001.003.7478], p. 8, which records that S&P's analysis has demonstrated that the 'E3.2 ABS matrix is implausible'.*

C. *Further, the default rates in the Amended ABS Table were unreasonable and irrational because they were not supported by historical data or any other objective considerations. They also provided for the default rates for ABS to decrease, as a percentage of corresponding corporate default rates, as the ratings of those ABS decreased, which was counterintuitive. Further, the default rate for BBB- rated ABS (of 3.00 or 40.353% of the default rate of BBB- corporates in the Corporate Table) had no rational correlation to any of the other corporate rates.*

D. *Further particulars may be provided following the service of expert evidence.*

250. S&P used the Amended ABS Table in E3.2:

250.1 with knowledge of the matters pleaded in paragraph 249;

250.2 to avoid deals rated using E3 being assigned a lower rating and/or requiring more credit enhancement to achieve the desired rating as compared to deals rated using E2.4.3;

250.3 to avoid losing deals because the ratings criteria in E3 were more stringent than E2.4.3 and/or its competitors.

PARTICULARS

A. *The Applicant also relies on the following documents from which S&P's knowledge and motivation can be evidenced or inferred:*

a. email from Kai Gilkes dated 29 March 2006 [SAP.008.036.7625] where he states, in response to a query concerning the basis for the Amended ABS Table, that the "approach was largely qualitative, and focused on producing tables that were broadly in line with historical data, yet produced results that were acceptable to the business" (emphasis added);

b. email from Elwyn Wong to Pat Jordan dated 2 August 2007 [MGH.001.003.7500] stating that they could not "pull it out of thin air like we did with CDOE 3.2";

c. emails between Tom Gillis and Cliff Griep (copying Pat Jordan, David Tesher and Erkan Erturk) on 16 May 2006 [SSP.001.021.8721]) concerning the development of the Amended ABS Table, in which Griep states that the default rates used raise questions concerning "the credibility of our criteria at the AAA level, and perhaps our criteria generally";

d. email from Perry Inglis to Pat Jordan and David Tesher on 23 May 2006 [SAP.001.0002.4852], following a meeting the previous day concerning the Amended ABS Table, concerning the use of the "pre-tweak" table;

e. email to Pat Jordan attaching documents concerning the Amended ABS Table [SSP.001.022.9195] [SSP.001.022.9196] which records the growing issuance of BBB- ABS and their poor historical performance. Those default rates are materially higher (particularly for BBB- rated assets) than the default rates using in E3.2; and

f. emails between Elwyn Wong and Andrea Bryan on 5 June 2006 [SSP.001.032.2112], which refer to changes to the ABS table to "facilitate the continued purchases of RMBS securities by CDOs" and "allow us to maintain our ability to rate CDOs of ABS assets".

B. S&P's knowledge and motivation can also be inferred from the process by which the Amended ABS Table was developed, as pleaded in paragraphs 244 to 249 above.

251. In the premises:

251.1 the default rates used in the ABS Table was not supported by S&P's analysis of historical data;

251.2 by no later than December 2005, S&P knew or was recklessly indifferent as to the same; and

251.3 S&P used the ABS Table to assign ratings to ABS CDOs despite its awareness or reckless indifference to those matters.

252. Further or alternatively, in the premises:

252.1 the default rates used in the Amended ABS Table were not supported by S&P's analysis of historical data and had no reasonable or rational basis;

252.2 by no later than June 2006, S&P knew or was recklessly indifferent as to the same; and

252.3 S&P used the Amended ABS Table to assign ratings to ABS CDOs on and from June 2005 despite its awareness or reckless indifference to those matters.

(F) Error 3: Static Correlation

253. S&P used correlation assumptions that were static in all versions of CDO Evaluator, including E2.4.3 and E3, meaning that it was assumed the estimated correlation between each obligor pair in the portfolio remained the same over the period to maturity of a CDO.

254. In the real world, correlation between obligor pairs:

254.1 varies over time in response to economic conditions;

254.2 increases in times of economic stress; and

254.3 almost doubles from periods of growth to periods of recession.

PARTICULARS

A. S&P document titled "Correlation: new empirical evidence, potential application to the CDO Space" (30 November 2005), which concluded (at p. 23) that "Correlation intensity almost doubles between growth and recession".

B. Email from Arnaud de Servigny to Norbert Jobst dated 11 October 2005.

255. Further, at the time E3 was released in December 2005, the data available to S&P indicated that:

255.1 the period 2000 to 2004 had been "one of the most stressful periods in recent history" and involved far higher defaults and correlation than the long-term averages; and

PARTICULARS

A. *Email from Kai Gilkes to Hiromi Saito, Perry Inglis and others (23 March 2005).*

B. *"Updating the Idealised Corporate Default Table: Committee Presentation" by Norbert Jobst and Kai Gilkes dated 20 October 2003, p. 6-7.*

C. *Email from Kai Gilkes to Daniel Strong and others (21 December 2005), which says "the data we obtained over the period 1999-2003 was extremely stressful, involving higher year-on-year volatility and levels of default than previous periods".*

255.2 the global corporate market would likely be affected by further corporate defaults and negative credit migration, which would directly affect CDO performance.

PARTICULARS

A. *Draft CDO Strategic Plan (1 December 2005) p. 12.*

B. *Memorandum from Patrice Jordan to Joanne Rose subject "Global CDO Activity Report" circulated on 12 December 2005 to, amongst others, Kai Gilkes and Perry Inglis, which notes on p. 2 that the market was expecting a "more challenging credit environment".*

256. S&P used static correlation assumptions because it was aware that its "current modelling approach" was not capable of "handling" the fact that correlations are "time varying in nature" and therefore used average estimates of "PD/correlation across a full economic cycle".

PARTICULARS

Email from Kai Gilkes to Lapo Guadagnuolo, Michael Drexler and Norbert Jobst dated 10 March 2005.

257. Having regard to the matters pleaded at paragraphs 253 to 256, the continued use of static correlation assumptions in CDOE 2.4.3 and E3 meant that it was likely, or there was at least a material risk, that CDOE would understate the risk of highly-rated

tranches of CDOs defaulting over the period to maturity, particularly in times of economic stress.

258. S&P was aware of each of the matters pleaded in paragraphs 253 to 257 above.

PARTICULARS

A. *The particulars to paragraphs 253 to 256,the Applicants refer to and repeat the particulars to those paragraphs.*

B. In respect of paragraph 257 above, S&P's knowledge of those matters can be inferred from the experience and expertise of the employees working on the development of E3, and their familiarity with S&P's own ratings process.

259. Despite being aware of the matters pleaded above, S&P continued to use static correlation assumptions in CDOE 2.4.3 and E3 without adopting any measures to address the likelihood or material risk that this would understate the risk of highly-rated tranches of CDOs.

PARTICULARS

A. The available measures that could have been adopted include:

a. adopting dynamic correlation assumptions; and/or

b. adjusting other assumptions (such as the correlation assumptions or quantile tables) to account for the additional risk of default; and/or

c. calibrating the outputs of the model against historical data reflecting the level of defaults in periods of economic stress to ensure that each CDO being rated could be expected to survive economic stress scenarios commensurate with the rating produced through the model.

B. Further particulars may be provided after the service of expert evidence.

260. In the premises:

260.1 the use of static correlation assumptions meant that the ratings produced by CDOE 2.4.3 and E3 were unreliable; and

260.2 by no later than December 2005, S&P knew this or was recklessly indifferent as to the same.

(G) Error 4: Gaussian Copula

261. CDOE used the Gaussian copula to simulate multiple assets in the collateral or reference portfolio jointly defaulting or not defaulting.

262. At all material times, the Gaussian copula had the following characteristics when used to model defaults of highly-rated tranches of CDOs:

262.1 it assumed a normal distribution of defaults;

262.2 it did not assume a clustering of defaults in the tail of the distribution, as was likely to occur in the real world in periods of economic stress;

262.3 by reason of the above matters, was likely to materially understate default correlation and therefore the riskiness of the CDO structures being modelled.

PARTICULARS

A. *Internal S&P document authored by Norbert Jobst titled "Modelling default dependency in multi-name credit products" dated 1 August 2003, which includes the following comments:*

a. *Page 8: although the Gaussian copula is "one of the most popular" the "ease of estimation and simulation comes at the price that the dependency the Gaussian copula imposes, lead to very unrealistic and undesirable intensity/credit spread dynamics".*

b. *Page 30:* "*Gaussian copula, despite its wide us [sic], implies some very strange dynamics in intensities/credit spreads which needs critical assessment. Usually, the better and well accepted the model, the closer it resembles real-world behaviour, which is contradicting for the Gaussian approach. This inconsistency in the default dynamics will lead to misinterpretation of the riskiness of structures due to maturity effects."*

c. *Page 31: "Overall, further work is required in analysing and detecting suitable copulae and deriving estimation techniques.*"

B. *Further particulars may be provided following the service of expert evidence.*

263. At the time it was updating E2.4.3 to E3, S&P investigated different industry standard multivariate models including the use of alternative copulas to the Gaussian copula, such as the *t*-copula with an appropriately low number of degrees of freedom (commonly known as a "fat tail").

PARTICULARS

A. *"Multivariate Research" paper prepared by Norbert Jobst and sent to Kai Gilkes on 9 June 2004.*

B. *Email from Kai Gilkes to Kurt Sampson, copying Perry Inglis, on 29 July 2004, noting in relation to "[a]lternative copulae, such as t-copula" that it is "is very important that we thoroughly investigate these models, so that we understand their benefits and shortcomings, and are ready to implement them when (not if) they start becoming commonplace in the market".*

C. *Presentation prepared by Kai Gilkes titled "The SF Quantitative Group" dated 31 August 2005, p. 22.*

D. *S&P document "Modelling Baskets and CDOs: Alternative credit portfolio approaches" dated February 2005, pp. 16-20.*

E. *The multivariate model research (including the use of different copulae, including a t-copula) was led by Norbert Jobst, and also involved Arnaud de Servigny and Astrid Van Landschoot.*

264. By no later than November 2005, S&P had:

264.1 developed a version of CDOE that used a *t*-copula with degrees of freedom inferior to 6 (i.e. a "fat tail");

264.2 assessed the validity of its choice of a Gaussian copula as opposed to a *t*-copula against its own empirical data;

264.3 ascertained that there was a far better fit between the empirical data and a *t*-copula when focusing on the tail of the distribution, being the area of most relevance to risk management and structured finance;

264.4 concluded that the Gaussian copula was not the most appropriate function for modelling CDOs unless the model discriminated between growth and recession periods (which CDOE did not).

PARTICULARS

A. *S&P document titled "Correlation: new empirical evidence, potential application to the CDO Space" (29 November 2005), pp. 40-49, 62. This document was prepared by Arnaud de Servigny with Astrid van Landschoot, and sent to Norbert Jobst.*

B. *S&P document titled "Correlation between sectors" dated 1 December 2005 authored by Astrid van Landschoot, and sent to Arnaud De Servigny and Norbert Jobst. This paper summarises research that shows that the fit between the t-copula (with degrees of freedom of 5 or 7) better fit the empirical data than the Gaussian copula, whether looked at for the period 1990-2004 or 1982-2004.*

C. *S&P document titled "Correlation: new empirical evidence, potential application to the CDO Space" (30 November 2005), pp. 47-50, 63. This document was prepared by Arnaud de Servigny with Astrid van Landschoot, and sent to Norbert Jobst amongst others.*

265. Notwithstanding the matters pleaded in paragraphs 261 to 264 above, S&P:

265.1 continued to use the Gaussian copula in E3;

265.2 did not make any further adjustments to the assumptions used in E3 to account for the fact that the use of the Gaussian copula understated the probability of joint defaults in the tail of the distribution;

265.3 did not disclose its research or conclusions into the use of alternative copula when it released E3 in December 2005;

265.4 did not calibrate the outputs of the model against historical data reflecting the level of defaults in periods of economic stress to ensure that each CDO being rated could be expected to survive economic stress scenarios commensurate with the rating produced through the model.

266. The continued use of the Gaussian copula in CDOE 2.4.3 and E3 caused those models to severely underestimate the clustering of defaults in the tail of the distribution when modelling CDOs, meaning that that it was very unlikely that CDOE would simulate extreme, severe or substantial events of economic stress.

267. At all material times, S&P was aware of the matters pleaded in paragraphs 261 to 266 above.

PARTICULARS

A. *Paragraphs 263 and 264 and their particulars are repeated.*

B. *S&P's awareness of the matters pleaded can also be inferred by reason of the experience and expertise of the employees working on the development of E3, and their familiarity with S&P's own ratings process.*

268. In the premises:

268.1 the use of the Gaussian copula meant that the ratings produced by CDOE 2.4.3 and E3 were unreliable; and

268.2 by no later than December 2005, S&P knew this or was recklessly indifferent as to the same.

(H) Error 5: Model Risk

269. To reliably assess the credit risk of a tranche of a CDO using a statistical model such as CDOE, it is necessary to account for the risk that model inputs estimated from historical data are incorrect or unsound (**model risk**).

270. Model risk is greater where:

270.1 there is limited data to support the model inputs; or

270.2 there is wide variation in the data used to estimate the model inputs; or

270.3 the model inputs are otherwise known to be unsound or unreliable.

271. At all times, there were modelling processes or procedures available to address model risk.

PARTICULARS

Model risk in respect of parameter values (e.g. correlation) can be addressed by:

A. *adjusting model inputs by reference to the confidence intervals around the estimated value of each parameter; or*

B. *using the weighted average of individual results for each parameter constellation, with the weight determined by the statistical likelihood (given the historical data) that the parameter constellation reflects the true values; or*

C. *calibrating the outputs of the model against historical data reflecting the level of defaults in periods of economic stress to ensure that each CDO being rated could be expected to survive economic stress scenarios commensurate with the rating produced through the model.*

Further particulars may be provided after the service of expert evidence.

272. At all material times, S&P was aware:

272.1 of the matters pleaded in paragraphs 269 to 271 above;

272.2 that its credit ratings for CDOs could not be based on reasonable grounds if the CDOE model it used was based on unsound model inputs.

PARTICULARS

S&P was aware of those things by virtue of its experience and expertise as a CRA (as to which, see paragraphs 88-90).

273. Further, S&P was aware:

273.1 by no later than April 2005, that the inputs used in CDOE 2.4.3 were unsound, unreliable and/or not supported by historical data;

PARTICULARS

Kai Gilkes, Powerpoint presentation, CDO Planning Session, Miami, April 2005, "The Future of CDO Analytics", p. 5. Attendees at the CDO Planning Session included Patrice Jordan, Perry Inglis and others.

In that presentation, Mr Gilkes explained that S&P:

A. *could "produce a rating" but it had "very little idea how sensitive [its] ratings are to market developments or model assumptions";*

B. *had conducted "little or no strategic research" in developing its model and placed too much reliance on bankers' models; and*

C. *created "new model risks every day" (meaning the risk that the model was based on unsound or uncertain inputs and assumptions and therefore that its results were unreliable).*

This was known to at least Kai Gilkes, the author of the presentation "The Future of CDO Analytics" and Perry Inglis and Patrice Jordan, attendees at the presentation given by Gilkes.

Each of Gilkes, Inglis and Jordan occupied senior positions within S&P's CDO Group and:

A. *was aware that S&P's ratings for CDOs depended upon the output of CDOE;*

B. *was responsible for and involved with the development of the CDO Evaluator model and the determination of model inputs;*

C. *was aware that the reliability of the ratings produced by CDOE depended upon the soundness of model inputs; and*

D. *was aware that the use of unsound or uncertain model inputs and assumptions would render the model outputs produced by CDOE unreliable.*

273.2 by no later than December 2005, that the inputs used in E3 were unsound, unreliable and/or not supported by historical data for the reasons pleaded above.

274. Despite S&P's knowledge pleaded in the preceding paragraphs:

274.1 S&P continued to use CDOE 2.4.3 and continued to publish ratings based on that model until December 2005 in the case of SCDOs and until 1 January 2007 in the case of cashflow CDOs;

274.2 when E3 was released on 19 December 2005, S&P did not introduce any modelling processes or procedures which would address the significant uncertainty about the reliability of its ratings based on CDOE, including by calibrating the outputs of the model against historical data reflecting the level of defaults in periods of economic stress to ensure that each CDO being rated could be expected to survive economic stress scenarios commensurate with the rating produced through the model;

274.3 at all times after 19 December 2005, S&P did not implement any modelling processes or procedures which would address that uncertainty in E3, including in the E3.1 and E3.2 updates or the CPDOE model.

275. S&P did not disclose that its ratings for CDOs were affected by model risk or were unreliable for the reasons pleaded above.

276. In the premises:

276.1 the failure to address model risk meant that the ratings produced by CDOE 2.4.3, CDOE 3 and CPDOE were unreliable; and

276.2 by no later than December 2005, S&P knew this or was recklessly indifferent as to the same.

(I) Effect of errors on ratings of Claim CDOs

277. As a result of the matters pleaded above, there were at least five serious errors with CDOE and CPDOE which caused it to materially underestimate the risk that highly-rated tranches of CDOs would default, particularly in stressed scenarios:

277.1 the corporate inter-sector and intra-sector correlation assumptions used were lower than the averages generated by the historical data (**Error 1**);

277.2 the table used to provide the rating cut-points for CDOs in E3 and CPDOE (the CDO Table) had no reasonable or empirical basis (**Error 2**);

277.3 the default rates for ABS referenced in ABS CDOs were not supported by S&P's historical analysis and/or had no reasonable or rational basis (**Error 2A)**;

277.4 S&P used static correlation assumptions which understate the risk of default in stressed scenarios (**Error 3**);

277.5 S&P used a Gaussian copula which understated defaults in the tail of the distribution (high joint default events), as compared to a fat-tailed t-copula (**Error 4**); and

277.6 S&P did not adequately compensate for model risk, including the significant model risk introduced by Errors 1 to 4 (including by calibrating the outputs of the model against historical data reflecting the level of defaults in periods of economic stress to ensure that each CDO or CPDO being rated could be expected to survive economic stress scenarios commensurate with the rating produced through the model) nor did it disclose that its ratings for CDOs and CPDOs were affected and/or potentially unreliable due to model risk) (**Error 5**).

278. The effect of the Errors, both individually and cumulatively, was that CDOE and CPDOE could not, and did not, simulate scenarios of extreme, severe or substantial stress.

279. The Claim CDOs were affected by the Errors as follows:

279.1 every corporate CDO rating assigned or surveilled by S&P using E2.4.3 after 19 December 2005 was affected by Errors 1, 3, 4 and 5;

279.2 every other CDO rating assigned or surveilled by S&P after 19 December 2005 using E2.4.3 was affected by Error 5;

279.3 every corporate CDO rating assigned or surveilled by S&P using E3 was affected by Errors 1 to 5;

279.4 every ABS CDO rating assigned or surveilled by S&P using E3 was affected by Errors 2 to 5,

279.5 every other CDO rating assigned or surveilled by S&P using E3 was affected by Errors 2 and 3 to 5; and

279.6 every CPDO rating assigned or surveilled by S&P using CPDOE was affected by Errors 2 and 5.

280. The Errors referred to above, both individually and cumulatively, materially inflated the ratings assigned to the Claim CDOs using CDO Evaluator or CPDOE beyond that which they would have been had the outputs of CDO Evaluator and CPDOE not been affected by the Errors.

PARTICULARS

Further particulars will be provided with the Applicants' expert evidence in relation to the CDOs acquired by the Applicants as identified in Schedule 4.

281. Further or alternatively, the Errors referred to above, both individually and cumulatively, caused each of the Ratings to be unreliable.

PARTICULARS

Further particulars will be provided with the Applicants' expert evidence in relation to the CDOs acquired by the Applicants as identified in Schedule 4.

11. S&P'S KNOWLEDGE OF THE ERRORS AND FALSITY OF S&P REPRESENTATIONS

(A) Relevant individuals

282. During the relevant period:

282.1 the group within S&P responsible for rating structured finance products was the Structured Finance Group (**SFG**);

282.2 within the SFG, there was the Global CDO Group, which was responsible for the initial rating of CDOs. This group was divided into separate sub-groups for SCDOs and cashflow CDOs;

282.3 from mid-2005, the quantitative analytics teams for all structured products were centralised into the Quantitative Centre for Excellence (**QCOE**);

282.4 there was also the Structured Finance Quantitative Group (**SFQG**) which was responsible for developing the tools used to rate and monitor CDOs. Before mid-2005, this was a division of the SFG but afterwards, it sat under the QCOE.

283. At all material times, the following S&P employees (**Key Employees**) mentioned in the particulars to the paragraphs above and below occupied the following positions:

283.1 Kai Gilkes: Director, Structured Finance (2004) Managing Director, Structured Finance (late 2004) and, from 2005, Head of SFQG for S&P's European operations. Mr Gilkes was the most senior quantitative analyst for CDO modelling at S&P and was the leader in the SFQG in relation to the development E3;

283.2 Joanne Rose: Executive Managing Director in charge of the SFG;

283.3 Patrice Jordan: Managing Director, International Structured Finance (RMBS) and, from December 2005, Managing Director, Global CDO Group;

283.4 Perry Inglis: Managing Director, SFG and Head of the European CDO Group;

283.5 Richard Gugliada: Head of Global CDO Group until December 2005, and thereafter was the Head of the QCOE;

283.6 Norbert Jobst: Associate Director (2005), and thereafter Director (2006) SFG;

283.7 Michael Drexler: Ratings Analyst, Criteria Group, Global CDO Group (until 2005); and.

283.8 Arnaud de Servigny: Managing Director – Global Head of Risk Analytics.

284. At all material times, S&P held the knowledge of those of its senior employees responsible for determining its ratings methodology and criteria for CDOs, including the Key Employees.

285. By reason of the knowledge of those employees, S&P knew that CDOE and CPDOE had the Errors and the development of CDOE's parameters was influenced by business considerations, for the reasons explained above.

(B) Falsity of S&P Representations

286. By reason of the Errors pleaded above:

286.1 CDOE did not require CDO tranches to be able to survive a level of economic stress commensurate with extreme, severe or substantial economic stress, in the case of each of AAA and AA ratings, respectively;

286.2 the Ratings did not reflect the qualitative statements of strength they conveyed as pleaded in paragraph 86 above;

286.3 there were not reasonable grounds to assign the Ratings;

286.4 the assignment of the Ratings using CDOE was not the product of reasonable care and skill;

286.5 the Ratings could not and should not be relied on by investors in making investment decisions;

and, thereby, the Rating Representations were false.

287. By reason of the matters pleaded in Parts 9, 10 and paragraphs 204 to 276 above:

287.1 S&P's aims in developing E3 were to produce a model that would result in the minimum number of CDO rating downgrades and enable it to maintain and increase its market share of CDO ratings;

287.2 key elements of E3, including, in particular, the corporate correlation assumptions and CDO Table, were chosen or "tweaked" based on business considerations rather than being constructed to align with the empirical data and independent analytical judgement;

287.3 the construction of CDOE and CPDOE was not the result of an objective, independent analytical process, and the ratings it produced therefore did not reflect S&P's true current opinion regarding the credit risks of those CDOs and CPDOs;

and, thereby, the Independence Representation was false.

(C) S&P knew S&P Representations were false

288. At all material times following the release of CDOE in around 2001, S&P knew that its credit ratings for CDOs were solely, or in the alternative primarily, determined by the model output for whichever version of CDOE was used to rate a given CDO, or of CPDOE used to rate CPDOs.

PARTICULARS

A. Draft CDO Strategic Plan, p. 41.

B. CDO Strategic Plan, pp. 32-33.

C. CDOE Technical Document.

D. *CPDO Quantitative Modelling Document.*

E. *By reason of the documents particularised above, that knowledge would have been held by any and all employees of S&P involved in its CDO ratings business.*

289. At all material times, S&P knew that its CDO credit ratings derived using E2.4.3, E3 and CPDOE were published worldwide.

PARTICULARS

This is evident from the following things, amongst others:

A. *The particulars to paragraphs 76 are repeated.*

B. *CDO Criteria Document, p. 1: "Standard & Poor's has been rating CDOs since their inception in the late 1980s and has participated in all segments of the CDO market on a global scale".*

C. *CDO Strategic Plan, which (inter alia) describes S&P's business objectives for its "global CDO business", notes that "CDOs are a global product" and that there is "impressive global investor interest in CDOs". See especially pp. 3-4, 17-18, 21.*

D. *By reason of the matters particularised above, that knowledge would have been held by any and all employees of S&P involved in its CDO ratings business.*

290. At all material times, S&P knew or was alternatively recklessly indifferent to the fact that in order to express the opinion, on reasonable grounds, that the ability of a CDO tranche or a CPDO to pay coupons and repay principal was "extremely strong" or "very strong", CDOE and CPDOE needed to be able to reliably model the performance of the CDO or CPDO respectively in periods of extreme, severe or substantial stress to assess how the instrument under consideration would perform in such circumstances.

PARTICULARS

This is evident from the following things, amongst others:

A. *S&P's research into alternative multivariate models, including regime switching and the use of a fat-tailed t-copula as pleaded in paragraphs 263-268 above. By reason of the fact that this research was openly discussed within the QCOE and Structured Finance Group, that knowledge would have been held by any and all employees of S&P involved in its CDO ratings business.*

B. *Email from Drexler to Fabienne Michaux and others dated 3 June 2005 re "RE: Final votes on swap criteria / new proposal on liquid swap definition", in which he says that "The whole point about AAA is that it is an extremely, extremely remote event".*

C. *The particulars to paragraph 86 above and paragraph 291 below are repeated.*

291. At all material times from at least around 2001, S&P knew or alternatively was recklessly indifferent to the fact that its credit ratings conveyed the Rating Representations, including the qualitative statements about the creditworthiness of the relevant instrument pleaded in paragraph 86.

PARTICULARS

The particulars to paragraph 86 are repeated.

By reason of particulars A-G to those paragraphs, each employee in S&P's CDO and CPDO ratings business, including each of the Key Employees, must be presumed to have known that the ratings conveyed the Rating Representations.

Further or alternatively this was known to each of:

A. *Gilkes, by reason of:*

   a. *his joint authorship of Standard & Poor's, "Credit Risk Analysis and Structured Finance Ratings: Quantitative Methods" (22 July 2004), pp. 4-5, where the Great Depression is referred to as a "AAA" event;*

   b. *the document "An Introduction to CDOs and Standard & Poor's Global CDO Ratings" dated 8 October 2003, to which he is noted as a "Quantitative Contact";*

   c. *his joint authorship of the CDOE Technical Document, which contained the CDO Table which contained expected probabilities of default for CDO tranches with particular ratings and maturities;*

B. *Jobst, by reason of his joint authorship of documents (i) and (iii) referred to above;*

C. *Drexler, by reason of:*

   a. *the document at (ii) above, to which he is noted as an "Analytical Contact";*

   b. *the email from Drexler to Fabienne Michaux and others dated 3 June 2005 re "RE: Final votes on swap criteria / new proposal on liquid swap definition", in which he says that "The whole point about AAA is that it is an extremely, extremely remote event".*

292. At all material times following the release of E3 on 19 December 2005, through the Key Employees, S&P knew or alternatively was recklessly indifferent to the fact that its process for rating CDOs was flawed due to the Errors

PARTICULARS

Error 1 (correlation assumptions in E3 below historical estimates) was known to at least each of:

A. *Gilkes, who was the Head of the SFQG in Europe, the most senior quantitative analyst responsible for determining the model criteria and methodology for E3 and an author of the CDOE Technical Document and who was a party to communications particularised at paragraphs 216, 223 and 256 ~~191, 192, 193, 194, 195, 179, 180 and 181~~ which includes those in Schedule 3 at particulars A, I, Q, R, S, V, W, X, Z, KK, LL, MM, RR, WW, GGG and III.*

B. *Inglis, who was a Managing Director, Structured Finance Ratings and Head of the Global CDO Group who had decision-making authority over the model criteria and methodology adopted for E3 and who was a party to communications particularised at paragraphs 216, and 223 ~~191, 193, 194, 195, 179, 180 and 181~~ which includes those in Schedule 3 at particulars A, I, M, R, W, MM, WW and III.*

C. *Jobst, who was a Director of S&P's Structured Finance Ratings, one of the authors of the CDOE Technical Document and who was a party to communications particularised at paragraphs 216, 223 and 256 ~~191, 192, 193, 194, 195, 179, 180 and 181~~ which includes those in Schedule 3 at particulars R, W, X, KK and III.*

D. *Drexler, who was a member of the Global Quantitative Group for S&P and who worked with Gilkes in developing the modelling criteria for E3 (including the transition from E2.4.3) and who was a party to communications particularised at paragraphs 216, 223 and 256, ~~191,193, 194, 195, 179, 180 and 181~~ which includes those in Schedule 3 at particulars I, R, W, X, KK and LL*

E. *Jordan, who was a Managing Director, Structured Finance Ratings and, from 2005, Managing Director of the Global CDO Group, who had decision-making authority over the model criteria and methodology adopted for E3 (including the transition from E2.4.3), and was a party to communications particularised at paragraphs 216, and 223 ~~191 193, 194, 195 and 180~~ which includes those in Schedule 3 at particulars S, T, W, MM, WW and III.*

Error 2 (CDO Table) was known at least to each of:

F. *Gilkes, who was a party to communications particularised at paragraphs 216, 224, 228, 233~~196, 197, 198, 199 and 200,~~ which includes those in Schedule 3 at particulars A, B, C, D, E, K, Q, R, S, V, W, X, KK, LL, MM, WW and III.*

G. *Inglis, who was a party to communications particularised at paragraphs 216, 228, 233 ~~196, 198, 199 and 200,~~ which includes those in Schedule 3 at particulars A, B, C, D, E, H, K, R, MM, WW and JJJ.*

H. *Jobst, who was a party to communications particularised at paragraphs 216, 228, 233 ~~196, 198, 199 and 200,~~ which includes those in Schedule 3 at particulars D, R, W, KK and JJJ.*

I. *Drexler, was a party to communications particularised at paragraphs 216, 228, ~~197, 199 and 200,~~ which includes those in Schedule 3 at particulars D, F, R, W, KK and LL.*

J. *Jordan, who was a party to communications particularised at paragraphs 216, 228, 233 ~~196, 198, 199 and 200,~~ which includes those in Schedule 3 at particulars G, S, MM, WW and JJJ.*

Error 2A (ABS Table) was known to at least each of:

K. *Gilkes, who was a party to communications particularised at paragraphs 241, 242, 243, 244, 246, 247, 249 and 250.*

L. *Inglis, who was a party to communications particularised at paragraphs 242, 244, 247, 249 and 250.*

M. *Jordan, who was a party to communications particularised at paragraphs 241, 242, 248, 249 and 250.*

Error 3 (static correlation assumptions) was known to at least each of:

N. *Gilkes, who was a party to communications particularised at paragraphs 216, 229, 255, 256. ~~181, 202, 203 and 205~~*

O. *Inglis, who was a party to communications particularised at paragraphs 216, 229, 255, 256.. ~~181, 202 and 203~~*

P. *Jobst, who was a party to communications particularised at paragraphs 216, 229, 255, 256. ~~181, 202 and 205~~*

Q. *Drexler, who was a party to communications particularised at paragraphs 216, 229, 255, 256. ~~181, 202 and 205~~*

R. *De Servigny, who was a party to the communications particularised at paragraph 254 above.*

Error 4 (Gaussian copula) was known to at least each of:

S. *De Servigny, who was party to communications (and prepared the presentations) particularised at paragraphs 264;*

T. *Jobst, who was responsible for the multivariate model research and a party to communications particularised at paragraphs 262, 263, 264*

U. *Gilkes, to whom Jobst reported and who was aware of the multivariate model research program as set out in the particulars to paragraphs 262, 263*

Error 5 (disregard of modelling assumptions) was known to at least each of Gilkes, Inglis and Jordan: see the particulars to paragraph 273 above.

Alternatively, each of the persons listed above was recklessly indifferent to the Errors in respect of which their knowledge is particularised.

The knowledge (or reckless indifference) of each of those Key Employees should be attributed to S&P.

Further or alternatively, the knowledge of one or more of the Key Employees can be aggregated to fix S&P with the requisite knowledge.

293. At all material times following the release of E3 on 19 December 2005, through the Key Employees, S&P knew or alternatively was recklessly indifferent to the fact that, by reason of the Errors:

293.1 the construction of CDOE and CPDOE and the assignment of any credit ratings thereby was not the product of reasonable care and skill;

293.2 CDOE and CPDOE did not require CDO tranches or CPDOs to be able to survive a level of economic stress commensurate with extreme, severe or substantial economic stress;

293.3 further or alternatively, the Errors meant that any prediction about the creditworthiness of a CDO modelled by CDOE or CPDO modelled using CPDOE was unreliable and there were not reasonable grounds to assign the ratings;

293.4 further or alternatively, there was substantial doubt as to whether or not ratings produced by E2.4.3, E3 or CPDOE were based on reasonable grounds.

PARTICULARS

The particulars to the paragraph above are repeated.

Further, S&P employed experts in quantitative analytics and structured finance, with long experience in CDOs, to whom this would have been obvious.

The Applicants will provide expert evidence to the effect that this would have been obvious to people with such expertise and experience.

294. By reason of the matters pleaded in paragraphs 288 to 293 above, S&P:

294.1 knew the Rating Representations were false; or

294.2 alternatively, knew there were no reasonable grounds to make the Rating Representations; or

294.3 alternatively, was recklessly indifferent to the falsity or lack of reasonable grounds for the Rating Representations.

295. Further, at all material times and at least following the release of E3 on 19 December 2005, through the Key Employees, S&P knew or alternatively was recklessly indifferent to the fact that:

295.1 business considerations had influenced S&P's ratings methodology; and

295.2 thereby, the Independence Representation was false.

PARTICULARS

This was known to at least:

A. *Gilkes, who was a party to the communications at particulars A, B, C, D, E, I, K, Q, R, S, U, V, W, X, Y, Z, BB, DD, EE, FF, GG, II, JJ, KK, LL, MM, OO, PP, RR, TT, UU, VV, WW, XX, YY, BBB, CCC, DDD, GGG, HHH, III and JJJ in **Schedule 3**, and had the knowledge and was a party to the communications particularised in paragraph 292*

B. *Inglis, who was a party to the communications at particulars A, B, C, D, E, H, I, K, M, R, U, AA, BB, DD, EE, FF, GG, HH, II, JJ, MM, NN, OO, PP, QQ, TT, UU, VV, WW, YY, BBB, DDD, EEE, HHH, III and JJJ in **Schedule 3**, and had the knowledge and was a party to the communications particularised in paragraph 292*

C. *Jobst, who was a party to the communications at particulars D, R, U, W, X, Y, KK, UU, VV, YY and JJJ in **Schedule 3**, and had the knowledge and was a party to the communications particularised in paragraph 292*

D. *Drexler, who was a party to the communications at particulars D, F, I, R, W, X ,Y, CC, KK and LL in **Schedule 3**, and had the knowledge and was a party to the communications particularised in paragraph 292*

E. *Jordan, who was a party to the communications at particulars G, J, S, U, BB, DD, EE, FF, GG, HH, II, JJ, MM, NN, OO, PP, SS, UU, WW, XX, YY, BBB, CCC, FFF, HHH, III and JJJ in **Schedule 3**, and had the knowledge and was a party to the communications particularised in paragraph 292*

F. *Gugliada, who was the Global Practice Leader for CDOs from late 1999 until December 2005 when E3 was released (and thereafter was the Head of the QCOE) and who (i) was a party to the communications at particulars A, B, C, D, E, G, H, J, M, N, O and HHH in **Schedule 3**, (ii) was aware that the risk of losing transaction revenue was a factor that affected updates of CDO Evaluator, (iii) set as goals for the update of CDOE 2-3 notch improvements for investment grade deals to improve S&P's market share with respect to investment grade CDOs. See DOJ Admissions at paragraph 4.*

G. *Rose, who was the Executive Managing Director of Standard & Poor's Rating Services and was a party to the communications at particulars G, OO, SS, XX, DDD and HHH in **Schedule 3**.*

Alternatively, each of those persons was recklessly indifferent to that fact.

10. S&P'S KNOWLEDGE OF FALSITY OF S&P REPRESENTATIONS

(A) Relevant individuals

175. During the relevant period:

175.1 the group within S&P responsible for rating structured finance products was the Structured Finance Group (**SFG**);

175.2 within the SFG, there was the Global CDO Group, which was responsible for rating CDOs;

175.3 from mid-2005, the quantitative analytics teams for all structured products were centralised into the Quantitative Centre for Excellence (**QCOE**);

175.4 there was also the Structured Finance Quantitative Group (**SFQG**) which was responsible for developing the tools used to rate and monitor CDOs. Before mid-2005, this was a division of the SFG but after it sat under the QCOE.

176. At all material times, the following S&P employees (**Key Employees**) mentioned in the particulars to the paragraphs below occupied the following positions:

176.1 Kai Gilkes: in 2004, Managing Director, Structured Finance Ratings and, from 2005, Head of SFQG for S&P's European operations. Mr Gilkes was the most senior quantitative analyst for CDO modelling at S&P and was the leader in the SFQG in relation to the development E3;

176.2 Joanne Rose: Executive Managing Director in charge of the SFG;

176.3 Patrice Jordan: Managing Director, International Structured Finance (RMBS) and, from December 2005, Managing Director, Global CDO Group;

176.4 Perry Inglis: Managing Director, Structured Finance Ratings and Head of the Global CDO Group;

176.5 Richard Gugliada: Global Practice Leader, CDOs until December 2005, and thereafter was the Head of the QCOE;

176.6 Norbert Jobst: Director, Structured Finance Ratings;

176.7 Michael Drexler: Analyst, Criteria Group, CDO Group;.

176.8 Arnaud de Servigny: Managing Director – Global Head of Risk Analytics.

177. At all material times, S&P held the knowledge of those of its senior employees responsible for determining its ratings methodology and criteria for CDOs, including the Key Employees.

178. By reason of the knowledge of those employees, S&P knew that the development of CDOE's parameters was influenced by business considerations, and there were at least five errors (**Errors**) in CDOE, for the reasons explained below.

(B) Importance of correlation

179. At all material times, S&P was aware that:

179.1 a principal vulnerability for CDOs is correlation;

179.2 correlation was a key model input for S&P's modelling of CDOs using CDOE;

179.3 CDO modelling using the CDOE was extremely sensitive to the input for correlation;

179.4 the probabilities of default rendered by the CDOE model significantly depended upon the estimate for correlation used in the CDOE;

179.5 as correlation increases, the likelihood of many defaults among the collateral or reference entities increases, compared to when correlation is low; and

179.6 the higher the correlation, the more likely a highly rated CDO tranche is to default and the lower the modelled rating will be.

PARTICULARS

A. "Corporate Default Correlation Study" to Correlation Committee from Sten Borgman, Andrew Smith dated 3 January 2002.

B. CDO Criteria Document, pp. 41-42: "The emphasis placed on modelling correlation in the CDO Evaluator is due to the profound effect that correlation can have on the level of SDR for various credit ratings…. [As correlation increases,] the mean remains unchanged, but extreme values become more likely."

C. Email chain between Kai Gilkes, Norbert Jobst, Mike Drexler, Perry Inglis, Lapo Guadagnuolo, Andrea Bryan, David Tesher and others dated 10 March 2005, which discusses a Creditflux article Kai Gilkes contributed to which notes "[c]orrelation is a key input in the rating agency models that

calculate how much subordination a CDO tranche needs to get a particular rating."

D. CDOE Technical Document, Section 5.

E. S&P was also aware of those things by virtue of its experience and expertise as a CRA (as to which, see paragraphs 71-74).

180. S&P was at all material times aware that the majority of the obligor pairs in the CreditPro database were in different sectors meaning that the inter-region and inter-sector correlation inputs were the most important inputs for corporate correlation.

PARTICULARS

A. Email from Kai Gilkes to Tom Gillis dated 22 December 2005, which records that many more obligor pairs were affected by different sector correlation than within sector and that the "main driver" of the model was "inter correlation".

B. S&P document titled "Impact of E3 on Synthetic CDOs July 2005" at page 6 which states that between industry correlation is "the key driver" of negative impact on CDO squared transaction; which is attached to an email from Kai Gilkes to Patrice Jordan, copying Perry Inglis, Andrea Bryan and David Tescher. A later version of that document was circulated to the same people on 1 November 2005.

C. S&P document titled "Correlation: new empirical evidence, potential application to the CDO Space" (30 November 2005), which concluded (at p. 63) that "Inter industry correlation really matters as it is 'what can go wrong' during recession periods". [SSP.001.013.1591].

*D. See also, **Schedule 3**, particulars KK, LL, MM and WW.*

180A. The majority of obligor pairs in the CreditPro database were smaller companies, rather than the investment grade obligors that commonly formed the collateral or reference portfolio for CDOs.

181. S&P was aware at all material times that estimating correlation for CDOs was extremely difficult, that correlation could not be measured precisely, and that correlation had to be estimated within a broad range because:

181.1 the estimate for correlation could not be known with certainty and had to be statistically estimated from historical data;

181.2 any estimate for correlation between corporate obligors made by S&P must be based on a limited amount of historical data available to S&P concerning corporate defaults and default correlation from its CreditPro database and any estimate for correlation made by S&P based on the information contained in

the CreditPro database contained wide "error bars", meaning that the statistical uncertainty or margin of error associated with such estimate was significant because of the paucity of information from which the estimate for correlation was made;

181.3 correlation is not static and varies from time to time depending upon market behaviour and the economic environment, which could not be predicted by S&P for the period through to maturity of a CDO.

PARTICULARS

A. CDOE Technical Document, Section 5.

B. Email from Nik Khakee to Jeff Brunton of QIC dated 16 May 2004, which noted the difficulty of observing correlations and that correlations are "unstable".

C. Email from Kai Gilkes to Michael Drexler, Perry Inglis and Kenneth Cheng dated 2017 August 2004, which recorded S&P's calculation of inter-sector correlation at 7.5% and noted that "error bars are reasonably wide".

D. Email from Kai Gilkes to Lapo Guadagnuolo, Michael Drexler and Norbert Jobst dated 10 March 2005, which noted that correlation is "time varying in nature".

(C) Problems with E2.4.3

182. From at least October 2001, S&P knew that it had to update the Corporate Table to take into account more recent default data in the CreditPro database.

PARTICULARS

A. Memorandum from Tom Gillis to Joanne Rose subject "Rating Quality & Knowledge Management Activity Report – Long Version" dated 21 June 2005 notes on p. 25 that, as at October 2001, "The current table needs to be revised".

B. Email from Kai Gilkes to Norbert Jobst and Michael Drexler dated 6 July 2005 attaching document entitled "Impact of E3 on Synthetic CDOs July 2005" which says "the primary motivation [to create E3] was to update the corporate default table, which investors and other users helpfully pointed out had become out of step with the available historical data". This was also included a note from Kai Gilkes to Tom Gills, Perry Inglis, Joanne Rose dated 12 December 2005 entitled "Release of CDO Evaluator Version 3.0 for Synthetic CDOs".

C. S&P Internal Document "Evolution of CDO Credit & Cash Flow Modelling Methodologies" prepared by Kai Gilkes dated 5 July 2005, which states

~~*"The main reason for updating the default table is the recent downgrades and defaults in the corporate sector. For over two years, investors and arrangers have been asking S&P to incorporate the last 5-7 years of corporate ratings behaviour in our analysis. It became clear over a year ago that the CDO Evaluator default table was significantly out of step with published default data."*~~

~~183. From at least 16 February 2005, S&P also knew that:~~

~~183.1 the use of an assumption of 0% inter-sector correlation for corporate obligors was unjustified;~~

~~183.2 it had to update its correlation assumptions in order to maintain credibility amongst users of CDOE in the structured finance industry.~~

~~PARTICULARS~~

~~*A. "Corporate Default Correlation Study" to Correlation Committee from Sten Berman, Andrew Smith dated 3 January 2002, p. 5.*~~

~~*B. Email from Stephen Mccabe to Kai Gilkes, Norbert Jobst and others dated 25 November 2004, forwarding a Creditflux article which says S&P has "Its methodology has attracted fierce criticism from rival rating agencies who believe it is assumes too little correlation."*~~

~~*C. Email from Michael Droxler to Perry Inglis, Kai Gilkes, Andrea Bryan, Elwyn Wong, Lapo Guadagnuolo and Norbert Jobst dated 16 February 2005 expressing the view that S&P's correlation assumptions were "weak" and that the zero percent correlation assumption for different sector, same region was "insanity" and recognised by the market as such. None of the recipients of that email disagreed with those statements.*~~

~~*D. "Timeline" marked "[draft 1] Privileged and Confidential for Internal Use Only" dated 18 February 2005, pp. 2, 8-9.*~~

~~*E. Memorandum from Tom Gillis to Joanne Rose subject "Rating Quality & Knowledge Management Activity Report – Long Version" dated 21 June 2005 notes at p. 25 that in September 2002 "The Risk Solutions analysts met with the CDO group and Kai Gilkes to discuss their approach to correlation. They have done extensive work that they are about to publish. The empirical evidence differs from the approach that is taken in the CDO model."*~~

~~*F. The Draft CDO Strategic Plan (notes that E2.4.3 contains "[o]utdated underlying assumptions" (p. 4) and says "Moody's states that they have and use better correlation assumptions than S&P and that S&P correlation assumptions are outdated (p. 45).*~~

~~*G. See also the particulars to paragraph 191 below.*~~

184. Despite the knowledge pleaded in the above paragraph, S&P continued to use an assumption of 0% inter-sector correlation for corporate obligors rated using E2.4.3 until 19 December 2005 for SCDOs and 1 January 2007 for cashflow CDOs.

(D) Delay in the Development of E3

185. S&P took almost a year to develop and release E3 for use on fully synthetic SCDO transactions.

186. S&P took more than one additional year to release E3 (specifically, E3.2) for use on cashflow CDOs.

PARTICULARS

E3 was released for use on fully synthetic SCDOs on 19 December 2005, but, to the best of the Applicant's knowledge, it was not released for use on cashflow CDOs until on or around 1 January 2007: see paragraph 80 and its particulars.

187. The delay in developing and releasing E3 for use was caused by:

187.1 S&P's consideration of the fact that some of the CDOs it had previously (and recently) rated could not achieve the same credit ratings using the version of E3 in development in 2004 and 2005 (the "beta" version);

187.2 S&P's consideration of the potential impact that E3 would have on its ability to provide arrangers and issuers with "favorable economics" for the transactions S&P was asked to rate;

187.3 S&P's consideration of the potential impact that E3 would have on its ratings business;

187.4 S&P's attempts to refine the model inputs for E3 so it would not negatively affect its ratings business by requiring downgrades of existing ratings or by reducing the competitive advantage it had enjoyed by using E2.4.3.

PARTICULARS

The Applicants rely on the documents and communications listed in ***Schedule 3.***

(E) S&P used corporate correlation assumptions in E3 that were below historical averages

188. One of the ways in which S&P refined the criteria in E3 to avoid rating downgrades for corporate CDOs was to use correlation assumptions for corporate obligors that it knew

were lower than the correlations indicated by the historical data. That came about through the circumstances pleaded below.

189. Paragraphs 182 and 183 are repeated.

190. As a first step in updating its correlation assumptions for E3, S&P used the historical transitions and default data for rated firms in its CreditPro database to estimate the historical correlation of corporate obligors.

190A. S&P's correlation measurements were for all corporate obligors in the CreditPro database, and were not limited to obligors within the same region or obligors classified as within local, regional or global industries.

PARTICULARS

A. *Email from Kai Gilkes to Lapo Guadagnuolo, Bob Watson, Aymeric Chauve, Katrien Van Acoleyen and Perry Inglis dated 2 December 2005, which stated that "[t]he inter correlation has not been estimated using local, regional, global classifications, as this is not possible with the data available". [SSP.001.013.0415]*

B. *Email from Kail Gilkes to Norbert Jobst and Emmanuel Blind (SGCIB) dated 9 January 2006, which stated that "The 5% inter-industry correlation applies regardless of whether different sectors are local, regional or global, and can therefore be considered as an average correlation across all types of sectors". [SSP.001.013.3383]*

191. Using that data, S&P determined that:

191.1 the historical correlation for corporate obligors in different sectors within the same region was between about 6% and or 7.5%; and

191.2 the historical correlation for corporate obligors in the same sector and same region was about 18%.

PARTICULARS

A. *Email from Kai Gilkes to Michael Drexler, Perry Inglis and Kenneth Cheng dated 17 August 2004, which calculated inter-sector correlation at 7.5%.*

B. *Email from Kai Gilkes to Michael Drexler, Perry Inglis, Andrea Bryan, Elwyn Wong, Lapo Guadagnuolo and Norbert Jobst dated 16 February 2005, which calculated inter-sector correlation of 6%.*

C. *Email from Kai Gilkes to Perry Inglis, Managing Director, Structured Finance Ratings and others dated 16 February 2005, which noted that inter/intra-sector asset correlation is approximately 6%/18%.*

D. Email from Perry Inglis to Patrice Jordan dated 18 February 2005, which said inter-sector correlation of 6% was observable from S&P's data.

E. Email from Bob Watson to Norbert Jorbst and Kai Gilkes dated 5 July 2005, which observed that "between sectors, within region corporate correlation is 6%."

F. S&P Presentation prepared by Kai Gilkes, "Updating CDO Evaluator" dated 5 April 2005, p. 7. Versions of the presentation were sent by Michael Drexler (to Stephen Anderberg on 20 April 2005) and Norbert Jobst (to Valerie Blair on 9 June 2005).

192. Based on that data those measurements, in or around April 2005:

192.1 S&P planned to replace the 0% corporate inter-sector correlation assumption with an assumption of 6% because it had determined that its data for the period 1981 to 2003 showed the average correlation to be "closer to 6%";

192.2 S&P planned to use an 18% assumption for corporate intra-sector correlation because it had determined that the average of such correlation to be "closer to 18%".

PARTICULARS

S&P Presentation prepared by Kai Gilkes, "Updating CDO Evaluator", p. 7.

193. However, S&P realised that "the problem" with using the 6/18 corporate correlations and the updated Corporate Table to provide the PDs for CDO tranches, was that "the combination… led to VERY HIGH SLRS for most deals and would have required many more downgrades of existing deals" and "much higher credit enhancement for new deals", which would cause S&P to lose business.

PARTICULARS

A. Email from Patrice Jordan to Kai Gilkes dated 9 March 2006, forwarding email from Kai Gilkes to Norbert Jobst, Perry Inglis, Patrice Jordan and others dated 3 March 2006.

*B. See also, **Schedule 3**, particulars P, R, V, X, Z, MM and WW.*

194. Ultimately, S&P decided to use an assumption of 5% for corporate inter-sector correlation in E3 because:

194.1 the difference between 5% and 6% was "significant"; and

194.2 S&P wanted to avoid the negative effects of using 6% on the credit ratings produced by CDOE.

PARTICULARS

A. Email from Kai Gilkes to Tom Gillis dated 22 December 2005.

B. Email from Kai Gilkes to Norbert Jobst and Michael Drexler dated 6 July 2005, attaching a document entitled "Impact of E3 on Synthetic CDOs July 2005". In the cover email, Gilkes notes he is "proposing to dial down inter-correlation to 5% and reduce the 'B' default rates".

C. The particulars to paragraph 193 are repeated.

195. Further, S&P decided to use in E3 an assumption of 15% for corporate intra-sector correlation assumption even though it was less than S&P's calculation of the historical average of correlation of 18% and did so in order to lower the "negative impact" of otherwise using 18%.

PARTICULARS

A. Email from Kai Gilkes to Tom Gillis dated 22 December 2005.

B. The particulars to paragraph 193 are repeated.

195A. Further, S&P used an assumption of 0% for correlation between obligors in different regions (other than corporate obligors in the same sector that had been classified by S&P as "global" industries).

PARTICULARS

A. CDOE Technical Document, Appendix III.

195B. The use of a 0% inter-region correlation meant that:

195B.1 the 5% and 15% inter- and intra-industry correlation assumptions described above were not applied to obligors in different regions (other than corporate obligors in the same sector that had been classified by S&P as "global" industries);

195C.1 E3 used correlation inter-industry and intra-industry assumptions that were materially lower than measured historical averages, which averages had not been calculated based on regions or industry classifications; and

195B.2 E3 could not simulate a dual-region or global crisis, except by chance, which would be highly unlikely.

195C. At all material times, S&P was aware of the matters pleaded in paragraph 195B.

PARTICULARS

A. Paragraph 190A and its particulars are repeated.

B. S&P's awareness of the matter pleaded in paragraph 195B.2 can be inferred by reason of the experience and expertise of the employees working on the development of E3, and their familiarity with S&P's own ratings process.

(F) S&P used the CDO Table to mitigate the effects of higher correlation assumptions

196. Paragraph 193 is repeated.

197. This led S&P to consider what other aspects of CDOE's criteria could be changed in order to enable it to avoid the ratings downgrades that would be caused by using the updated Corporate Table and higher corporate correlations.

PARTICULARS

See, for example:

A. S&P Presentation prepared by Kai Gilkes, "Updating CDO Evaluator", dated 5 April 2005, which noted that once all assumptions have been updated on the asset side, the impact on the CDO business could be assessed to determine the appropriate CDO liability table (quantile table) to use, including potentially a new table, determined using historical data and or intuition.

B. S&P Internal Document "Evolution of CDO Credit & Cash Flow Modelling Methodologies" prepared by Kai Gilkes dated July 2005, which stated that "In February 2005, the decision was made to look at other changes, which might allow levels of inter-industry correlation more in line with historical data to be adopted."

198. What S&P decided to do was to create a separate table to provide the rating cut-points for CDOs – the CDO Table – which had higher PDs than the Corporate Table or the ABS Table (or ABS Table) and thus allowed CDO tranches to achieve higher ratings than they would if the Corporate Table (or ABS Table) was used.

PARTICULARS

See, for example, email from Patrice Jordan to Kai Gilkes dated 9 March 2006, forwarding email from Kai Gilkes to Norbert Jobst, Perry Inglis, Patrice Jordan and others dated 3 March 2006, which states that they had three possible choices for the "CDO liability table", which were (i) leave it unchanged, (ii) change it to the new corporate table, (iii) create a new table, and the problem

with (ii) was that it led to very high SLRs for most deals and would have required many downgrades which "left us with (iii)".

199. S&P determined to use the CDO Table to provide the cut-points for corporate CDOs in E3 despite the facts that:

199.1 the risk of corporate CDOs defaulting was determined primarily by the risk of corporate bonds of the reference entities defaulting;

199.2 for all versions of CDOE prior to E3, S&P had used the Corporate Table as the cut-point table for CDOs;

199.3 S&P's understanding that CDOs referencing corporates "should default like corporates" and that had been a "central tenet" of its CDO analysis until that point;

PARTICULARS

A. Email from Michael Drexler to Kai Gilkes, Perry Inglis, Andrea Bryan, Elwyn Wong, Lapo Guadagnuolo and Norbert Jobst dated 16 February 2005. In their responses, none of the recipients of that email disagreed with the views expressed in Mr Drexler's email.

B. See also, emails about response of French regulator to release of E3 between Alain Carron, Claire Robert, Kai Gilkes, Perry Inglis, Lapo Guadagnuolo and others on 4 and 12 January 2006.

199.4 S&P knew that ABS securities derive their performance largely from the asset pools that collateralize them;

PARTICULARS

CDO Criteria Document, p. 41.

199.5 S&P had very limited performance data for CDOs, including corporate and ABS CDOs, and knew that limited data was not sufficient to create a reliable, separate CDO Table;

PARTICULARS

A. CDOs had only been around since 1988: CDO Strategic Plan, p. 1<u>1</u>.

B. CDO<u>E</u> Technical Document, pp. 6, 10.

C. Email from Stephen McCabe to Kai Gilkes, Norbert Jobst and others dated 25 November 2004, questioning whether S&P intends to refine ABS correlation or default rates "despite the lack of default data for ABS".

D. S&P Presentation prepared by Kai Gilkes, "Updating CDO Evaluator APB Presentation" dated 17 February 2005, noting that historical transition and default data was "still somewhat limited" for asset-backed securities.

E. Email from Mike Drexler to Perry Inglis, Kai Gilkes, Norbert Jobst and others dated 16 February 2005, which noted that "By decoupling the asset PDs from the liability PDs, there ceases to be any rationale for the construction of the liability PD table at all".

F. Email from Kai Gilkes to Cian Chandler and others dated 3 March 2006, noting that S&P did not have sufficient CDO performance data to create a CDO table that accurately reflects this data.

G. Email from Kai Gilkes to Perry Inglis, Patrice Jordan, Norbert Jobst and others dated 3 March 2006, in which Gilkes said that moving to a separate CDO quantile table was "premature" because S&P did not have sufficient performance data.

H. The Applicants also rely on S&P's admissions in its Defences in Federal Court proceedings NSD 1018/2014, 1020/2014 and 957/2015 that "it had less CDO performance data than corporate performance data".

199.6 from the little data it did have, S&P considered corporate CDOs to be more volatile than corporates, and ABS CDOs to be more volatile than ABS;

PARTICULARS

A. CDO Criteria Document, p. 12: "CDO transactions have potentially greater rating volatility relative to traditional ABS because their performance is susceptible to more variables" and p. 45 "CDOs are more like finance companies than asset pools and have the inherent risks of highly levered, actively managed products. The fact that the CDO may only manage ABS assets, in and of itself does not liken these vehicles to a structured ABS portfolio."

B. Email from Patrice Jordan to Kai Gilkes dated 9 March 2006, forwarding email from Kai Gilkes to Norbert Jobst, Perry Inglis, Patrice Jordan and others dated 3 March 2006, which states that "our (limited) experience" was that "CDO ratings tend to be more volatile than corporates in periods of stress (due to leverage)".

C. S&P Presentation prepared by Kai Gilkes, "A Tour of CDO Evaluator V3" presented at the London CDO Conference dated 13 March 2006, which said "CDO tranches … [h]istorically ratings have been more volatile than corporates, but there is insufficient data to be conclusive."

199.7 S&P knew that the PDs for AAA rated tranches in the CDO Table could not be considered to reflect the behaviour of CDOs that were "extremely strong".

PARTICULARS

A. The PDs in the CDO Table were lower than the PDs for the same rating and maturity in the other asset tables.

B. S&P represented, and its credit ratings were understood in the market to be, comparative or equivalent across different asset classes. This is evident, for example, from the fact that the same ratings were used across all rating classes and had the same descriptions for different rating classes: see the particulars to paragraph 69 above. The Applicants will also provide expert evidence as to the understanding of S&P's ratings in the market during the relevant period.

C. The PDs in the CDO Table were set at levels that enabled the CDO tranche to fail a high number of simulations in the Monte Carlo simulation and still achieve a high rating. For example, an AAA rated tranche with a maturity of 8 years was able to attain an AAA rating even if it failed 405 of 100,000 runs of CDOE.

200. S&P decided to create and utilise the CDO Table in E3 as a result of the discussions particularised in **Schedule 3** and primarily on the basis of business considerations, in particular:

200.1 to neutralise or reduce the negative impact of using the 5% corporate inter-sector correlation assumption in E3 versus the 0% assumption in E2.4.3;

200.2 to avoid S&P losing deals because of ratings criteria in E3 was more stringent than its predecessor;

200.3 to avoid having to downgrade existing deals rated using E2.4.3; and/or

200.4 to avoid S&P losing deals because the ratings criteria of its competitors were more lenient.

PARTICULARS

*See the internal S&P documents and communications in **Schedule 3**, in particular, particulars A, B, C, D, E, F, G, H, K, L, O, Q, R, S, T, V, W, X, KK, LL, MM, WW and JJJ.*

201. As a result of the matters pleaded in the above paragraph, the CDO Table had no reasonable or empirical basis or justification, and S&P knew this or was recklessly indifferent as to the same.

(G) S&P knew correlation was not static

202. Further to the above, from at least 2005, S&P was aware, that:

202.1 correlation does not remain stable over time and therefore could not be expected to remain the same over the period to maturity of a CDO;

PARTICULARS

The particulars to paragraph 181 above are repeated.

202.1A correlation intensity almost doubles between growth and recession;

PARTICULARS

A. S&P document titled "Correlation: new empirical evidence, potential application to the CDO Space" (30 November 2005), which concluded (at p. 23) that "Correlation intensity almost doubles between growth and recession". [SSP.001.013.1591].

202.1B that the correlation studies undertaken to determine the inputs for E3 did not help very much to identify the co-movement of extreme events during stressed periods;

PARTICULARS

A. Email from Arnaud de Servigny to Norbert Jobst dated 11 October 2005 [SSP.001.016.6346].

202.2 it was "incorrect" and "wrong" to use a static correlation assumption in CDOE because S&P's historical data showed S&P "definitively" that "correlation is not static, as [its] modelling suggests, but changes dynamically (i.e. increases in times of stress)";

PARTICULARS

A. Email from Michael Drexler to Kai Gilkes, Perry Inglis, Andrea Bryan, Elwyn Wong, Lapo Guadagnuolo and Norbert Jobst (16 February 2005). In their responses, none of the recipients of that email disagreed with the views expressed in Mr Drexler's email about the use of static correlation assumptions.

B. "Corporate Default Correlation Study" to Correlation Committee from Sten Bergman, Andrew Smith dated 31 January 2002, p. 9.

202.3 the period 2000 to 2004 was "one of the most stressful periods in recent history" and involved far higher defaults and correlation than the long-term averages.

PARTICULARS

A. Email from Kai Gilkes to Hiromi Saito, Perry Inglis and others (23 March 2005).

B. "Updating the Idealised Corporate Default Table: Committee Presentation" by Nobert Jobst and Kai Gilkes dated 20 October 2003, p. 6-7.

C. Email from Kai Gilkes to Daniel Strong and others (21 December 2005), which says "the data we obtained over the period 1999-2003 was extremely stressful, involving higher year-on-year volatility and levels of default than previous periods".

203. From at least December 2005, S&P expected that the global corporate market would be affected by further corporate defaults and negative credit migration, which would directly affect CDO performance.

PARTICULARS

A. Draft CDO Strategic Plan (1 December 2005) p. 12.

B. Memorandum from Patrice Jordan to Joanne Rose subject "Global CDO Activity Report" circulated on 12 December 2005 to, amongst others, Kai Gilkes and Perry Inglis, which notes on p. 2 that the market was expecting a "more challenging credit environment".

204. Notwithstanding the matters pleaded in the preceding two paragraphs, S&P used the static correlation assumptions pleaded in paragraph 110.

205. S&P used static correlation assumptions because it was aware that its "current modelling approach" was not capable of "handling" the fact that correlations are "time varying in nature" and therefore used average estimates of "PD/correlation across a full economic cycle".

PARTICULARS

Email from Kai Gilkes to Lapo Guadagnuolo, Michael Drexler and Norbert Jobst dated 10 March 2005.

(G1) S&P continued to use the Gaussian copula

205A. Paragraphs 98 to 103 above are repeated.

205B. By around mid-2004, at the same time it was updating CDOE to E3, S&P undertook a project to investigate different industry standard multivariate models, including the use of alternative copulas to the Gaussian copula.

PARTICULARS

A. Internal S&P document authored by Norbert Jobst titled "Modelling default dependency in multi-name credit products" dated 1 August 2003 [SAP.001.0001.4775], which includes the following comments:

a. Page 8: although the Gaussian copula is "one of the most popular" the "ease of estimation and simulation comes at the price that the

dependency the Gaussian copula imposes, lead to very unrealistic and undesirable intensity/credit spread dynamics".

b. Page 30: "*Gaussian copula, despite its wide us [sic], implies some very strange dynamics in intensities/credit spreads which needs critical assessment. Usually, the better and well accepted the model, the closer it resembles real world behaviour, which is contradicting for the Gaussian approach. This inconsistency in the default dynamics will lead to misinterpretation of the riskiness of structures due to maturity effects."*

c. Page 31: "*Overall, further work is required in analysing and detecting suitable copulae and deriving estimation techniques.*"

B. "Multivariate Research" paper prepared by Norbert Jobst and sent to Kai Gilkes on 9 June 2004 [SSP.001.017.5467] [SSP.001.017.5468].

C. Email from Kai Gilkes to Kurt Sampson, copying Perry Inglis, on 29 July 2004 [SAP.009.014.8890], noting in relation to "[a]lternative copulae, such as t-copula" that it is "is very important that we thoroughly investigate these models, so that we understand their benefits and shortcomings, and are ready to implement them when (not if) they start becoming commonplace in the market".

D. Presentation prepared by Kai Gilkes titled "The SF Quantitative Group" dated 31 August 2005 [SAP.001.0001.6260], p. 22.

E. S&P document "Modelling Baskets and CDOs: Alternative credit portfolio approaches" dated February 2005 [SSP.001.017.3958], pp. 16-20.

F. The multivariate model research (including the use of different copulae, including a t-copula) was led by Norbert Jobst, and also involved Arnaud de Servigny and Astrid Van Landschoot.

205C. By no later than November 2005, S&P had:

205C.1 assessed the validity of the choice of a Gaussian copula against its own empirical data;

205C.2 demonstrated there was a far better fit between the empirical data and a *t* copula with degrees of freedom inferior to 6 (i.e. a "fat tail") when focusing on the tail of the distribution, being the area of most relevance to risk management and structured finance;

205C.3 concluded that the Gaussian copula was not the most appropriate function for modelling CDOs, unless the model discriminated between growth and recession periods (which CDOE did not).

PARTICULARS

A. S&P document titled "Correlation: new empirical evidence, potential application to the CDO Space" (29 November 2005) [SSP.001.013.3186], pp. 40-49, 62. This document was prepared by Arnaud de Servigny with Astrid van Landschoot, and sent to Norbert Jobst. [SSP.001.013.3185]

B. S&P document titled "Correlation between sectors" dated 1 December 2005 [SSP.001.017.2919] authored by Astrid van Landschoot, and sent to Arnaud De Servigny and Norbert Jobst [SSP.001.017.2918]. This paper summarises research that shows that the fit between the t copula (with degrees of freedom of 5 or 7) better fit the empirical data than the Gaussian copula, whether looked at for the period 1990-2004 or 1982-2004.

C. S&P document titled "Correlation: new empirical evidence, potential application to the CDO Space" (30 November 2005) [SSP.001.013.1591], pp. 47-50, 63. This document was prepared by Arnaud de Servigny with Astrid van Landschoot, and sent to Norbert Jobst amongst others. [SSP.001.013.1590]

205D. Notwithstanding the matters pleaded in paragraphs 205B and 205C above, S&P:

205D.1 continued to use the Gaussian copula in E3;

205D.2 did not make any further adjustments to the assumptions used in E3 to account for the fact that the use of the Gaussian copula understated the probability of joint defaults in the tail of the distribution; and

205D.3 did not disclose its research or conclusions into the use of alternative copula when it released E3 in December 2005; and

205E. The effect of continuing to use the Gaussian copula was to severely underestimate the clustering of defaults in the tail of the distribution, meaning that that it was very unlikely that E3 would simulate extreme, severe or substantial stress events.

205F. At all material times, S&P was aware of the matters pleaded in paragraph 205E.

PARTICULARS

A. Paragraph 205C and its particulars are repeated.

B. S&P's awareness of the matter pleaded in paragraph 205E can also be inferred by reason of the experience and expertise of the employees working on the development of E3, and their familiarity with S&P's own ratings process.

(H) S&P disregarded model risk

206. At all material times, S&P was aware that its credit ratings for CDOs could not be based on reasonable grounds if the CDOE model it used was based on unsound model inputs and therefore its results were unreliable.

PARTICULARS

S&P was aware of those things by virtue of its experience and expertise as a CRA (as to which, see paragraphs 71-74).

207. In April 2005, S&P recognised the "current reality" of its rating process and methodology for CDOs utilising E2.4.3 (the version of CDOE in use at that time) was that:

207.1 it could "produce a rating" but it had "very little idea how sensitive [its] ratings are to market developments or model assumptions";

207.2 it had conducted "little or no strategic research" in developing its model and placed too much reliance on bankers' models; and

207.3 it created "new model risks every day" (meaning the risk that the model was based on unsound or uncertain inputs and assumptions and therefore that its results were unreliable).

PARTICULARS

Kai Gilkes, Powerpoint presentation, CDO Planning Session, Miami, April 2005, "The Future of CDO Analytics", p. 5. Attendees at the CDO Planning Session included Patrice Jordan, Perry Inglis and others.

208. S&P also knew that the issues with its correlation assumptions, and the CDO Table, and the use of the Gaussian copula introduced inaccuracy and error into the rating process, as pleaded in paragraphs 188-205 above.

209. S&P thus recognised that this meant that there was significant uncertainty as to the soundness of the model assumptions used by CDOE which raised significant doubts about the reliability of ratings assigned based on the output of the CDOE.

PARTICULARS

This was known to at least Kai Gilkes, the author of the presentation "The Future of CDO Analytics" and Perry Inglis and Patrice Jordan, attendees at the presentation given by Gilkes. Each of Gilkes, Inglis and Jordan occupied senior positions within S&P's CDO Group and:

A. was aware that S&P's ratings for CDOs depended upon the output of CDOE;

B. was responsible for and involved with the development of the CDO Evaluator model and the determination of model inputs;

C. was aware that the reliability of the ratings produced by CDOE depended upon the soundness of model inputs; and

D. was aware that the use of unsound or uncertain model inputs and assumptions would render the model outputs produced by CDOE unreliable.

210. Despite S&P's knowledge pleaded in the preceding paragraph, S&P continued to use E2.4.3 and continued to publish ratings based on that model until December 2005 in the case of SCDOs and until 1 January 2007 in the case of cashflow CDOs.

211. By the time S&P released E3.0 on 19 December 2005, S&P had not identified modelling processes or procedures which would address the significant uncertainty about the reliability of its ratings based on CDOE, pleaded in paragraphs 207-209.

212. S&P did not identify implement any modelling processes or procedures which would address that uncertainty in either E3.1 or E3.2.

213. S&P did not disclose that its ratings for CDOs were affected by model risk or were unreliable for the reasons pleaded in paragraphs 207-209 above.

(I) Effect of errors on ratings of Claim CDOs

214. As a result of the matters pleaded above, there were at least four five serious errors in CDOE3 which caused it to materially underestimate the risk that the collateral or reference entities in a CDO would default, particularly in stressed scenarios:

214.1 the corporate inter-sector and intra-sector correlation assumptions used in E3 were lower than the averages generated by the historical data, and were chosen to mitigate the effects of using higher assumptions in accordance with the historical data (**Error 1**);

214.2 the table used to provide the rating cut-points for CDOs in E3 (the CDO Table) was constructed to avoid rating downgrades and had no reasonable or empirical basis (**Error 2**);

214.3 S&P used static correlation assumptions when it knew correlation was dynamic (**Error 3**); and

214.3A E3 used a Gaussian copula in circumstances where S&P's research had demonstrated that the Gaussian copula understated defaults in the tail of the

distribution (high joint default events), as compared to a fat tailed t-copula (**Error 3A**);

214.4 E3 did not adequately compensate for model risk, including the significant model risk introduced by Errors 1-3A4, nor did it disclose that its ratings for CDOs were affected and/or potentially unreliable due to model risk (**Error 4**).

215. Every corporate CDO rating assigned or surveilled by S&P using E3 was affected by Errors 1-4.

216. Every other CDO rating assigned or surveilled by S&P using E3 was affected by Errors 2, 3, 3A and 4.

216A. The Errors referred to above meant that CDOE3 could not, and did not, simulate scenarios of extreme, severe or substantial stress.

217. The Errors referred to above materially inflated the ratings assigned to the Claim CDOs using CDO Evaluator beyond that which they would have been had the outputs of CDO Evaluator not been affected by the Errors.

PARTICULARS

Further particulars will be provided with the Applicant's expert evidence in relation to the CDOs acquired by the Applicant as identified in Schedule 4.

218. Further or alternatively, the Errors referred to above caused each of the Ratings to be unreliable.

PARTICULARS

Further particulars will be provided with the Applicant's expert evidence in relation to the CDOs acquired by the Applicant as identified in Schedule 4.

(J) Falsity of S&P Representations

219. By reason of the Errors pleaded above:

219.1 CDOE did not require CDO tranches to be able to survive a level of economic stress commensurate with extreme, severe or substantial economic stress, in the case of each of AAA and AA ratings, respectively;

219.2 the Ratings did not reflect the qualitative statements of strength they conveyed as pleaded in paragraph 69 above;

219.3 there were not reasonable grounds to assign the Ratings;

219.4 the assignment of the Ratings using CDOE was not the product of reasonable care and skill;

219.5 the Ratings could not be relied on by investors in making investment decisions;

and, thereby, the Rating Representations were false.

220. By reason of the matters pleaded in Part 9 and paragraphs 175-213 above:

220.1 S&P's aims in developing E3 were to produce a model that would result in the minimum number of CDO rating downgrades and enable it to maintain and increase its market share of CDO ratings;

220.2 key elements of E3, including, in particular, the corporate correlation assumptions and CDO Table, were chosen or "tweaked" based on business considerations rather than being constructed to align with the empirical data and independent analytical judgement;

220.3 the construction of CDOE was not the result of an objective, independent analytical process, and the ratings it produced therefore did not reflect S&P's true current opinion regarding the credit risks of those CDOs;

and, thereby, the Independence Representation was false.

(K) S&P knew S&P Representations were false

221. At all material times following the release of CDOE in around 2001, S&P knew that its credit ratings for CDOs were determined by the model output for whichever version of CDOE was used to rate a given CDO.

PARTICULARS

A. Draft CDO Strategic Plan, p. 41.

B. CDO Strategic Plan, pp. 32-33.

C. CDOE Technical Document.

D. By reason of the documents particularised above, that knowledge would have been held by any and all employees of S&P involved in its CDO ratings business.

222. At all material times, S&P knew that its CDO credit ratings derived using E3 were published worldwide.

PARTICULARS

This is evident from the following things, amongst others:

A. The particulars to paragraphs 58 are repeated.

B. Global CDO Criteria Document, p. 1: "Standard & Poor's has been rating CDOs since their inception in the late 1980s and has participated in all segments of the CDO market on a global scale".

C. CDO Strategic Plan, which (inter alia) describes S&P's business objectives for its "global CDO business", notes that "CDOs are a global product" and that there is "impressive global investor interest in CDOs". See especially pp. 3-4, 17-18, 21.

D. By reason of the matters particularised above, that knowledge would have been held by any and all employees of S&P involved in its CDO ratings business.

222A. At all material times, S&P knew or was alternatively recklessly indifferent to the fact that in order to express the opinion, on reasonable grounds, that the ability of a CDO tranche to pay coupons and repay principal was "extremely strong" or "very strong", CDOE needed to be able to reliably model the performance of the CDO in periods of extreme, severe or substantial stress to assess how the instrument under consideration would perform in such circumstances.

PARTICULARS

This is evident from the following things, amongst others:

A. S&P's research into alternative multivariate models, including regime switching and the use of a fat tailed t copula as pleaded in paragraphs 205A-205F above. By reason of the fact that this research was openly discussed within the QCOE and Structured Finance Group, that knowledge would have been held by any and all employees of S&P involved in its CDO ratings business.

B. Email from Drexler to Fabienne Michelle and others dated 3 June 2005 re "RE: Final votes on swap criteria / new proposal on liquid swap definition", in which he says that "The whole point about AAA is that it is an extremely, extremely remote event".

C. The particulars to paragraph 69 above and paragraphs 223 below are repeated.

223. At all material times from at least around 2001, S&P knew or alternatively was recklessly indifferent to the fact that its credit ratings conveyed the Rating

Representations, including the qualitative statements about the creditworthiness of the relevant instrument pleaded in paragraph 69.

PARTICULARS

The particulars to paragraph 69 are repeated.

By reason of particulars A-G to those paragraphs, each employee in S&P's CDO ratings business, including each of the Key Employees, must be presumed to have known that the ratings conveyed the Rating Representations.

Further or alternatively this was known to each of:

- *Gilkes, by reason of:*
  - *his joint authorship of Standard & Poor's, "Credit Risk Analysis and Structured Finance Ratings: Quantitative Methods" (22 July 2004), pp. 4-5, where the Great Depression is referred to as a "AAA" event;*
  - *the document "An Introduction to CDOs and Standard & Poor's Global CDO Ratings" dated 8 October 2003, to which he is noted as a "Quantitative Contact";*
  - *his joint authorship of the CDOE Technical Document, which contained the CDO Table which contained expected probabilities of default for CDO tranches with particular ratings and maturities;*
- *Jobst, by reason of his joint authorship of documents (i) and (iii) referred to above;*
- *Drexler, by reason of:*
  - *the document at (ii) above, to which he is noted as an "Analytical Contact";*
  - *the email from Drexler to Fabienne Michelle and others dated 3 June 2005 re "RE: Final votes on swap criteria / new proposal on liquid swap definition", in which he says that "The whole point about AAA is that it is an extremely, extremely remote event".*

224. At all material times following the release of E3 on 19 December 2005, through the Key Employees, S&P knew or alternatively was recklessly indifferent to the fact that its process for rating CDOs was flawed due to the Errors described in paragraph 214.

PARTICULARS

Error 1 (correlation assumptions in E3 below historical estimates) was known to at least each of:

- *Gilkes, who was the Head of the SFQG in Europe, the most senior quantitative analyst responsible for determining the model criteria and methodology for E3 and an author of the CDOE Technical Document and*

~~*who was a party to communications particularised at paragraphs,191, 192, 193, 194, 195, 179, 180 and 181 which includes those in Schedule 3 at particulars A, I, Q, R, S, V, W, X, Z, KK, LL, MM, RR, WW, GGG and III.*~~

- ~~*Inglis, who was a Managing Director, Structured Finance Ratings and Head of the Global CDO Group who had decision-making authority over the model criteria and methodology adopted for E3 and who was a party to communications particularised at paragraphs 191, 193, 194, 195, 179, 180 and 181, which includes those in Schedule 3 at particulars A, I, M, R, W, MM, WW and III.*~~

- ~~*Jobst, who was a Director of S&P's Structured Finance Ratings, one of the authors of the CDOE Technical Document and who was a party to communications particularised at paragraphs 191, 192, 193, 194, 195, 179, 180 and 181, which includes those in Schedule 3 at particulars R, W, X, KK and III.*~~

- ~~*Drexler, who was a member of the Global Quantitative Group for S&P and who worked with Gilkes in developing the modelling criteria for E3 (including the transition from E2.4.3) and who was a party to communications particularised at paragraphs, 191, 193, 194, 195, 179, 180 and 181, which includes those in Schedule 3 at particulars I, R, W, X, KK and LL*~~

- ~~*Jordan, who was a Managing Director, Structured Finance Ratings and, from 2005, Managing Director of the Global CDO Group, who had decision-making authority over the model criteria and methodology adopted for E3 (including the transition from E2.4.3), and was a party to communications particularised at paragraphs 191, 193, 194, 195 and 180 which includes those in Schedule 3 at particulars S, T, W, MM, WW and III.*~~

~~*Error 2 (CDO Table) was known at least to each of:*~~

- ~~*Gilkes, who was a party to communications particularised at paragraphs 196, 197, 198, 199 and 200, which includes those in Schedule 3 at particulars A, B, C, D, E, K, Q, R, S, V, W, X, KK, LL, MM, WW and III.*~~

- ~~*Inglis, who was a party to communications particularised at paragraphs 196, 198, 199 and 200, which includes those in Schedule 3 at particulars A, B, C, D, E, H, K, R, MM, WW and JJJ.*~~

- ~~*Jobst, who was a party to communications particularised at paragraphs 196, 198, 199 and 200, which includes those in Schedule 3 at particulars D, R, W, KK and JJJ.*~~

- ~~*Drexler, was a party to communications particularised at paragraphs 197, 199 and 200, which includes those in Schedule 3 at particulars D, F, R, W, KK and LL.*~~

- ~~*Jordan, who was a party to communications particularised at paragraphs 196, 198, 199 and 200, which includes those in Schedule 3 at particulars G, S, MM, WW and JJJ.*~~

Error 3 (static correlation assumptions) was known to at least each of:

- *Gilkes, who was a party to communications particularised at paragraphs 181, 202, 203 and 205.*
- *Inglis, who was a party to communications particularised at paragraphs 181, 202 and 203.*
- *Jobst, who was a party to communications particularised at paragraphs 181, 202 and 205.*
- *Drexler, who was a party to communications particularised at paragraphs 181, 202 and 205.*
- *De Servigny, who was a party to the communications particularised at paragraphs 202.1A and 202.1B.*

Error 3A (Gaussian copula) was known to at least each of:

- *De Servigny, who was party to communications (and prepared the presentations) particularised at paragraphs 205C and 205F;*
- *Jobst, who was responsible for the multivariate model research and a party to communications particularised at paragraphs 205B, 205C and 205F.*
- *Gilkes, to whom Jobst reported and who was aware of the multivariate model research program as set out in the particulars to 205B.*

Error 4 (disregard of modelling assumptions) was known to at least each of Gilkes, Inglis and Jordan: see the particulars to paragraph 209 above.

Alternatively, each of the persons listed above was recklessly indifferent to the Errors in respect of which their knowledge is particularised.

The knowledge (or reckless indifference) of each of those Key Employees should be attributed to S&P.

Further or alternatively, the knowledge of one or more of the Key Employees can be aggregated to fix S&P with the requisite knowledge.

225. At all material times following the release of E3 on 19 December 2005, through the Key Employees, S&P knew or alternatively was recklessly indifferent to the fact that, by reason of the Errors:

225.1 the construction of CDOE and the assignment of any credit ratings thereby was not the product of reasonable care and skill;

225.2 CDOE did not require CDO tranches to be able to survive a level of economic stress commensurate with extreme, severe or substantial economic stress;

225.3 further or alternatively, the Errors meant that any prediction about the creditworthiness of a CDO modelled by CDOE was unreliable and there were not reasonable grounds to assign the ratings;

225.4 further or alternatively, there was substantial doubt as to whether or not ratings produced by E3 were based on reasonable grounds.

PARTICULARS

The particulars to the paragraph above are repeated.

Further, S&P employed experts in quantitative analytics and structured finance, with long experience in CDOs, to whom this would have been obvious.

The Applicants will provide expert evidence to the effect that this would have been obvious to people with such expertise and experience.

226. By reason of the matters pleaded in paragraphs 221-225 above, S&P:

226.1 knew the Rating Representations were false; or

226.2 alternatively, knew there were no reasonable grounds to make the Rating Representations; or

226.3 alternatively, was recklessly indifferent to the falsity or lack of reasonable grounds for the Rating Representations.

227. Further, at all material times and at least following the release of E3 on 19 December 2005, through the Key Employees, S&P knew or alternatively was recklessly indifferent to the fact that:

227.1 business considerations had influenced S&P's ratings methodology; and

227.2 thereby, the Independence Representation was false.

PARTICULARS

This was known to at least:

- *Gilkes, who was a party to the communications at particulars A, B, C, D, E, I, K, Q, R, S, U, V, W, X, Y, Z, BB, DD, EE, FF, GG, II, JJ, KK, LL, MM, OO, PP, RR, TT, UU, VV, WW, XX, YY, BBB, CCC, DDD, GGG, HHH, III and JJJ in **Schedule 3**, and had the knowledge and was a party to the communications particularised in paragraph 224.*

- *Inglis, who was a party to the communications at particulars A, B, C, D, E, H, I, K, M, R, U, AA, BB, DD, EE, FF, GG, HH, II, JJ, MM, NN, OO, PP, QQ,*

~~*TT, UU, VV, WW, YY, BBB, DDD, EEE, HHH, III and JJJ in **Schedule 3**, and had the knowledge and was a party to the communications particularised in paragraph 224.*~~

- ~~*Jobst, who was a party to the communications at particulars D, R, U, W, X, Y, KK, UU, VV, YY and JJJ in **Schedule 3**, and had the knowledge and was a party to the communications particularised in paragraph 224.*~~

- ~~*Drexler, who was a party to the communications at particulars D, F, I, R, W, X ,Y, CC, KK and LL in **Schedule 3**, and had the knowledge and was a party to the communications particularised in paragraph 224.*~~

- ~~*Jordan, who was a party to the communications at particulars G, J, S, U, BB, DD, EE, FF, GG, HH, II, JJ, MM, NN, OO, PP, SS, UU, WW, XX, YY, BBB, CCC, FFF, HHH, III and JJJ in **Schedule 3**, and had the knowledge and was a party to the communications particularised in paragraph 224.*~~

- ~~*Gugliada, who was the Global Practice Leader for CDOs from late 1999 until December 2005 when E3 was released (and thereafter was the Head of the QCOE) and who (i) was a party to the communications at particulars A, B, C, D, E, G, H, J, M, N, O and HHH in **Schedule 3**, (ii) was aware that the risk of losing transaction revenue was a factor that affected updates of CDO Evaluator, (iii) set as goals for the update of CDOE 2-3 notch improvements for investment grade deals to improve S&P's market share with respect to investment grade CDOs. See DOJ Admissions at paragraph 4.*~~

- ~~*Rose, who was the Executive Managing Director of Standard & Poor's Rating Services and was a party to the communications at particulars G, OO, SS, XX, DDD and HHH in **Schedule 3**.*~~

~~*Alternatively, each of those persons was recklessly indifferent to that fact.*~~

12. CAUSATION AND RELIANCE

First Applicant

(A) First Applicant's Investment Policy

296. The First Applicant's investment objective and strategy was to generate above benchmark returns and medium to long term capital growth through investing in investment grade Australian dollar denominated, fixed and floating interest rate securities.

PARTICULARS

A. *Vale Cash Management Fund Pty Ltd – Information Memorandum dated 5 May 2006*

B. *Vale Cash Management Fund Pty Ltd – Compliance Plan November 2006 (**Compliance Plan**)*

297. According to the First Applicant's Compliance Plan:

297.1 the Applicant's investments were required to be in line with the approved investment guidelines as approved by the Board;

297.2 the Applicant's investments had to comply with asset allocation and structural constraints, including credit ratings constraints;

297.3 S&P's ratings description meant that an obligor rated AAA has the highest rating assigned by S&P and the obligor's capacity to meet its financial obligation on the obligation was extremely strong; and

297.4 S&P's ratings description meant that an obligor rated AA differed from the highest rated obligations in a small degree and the obligor's capacity to meet its financial obligation on the obligation was very strong.

298. The First Applicant understood that:

298.1 S&P was a CRA who was well-respected and independent and expert in analysing the credit risk of financial products, including CDOs and CPDOs;

298.2 S&P used objective, statistical analysis to assess the credit risk of, and assign ratings to, structured credit products including CDOs and CPDOs;

298.3 a credit rating from S&P was an independent and reliable indicator of the creditworthiness of the product to which it referred; and

298.4 the credit risk of a CDO tranche or CPDO as indicated by its credit rating was a key factor in determining the coupon or yield and price of the notes.

(B) Vale CDOs

299. The First Applicant invested in the CDOs and CPDO described in **Schedule 4** (**Vale CDOs**).

PARTICULARS

Schedule 4 *sets out in respect of each Vale CDO: its name; the tranche rating assigned by S&P; the type of CDO or CPDO; the date the CDO or CPDO was issued; the date the First Applicant purchased notes in the CDO or CPDO.*

(C) Reliance on ratings

300. The First Applicant invested in the Vale CDOs on the basis that the credit rating for each of the Vale CDOs (or the expected credit rating to be assigned by S&P) (**Vale CDO Ratings**) was:

300.1 a reliable indicator of the credit risk of that tranche; and

300.2 a factor in its assessment of the appropriate price to pay for the notes.

PARTICULARS

Further particulars will be provided with the First Applicant's lay evidence.

(D) Fund credit quality rating

301. Further or alternatively, the First Applicant relied on the ratings assigned by S&P to the Vale CDOs in order to maintain the overall rating of the First Applicant's fund.

302. In December 2006, the First Applicant engaged S&P to provide a confidential credit quality rating of the Applicant's fund (**Credit Quality Rating**), whereby S&P evaluated, inter alia:

302.1 the creditworthiness of the First Applicant's investments;

302.2 the market price exposure of the First Applicant's investments;

302.3 the sufficiency of the First Applicant's portfolio liquidity; and

302.4 the First Applicant's management ability and policies to maintain the fund's stable net asset value by limiting exposure to loss,

and expressed an opinion regarding the First Applicant's ability to maintain principal stability and to limit losses due to credit, market and/or liquidity risks.

PARTICULARS

A. *Letter from Standard & Poor's to Oakvale Capital Ltd dated 12 December 2006.*

B. *Standard & Poor's Fund Ratings Criteria 2005: Principal Stability Fund Ratings Fund Credit Quality and Volatility Ratings.*

303. In calculating the Credit Quality Rating of a fund, S&P applied a credit quality matrix score that analysed the credit rating and maturity length of products held by the fund (**Matrix Score**).

PARTICULARS

A. Standard & Poor's Fund Ratings Criteria 2005: Principal Stability Fund Ratings Fund Credit Quality and Volatility Ratings pg. 56-57.

304. On 12 December 2006, the First Applicant was issued a Credit Quality Rating of 'AAf' by S&P. The First Applicant subsequently represented the Credit Quality Rating assigned by S&P on the monthly portfolio reports provided to unitholders between December 2006 and April 2008.

305. In order to maintain a Credit Quality Rating of 'AAf', the First Applicant was required to maintain a Matrix Score score of below 20. On that basis, the First Applicant actively and carefully considered the ratings of its investment products, including the Vale CDOs, prior to investing in order to maintain its overall Credit Quality Rating of 'AAf'.

306. The First Applicant would not have invested in the Vale CDOs and suffered a loss, if S&P had provided a true representation of the proper rating of the Vale CDOs.

(E) Date of acquisition

307. In the case of the Vale CDOs, the First Applicant;

307.1 purchased the CDO or CPDO after S&P had assigned final credit ratings to its tranches and the CDOs had been issued and relied on those final ratings in the ways described above; or

307.2 entered into an agreement to purchase notes in the relevant tranche of the CDO or CPDO before the CDO had been issued.

308. For each CDO and CPDO referred to in ~~the~~ paragraph 307.2 above ~~239.2~~, it was a term of the CDO or CPDO that they could not be issued until S&P had confirmed its ratings. ~~relevant First Applicant's agreement to acquire the CDO that the acquisition would proceed only when S&P confirmed the expected credit ratings of those CDOs and the final legal documentation for the transaction was issued.~~

PARTICULARS

The agreement was part express and part implied.

Insofar as it was express, it was recorded in the final term sheets for each of the relevant CDOs or CPDO provided to the First Applicant by the dealers.

Further or alternatively, such a term should be implied in all such contracts (viz. contracts by CDO investors to purchase full capital structure CDOs or CPDO which have not yet been issued) because it is necessary to give them business efficacy as:

- *the settlement date for the investor's purchase was not until the issue date;*
- *investors in the rated tranches would not have agreed to invest in securities whose ratings were uncertain;*
- *notes in CDOs were typically marketed to investors in advance of the CDO's issue and in a manner akin to a "sale by description" by reference to the expected ratings of the tranches as described in paragraphs 167-172 ~~142-147~~ above, and the particulars to those paragraphs are repeated;*
- *investors in the lower rated tranches and equity tranches would not have agreed to invest if the other tranche ratings were uncertain as they would not be able to assess the likely risk and reward of their investment;*
- *it was a condition of the underlying contractual documentation between the arranger/issuer and dealer that the deal would not issue unless the rating agencies confirmed the ratings of all the rated tranches on the issue date, as particularised in paragraph 172 ~~147~~ above and, as such, the investor's contract would be frustrated if it did not have a similar term;*
- *paragraph 33.3 ~~27.3~~ regarding full capital structure CDOs is repeated.*

Further particulars will be provided with the First Applicant's evidence.

309. As such, the First Applicant's acquisition of each of those Vale CDOs was conditional and contingent upon S&P's confirmation that it had assigned the expected credit ratings to the Vale CDOs and the issuance of the final legal documentation for the transaction.

(F) Condition of issuance

310. Further or alternatively, it was a condition of issuance of those Vale CDOs pleaded in paragraph 307.2~~239.2~~ above that they be assigned the ratings indicated in term sheets and marketing materials provided to investors. Had those expected ratings not been assigned, those CDOs or CPDOs would not have been issued, and the First Applicant would not have invested in them and suffered loss as a result.

PARTICULARS

A. It was typically an express term of the contractual documentation between the arranger/issuer and dealer that the issuance of the rated tranches of a CDO was dependent on those tranches achieving their expected ratings.

B. It was often an express term of the contractual documentation between the arranger/issuer and dealer that the issuance of all tranches of a CDO was dependent on all the rated tranches achieving their expected ratings.

C. See, for example, such language in the offering circulars for the Vale CDOs given in the particulars to paragraph 172 ~~147~~.

311. Had the ratings for those CDOs or CPDO been free from the errors pleaded above, the CDOs or CPDO would not have achieved the expected ratings and would not have been issued.

(G) Reliance on Independence Representation

312. If the First Applicant had known that S&P's credit ratings were unreliable and/or influenced by business considerations, then they would not have relied on CDOE and its outputs, including the Ratings, in the ways described above.

Second Applicant

(A) Second Applicant's Investment Policy

313. The Second Applicant's investment objective was to maximise the return on its surplus cash with the aim of outperforming the benchmark, through investments in, *inter alia*, CDOs and other forms of securities, within agreed levels of risk return exposure contained in the Second Applicant's investment policy.

PARTICULARS

City of Cockburn Policy 'Investments' SFCS1 Finance and Corporate Services dated 13 December 2007.

314. The Second Applicant understood that:

314.1 S&P was a CRA who was well-respected and independent and expert in analysing the credit risk of financial products, including CDOs;

314.2 S&P used objective, statistical analysis to assess the credit risk of, and assign ratings to, structured credit products including CDOs;

314.3 a credit rating from S&P was an independent and reliable indicator of the creditworthiness of the product to which it referred;

314.4 the credit risk of a CDO tranche as indicated by its credit rating was a key factor in determining the coupon or yield and price of the notes.

(B) Cockburn CDOs

315. The Second Applicant invested in the CDOs described in **Schedule 5** (**Cockburn CDOs**).

PARTICULARS

Schedule 5 *sets out in respect of each Cockburn CDO: its name; the tranche rating assigned by S&P; the type of CDO; the date the CDO was issued.*

(C) Reliance on ratings

316. Where the Second Applicant invested in the Cockburn CDOs, the Second Applicant relied on the credit rating assigned by S&P (or the expected credit rating to be assigned by S&P) (**Cockburn CDO Ratings**) as:

316.1 a reliable indicator of the credit risk of that tranche; and

316.2 a factor in its assessment of the appropriate price to pay for the notes.

PARTICULARS

Further particulars will be provided with the Second Applicant's evidence.

(D) Reliance on Independence Representation

317. If the Second Applicant had known that S&P's credit ratings were unreliable and/or influenced by business considerations, then they would not have relied on CDOE and its outputs, including the Ratings, as a reliable, independent indicator of the creditworthiness of the Cockburn CDOs.

13. LOSSES SUSTAINED BY APPLICANTS

318. As a result of its investment in CDOs rated on E2.4.3, E3.0, E3.1, ~~or~~ E3.2, or CPDOE, the Applicants sustained losses, including but not limited to:

318.1 loss of the whole of or a substantial portion of the value of its investment in the Vale CDOs and Cockburn CDOs; and/or

318.2 losses arising from a decrease in the market value of the Vale CDOs and Cockburn CDOs in which they invested; and/or

318.3 loss of the opportunity to invest the sums invested in the Vale CDOs and Cockburn CDOs in other interest-bearing investments or alternatively, loss in the form of overpaying for the Vale CDOs and Cockburn CDOs~~,~~; and/or

318.4 loss from costs and liabilities incurred in relation to any funding fee and legal expenses payable as a result of any judgment.

PARTICULARS

Further particulars of the losses sustained by the Applicants will be provided with the Applicants' evidence.

14. CONCEALMENT

(A) Misdescriptions in CDOE Technical Document

319. In the CDOE Technical Document, published with the release of E3.0 on 19 December 2005, S&P represented in Section 6.1, that:

319.1 it had developed the CDO Table which was no longer identical to the "corporate credit curves" used in previous versions of CDO Evaluator, which it said were highly "idealized" due to a lack of historical data;

319.2 the corporate credit curves were "now based on a more extensive analysis of historical corporate transition and default data, and have therefore been de-linked from the CDO rating quantiles";

319.3 because there was much less historical performance data for CDOs than the underlying corporates, the CDO rating quantiles have not been determined purely from historical data and had been determined using a number of quantitative and qualitative considerations,

(**CDO Table Representations**).

320. The CDO Table Representations were false, to the knowledge of S&P, because:

320.1 S&P had very limited CDO performance data, which data was not sufficient to create a reliable, separate CDO table to be used instead of the CDO Table;

320.2 S&P knew that CDOs structured with their reference entities being the issuers of corporate bonds would default in same manner as corporate bonds;

320.3 the decision to cease using the CDO Table for CDOs was driven primarily by business considerations and S&P's attempt to neutralise or reduce the negative impact of using the 5% correlation assumption for inter sector correlation in ~~CDO Evaluator version~~ E3.0 versus the 0% assumption used in its ~~CDO Evaluator version~~ E2.4.3.

PARTICULARS

A. Paragraphs 216-239 ~~191-201~~ and their particulars are repeated.

B. Email from Kai Gilkes to Patrice Jordan dated 18 February 2005 at 10.08~~a~~pm, in which he describes how S&P can explain "asset/liability decoupling to market participants" which were different to the arguments for doing so "internally".

C. The falsity of the CDO Table Representations was known to at least each of Gilkes, Jobst, Inglis, Drexler and Jordan: see the particulars regarding Error 1 at paragraphs 292-292 ~~224~~ above.

321. The CDO Table Representations had the effect of concealing from the Applicants and Group Members material facts about the creation of the CDOE Table, being Error 3 and/or the matters pleaded in paragraph 320 ~~252~~ and consequently, the fact that the Ratings could not be relied upon for the reasons pleaded at paragraphs 286, 287, 293, 294 and 295. ~~219, 220, 225, 226, 227.~~

(B) Independence Representation

322. The Independence Representation concealed from the Applicants and Group Members the facts that:

322.1 S&P's ratings methodology was influenced by business considerations and was a result of the intentional conduct of S&P pleaded in Part 11~~10~~;

322.2 as a result, the CDOE and the Ratings could not and should not be used and relied upon in the ways pleaded in Part 12 ~~11~~.

PARTICULARS

A. S&P made the Independence Representation for the purposes pleaded in paragraphs 201-202 ~~202-201~~ above.

B. At the time S&P made the Independence Representation, it had the knowledge pleaded in paragraph~~s~~ 292 ~~225~~.

C. The Independence Representation induced in the Applicants and Group Members the view about S&P described in paragraph 201 ~~172~~ above.

D. Investors such as the Applicants and Group Members were external to S&P and were not a party to the internal discussions within S&P particularised in Part 11~~10~~ above. They were not in a position to determine for themselves how S&P came to decide what model inputs to use in CDOE.

E. Further and alternatively, S&P were aware that investors were likely to rely upon their credit ratings for CDOs and were under a duty to disclose to potential users of their ratings (including the Applicants and Group Members) all material information concerning the reliability of S&P credit ratings for CDOs including the facts, matters and circumstances pleaded in Part 11~~10~~ above which meant that S&P's ratings could not and should not be relied upon.

F. Further particulars may be provided with the Applicants' evidence.

(C) Concealment Conduct

323. Further, S&P's conduct in the period after the Ratings were assigned (**Concealment Conduct**) concealed from the Applicants and Group Members that:

323.1 S&P's ratings methodology was influenced by business considerations and was a result of the intentional conduct of S&P pleaded in Part 11~~10~~;

323.2 as a result, the CDOE and the Ratings could not and should not be used and relied upon in the ways pleaded in Part 12 ~~11~~;

323.3 the facts and circumstances giving rise to the claims pleaded in this Further Amended Statement of Clam.

PARTICULARS

A. At all material times after it assigned the ratings to the Claim CDOs, S&P continued to represent to the world at large that its ratings were based on reasonable grounds, independent and uninfluenced by business considerations and to promote its ratings on that basis.

B. At the time those representations were made, S&P continued to hold the knowledge, and remained in possession of the documents, pleaded and particularised in Part 11~~10~~ above, which documents disclosed the conduct by S&P pleaded in that section of the Further Amended Statement of Claim.

C. Notwithstanding those facts, from at least 2007, S&P consistently denied that business considerations impacted its ratings and asserted in response to various lawsuits that its ratings were independent and that the events that had led to the collapse of many of the financial instruments it had rated were extraordinary and simply unforeseen by all market participants. See, for example:

a. "S&P's Joanne Rose On The Lessons Learned About – And the Future Of – Structured Finance" dated 1 November 2007: "And it's important to remember that the 'issuer pays' business model does

not compromise our analytic judgments. We say no to issuers regularly. Standard & Poor's… is the world's foremost provider of financial market intelligence, including independent credit ratings, indices, risk evaluation, investment research, and data."

b. *The First Respondent's Annual Report for the year ended 31 December 2007 at p. 44.*

c. *S&P's press releases dated 4 and 5 February 2013 asserting that a Department of Justice lawsuit (alleging that, contrary to its public statements, S&P's ratings were not objective, independent or free from influence of conflicts of interest posed by its relationships with issuers) was entirely without factual merit, that the DOJ would be wrong in contending that S&P's ratings were motivated by commercial considerations and not issued in good faith and that the suit would be meritless and unwarranted and reasserting that S&P is the world's leading provider of independent credit risk research and benchmarks.*

d. *US SEC filing publishing S&P's results for the 4th Quarter of 2012, asserting that the Department of Justice lawsuit is entirely without factual and legal merit and that S&P has very strong defences against the suit and all pending litigation.*

e. *S&P's press release dated 25 July 2013 asserting that its ratings were independent and that the Department of Justice lawsuit lacked merit.*

f. *Testimony of Vickie A Tillman, Executive Vice President, Standard & Poor's Credit Market Services, Before the Subcommittee on Capital Markets, Insurance and Government Sponsored Enterprises, United States House of Representatives on 27 September 2007, in which she says that there is "no evidence" that the "issuer pays" model compromises S&P's integrity (see pp. 13-15).*

g. *Testimony of Deven Sharma, President of S&P, before the Committee on Oversight and Government Reform of the United States House of Representatives on 22 October 2008 acknowledging that many of the assumptions used in S&P's credit ratings issued between the last quarter of 2005 and the middle of 2007 did not work but representing that those assumptions were the result of a robust analysis of the transactions, monitoring of the market, experience in rating those kinds of securities and historical data and that there was no evidence that the fundamental integrity of S&P's credit ratings process had been compromised by S&P's relationships with issuers and denying that in pursuit of fees S&P may give higher ratings than would otherwise be warranted (see especially, pp. 9-11).*

h. *Testimony of Mr Sharma before the United States House of Representatives Committee on Financial Services, Subcommittee on Oversight and Investigations on 27 July 2011 on the importance of analytical independence (p. ~~9~~31).*

D. *S&P's Defences in ~~Clurname Pty Ltd v McGraw Hill Financial, Inc. (Federal Court proceeding no. NSD 957 of 2015)~~ the ~~(~~Clurname proceedings~~)~~ and in the Swan proceedings (Federal Court proceeding no. 656 of 2013) denying that the allegations concerning the Independence Representation were false.*

E. *Further and alternatively, S&P were aware that investors were likely to rely upon their credit ratings for CDOs and were under a duty to disclose to potential users of their ratings (including the Applicants and Group Members) all material information concerning the reliability of S&P credit ratings for CDOs including the facts, matters and circumstances pleaded in Part* 11~~10~~ *above which meant that S&P's ratings could not and should not be relied upon.*

F. *Further particulars may be provided with the Applicants' evidence.*

15. TORT OF DECEIT

(A) False representation

324. S&P made each of the S&P Representations, as pleaded in Part 4(C).

325. By reason of the matters pleaded in Part 11~~(~~B~~)~~ ~~10(J)~~, each of those S&P Representations were false.

(B) Knowledge of false representations

326. For the reasons explained in Part 11~~(~~C~~)~~ ~~10(K)~~, S&P knew or at least was recklessly indifferent to the falsity of each of the S&P Representations.

(C) Reliance

327. The Applicants and Group Members relied on each of the S&P Representations in the manner described in Part 12 ~~11~~.

328. If the Applicants and Group Members had not relied on each of the S&P Representations in the manner described therein, they:

328.1 would not have invested in the Claim CDOs;

328.2 alternatively, would not have paid as much for their investments in the Claim CDOs as they paid.

(D) Inducement

329. For the reasons explained in Part 8(C), S&P knew and intended that investors and potential investors in CDOs, such as the Applicants, would rely on their credit ratings of CDO tranches, including the Ratings, to assess the credit risk of a CDO and thus the riskiness of their investment or potential investment in that CDO.

PARTICULARS

A. The particulars to the paragraphs in Part 8(C) are repeated.

B. To the extent it is necessary to prove, that knowledge and intention was held by each of the Key Employees by reason of particular H to paragraph 191 ~~162~~.

C. Further or alternatively, that knowledge and intention was held by each of Gilkes, Jordan, Gugliada, Inglis and Rose, who each reviewed and provided input into the CDO Strategic Plan.

330. For the reasons explained in Part 8(B), S&P knew of the process for structuring and marketing ~~*process*~~ CDOs described in Part 7 above, and intended and encouraged the use of CDOE and its credit rating outputs to market CDOs to investors in advance of the final issuance of the rating.

PARTICULARS

A. The particulars to the paragraphs in Part 8(B) are repeated.

B. To the extent it is necessary to prove, that knowledge and intention was held by each of the Key Employees by reason of particular G to paragraph 185 ~~158~~.

C. Further or alternatively, those matters were known to each of the Key Employees by reason of the following:

a. Gilkes, who authored or was a party to the communications at particulars D, E, F, G, H, K and L of Schedule 2 (L being the CDO Strategic Plan);

b. Inglis, who authored or was a party to the communications at particulars F, G, H, K and L of Schedule 2;

c. Jordan, who was a party to the communications at particulars E, F, G, H and L of Schedule 2;

d. Jobst, who was a party to the communication at particular H of Schedule 2;

e. Gugliada, who was a party to the communications at particular E and L of Schedule 2; and

f. Rose, who was likewise a party to the communications at particular E and L of Schedule 2.

331. For the reasons explained in paragraph 198 ~~169~~, S&P knew that:

331.1 the CDOs it rated could form the reference entities in other CDOs;

331.2 the credit ratings and/or weighted average credit ratings of the reference entities in a CDO were relevant to the arranger's structuring of the CDO and were used by investors in assessing the risks of investing in a CDO.

332. Further or alternatively, S&P made the Independence Representation with the intention and for the purposes described in paragraphs 201-202 ~~172-173~~.

333. As a result of the matters pleaded in paragraphs 329-332 ~~261-264~~, S&P induced the Applicants and Group Members to rely on each of the S&P Representations.

(E) Loss

334. The Applicants and Group Members suffered the loss and damage described in Part 14 as a direct result of their reliance on the false S&P Representations.

335. By reason of the matters pleaded in paragraphs 324-334 ~~256-266~~, S&P committed the tort of deceit in relation to each of the separate S&P Representations.

16. CONTRAVENTION OF THE CORPORATIONS ACT

(A) Inducing persons to deal – s 1041F

336. The Claim CDOs are financial products as that term is defined in the Corporations Act.

337. The publication of S&P's assignment of the Ratings pleaded in paragraphs 74 and 76~~58~~ was conduct in this jurisdiction for the purposes of s 1041F of the Corporations Act.

338. Each of the Ratings, and each of the S&P Representations, was a statement, promise or forecast for the purposes of s 1041F(1)(a) of the Corporations Act.

339. By reason of the matters pleaded in Part 12 ~~11~~, each of the Ratings and the S&P Representations induced the Applicants and Group Members to deal in financial products, namely, CDOs rated on E2.4.3, E3.0, E3.1, ~~and/or~~ E3.2 and/or CPDOE.

340. The representations as to credit strength pleaded in paragraph 86 ~~69~~ above were representations as to future matters.

341. By reason of the matters pleaded in Part 11 ~~10~~:

341.1 the representations as to credit strength lacked reasonable grounds and thereby are taken to be misleading pursuant to section 796C of the Corporations Act;

341.2 thereby or otherwise, the S&P Representations were misleading, false and/or deceptive for the purposes of s 1041F(1)(a) of the Corporations Act.

342. By reason of the matters pleaded in paragraphs 288-295 ~~221-227~~, S&P made or published each of the Ratings and the S&P Representations knowing, or being reckless as to whether, they were misleading, false or deceptive, for the purposes of s 1041F(1)(a) of the Corporations Act.

343. Further or alternatively, by reason of the matters pleaded in Part 14 ~~13~~, S&P dishonestly concealed material facts for the purposes of s 1041F(1)(b) of the Corporations Act.

PARTICULARS

The conduct described in Part 14 ~~13~~ above was dishonest according to the standard of ordinary people because, amongst other things:

- *it involved deliberate false representations and/or concealment of material facts for economic gain;*
- *S&P knew investors relied on their credit ratings as independent indicators of creditworthiness and that investors were not in a position to second-guess S&P's ratings;*
- *S&P knew that "Standard & Poor's recognition as a rating agency ultimately depends on investors' willingness to accept its judgment": see Standard & Poor's, "Corporate Ratings Criteria" (2001), p. 3.*
- *S&P held itself out as independent and expert in the field of CDO credit ratings and thereby induced reliance on its credit ratings.*

344. By reason of the matters pleaded in paragraphs 336-343 ~~268-276~~, S&P contravened s 1041F of the Corporations Act.

(B) Dishonest conduct – s 1041G

345. S&P carried on a financial services business in Australia.

PARTICULARS

The nature of that business is described in paragraph 10 above.

The particulars to paragraphs 74 and 76~~58~~ are repeated.

346. S&P's assignment and/or the publication of S&P's assignment of the Ratings, and S&P's making of the S&P Representations, was conduct in relation to a financial product and/or a financial service (namely, the Ratings), as each term is defined in the Corporations Act.

347. By reason of the matters pleaded in Parts 11~~-10~~ and 14 ~~13~~ above, S&P engaged in dishonest conduct in relation to a financial product and/or financial service, namely, the Claim CDOs and the Ratings.

PARTICULARS

The particulars to paragraph 343 ~~275~~ are repeated.

348. By reason of the matters pleaded in paragraphs 345 to 347 ~~277-279~~ above, S&P contravened s 1041G of the Corporations Act.

(C) Remedies

349. By reason of the matters pleaded in Part 12 ~~11~~ above, the Applicants and Group Members suffered loss or damage by S&P's conduct in contravention of ss 1041F and/or 1041G of the Corporations Act, and are thus entitled to recover the amount of the loss or damage from S&P pursuant to ss 1041I(1) and/or 1325(2).

17. UNCONSCIONABLE CONDUCT

350. The Applicants and Group Members were:

350.1 outsiders to S&P's organisation;

350.2 not privy to the internal processes which led to the development of E3;

350.3 not in a position to second-guess S&P's ratings; and

350.4 by reason of the above matters, relied on S&P to disclose any reason why its ratings should not be relied on in making investment decisions.

351. By reason of those matters, the Applicants and Group Members were under a special disability or disadvantage.

352. S&P knew of this disability or, further or alternatively, this disability was sufficiently evident to S&P.

PARTICULARS

Knowledge of the matters in paragraph 350 ~~282~~ may be inferred, including from the fact that the purpose of a rating is to provide an easy way for people inexpert in quantitative analysis to assess the credit risk of a financial product.

353. S&P took unconscionable advantage of the disability of the Applicants and Group Members by inducing investors (including the Applicants and Group Members) to rely on its ratings, while deliberately concealing material facts that would have allowed those persons to form a proper judgment as to the reliability of those ratings and the credit strength of the products to which they referred.

PARTICULARS

As to inducement, the matters in Part 8(B) and paragraph 329 ~~261~~(and their particulars) are repeated.

As to concealment, the matters in Part 14 ~~13~~ (and its particulars) are repeated.

18. LIMITATION PERIODS

(A) Deceit

354. The claim made by the Applicants and Group Members in Part 15 ~~14~~ above (**Deceit Claim**) is a claim based on fraud or deceit.

355. Further or alternatively, the Deceit Claim was fraudulently concealed by S&P by reason of the conduct described in Part 14 ~~13~~ above.

356. The limitation period for deceit is six years from when the cause of action accrued.

PARTICULARS

Limitation Act 1969 (NSW), s 14.

357. By reason of the matters described in paragraph 354 ~~286~~ and/or paragraph 355 ~~287~~ above, the running of the limitation period for the Deceit Claim was suspended until the claim was discovered or was reasonably discoverable.

PARTICULARS

Limitation Act 1969 (NSW), s 55(1).

358. The Applicants and Group Members did not discover and could not with reasonable diligence have discovered the Deceit Claim until sometime after November 2017.

PARTICULARS

Between 10-11 October 2017, an amendment application to add a deceit claim based on the Errors as they applied to SCDOs of corporate obligors was heard before Justice Wigney in the Clurname proceedings.

During that hearing, many of the internal S&P documents upon which the Deceit Claim is based, and which had only become available to the Applicants in the Clurname proceedings through the discovery processes in those proceedings, were tendered in open court. Before those documents were tendered in open court, they were not public or otherwise available to the Applicants.

On 11 October 2017, Justice Wigney made orders allowing the amendment application in the Clurname proceedings, with reasons to follow. Those reasons, which described the nature of the deceit claim in those proceedings, were published on 10 November 2017.

On 12 March to 18 May 2018, there was a hearing of the Clurname proceedings, during which further internal S&P documents were tendered in support of the deceit claim in those proceedings. Before those documents were tendered in open court, they were not public or otherwise available to the Applicants.

After the documents and judgment were in the public domain, the Applicants required further time to review the documents and judgment, to determine whether the Applicants had a deceit claim based thereon and prepare a pleading.

359. Accordingly, the six-year limitation period for the Deceit Claim did not commence to run until at least November 2017, and therefore the Deceit Claim is within time.

Deceit Claims governed by Western Australian law

360. Paragraph 361 ~~293~~ below applies to the Deceit Claims of the Applicants and Group Members which are governed by Western Australian law.

361. For the reasons pleaded at paragraphs 354 to 359 ~~286 to 291~~ above, if the Court finds that the Deceit Claims governed by Western Australian law would otherwise be statute barred the Court should extend *nunc pro tunc* the time in which the Deceit Claim could be commenced until at least the date of commencement of these proceedings.

PARTICULARS

Limitation Act 2005 (WA), s 38.

(B) Corporations Act

362. A civil action under s 1041I(1) of the Corporations Act by a person who suffers loss or damage by conduct of another person that was engaged in in contravention of s 1041F or s 1041G may be commenced any time within six years after the day on which the cause of action arose.

PARTICULARS

Corporations Act, ss 1041I(1),(2).

363. An application for remedies under s 1325(2) of the Corporations Act by a person who has suffered, or is likely to suffer, loss or damage because of conduct of another person what was engaged in in contravention of s 1041F or s 1041G may be made within six years after the day on which the cause of action arose.

PARTICULARS

Corporations Act, ss 1325(4),(7).

364. A cause of action based on a contravention of s 1041F or s 1041G of the Corporations Act arises when the material facts constituting the cause of action are first discovered or first become reasonably discoverable.

365. The Applicants and Group Members:

365.1 could not reasonably have discovered the material facts constituting the cause of action for contraventions of ss 1041F and 1041G until sometime after November 2017; and

365.2 did not discover the material facts constituting the cause of action for contraventions of ss 1041F and 1041G until on or around the date of filing of ~~this~~ the ~~Amended~~ Statement of Claim.

PARTICULARS

The particulars to paragraph 358 ~~(A)290~~ above are repeated, with references to the Deceit Claim to be read as references to actions in respect of contraventions of s 1041F and 1041G of the Corporations Act.

366. Accordingly, the six-year limitation periods in s 1041I(2) did not begin to run until November 2017 at the earliest and therefore the actions brought for contraventions of s 1041F and 1041G are within time.

367. Further or alternatively, to the extent that more than six years has elapsed since the date on which causes of action accruing to the Applicants and Group Members in respect of contraventions of ss 1041F and 1041G of the Corporations Act arose:

367.1 the cause of the Applicants and Group Members not having commenced proceedings to vindicate those causes of action prior to the expiry of the time limit in s 1041I(2) was the fraudulent concealment of the material facts constituting those cause of action as described in Part 14 ~~13~~ above;

367.2 in the circumstances alleged at paragraph 367.1 ~~299.1~~ it would be unconscionable for S&P to rely on the limitation in s 1041I(2) or s 1325(2) to defeat the claims brought by the Applicants and Group Members for contraventions of s 1041F and 1041G of the Corporations Act;

367.3 in the premises, S&P is estopped from relying on s 1041I(2) or s 1325(2) to defeat the claims brought by the Applicants and Group Members for contraventions of s 1041F and 1041G of the Corporations Act.

368. Further or alternatively, s 1322(4)(d) of the Corporations Act entitles the Applicants and Group Members to seek an order extending the time period for instituting proceedings based on S&P's contraventions of ss 1041F and 1041G, and the Court should make such an order.

PARTICULARS

The particulars to paragraphs 358 ~~290~~ are repeated.

S&P engaged in serious misconduct as described in Parts 11 ~~10~~ and 14 ~~13~~ above, which caused substantial loss to the Applicant and Group Members.

It is in the interests of justice, and in furtherance of the objects of the Corporations Act, and ss 1041F and 1041G, to hold S&P accountable for that misconduct.

(C) Unconscionable conduct

369. There is no statutory limitation period in NSW for equitable causes of action and limitation periods may only be applied to equitable causes of action by analogy to statutory limitation periods.

PARTICULARS

Limitation Act 1969 (NSW), s 23.

370. The Court should not apply any statutory limitation periods by analogy to the unconscionable conduct claim because it would be unconscionable to do so by reason of S&P's conduct pleaded in Parts 11 ~~10~~ and 14 ~~13~~ above.

371. If and to the extent the Court applies the statutory limitation periods to the unconscionable conduct claim by analogy, the Court should also apply by analogy the provisions for suspension of those limitation periods in cases of concealment such that the running of the limitation period was suspended until sometime after November 2017.

372. Further and in the alternative, the unconscionable conduct claim was fraudulently concealed for the reasons pleaded in Part 14 ~~13~~ above.

373. In the premises, the unconscionable conduct claim is not defeated by any limitation period.

Equitable Claims governed by WA law

374. Paragraphs 375 to 377 ~~307 to 309~~ below apply to the equitable claims of the Applicant or Group Members which are governed by Western Australian law.

375. An equitable action cannot be commenced after the elapse of 6 years since the cause of action accrued, or the elapse of 3 years since time started running, on equitable principles, for the commencement of the action.

PARTICULARS

Limitation Act 2005 (WA), s 27.

376. For the reasons set out at paragraphs 354 to 359 ~~307 to 309~~ above, time for the equitable claims only commenced running in November 2017.

377. In the premises, the equitable claims are not defeated by any limitation period.

19. COMMON QUESTIONS OF FACT AND LAW

378. The common questions of law or fact are as follows:

(A) Rating of the Claim CDOs

379. Whether S&P's modelling of the Claim CDOs was deficient, for the reasons pleaded and particularised in Part 11~~10~~ above;

(B) Tort of Deceit

380. Whether the S&P Representations, as pleaded in Part 4(C), were false;

381. Whether S&P knew or at least was recklessly indifferent to the falsity of each of the S&P Representations; and

382. Whether S&P knew and intended that investors and potential investors in CDOs, such as the Applicants, would rely on the S&P Representations.

(C) Contravention of the Corporations Act

383. Whether S&P's conduct as pleaded at Part 11~~10~~ and Part 14~~13~~ above contravened s 1041F and/or s 1041G of the Corporations Act.

(D) Unconscionable Conduct

384. Whether S&P engaged in unconscionable conduct in breach of unwritten equitable principles.

(E) Concealment

385. Whether S&P's conduct in the period after the Ratings were assigned concealed from the Applicants and Group Members the facts and circumstances giving rise to the claims pleaded in this Further Amended Statement of Clam.

(F) Damages

386. The correct principles for measuring compensable loss and damage for losses suffered as alleged herein;

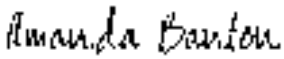
387. The correct principles for awarding exemplary and/or aggravated damages to the Applicants and Group Members;

388. Whether the Applicants and Group Members are entitled to exemplary and/or aggravated damages;

389. Whether the Applicants and Group Members should be entitled to recover any litigation funding fees and legal expenses payable by the Applicants and Group Members in these proceedings as damages and/or exemplary and/or aggravated damages; and

390. What relief other than monetary relief may be available to the Applicants and Group Members.

Date: ~~7 August 2020~~ ~~13 August 2021~~ 9 August 2023



Amanda Kim Banton

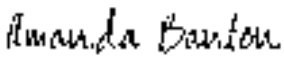
Lawyer for the Applicants

This Further Amended Statement of Claim was prepared by Amanda Kim Banton of the Banton Group and settled by Christopher Withers SC of Counsel and Jerome Entwisle of Counsel.

Certificate of lawyer

I, Amanda Kim Banton, certify to the Court that, in relation to the Further Amended Statement of Claim filed on behalf of the Applicants, the factual and legal material available to me at present provides a proper basis for each allegation in the pleading.

Date: ~~7 August 2020~~ ~~13 August 2021~~ 9 August 2023



Signed by Amanda Kim Banton

Lawyer for the Applicants

Schedule 1

Excluded products

Product	**ISIN**
Aphex Pacific Capital Ltd Series 2006-5	AU300AFEX047
Beryl Finance Limited Series 2008-4	AU3FN0005260
Corsair (Cayman Islands) No.4 Ltd Series 2006-5	AU300CSRJ039
Corsair (Jersey) No.2 Ltd Series 2006-72	AU300CSRJ021
Corsair (Jersey) No.2 Ltd Series 88	AU300CSRJ054
Corsair (Jersey) No.2 Ltd Series 89	AU300CSRJ062
Duke Funding XI Ltd Series 2006 Class A-3E	XS0261422702
Ethical CDO 1 Limited Series 2	AU300ETHI010
Helium Capital Limited Series 60	AU300HCAP019
Helium Capital Limited Series 64	AU300HCAP027
Helix Capital (Jersey) Limited Series 2006-3A	AU3TI000031
Helix Capital (Jersey) Limited Series 2006-3B	AU3TI000049
Helix Capital (Jersey) Limited Series 2006-3C	AU3TI000056
Khamsin Credit Products (Netherlands) II B.V. Silver Square 2006-12 Series 13	XS0254089260
Managed ACES SPC Series 2006:7 Class 1A	AU300MSMA020
Managed ACES SPC Series 2006:7 Class 11A	AU300MSMA012
Momentum CDO (Europe) Ltd Series 2006-19	AU300MTEL030
Momentum CDO (Europe) Ltd Series 2007-7	AU3FN0002598
Obelisk Trust 2006-2	AU300OBSK069
Prelude Europe CDO Ltd Series 2006-3	AU300PRE011
STARTS (Cayman Islands) No.4 Ltd Series 2005-5	AU300STRC012
STARTS (Cayman Islands) No.4 Ltd Series 2006-5	Repeated above

Schedule 2 – Impact of ratings on CDO structuring

A. *S&P's "CDO Evaluator Applies Correlation and Monte Carlo Simulation to the Art of Determining Portfolio Quality" dated November 2001 discusses the methodology used by CDOE to create "for each portfolio a probability distribution of defaults and a set of SDRs." The purpose of this, the article says, it to verify that each CDO tranche can continue to pay principal and interest in accordance with its terms notwithstanding defaults up to the SDR on the underlying portfolio.*

B. *S&P's "Global CBO/CLO Criteria Document" (1999) refers at p. 57 to "payment structure risks" and in particular, the "principal and interest 'waterfalls'" that "drive the transaction's allocation or distribution of cash flow down the capital structure." The paper describes the fact that in senior/subordinated structures, the most senior, highly rated tranche should have priority in the principal and interest waterfalls and that subordinated tranches are in place to provide credit support. It notes that when several tranches of a CDO are rated, the "tradeoffs" across the classes and waterfall mechanics can become quite complex, as differing interests complete for the same collateral cash flow. It says "[i]n general, the analyst looks closely at what is released through both the principal and interest waterfalls to junior debt holders and equity holders while senior debt is outstanding. In addition a broad range of default patters are assessed over the life of the deal…which reflect potential release of cash flow to subordinated holders in certain structures."*

C. *The CDO Criteria Document (21 March 2002) notes:*

    a. *"Standard & Poor's works closely with the sponsor on every transaction and customizes its analyses based on the requirements of each transaction" (p. 1).*

    b. *"Payments to each of the liability classes are dictated by a stipulated priority of payments that reallocates the risk and rewards associated with the assets. This allows the CDO issuer to tailor the liabilities to meet the risk/return profiles of a broad range of investors and to attract additional groups of investors" (p. 3).*

    c. *"The manner in which the waterfall is structured, the way in which the interest and/or foreign currency hedges work, liquidity considerations and how defaults are defined, all play a significant role in the rating of the transaction" (p. 15).*

    d. *"The principal and interest 'waterfalls' drive the transaction's allocation or distribution of cash flow down the capital structure. Even synthetic CDOs have cash waterfalls that dictate how premiums, interest and c from the collateral accounts will be distributed… As one would expect, in senior/subordinated structures, the most senior, highly rated tranche should have priority in the principal and interest waterfalls. Subordinated tranches are in place to provide credit support, which, for example, may translate into deferring interest receipts while the transaction tries to build back its O/C tests. Junior investors, however, have their own return hurdles. Usually, the investor will invest in a single rated or unrated tranche position in the capital structure. When several tranches are rated, however, the "trade-offs" across classes and waterfall mechanics can become quite complex, as differing interests compete for the same collateral cash flow." (p. 36)*

    e. *"Most cash flow transactions will also deliver sequentially beginning with the senior most outstanding tranche. However, under certain conditions, some waterfalls might pay pro-rata or divert the paydown to a subordinated tranche. In general, the analyst looks closely at what is released through both the principal and interest waterfalls to junior debt holders and equity holders while senior debt is outstanding*

and will apply additional stresses to the cash flow modeling to ensure adequate subordination protection to the senior tranche" (p. 37).

f. *"The manner in which collateral principal payments and losses are allocated among classes has a large impact on the level of credit support each tranche has over time. All payment structures represent different trade-offs between paydown and support of the senior class, versus return of cash to the junior debt and equity holders" (p. 66).*

g. *"The exact capital structure for cash flow CDO transaction, or for SCDO transaction with cash flow components, is determined by modelling cash flow simulations under different assumptions. The aim of this analysis is to show that each tranche can withstand the stresses commensurate with the desired rating" (p. 76).*

h. *"[T]he cash flow model must accurately incorporate the transaction structure and provision. It must model the payment waterfall as detailed in the documents" (p. 77).*

i. *"Sponsors" seeking a rating must provide (amongst other things) "[t]he results of the CDO Evaluator for the input file" (p. 83).*

D. *Standard & Poor's Structured Finance, "Drill-Down Approach for Synthetic CDO Squared Transactions" published 10 December 2003, which notes the "credit analyst" as Kai Gilkes, says at p. 3: "Once an attachment point has been sized, the arranger of the CDO squared transaction will determine the detachment point for each CDO tranche."*

E. *As at 20 July 2004, S&P was allowing certain of its arranger clients to test a "beta" version of E3. It noted that the Royal Bank of Canada (London) is "the first client to have installed the CDO Evaluator Engine into a 'grid' of workstations": email from David Goldstein to David Goldstein, Patrice Jordan, Richard Gugliada and others dated 20 July 2004, attaching memorandum to Joanne Rose subject "Activity Report – June / July"; see also email from Kai Gilkes to Patrice Jordan titled "E3 timeline" dated 5 May 2005 and Memorandum to Joanne Rose from Patrice Jordan subject "Global CDO Activity Report" dated 21 June 2005, p. 4.*

F. *Email chain among Fabienne Michaux, Patrice Jordan, Perry Inglis, Kai Gilkes and others (17 June 2005) which says S&P is in "damage control" with "customers" (banks) who have structured deals using E2.4.3 and are worried that they will be downgraded when E3 is released and forwards an email from Société Générale which says that they have spent "the last 3 weeks marketing" a deal that was rated using E2.4.3.*

G. *Email from Perry Inglis to Patrice Jordan, Andrea Bryan, Kai Gilkes and others dated 17 June 2005, saying "Pat - we have been telling our clients that we will not be undertaking wholesale downgrading of transactions and that our clients should continue to use 2.4.3 without being concerned about E3."*

H. *Email from Elwyn Wong to Perry Inglis, Kai Gilkes, Norbert Jobst, Patrice Jordan and others dated 18 July 2005 re "FW: Bear NY E3 feedback" which explains how Bear Stearns uses CDOE in its CDO structuring, including: "(2) Use COO Evaluator or E3 attachment point based on rating seeked [sic] (our correlation assumptions - and so, 6%/20% in E3 - to get atathcment [sic] points) (3) Use Bears proprietary pricing model and these S&P attachment and detachment points."*

I. *S&P Rating Services, "CDO Spotlight: First Study of US CDO Equity Performance Highlights Payment Trends" dated 12 September 2005), which analyses the performance*

of the equity tranches of CLOs and CBOs in the period 1998 to 2002. This indicates that S&P viewed CDO equity as a product within the scope of its research and analytic services even though CDO equity itself was usually not rated.

J. *When it became known amongst arrangers that S&P was intending to change from E2.4.3, S&P received many communications from arrangers who were worried about the effect this would have on their ability to structure and market CDOs. For example, on 23 November 2005, Brian Neer of Morgan Stanley wrote to Elwyn Wong (S&P) who said his "business was on 'pause' right now" while waiting for S&P's decision on grandfathering. See also, email from Brian Neer of Morgan Stanley to Elwyn Wong (14 November 2005) subject 'New Model'. See similarly, particulars AA, FF, HH, II and OO in* ***Schedule 3****.*

K. *In S&P's media release announcing the release of E3, with analyst contacts listed as Perry Inglis and Kai Gilkes, Gilkes is quoted as saying "We recognize that transactions are often structured for some time before reaching our pipeline. We therefore felt that a reasonable period is required to ensure an orderly transition in the market": "S&P Launches Latest Version of CDO Evaluator Modelling Tool" (19 December 2005).*

L. *CDO Strategic Plan (January 2006), p. 25: "Criteria will directly impact the economics of any transaction… arrangers will go with the agencies that are able to (1) meet their transaction schedule, and (2) use criteria that provide them with favorable economics for the transaction… Additionally, part of the overall customer service approach is providing dealers and arrangers with tools, which our analysts use in the rating process, which in turn helps them reduce transaction times and execution risk. Embedding these tools — such as CDO Evaluator and CDS Accelerator — into the arrangers' workflow helps them optimize the transaction based on their economics and our criteria. This in turn, increases the chances that S&P will rate the transaction. … Additionally providing our analytical tools to customers who in turn provide us with ratings revenue is a mutually advantageous practice."*

M. *S&P's "CDO Spotlight: First S&P Study of US CDO of ABS Equity Performance Highlights Vintage Effects" (27 March 2006) includes a study of the performance of equity returns for 45 CDOs of ABS issued between 2000 and 2003. It includes as one of the key findings: "Equity payment amounts for CDOs of ABS that were not downgraded remained relatively constant over time, while payment amounts for downgraded CDOs declined significantly over time" (p.2). The document observes that the presence of downgraded CDO tranches was a factor in the decline of average quarterly payments made to equity holders in the ABS CDOs it analysed.*

N. *Standard & Poor's Rating Services, "Guide to Credit Rating Essentials: What are credit ratings and how do they work?" (2014), pp. 12-13: "Stratifying a pool of undifferentiated risk into multiple classes of bonds with varying levels of seniority is called "tranching". Investors who purchase the senior tranche, which generally has the highest quality debt from a credit perspective and the lowest interest rate, are the first to be repaid from the cash flow of the underlying assets. Holders of the next-lower tranche, which typically pays a somewhat higher interest rate, are paid second, and so forth. Investors who purchase the lowest tranche generally have the potential to earn the highest interest rate, but they also tend to assume the highest risk. / In forming its opinion of a structured finance instrument, Standard & Poor's evaluates, among other things, the potential risks posed by the instrument's legal structure and the credit quality of the assets the SPE holds. Standard & Poor's also considers the anticipated cash flow of these underlying assets and any credit enhancements that provide protection against default."*

Schedule 3 – Influence of business considerations on S&P's rating process

A. *Email chain between Kai Gilkes, Richard Gugliada, David Tesher, Andrea Bryan, Nik Khakee and Perry Inglis dated 13 April 2004 concerning a "new default matrix". Gugliada says it is being held up by testing and was "very concerned about the amount of missed business in the IG deals while we work this out" and was "willing to delegate the decision" to the "PLs" (Practice Leaders, i.e. business people). Gilkes responded that he was still working on the assumption that the default table "cannot be accepted in its current form for one reason, namely the potential adverse impact on cashflow CDOs backed by NIG collateral" and that, in his view, there was only one way to resolve the impasse, namely to use a "slightly different R&S methodology for cash flow deals" which "can accommodate the new default ttable without the adverse effect on HY transactions that you are unwilling to accept"*

B. *Email from Perry Inglis to Kai Gilkes, Richard Gugliadia, David Tesher and others dated 20 April 2004 noting that his understanding was that "the revised table from Kai's team gave too low an outcome for NIG portfolios".*

C. *Email from Perry Inglis to Henry Albulescu, Richard Gugliada and others, cc Kai Gilkes and others dated 20 April 2004 saying that he understood the "updated proposal from Kai" resulted in "about a 7 notch downgrade at AAA level for B rated asset pools – which was not acceptable".*

D. *Email from Henry Albulescu to Danyel Hudson, Richard Gugliada, Perry Inglis, Michael Drexler, Kai Gilkes, Norbert Jobst and others dated 26 May 2004, about a meeting to discuss different options for the default tables, including "Evaluator 2.3, Kai proposed, Christina proposed, Guido proposed – A merger of Kai's and Christina's, Historical – Based on Published Risk Solution". The "next objective was to use the 5 different default tables and look at 25+ actual deals to see how the results would fare".*

E. *Email from Richard Gugliada to David Tesher, Perry Inglis, Kai Gilkes, Katrien Van Acoleyen, Tom Gillis and Cristina Polizu dated 28 May 2004, noting that a compromised default matrix known as the "Guido" matrix was to begin testing with selected external customers chosen by the practice leaders and asking for any proposed changes to the matrix "that improve the results relative to the goal of small impacts to NIG deals and 2-3 notch improvements for IG and small basket deals".*

F. *"Criteria Team, July 2004 Activity Report" which notes under "Update of Default Table for Evaluator": "During a meeting focusing on the beta testing of new proposed Default Tables, it was concluded that the results were not satisfactory, on their own, to any of the product lines. Follow up analysis focusing upon adding potential changes of correlation assumptions, recovery assumptions and stress factor implementation has bee[n] requested and is to be delivered to the Practice Leaders on July 20." It also notes that Michael Drexler was coordinating information from the various parties.*

G. *Email from David Goldstein to David Goldstein, Patrice Jordan, Richard Gugliada and others dated 20 July 2004 attaching memorandum to Joanne Rose subject "Activity Report – June / July" dated 20 July 2004, which notes that "Feedback from investment banks who are beta testing a CDO Evaluator with new default tables has been mixed. Analysis of the impact to current and future deals is still ongoing."*

H. *"Practice Leader Minutes" for meeting on 20 July 2004, from Nik Khakee to Richard Gugliada, Perry Inglis, Andrea Bryan, David Tesher, Chris Howley, Henry Albulescu, which notes that "There was confusion surrounding Default Tables… P. Inglis stated that the goal should be that no current deals ratings should be impacted."*

I. *Email chain between Michael Drexler, Perry Inglis, Kai Gilkes and Kenneth Cheng dated 17-20 August 2004 regarding sensitivity analysis, in which Cheng says "As the tests results demonstrate, the increase on SDRs for synthetic CDOs is minimal but is much more significant for cashflow CDOs. Thus, if we are to move to the new default table, eliminate the stress factors, use stochastic recoveries, and change the correlation assumptions then, as a next step, we would need to determine what adjustments need to be made in the cash flow modeling stresses to minimize the impact of the resultant higher SDRs on ratings of cash flow CDOs."*

J. *Email from Scott Gale to Richard Gugliada, Patrice Jordan and others dated 17 August 2004, which says "We are meeting with your group this week to discuss adjusting criteria for rating CDOs of real estate assets this week because of the ongoing threat of losing deals". Gugliada responds "Ok with me to revise criteria, but you must consider ALL possibilities and the impact on diversified asset class deals as well as those that are 100% CMBS… SFLT is aware of the competitive threats that Moody's is taking in CDOs and has authorized us to take certain actions".*

K. *Meeting invitation from Perry Inglis to Kai Gilkes, Andrew South and Simon Collingridge for 24 August 2004, which says "It was decided last Friday that along with updating/ changing the default tables used in the evaluator, changes would be made to our correlation assumptions and also the way we model recoveries. / There was general consensus that we would focus on the following as the 'preferred' suite of changes: New Default Table as created by Kai and Norbert; Correlation assumptions of 3% and 18% (replacing the current 0% and 30%); Removal of stress factors; Stochastic recoveries with a mean of 40% and STD of 30% / I would like to test every deal that we currently rate with these new assumptions and see precisely what the impact of these changes would be."*

L. *Note to "CDO Management" from Sten Bergman and Ed Sargsyan dated 2 September 2004, which notes as to "Correlation": "These results suggested possible correlation assumptions of 0.075/0.200, 0.05/0.200. and possibly even 03/0180. The first of these were very stressful to the investment grade tranches. The second was much less stressful. but still caused some difficulty in achieving our business objectives. The third was relatively benign and would help achieve our business objectives/To test its consistency with the historical results. a hypothesis test was performed. with the null hypothesis that the true rate is 0.03. against the alternative that it is higher. The results were significant at the 5% level and therefore could not be considered consistent with the data… The Guido default table, and presumably Kai's modification of it, are generally supported by the data and can be used to meet our business objectives."*

M. *Email from Richard Gugliada to David Tesher, Perry Inglis and others dated 24 September 2004 attaching "CDO Quantitative Group Monthly Activity Report – September 2004", which notes that using 3/18 for the correlations assumptions is "challenging" because it "meets our business objectives, but likely understates the average historical inter correlation between sectors."*

N. *Email from Sten Bergman to Clifford Griep and Richard Gugliada dated 8 October 2004, which notes that S&P proposed to adopt correlation assumptions that were "too low as far as the historical data is concerned, but they make it possible to meet our business objectives".*

O. *Email from Sten Bergman to Richard Gugliada dated 18 November 2004, attaching "CDO Quantitative Group Monthly Activity Report November 2004 which notes that "Guido delegated responsibility for the [default table] project to the Practice Leaders, with the requirement that they seek consultation from Henry, Sten, Kai, Stephen and Simon".*

P. *"CDO Quantitative Group Monthly Activity Report December 2004" which notes that "Work on the Default Table project continues. The current focus is on systematically forgiving some stress scenarios and on ASS defaults. It is not clear how easy it will be to find appropriate assumptions that meet competing objectives and are consistent with historical data."*

Q. *Email chain between Andrea Bryan and Kai Gilkes on 8-10 February 2005, in which Bryan says "I looked at the 5:20 relationship using the same table for asset and liab and understand that it kills the deals. / But from a decoupling point of view, using the 5:20 assumptions on the asset side combined with the existing liab. cut points will in effect cause no real change."*

R. *Email chain between Kai Gilkes to Perry Inglis, Andrea Bryan, Elwyn Wong, Michael Drexler, Lapo Guadagnuolo and Norbert Jobst dated 16-17 February 2005, in which the participants debate what modelling assumptions to use to minimise the impact on ratings. This includes comments such as: (Gilkes) the impact of changes to CDOE "is severe if the new corporate default table is used to establish new default performance targets for CDO tranches. (Reducing correlation assumptions to approx. 18%/3% reduces this negative impact to acceptable levels.) However, if the current 'idealised' default table is retained on the liability side, the impact is broadly neutral" and that using 6/18 correlation "is not possible if the new corporate table is used on the liability side"; (Drexler) "By decoupling the asset PDs from the liability PDs, there ceases to be any rationale for the construction of the liability PD table at all", "The only justification" for a separate CDO default table is "that it allows us to use a 5% inter-industry correlation assumption" which he describes as "still wrong, in my opinion"; (Inglis) "the problem is, I want it all. I want to be able to look the market right in the eye and tell them we are using correlation assumptions that are close to historically observed or higher. … I don't want to miss one deal because of our model assumptions either. Is there any possibility of 'tweaking' the default table to get all of this so that we don't have to compromise?".*

S. *A similar email was sent by Kai Gilkes to Patrice Jordan on 18 February 2005, forwarding the internal debates on the topic.*

T. *Emails from Sten Bergman to Patrice Jordan and David Tesher to Patrice Jordan (17 February 2005) noting that S&P was facing the choice of using correlation assumptions that were inconsistent with historical data (3% between sectors / 18% different sectors) or using historical correlations but decoupling the CDO ratings quantile table from the corporate ratings quantile table in order to counter-balance the effect of higher correlations.*

U. *Email from David Tesher to Perry Inglis, Andrea Bryan, Chris Howley, Kai Gilkes and Patrice Jordan dated 4 March 2005, which discusses a concern that if S&P increases its correlation assumptions without increasing its subordination levels, it would "imply we did something to 'neutralize' the shift to a more stringent set of assumptions and raises for discussion how S&P would go about "spinning" its revised correlation assumptions.*

V. *Email from Kai Gilkes to Stephen McCabe dated 23 March 2005, which says "You are right, the results are pretty bad for most deals. However, this is to be expected if we use 6/18 correlation, new PDs for both assets and liabilities, and no stress factors. My proposal is to "de-link" the asset and liability tables, as there are some good reasons why we should not use the new asset PDs as our CDO benchmarks, and frankly this is the only way we can introduce 6/18 correlation without demanding much higher levels of c/e." He noted that there were 3 options; (1) "Use new corporate PDs on both sides (unlikely to work for the business) / (2) Use new corporate PDs on asset side, and retain current 'idealised' table on liability side / (3) Use new corporate PDs on asset side, and create a new CDO*

table from historical data, intuition about CDO behaviour, etc. We intend to test all three "packages" in order to determine which one makes most sense from a business perspective".

W. *"Evolution of CDO Credit & Cash Flow Modelling Methodologies, prepared by Kai Gilkes, which included a section including "Understanding the Business Impact". It also said under the heading "Updating Corporate Correlation Assumptions" that: "The first proposal (made in December 2004) was to update the corporate correlations to 3%/18% respectively, mainly because it was felt that higher inter-industry correlation would be unacceptable for the synthetic CDO business. In February 2005, the decision was made to look at other changes, which might allow levels of inter-industry correlation more in line with historical data to be adopted." Versions of this document were circulated to Perry Inglis, Michael Drexler and Norbert Jobst on 21 December 2004, Tom Gillis on 1 April 2005 and Patrice Jordan on 5 July 2005.*

X. *S&P Presentation prepared by Kai Gilkes, "Updating CDO Evaluator" dated 5 April 2005, which noted that once all assumptions have been updated on the asset side, the impact on the CDO business could be assessed to determine the appropriate CDO liability table (quantile table) to use, including potentially a new table, determined using historical data and or intuition. Versions of the presentation were sent by Michael Drexler (to Stephen Anderberg on 20 April 2005) and Norbert Jobst (to Valerie Blair on 9 June 2005).*

Y. *Email from Kai Gilkes to Stephen McCabe, cc Michael Drexler, Lapo Guadagnuolo ~~Guradagnuolo~~ and Norbert Jobst dated 8 April 2005, which notes that "We will probably need to make a few tweaks to our assumptions… to make sure that CDO squareds – especially fungible ones – are not hit too hard."*

Z. *"Impact Analysis for U.S. Cash Flow Transactions" dated 15 April 2005 (with hand annotations that it was "latest presentation from Kai & team") which set out the impact of the proposed model changes on US cashflow CDOs. The "conclusion" was that "The long-term competitive implications are therefore a significant decrease in market penetration, if the revised credit opinion is viewed as unjustifiably more conservative and not matched by Fitch and Moody's. This may manifest itself gradually as participation only at the top of the capital structure, and then potentially nowhere in the capital structure. The impact may translate into millions of lost revenue, given that each cash flow CDO transaction generally generates $150 to $500 thousand in ratings fees and a $35,000 ten or more year surveillance annuity stream."*

AA. *Email chain between Andrea Bryan and Perry Inglis dated 31 May 2005 re "RE: May 31st Practice Leader Call", in which Inglis says: "Feedback is: 'IG we can live with, NIG you better have a good reason for why c/e doubles and what you are going to do with grandfathering". Bryan replies "I've tapped danced around the grandfathering issue basically told them that we will not downgrade their deals due to model changes".*

BB. *Email from Simon Collingridge to Patrice Jordan, Tom Gillis, Andrea Bryan, Stephen Anderberg, Perry Inglis, Kai Gilkes and others dated 6 June 2005 re "E3: Surveillance approach for synthetics". The email attaches a document entitled "Policy for Surveillance on introduction of Evaluator E3", which notes that "Option 1" is to move surveillance of all deals to E3, which is "potentially less customer friendly (if leads to downgrades)" and "Option 2" is to show the arranger the results on E2.4.3 vs. E3 and allow them to choose which they prefer, which is "more customer friendly". Collingridge recommends Option 2. He notes that "Kai has put forward a proposal that a 'tolerance factor' is applied but we are not proposing that his be pursued".*

CC. Email from Stephen Anderberg to Andrea Bryan, Jimmy Kobylinski and Michael Drexler dated 8 June 2005 subject "FW: E3: Surveillance approach for synthetics", forwarding the email from Collingridge and saying "If this is the way the org wants to go then we'll be on board, but to me London's proposed approach seems to me to combine the worst of both worlds: it manages to be both an operational nightmare and analytically muddled at the same time. If we want to pursue a client-friendly strategy (I have no problem with this) then I think we should simply grandfather the existing deals."

DD. Email from Stephen Anderberg to Patrice Jordan, Thomas Gillis, Andrea Bryan, Kai Gilkes, Perry Inglis and others dated 10 June 2005, again forwarding Collingridge's email and stating in respect of the surveillance approach for E3 "I will of course be on board with whatever SCDO approach we end up deciding on, but it seems to me that letting the banker decide which model to use (especially if it's done at the deal level) would be both challenging operationally and analytically unclear- two identical deals of the same vintage could end up with different ratings based solely on the banker's discretion."

EE. Email from Tom Gillis to Patrice Jordan, Andrea Bryan, Stephen Anderberg, Perry Inglis and Kai Gilkes dated 12 June 2005, which states that "[i]f your goal is to provide high quality consistent rating opinions, Option 1 appears to me to be the only choice".

FF. Email from Perry Inglis to Patrice Jordan, Andrea Bryan, Kai Gilkes, Thomas Gillis, Stephen Anderberg and Mei Lee da Silva dated 15 June 2005, which states "Pat - we have been telling our clients that we will not be undertaking wholesale downgrading of transactions and that our clients should continue to use 2.4.3 without being concerned about E3."

GG. Email from Simon Collingridge to Perry Inglis, Patrice Jordan, Andrea Bryan, Kai Gilkes, Mei Lee da Silva, Stephen Anderberg and Thomas Gillis dated 17 June 2005, which states "I think that the proposed policy of allowing arrangers to choose between E3 & existing model for surveillance but publishing SROC for all from E3 will allow us to be sensitive to client need and still retain transparency and consistency".

HH. Email chain among Fabienne Michaux, Perry Inglis, Patrice Jordan, Mei Lee Da Silva and Andrea Bryan and others dated 16 June 2005, which asks how to address the fact that using the E2.4.3, a transaction would achieve a AA- rating and using E3 it would receive a BBB- rating. An email in the chain (15 June 2005, 6.16 am) notes the opinion of S&P's legal counsel that S&P could be open to liability issues with investors if it assigned the higher rating based on E2.4.3 only to then downgrade the rating when E3 is released.

II. Email from Fabienne Michaux to Patrice Jordan, Perry Inglis, Andrea Bryan, Thomas Gillis, Kai Gilkes and Mei Lee Da Silva dated 17 June 2005, which discusses an email from Société Générale expressing a "major concern" that if the new CDOE model caused "multiple Australian deals to be downgraded in any fashion" this would cause "mayhem" because the majority of Australian buyers could not hold CDOs below A- and would become "forced sellers if those deals were downgraded as a result of the introduction of the new model and that promoters and arrangers would be sued as a result, concluding "What consequences that has for S&P you can tell me". In an earlier email in the chain, Vera Ha says that "it is difficult to justify why we could rate a deal 'AAA' when we know it is not 'AAA'. This means that we should insist on rating the deal on E3 outcome, however if we are not prepared to use E3 to rate transactions yet or the client is not will be accept E3 outcome, then we should decline to rate deals based on this knowledge."

JJ. S&P handwritten notes concerning CDO Strategy Discussions dated 28 June 2005 attended by Perry Inglis, Patrice Jordan and Kai Gilkes among others, which says "Kai believes have come up w/a package that best fits the overall biz (in single model form) –

very explainable to market" and that they need to have "comprehensive, detailed, quantification discussion b/ Perry, Andrea & Pete/David re: our best estimate of cost/impact of E3 on new biz" and "Discussions w/ Kai (& team?) to explore analytics and methodology more deeply w/ biz people".

KK. Email from Kai Gilkes to Michael Drexler and Norbert Jobst dated 6 July 2005 attaching a document titled "Impact of E3 on Synthetic CDOs July 2005" which includes sections called "Understanding the Business Impact" and "Mitigating the Impact of E3".

LL. Email from Kai Gilkes to Michael Drexler dated 7 July 2005 attaching a revised version of the impact document.

MM. Email from Kai Gilkes to Patrice Jordan cc Perry Inglis and others dated 7 July 2005 entitled "E3 Impact on Synthetic CDOs", which attaches the impact document and says "I have also made some recommendations on how the impact can be mitigated…". Although Gilkes says that "Levels [of correlation] below 5% are also not consistent with historical data", Jordan requests that he do sensitivity testing on those levels anyway.

NN. Email from Nik Khakee to Brenda Shaw, Patrice Jordan and Perry Inglis dated 18 July 2005, which attaches the "CVM Activity Report June 2005" which says: "Due to the not insignificant impact on lowly rated (BBB and down) synthetic reference pools, where parallel cash flow and recovery assumptions could not be tailored towards lessening rating pressure, we have toned down and slowed down our roll out of E3 to the market, pending further measures to deal with such negative results. / … E3 would not be conducive towards rating low credit quality pools. Importantly, Bear Stearns pointed out that the potential business opportunities we would miss by effectively having to walk away from such high yield structures would NOT be compensated for by any increase in rating volume for highly rated collateral pools. This is because Moody's and Fitch have been far more competitive in this area well before the roll-out of E3."

OO. The "Global CDO Activity Report" dated 20 July 2005 issued by Patrice Jordan to Joanne Rose includes the same paragraphs. This memorandum was distributed by email Brenda Shaw on behalf of Patrice Jordan to Kai Gilkes, Tom Gillis, Perry Inglis and others on 25 July 2005.

PP. Email chain between Kai Gilkes, Patrice Jordan, Perry Inglis, Mei Lee Da Silva and others between 28 July and 1 August 2005, which forwards concerns from Nomura Asia about the impact E3 will have on CDO deals. In the email chain, the S&P employees discuss how banks have gained access to E3 betas which have required much higher levels of credit enhancement for the same ratings on E2.4.3, that many banks have "recently pulled their deals because of the uncertainty regarding grandfathering policy" and that a decision on grandfathering is needed "pronto". Gilkes says "my personal opinion is that should run every deal through both E2.4.3 and E3 internally, in order to properly understand the impact. If the impact is significant, we should give careful consideration to this fact before assigning ratings."

QQ. Further concerns from Nomura are circulated by Elwyn Wong to Perry Inglis, Andrea Bryan and others on 23 August 2005.

RR. Email from Kai Gilkes to Bob Watson dated 31 August 2005, which notes the need to "check in with the business" as to whether they were sensitive to changes to correlation based on geographical separation.

SS. Memorandum from Patrice Jordan to Joanne Rose subject "Global CDO Activity Report" dated 21 September 2005, which refers to the E3 testing for cashflow deals and the notch

movement (pp. 3-4) and dissatisfaction amongst Australian clients about the development of E3 (p. 5).

TT. Email from Andrea Bryan to Perry Inglis dated 28 September 2005, forwarding email from Kai Gilkes to Andrea Bryan of the same date, which discusses the preparation of E3 for cashflow deals and says: "It's easy to get caught up in the process of trying to "tweak" assumptions to minimise the impact, which Steve A wants to do before extending the sample of deals further. I think we need to make it very clear next Tuesday what the exact deliverables will be for E3 rollout (100% of all eligible cash flow deals is not realistic). We need to determine what our statement to the market needs to be (both surveillance policy AND our policy on transitioning the market from E2.4.3 to E3 for new deals), and work back from that to a realistic timeline and set of deliverables."

UU. Email from Kai Gilkes to Stephen Anderberg, Patrice Jordan, Perry Inglis, Norbert Jobst, David Tesher and others re "New assumptions for E3 testing" dated 5 October 2005, which attaches a spreadsheet of "High" and "Low" default table and correlation assumptions for testing purposes (for the purpose of tolerance bands).

VV. Email chain between the same parties on the same topic, on 5-6 October 2005, in which Anderberg asks where the high/low tables are for ABS assets. Gilkes responds they are not proposing to vary those tables and that "Norbert and Astrid are working on developing a more robust set of assumptions for ABS. This task is more difficult and subjective than corporates, given the smaller extent of historical data and diversity or performance by asset class. It may be the case that PDs need to be increased slightly, with a compensating decrease in correlation." Tesher says "Given the results we are seeing on the sample of Cash ABS deals we have tested with E3 and our proposed new cash flow analytics ... I do believe we need to re-think our current assumptions ....". Inglis says "Please also be aware that first loss results for pure AAA synthetic ABS pools barely get to IG when our 'gut feel' (Tommy's words not mine) was A!" Gilkes says he is not proposing to refine E3 for CDO of ABS as releasing the model is more important than getting it absolutely right for all assets.

WW. Email from Kai Gilkes to Patrice Jordan, Perry Inglis and others dated 1 November 2005 re "E3 Impact on Synthetic CDOs" attaching a revised version of the note prepared by Gilkes entitled "Impact of E3 on Synthetic CDOs November 2005". Under "Mitigating the Impact of E3", the note now includes an explanation of "rating tolerance" bands.

XX. Email from Henry Carrier to Stephen Anderberg, Kai Gilkes, Patrice Jordan, Joanne Rose and others dated 8 November 2005, attaching document entitled "CDO product and infrastructure governance" which notes that the charter for a proposed senior level steering team for CDO ratings was to "ensure that the development CDO product and infrastructure are aligned to CDO Business Strategy".

YY. Email from Perry Inglis to Patrice Jordan, David Tesher, Andrea Bryan, Kai Gilkes and Norbert Jobst dated 11 November 2005 regarding testing of E3 on existing deals, which notes that there is an "anomaly" in E2.4.3 in how it dealt with ABS CDOs in that it was "ignoring the maturity of the liability PD that the deal should be compared to" which allowed more defaults than it should have been. "When we take this issue into account (by making all of the ABS assets in E3 7yr maturity) you can see that all of the deals fall within the tolerance band comparing E2.4.3 and Low/Base/High E3 (Columns N, 0, and P) and therefore can be grandfathered".

ZZ. Email chain between Elwyn Wong, Andrea Bryan and Brian Neer of Morgan Stanley between 14-17 November 2005, regarding Morgan Stanley's concerns about the impact of E3 on CDO ratings.

AAA. Email between Elwyn Wong, Belinda Ghetti, Peter Kambeseles and Andrea Bryan dated 23 November 2005, forwarding an email from Neer to Wong where Neer says his "business is on 'pause' right now" awaiting what is happening with E3. Wong says to Bryan "Lord help our fucking scam… this has to be the stupidest place I have worked at".

BBB. Email from Tom Gillis to Perry Inglis, Kai Gilkes, Andrea Bryan, Patrice Jordan and David Tesher dated 2 December 2005, attaching document entitled "Transition and Ongoing Surveillance Process for E2.4.3 versus E3", which explains how tolerance bands will be used to for surveillance of deals rated on pre-E3 models.

CCC. Email from Henry Carrier to Stephen Anderberg, Kai Gilkes, Tom Gillis, Patrice Jordan, David Tesher and Elwyn Wong dated 12 December 2005, attaching S&P Presentation "CDO Product & Infrastructure Steering Committee, Kick-off Meeting", which notes that the charter for the Steering Committee was to "ensure that the development CDO product and infrastructure are aligned to CDO Business Strategy", p. 3, distributed internally by.

DDD. Email from Kai Gilkes to Tom Gills, Perry Inglis, Joanne Rose and others re "E3 presentation to EC" dated 12 December 2005 which attaches a note prepared by Gilkes entitled "Release of CDO Evaluator Version 3.0 for Synthetic CDOs". The note explains a "new surveillance methodology… that allows Standard & Poor's to avoid the potential market disruption of releasing E3, which makes use of a 'tolerance band'" and summarises the surveillance impact of E3 on existing CDOs. The "E3 'Low'" tolerance band has correlations of 12/4 (instead of 15/5) and PDs that are approximately 10% lower.

EEE. Email from Fabienne Michaux to Tom Gillis and others and forwarded to Perry Inglis, Andrea Bryan and David Tesher dated 13 December 2005, which notes that the "NUMBER 1" concern for the S&P "franchise" was "rating something AAA one day and dumping it to bare investment grade the next – especially anything rated after knowledge of E3".

FFF. Email from Belinda Ghetti to David Tesher, Patrice Jordan and a large number of people in S&P's CDO ratings team dated 14 December 2005 re "Synthetic CDO Pipeline and E3" asking the team to do sensitivity testing on all pure SCDO transactions using E3 and E3 "low" if it does not pass E3.

GGG. Email from Kai Gilkes to Tom Gillis dated 22 December 2005, which says "18 was our best estimate, but we reduced it to 15 to lower the negative impact. … As I said before, our target of 55% of the new corporate table increases the BBB- results relative to E2.4.3. If you want to tweak the targets to maintain neutrality for pure BBB- pools, you are welcome to do so."

HHH. CDO Strategic Plan, p. 31: "future CDO criteria changes will also need to be made with an understanding of the surveillance impact, both in terms of the impact on the ratings assigned to the universe of existing deals…". See similarly, Draft CDO Strategic Plan, p. 36.

III. Email chain between Kai Gilkes, Perry Inglis and Patrice Jordan dated 1 March 2006 regarding sensitivity tests on pre-E3 deals. Gilkes notes that "The majority of tranches actually suffer a less severe downgrade under E3 low" than E2.4.3. He says this is "persuasive evidence that we should adopt a surveillance policy that simply applies the same model that was used to rate the deal".

JJJ. Email from Patrice Jordan to Kai Gilkes dated 9 March 2006, forwarding email from Kai Gilkes to Norbert Jobst, Perry Inglis, Patrice Jordan and others dated 3 March 2006, which explained the rationale for decoupling the corporate and CDO tables. Gilkes explained that they realised "the problem" with using the 6/18 corporate correlations and

the updated Corporate Table to provide the PDs for CDO tranches, was that "the combination… led to VERY HIGH SLRS for most deals and would have required many more downgrades of existing deals" and "much higher credit enhancement for new deals". They therefore had three possible choices for the "CDO liability table", which were (i) leave it unchanged, (ii) change it to the new corporate table, (iii) create a new table, and the problem with (ii) was that it led to very high SLRs for most deals and would have required many downgrades which "left us with (iii)".

KKK. Email from Steven Anderberg to David Tesher and Ramki Muthukrishnan dated 17 May 2006 re "E3 Surveillance Policy", setting out the proposed surveillance policy for cashflow CDOs, which is said to be "consistent with the way pre-E3 deals were handled in connection with the rollout for E3 for synthetics" and also reflective of feedback from Patrice Jordan and Joanne Rose. This involves a "tolerance band" of 3 notches for deals rated pre-E3.

LLL. S&P Presentation "A New Approach to Estimating ABS PDs" (undated) which states that to come up with probabilities of default and asset correlations in E2.4.3 S&P looked at the data and then when this does not meet its business needs, changed its parameters ex-post to accommodate; includes a "The Old Way: One Way Street" flow chart depicting that if the results using existing PDs did not "work for [its] rating business" then S&P "need[ed] to tweak PDs"; and includes a "The New way: Two Way Street" flow chart depicting S&P's new flexible methodology, under which S&P decides on a number of "business friendly PD matrices" and undertakes Hypothesis Testing using those different PDs in order to achieve results that are business friendly.

MMM. The Applicant further rely on the admissions made by the Respondents in Annex 1 to the Settlement Agreement reached between the United States and various US states against the Respondents in the United States (the DOJ Admissions) alleging that the Respondents had engaged in a scheme to defraud investors in structured financial products including CDOs including:

a. S&P's admission (paragraph 4) that the risk of losing transaction revenue was a factor that affected updates of CDOE;

b. S&P's admission (paragraph 4) that a design goal of the update of CDOE to E3 was "to improve S&P's market share with respect to investment grade synthetic CDOs";

c. S&P's admission (paragraph 4) that the decision to test the default matrix referred to in sub-paragraph (B) above was "in part based upon business decisions, considerations."

d. S&P's admission (paragraph 5) in July 2005 that "the roll out of E3 to the market had been 'toned down and slowed down' pending further measures to deal with [ ] negative results" and as a result of feedback from an investment bank that the move to E3 would negatively impact S&P's business and result in the loss of business opportunities. See "Global CDO Activity Report" (July 2005).

Schedule 4 – Vale CDOs

Product Name	ISIN	S&P rating on issue	Type of CDO	Date of issue	Date of acquisition(s) by Vale
Aramis - Series 34	AU3FN0002234	AA	SCDO of ABS	28/03/2007	~~TBA~~ 28/03/2007
Aramis – Series 40	AU3FN0002242	AAA	SCDO of ABS	28/03/2007	28/03/2007
ARLO Limited Series 2006 (Spinnaker III Asia - Class A)	XS0269177860	AAA	SCDO of Corporates	16/10/2006	22/12/2008 18/09/2009
ARLO Limited Series 2006 OCL-1	XS0265147115	AA	SCDO of Corporates	25/08/2006	25/08/2006
Borealis No 1 CDO Limited Class B	AU3FN0002341	AA	Long CDO	23/05/2007	8/05/2007
Echo Funding Pty Ltd Series 20	AU300ECHO154	AA	CDO of Corporates	20/03/2006	30/05/2007 06/06/2007
Far East Funding I SPC Limited Series 2007-18 Class B2	XS0296040610	AA-	Long short SCDO	26/01/2007	13/04/2007
Helium Capital Limited Series 69	~~HELI06-11052~~ AU3FN0001442	AA	SCDO of MBS	14/12/2006	~~TBA~~ 14/12/2006
Khamsin Credit Products II B.V. Series 14 2006-12 Class B	XS0254089690	AA	SCDO of Corporates	17/05/2007	17/05/2007
Momentum - Series 2007-12	AU3FN0003695	AA	SCDO of Corporates	16/08/2007	30/08/2007
Momentum - Series 5	AU3FN0001871	AA	SCDO of Corporates	7/03/2007	7/03/2007 16/05/2007 20/06/2007
Motif Finance (Ireland) PLC Series 2007-6	AU3FN0002879	AAA	CPDO	1/06/2007	1/06/2007
Obelisk Series 2007-1 Class A	AU3FN0001913	AAA	SCDO of CMBS	7/03/2007	27/06/2007
Obelisk Series 2007-1 Class B	AU3FN0001921	AA	SCDO of CMBS	7/03/2007	15/03/2007 16/04/2007
Omega Capital Investments II Plc Series 31 Class B-1A	XS0263576596	AA	SCDO of Corporates	3/08/2006	17/08/2006
STARTS (Cayman) Plc Class B1 – A1	XS0263633496	AA	SCDO of Corporates	16/08/2006	16/08/2006
Titian CDO PLC Series F	XS0274986040	AA	SCDO of Corporates	15/11/2006	15/11/2006

Schedule 5 – Cockburn CDOs

Product Name	ISIN	S&P rating on issue	Type of CDO	Date of issue	Date of acquisition(s) by Cockburn
Aramis - Series 34	AU3FN0002234	AA	SCDO of ABS	28/03/2007	2/04/2007

Schedule 7 – Impact of ratings on CDO structuring

A. S&P's "CDO Evaluator Applies Correlation and Monte Carlo Simulation to the Art of Determining Portfolio Quality" dated November 2001 discusses the methodology used by CDOE to create "for each portfolio a probability distribution of defaults and a set of SDRs." The purpose of this, the article says, it to verify that each CDO tranche can continue to pay principal and interest in accordance with its terms notwithstanding defaults up to the SDR on the underlying portfolio.

B. S&P's "Global CBO/CLO Criteria Document" (1999) refers at p. 56 to "payment structure risks" and in particular, the "principal and interest 'waterfalls'" that "drive the transaction's allocation or distribution of cash flow down the capital structure." The paper describes the fact that in senior/subordinated structures, the most senior, highly rated tranche should have priority in the principal and interest waterfalls and that subordinated tranches are in place to provide credit support. It notes that when several tranches of a CDO are rated, the "tradeoffs" across the classes and waterfall mechanics can become quite complex, as differing interests complete for the same collateral cash flow. It says "[i]n general, the analyst looks closely at what is released through both the principal and interest waterfalls to junior debt holders and equity holders while senior debt is outstanding. In addition a broad range of default patters are assessed over the life of the deal…which reflect potential release of cash flow to subordinated holders in certain structures."

C. The CDO Criteria Document (21 March 2002) notes:

a. "Standard & Poor's works closely with the sponsor on every transaction and customizes its analyses based on the requirements of each transaction" (p. 1).

b. "Payments to each of the liability classes are dictated by a stipulated priority of payments that reallocates the risk and rewards associated with the assets. This allows the CDO issuer to tailor the liabilities to meet the risk/return profiles of a broad range of investors and to attract additional groups of investors" (p. 3).

c. "The manner in which the waterfall is structured, the way in which the interest and/or foreign currency hedges work, liquidity considerations and how defaults are defined, all play a significant role in the rating of the transaction" (p. 15).

d. "The principal and interest 'waterfalls' drive the transaction's allocation or distribution of cash flow down the capital structure. Even synthetic CDOs have cash waterfalls that dictate how premiums, interest and c from the collateral accounts will be distributed… As one would expect, in senior/subordinated structures, the most senior, highly rated tranche should have priority in the principal and interest waterfalls. Subordinated tranches are in place to provide credit support, which, for example, may translate into deferring interest receipts while the transaction tries to build back its O/C tests. Junior investors, however, have their own return hurdles. Usually, the investor will invest in a single rated or unrated tranche position in the capital structure. When several tranches are rated, however, the "trade offs" across classes and waterfall mechanics can become quite complex, as differing interests compete for the same collateral cash flow." (p. 36)

e. "Most cash flow transactions will also deliver sequentially beginning with the seniormost outstanding tranche. However, under certain conditions, some waterfalls might pay pro rata or divert the paydown to a subordinated tranche. In general, the analyst looks closely at what is released through both the principal and interest waterfalls to junior debt holders and equity holders while senior debt is

~~*outstanding and will apply additional stresses to the cash flow modeling to ensure adequate subordination protection to the senior tranche" (p. 37).*~~

~~*f. "The manner in which collateral principal payments and losses are allocated among classes has a large impact on the level of credit support each tranche has over time. All payment structures represent different trade-offs between paydown and support of the senior class, versus return of cash to the junior debt and equity holders" (p. 66).*~~

~~*g. "The exact capital structure for cash flow CDO transaction, or for SCDO transaction with cash flow components, is determined by modelling cash flow simulations under different assumptions. The aim of this analysis is to show that each tranche can withstand the stresses commensurate with the desired rating" (p. 76).*~~

~~*h. "[T]he cash flow model must accurately incorporate the transaction structure and provision. It must model the payment waterfall as detailed in the documents" (p. 77).*~~

~~*i. "Sponsors" seeking a rating must provide (amongst other things) "[t]he results of the CDO Evaluator for the input file" (p. 83).*~~

~~*D. Standard & Poor's Structured Finance, "Drill-Down Approach for Synthetic CDO Squared Transactions" published 10 December 2003, which notes the "credit analyst" as Kai Gilkes, says at p. 3: "Once an attachment point has been sized, the arranger of the CDO squared transaction will determine the detachment point for each CDO tranche."*~~

~~*E. As at 20 July 2004, S&P was allowing certain of its arranger clients to test a "beta" version of E3. It noted that the Royal Bank of Canada (London) is "the first client to have installed the CDO Evaluator Engine into a 'grid' of workstations": email from David Goldstein to David Goldstein, Patrice Jordan, Richard Gugliada and others dated 20 July 2004, attaching memorandum to Joanne Rose subject "Activity Report – June / July"; see also email from Kai Gilkes to Patrice Jordan titled "E3 timeline" dated 5 May 2005 and Memorandum to Joanne Rose from Patrice Jordan subject "Global CDO Activity Report" dated 21 June 2005, p. 4.*~~

~~*F. Email chain among Fabienne Michaux, Patrice Jordan, Perry Inglis, Kai Gilkes and others (17 June 2005) which says S&P is in "damage control" with "customers" (banks) who have structured deals using E2.4.3 and are worried that they will be downgraded when E3 is released and forwards an email from Société Générale which says that they have spent "the last 3 weeks marketing" a deal that was rated using E2.4.3.*~~

~~*G. Email from Perry Inglis to Patrice Jordan, Andrea Bryan, Kai Gilkes and others dated 17 June 2005, saying "Pat - we have been telling our clients that we will not be undertaking wholesale downgrading of transactions and that our clients should continue to use 2.4.3 without being concerned about E3."*~~

~~*H. Email from Elwyn Wong to Perry Inglis, Kai Gilkes, Norbert Jobst, Patrice Jordan and others dated 18 July 2005 re "FW: Bear NY E3 feedback" which explains how Bear Stearns uses CDOE in its CDO structuring, including: "(2) Use COO Evaluator or E3 attachment point based on rating seeked [sic] (our correlation assumptions - and so, 6%/20% in E3 - to get atathcment [sic] points) (3) Use Bears proprietary pricing model and these S&P attachment and detachment points."*~~

~~*I. S&P Rating Services, "CDO Spotlight: First Study of US CDO Equity Performance Highlights Payment Trends" dated 12 September 2005), which analyses the performance*~~

~~*of the equity tranches of CLOs and CBOs in the period 1998 to 2002. This indicates that S&P viewed CDO equity as a product within the scope of its research and analytic services even though CDO equity itself was usually not rated.*~~

~~*J. When it became known amongst arrangers that S&P was intending to change from E2.4.3, S&P received many communications from arrangers who were worried about the effect this would have on their ability to structure and market CDOs. For example, on 23 November 2005, Brian Neer of Morgan Stanley wrote to Elwyn Wong (S&P) who said his "business was on 'pause' right now" while waiting for S&P's decision on grandfathering. See also, email from Brian Neer of Morgan Stanley to Elwyn Wong (14 November 2005) subject 'New Model'. See similarly, particulars AA, FF, HH, II and OO in* **Schedule 3**.*~~

~~*K. In S&P's media release announcing the release of E3, with analyst contacts listed as Perry Inglis and Kai Gilkes, Gilkes is quoted as saying "We recognize that transactions are often structured for some time before reaching our pipeline. We therefore felt that a reasonable period is required to ensure an orderly transition in the market": "S&P Launches Latest Version of CDO Evaluator Modelling Tool" (19 December 2005).*~~

~~*L. CDO Strategic Plan (January 2006), p. 25: "Criteria will directly impact the economics of any transaction… arrangers will go with the agencies that are able to (1) meet their transaction schedule, and (2) use criteria that provide them with favorable economics for the transaction… Additionally, part of the overall customer service approach is providing dealers and arrangers with tools, which our analysts use in the rating process, which in turn helps them reduce transaction times and execution risk. Embedding these tools — such as CDO Evaluator and CDS Accelerator — into the arrangers' workflow helps them optimize the transaction based on their economics and our criteria. This in turn, increases the chances that S&P will rate the transaction. … Additionally providing our analytical tools to customers who in turn provide us with ratings revenue is a mutually advantageous practice."*~~

~~*M. S&P's "CDO Spotlight: First S&P Study of US CDO of ABS Equity Performance Highlights Vintage Effects" (27 March 2006) includes a study of the performance of equity returns for 45 CDOs of ABS issued between 2000 and 2003. It includes as one of the key findings: "Equity payment amounts for CDOs of ABS that were not downgraded remained relatively constant over time, while payment amounts for downgraded CDOs declined significantly over time" (p.2). The document observes that the presence of downgraded CDO tranches was a factor in the decline of average quarterly payments made to equity holders in the ABS CDOs it analysed.*~~

~~N. *Standard & Poor's Rating Services, "Guide to Credit Rating Essentials: What are credit ratings and how do they work?" (2014), pp. 12-13: "Stratifying a pool of undifferentiated risk into multiple classes of bonds with varying levels of seniority is called "tranching". Investors who purchase the senior tranche, which generally has the highest quality debt from a credit perspective and the lowest interest rate, are the first to be repaid from the cash flow of the underlying assets. Holders of the next-lower tranche, which typically pays a somewhat higher interest rate, are paid second, and so forth. Investors who purchase the lowest tranche generally have the potential to earn the highest interest rate, but they also tend to assume the highest risk. / In forming its opinion of a structured finance instrument, Standard & Poor's evaluates, among other things, the potential risks posed by the instrument's legal structure and the credit quality of the assets the SPE holds. Standard & Poor's also considers the anticipated cash flow of these underlying assets and any credit enhancements that provide protection against default."*~~