

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

2007 Folio No. 1418

B E T W E E N:-

EQUITAS LIMITED

Claimant

and

R&Q REINSURANCE COMPANY (UK) LIMITED

Defendant

AND

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

2007 Folio No. 1420

B E T W E E N:-

EQUITAS LIMITED

Claimant

and

ACE EUROPEAN GROUP LIMITED

Defendant

EQUITAS' CLOSING ARGUMENT

Legal Analysis of the contractual framework

1. The contracts provide for an indemnity in respect of the Syndicates' 'net loss', up to specified limits and excess of specified retentions or excess points. Such 'net loss' means "*the sum paid by the reassured in settlement of loss, damage, liability ...*" (JELC 2.1) which arises from any one event (JELC 3.1).
2. No indemnity can be recovered as regards any part of the Syndicates' settlements which fall outside "*the terms and conditions*" of the Syndicates' inwards contracts or of the reinsurance contracts (JELC 1.3 and the Settlements Clause). It is still unclear whether R&Q suggests that the mere

fact that some irrecoverable element is included in a loss settlement prevents there being any right of indemnity in respect of the recoverable element thereof; if it does, the argument is misconceived.¹

3. This express proviso is dealing with the legal extent of the inwards and outwards contracts, not the facts which generate the claims or the quantum of any (proper and businesslike) settlement: this distinction is explicit in the famous passage in Lord Mustill's speech in *Hill v Mercantile* @ 1252H – 153H, and is further endorsed in later cases (e.g. *Assicurazioni Generali*).²

Thus,

- a. on account of this proviso, there is no dispute that reinsurers are entitled to argue that sums paid in respect of BA and irrecoverable Exxon fall outside the scope of the inwards and outwards reinsurance.³ However, Equitas is not seeking to recover in respect of such sums.
- b. Per contra, however, R&Q is quite wrong to say, in riposte to the question posed in paragraph 58(3) of Equitas' Opening (what if Equitas had settled on the correct *Scott v Copenhagen / King v Brandywine* legal basis for sums calculated by reference to the modelled output?) that it would not have been bound by such

¹ Opening para 50. The argument that a loss settlement is 'indivisible' and cannot be 'part in and part out' (Mr Lockey day 2 p36) is not understood; loss settlements frequently include an uninsured element (e.g. an IBNR element or a punitive damages element) which could not be passed on but which would not vitiate the recovery of the reinsured element for which the reinsured was liable: see *English & American v. Axa* [2007] Lloyd's Rep IR 359 (Gloster J.); and see, by analogy in the field of liability insurance, *Structural Polymer v Brown* [2000] Lloyd's Rep. IR 64 @ 73 per Moore-Bick J.

² Although *Assicurazioni Generali* involved a 'simple' *SCOR* follow settlements clause, Mr Gavin Kealey QC's judgment makes it very clear that the same distinction between fact and law underlies both *SCOR* and *Hill v Mercantile* clauses: the relevant difference lies elsewhere, in that in a *SCOR* clause, it is unnecessary to show that the loss falls within the inwards cover as a matter of law.

³ The issue of whether the mis-aggregated BA losses fall outside the terms and conditions of the outwards reinsurance (i.e. the 2nd limb of the Settlements Clause) as Equitas suggests or outside the terms and conditions of the inwards contracts (as R&Q suggests) may not matter greatly.

settlements. Although this is a hypothetical issue, in the present context, its resolution throws light on the not-so hypothetical issue of how Equitas has to prove the Syndicates' loss. Equitas accepts that R&Q is able to raise all 'policy defences' (i.e. as to the legal scope of cover) and Equitas can only aggregate what in law are 'true Kuwaiti losses,' so that a settlement which treated the original BA loss as in law constituting part of the KAC loss would not bind R&Q. However, a businesslike assessment of the quantum payable in respect of the KAC or recoverable Exxon loss which formed part of a settlement predicated (correctly) on the basis that the Syndicates were not liable for BA or section I and IIIB losses would have bound R&Q.⁴

4. In identifying the legal requirements for proof of loss, the following considerations are relevant, as part of the background against which the contracts are to be construed.
 - a. The LMX market in the late 1980's and early 1990's was a good faith market conducted on the basis of mutual trust.⁵
 - b. For any particular loss, any one cedant might have written 1000's of inwards contracts⁶ and might have made over 10,000 individual claims settlements.⁷ Each of his cedants and each of his reinsurers would almost certainly be in a similar boat.

⁴ Cf. Mr Lockey, day 2 pp. 71-2. With respect, it is difficult to see how a settlement based on the modelled output, reflecting a split which broadly coincides with overarching reality checks and with how the market would almost certainly have approached matters in pre-computer days, could be anything other than proper and businesslike.

⁵ Berry para 3.2 @ D3/7-8; Emney paras 3.8 & 3.13 @ D4/149, 151 and XX day 3 pp. 59-61

⁶ The citation from Mr Craighead's article @ Sanders Final para 4.9, D4/8

⁷ As was the case with Mr Hill in *Hill v Mercantile*; similar figures arose with 'Piper Alpha.'

- c. Collections were made on the basis of invoices (ie collection notes). This was the invariable practice of everybody in the market, both inwards and outwards.⁸ It was a practice which was in the mutual interest of both parties, including the reinsurer who would himself be the reinsured under his own LMX outwards programme.⁹
- d. For obvious practical reasons, therefore, to avoid drowning the spiral in a 'sea of enquiry' and causing cash-flow problems or insolvencies,¹⁰ in practice, no one ever required strict proof of each underlying loss settlement, let alone proof of the underlying loss settlements at each intermediate level of the spiral.¹¹ The 'exigencies' of the market demanded this approach.¹²
- e. The correction of errors took place on a 'top-down' basis; they were sometimes not even drawn to the attention of the (over-paying) reinsurer, but were corrected by reducing the amount of the UNL to the benefit of the top layer reinsurers, not to the benefit of the original over-paying reinsurers (and not to the benefit of the reinsurers of the original over-paying reinsurers).¹³
- f. In exceptional circumstances, the right to ask for further information was reserved. But no one had ever encountered a situation where it was necessary to ask for further information, let alone determine what further information could legitimately be required in such exceptional

⁸ Emney, para 3.12 @ D4/151 and XX day 3 pp. 62-5; Lloyd para 2.2 @ D3/tab 6/16; Cornick day 3 pp. 111-112 (although he then became a little coy on the subject @113-6), 124-126

⁹ Emney, day 3 p. 61

¹⁰ Emney para 3.11 @ D4/ tab 10/150.

¹¹ Thus, no one asked for LPSO settlement information from the ground up: Lloyd paras 2.3-2.4 @ D3/tab 6/16-17; Cornick para 72 @ D4/218 and XX day 3 p119-120

¹² Emney xx day 3 p 70, commenting on para 3.15 of his report

¹³ The practice described by Mr Berry at paras 3.3 – 3.6 (D3/tab 5/pp8-9) was specifically agreed by Mr Emney (day 3 pp 73-7) and by Mr Cornick (day 3 p140-2)

circumstances.¹⁴ The right of inspection existed but was seldom or never exercised.¹⁵

- g. JELC provided the relevant contractual framework. Significantly,
- i. Clause 1.3 only required the Syndicate's settlements to fall within the terms and conditions of the inwards contracts (there is no provision requiring them to fall within the terms and conditions of each underlying contract) and the manner in which that onus was satisfied was as above, ie by production of collection notes; and
 - ii. Clause 9, which preserved reinsurers' contractual right to seek further information in exceptional circumstances,¹⁶ only conferred a right of inspection of the reassured's books and records (there is no provision requiring the reassured to obtain underlying documents or information from its cedants and/or requiring the reassured to require its cedants to obtain underlying documents or information from its cedants).
5. Everyone agrees that this is a unique claims-handling situation.¹⁷ A market-wide solution has not proved possible; although the experts 'opined' that this might have involved the progression of refunds back up the spiral, on a 'top-

¹⁴ Berry 2nd, para 2.1 @ D7/tab 16/120; Emney day 3/pp 66-70, confirming that the very sweeping statements in paras 3.5 and 3.15 (D4/tab 10/148,152) had no basis in practice and the circumstances suggested had never been encountered; Cornick 2nd para 12 @ D7/tab 20/151 and XX day 3/pp 124-6, confirming that the very sweeping statements in para 34 @ D4/tab 11/209 likewise had no basis in practice and the circumstances suggested had never been encountered; see also day 3 p131, commenting on the evidence of Mr Fisher, of LCO.

¹⁵ Emney XX day 3 p61; Cornick day 3 pp133-4

¹⁶ Emney XX day 3 p70

¹⁷ Joint memo of the claims experts para 7 @ D4/tab 13/280; Emney para 3.16 and XX day 3 p18; Berry XX day 3 p19.

down' basis,¹⁸ such a solution can no longer be fully or adequately achieved.¹⁹ One is left, therefore with the terms of the contracts of reinsurance, construed (in their 1989 and 1990) factual matrix.

6. There is simply no basis in principle, let alone when set against that market background, to construe the contracts as requiring proof that the relevant loss falls within the terms and conditions of each intermediate contract in the spiral, let alone as requiring proof of the amount of recoverable loss which falls within the terms and conditions of each intermediate contract in the spiral. *Hill v Mercantile* is no authority for any such proposition. In particular,
 - a. *Hill v Mercantile* does not decide any issue as to the requirements of proof of loss on a properly aggregated basis at all; it merely decides that reinsurers cannot be bound by a good faith and reasonable (but erroneous) decision by the reinsured as to the legal scope of the inwards cover as regards the period of loss and as regards the relevant 'event' giving rise to such loss;²⁰ and
 - b. the key ingredient in *Hill v Mercantile* was that the inwards contracts under which the reassured had settled the inwards claims covered a period of loss which (on the arguable assumption that the losses arose not in 1990, on the invasion of Kuwait, but only in 1991 on the occurrence of Desert Storm) did not cover the relevant loss; the fact that the intermediate contracts may also have been on similar terms was legally irrelevant to the decision; and

¹⁸ Berry day 3 pp18-20; Lloyd day 3 pp 104-8; Cornick day 3 pp 142-4.

¹⁹ This is stating the obvious, with the disappearance of so many players, and was confirmed by Mr Cornick: para 45 @ D4/234; XX day 3/137-8.

²⁰ A decision which itself was recognised by Lord Mustill as being likely to cause 'chaos' (p1253E-F) on account of the fact that allowing the defences as to date of loss and aggregation to be run would leave the validity, size and incidence of claims in suspense.

- c. the speech of Lord Mustill makes it crystal clear that the relevant settlements for the purposes of the Settlements Clause which had to be considered for the purposes of whether or not they satisfied the dual proviso were the reassured's settlements and not the settlements of parties lower down the chain: see pages 1246H-1247A and 1254B-C. The whole point about Lord Mustill's classic paragraph where he states that

"...the purpose of the second proviso ... would be undermined if an honest attempt by those further down the chain to ascertain the legal consequences of the facts could impose on the reinsurers responsibilities beyond those expressed in the policies. So also with the first proviso. The reinsurers undertake to protect the reinsured against risks which they have written, not risks which they have not written. To allow even an honest and conscientious appraisal of the legal implications of the facts embodied in an agreement between parties down the chain to impose on the reinsurers risks beyond those which they have undertaken and those which the reinsured have undertaken would effectively rewrite the outward contract: and it is this, in my opinion, which the provisos are designed to forestall..."

is that if the reinsurer were bound unqualifiedly by a (bona fide and reasonable) settlement by his reassured as to the legal scope of cover, which settlement was itself likely to be a reflection of an underlying settlement which (by parity of reasoning) the reassured had himself been bound to follow, and so on, the reinsurer would end up having the legal scope of the reinsurance being effectively rewritten by 'a stranger' (p1252E).

- d. This is not the same thing at all as saying that a settlement by a reassured on a correct interpretation of the legal scope of the inwards cover does not bind the reinsurer because someone lower down the chain has erroneously misinterpreted his inwards cover for the purposes of his underlying settlements.
7. So far as proving the extent to which the Syndicates' loss settlements fell within the terms and conditions of the inwards policies (JELC clause 1.3/Settlements Clause 1st proviso),

- a. the market practice described above treated that requirement as satisfied by the production of collection notes, trusting to the good faith of the market participants that they had in fact settled the claims in accordance with what they had said;
 - b. although the right of inspection existed so as to verify that the process of claims presentation was satisfactory, the evidential burden of proof would still ordinarily be satisfied by the production of the reassured's books and records: *Wurtembergische v Home* [1993] 2 Re LR 253 @ 261 per Evans J.
8. There is no legal requirement which dictates the manner in which the reassured must prove the amount of its 'net loss' or the extent to which its settlements fall within the terms and conditions of the inwards contracts. Thus, it is not the case that a reinsurer has the right to insist on production and proof of each inwards contract and each inwards loss settlement and the amount of liability to each inwards cedant in order to prove the amount of recoverable loss; or that a reassured's claim will fail without production of such materials.²¹ It remains throughout a question of fact and a question of evidence as to whether and to what extent the reassured has proved its loss.
9. Equitas does not dispute that it must prove the amount of its reinsured loss on the 'balance of probabilities'. But the 'balance of probabilities' test concerning the assessment of the Syndicates' loss and how much of it was made up of the KAC 'event' or the Exxon recoverable elements raises a 'jury question' upon

²¹

An analogy from the field of liability insurance can be found in *P&O v Youell* [1997] 2 LLR 136 @ 141, 143 where it was accepted that it was unnecessary to prove the amount of each individual liability to each passenger but rather that the overall intention of the parties to the insurance justified a 'bulk' or 'across the board' approach to the settlement of passenger claims arising from each casualty, in circumstances where there was no reason to think that the expectation or circumstances of individual passengers would have differed significantly for material purposes.

which the Court must do the best it can, on the available evidence: it does not need to be determined with scientific exactitude.²²

10. Thus, this case is not:

- a. a “*Popi M*” case where the issue concerns whether the loss of the ship was caused by perils insured against; the better analogy would be with the assessment of the cost of repair for the purposes of ascertaining the measure of indemnity in respect of a vessel which was lost by perils insured against;
- b. a medical negligence case where the issue is whether a negligent doctor has caused the necessary head of damage (eg loss of life expectancy as in *Gregg v Scott*).²³ As Lord Hoffmann, pointed out, in the critical paragraph of his speech,²⁴ the relevant distinction is “*between the question of whether damage is attributable to the defendant and the quantification of damage... the rule against the recovery of uncertain damages is directed against uncertainty as to cause rather than as to extent or measure;*”²⁵ or
- c. a case involving the identification of a defendant, e.g. the ‘gatecrasher’ example; or the example of the operator of red and blue buses.²⁶

²² Opening para 52 and cases cited, in particular *Municipal Mutual* per Hobhouse LJ.

²³ The critical finding was that the negligence had only reduced the chances of survival (for more than 10 years) from 42% to 25%: p193F. In other words, the evidence established that the claimant would probably have died within 10 years in any event. As a matter of causation, therefore, the claim failed (see per Lord Hoffmann @ para 71).

²⁴ See McGregor on Damages (3rd supplement to the 17th ed) para 8-032B

²⁵ Lord Hoffmann @ para 69, citing a Canadian judgment of Master J in *Kranz v McCutcheon*.

²⁶ Professor Glanville Williams @ 304-5, in giving these examples, is at pains to point out that the proof fails in these examples because they do not sufficiently mark out the defendants from others and that the reluctance to accept statistical evidence as the sole reason for condemning a defendant is not necessarily felt so strongly outside issues of identity, for example in civil cases, where no question arises as to the

In this case, we know the identity of the reinsurer; we know the identity of the Syndicates;²⁷ we know the terms of the reinsurance contracts between them; we know that there has been reinsured loss; we know that the Syndicates have made actual payments in respect of that reinsured loss; and in assessing the amount which they have actually paid in respect of, or attributable to that reinsured loss, Equitas is not seeking to recover on the basis of a less than 50% chance as to what the amount of that recoverable loss actually is.

11. Analytically, there may be different questions to be posed as regards different items of claim, in particular as regards the claim for the recovery of a specific KAC loss (contract 1) or specific Exxon losses, as opposed to the claims for the recovery of other losses where the issue arises as to the exhaustion of the underlying layers. Since Equitas has applied the output of the model to both situations, this distinction may not matter.

12. Equitas seeks to establish the extent to which the Syndicates' inwards losses were in accordance with the terms and conditions of their inwards (and outwards) contracts. It does so by using the models as evidential tools to demonstrate on the balance of probabilities that at least [X%] of the Cat 90V losses and at least [Y%] of the Cat 89G losses (i) were made up of KAC or recoverable Exxon losses (Scenario A); or (ii) would have been incurred had the BA or irrecoverable losses not entered the spiral (Scenario B). Assuming that each model "*does what it says on the tin*"²⁸ there is no reason in law why the models cannot be used to discharge that evidential burden.

identity of those involved in an accident. Of course, if there is other evidence implicating the defendant, the statistical evidence may be very probative.

²⁷ Even if Professor Glanville Williams' comments also apply to the identity of the claimant (as well the identity of the defendant), it is wholly unclear where this takes R&Q's argument; this is not a case where Equitas is seeking to prove by 'bare' statistical evidence that the Claimants were victims of a tort.

²⁸ Mr Lockey day 6 p115

13. If it is appropriate to ask to what extent the Syndicates were liable to their inwards cedants,²⁹ the models provide the same answer. The Syndicates were not liable to their cedants for the full amount of their UNLs, because those UNLs contain elements of loss paid in respect of a different event (the BA loss) or in respect of an irrecoverable element (the Section I and IIIB loss); but they were liable to their cedants for the amount of loss paid in respect of KAC and recoverable Exxon losses, as reflected by the discounted output of the models.

The Use of the Models (General Points)

14. R&Q make a number of fundamental points about the use of the models which it is appropriate to deal with at the outset.
15. First, it is said that the models do not seek to recreate the actual spiral. This is true. However, if the models provide reasonable representations of the relevant features of the spiral for the purposes which matter, viz the degree of mixing of KAC/BA or recoverable / irrecoverable Exxon losses, the proportion of KAC/BA or recoverable / irrecoverable Exxon losses in a spiral player's UNLs and the effect of stripping out the BA or irrecoverable Exxon elements from a spiral player's UNLs, that is all that is required. The argument of 'principle' that a recreation of the spiral is required in order to prove the Syndicates' loss is not understood.³⁰
16. Secondly, it is said that the models are not realistic approximations of the spiral. This point raises a central evidential issue, considered below, and of course must be considered separately for the KAC/BA model and the Exxon model. But it needs to be made very clear that, throughout this trial, not least during the XX of Mr Bulmer, R&Q appears to have been largely 'tilting at windmills.'

²⁹ Care must be taken with this formulation, lest it be thought (which is not the case) that a reinsurer can reopen issues of fact or proper and businesslike settlements as to quantum: the reinsurer can only take defences going to the legal scope of cover.

³⁰ Mr Lockey's Opening day 2 pp32-3

- a. The issue is not, as R&Q appears to think it is, whether the models are realistic approximations of the spiral, period. In certain respects, the simplifications of the spiral and the way in which assumptions have been utilised make it clear that the spiral is not realistically modelled in all its aspects. However, this case is not about a search for “*an ideal model*”³¹ or one which conforms to features of “*universal application*.”³²
- b. The first issue is whether the models are realistic approximations of the spiral for the purposes that matter, ie in order to assess the degree of mixing, the proportions of the actual UNLs and the ratios of KAC or recoverable Exxon losses to the total UNLs. This is the task which Mr Bulmer set out to achieve.³³ Even Mr Sanders accepted that simplification ‘per se’ was unobjectionable if the omitted matters were irrelevant to the modelled aspects.³⁴ As he conceded in XX, large swathes of the background matters vigorously relied on by R&Q as being features of the spiral which the model had omitted, eg the widespread presence of back-up contracts or top and drop contracts, were irrelevant to the issues in point.³⁵

³¹ Sanders XX day 5 p97

³² Emney para 4.15 @ D4/tab 10/159; although Mr Lockey put to Mr Berry that two market participants could fairly come to differing views as to whether a particular assumption was ‘a fair working assumption’ or not (day 3 p25) and although the underwriting experts agreed that ‘reasonableness is in the eye of the beholder’ (para 2.7 @ D4/tab 12/276), it is not obvious that Mr Emney’s comments were actually directed to this issue (see para 4.25 @ D4/164 where Mr Emney states that “*the question of ‘reasonableness does not, and should not, arise.*”.

³³ See D2/Appendix B/ 45-6 (KAC/BA) and Appendix D/90-1 (Exxon) where Mr Bulmer explained identified which aspects of the spiral he had and had not concentrated on and why; see also para 3.8 @ D2/15.

³⁴ Sanders Final para 5.20 @ D4/20

³⁵ Sanders XX day 5 pp 98-100

- c. The second (related) issue is whether any omitted features of the spiral and/or any lack of actual realism in the models are material to the output of the models such that, if included or redressed in the models, the output would have been materially affected. It is hard to recall any real XX of Mr Bulmer on this aspect; so, for example, simply because it may be unrealistic to assume that in the real world, spiral players had less than 35% of their inwards book covered by outwards reinsurance, this has no relevance to the degree of mixing of the losses and the distribution of proportions and ratios, for the reasons given by Mr Bulmer; and Mr Bulmer was not even challenged on that evidence.³⁶
- d. The matters directly relevant to the level of mixing are actually quite limited; the number of spiral turns, the number of parcels into which the loss is divided by layer and player; and the amount of leakage are the principal variables.³⁷

17. Thirdly, quoting Disraeli,³⁸ it is said that the models are dealing with 'naked' statistics, which bear no connection, either with reality in general or with the relevant Syndicates in particular. This criticism is quite unfounded.

- a. The models' input is based very substantially on significant and voluminous sources of actual data, all of which is directly relevant to Lloyd's Syndicates (including the relevant Syndicates in this case) as regards their inwards writings and outwards protections concerning the Cat 90V and 89G losses and the development of the relevant UNLs. This includes:

³⁶ Bulmer day 4 pp 102-3,110

³⁷ Bulmer XX day 4 p46; and see Sanders para 13.17-13.18 @ D4/81-2, where he specifically addresses the principal features relevant to the mix (XX day 5 pp95-6)

³⁸ "*Lies, damned lies and statistics...*"

- i. the COSS database which has details of all claims, including Cat 90V and Cat 89G claims, paid by Lloyd's Syndicates up until the end of 1999;
 - ii. the MAX database which contains all details of the reinsurance protections purchased by Lloyds Syndicates, including a very considerable volume of information as to the actual reinsurance programmes of the Lloyd's Syndicates likely to have been impacted by Cat 90V and 89G losses;³⁹ and
 - iii. Control Sheets of 52 and 39 of the largest KAC or Exxon affected players respectively, containing details of Syndicate UNLs based on actual Syndicate records.⁴⁰ The Control Sheets feature all but two of the relevant Syndicates in this action⁴¹ and make up 74% and 72% respectively of the total Lloyd's UNLs.⁴²
- b. So far as the outwards reinsurance programmes are concerned, the models are based on the analysis of actual data concerning the reinsurance of Lloyd's Syndicates, including the Lloyd's Syndicates in question, of 3,797 KAC contracts and 2,470 Exxon contracts, grouped together into 446 and 305 separate reinsurance programmes respectively. From that information, Mr Bulmer was able to ascertain, on a programme by programme basis, (i) total amounts of coverage; (ii) number of layers; and (iii) excess points; and on a layer by layer basis, (iv) the number of shares or signed lines; and (v) the percentage

³⁹ Bulmer XX day 4 p57. If it be material, MR Bulmer's understanding was wrong on one point: the MAX database does include Gooda Walker outwards contracts (notwithstanding their exhaustion), a point which Mr Gregory would have confirmed had he been asked.

⁴⁰ Bulmer XX day 4 pp53-4

⁴¹ The exceptions are Syndicate 902 (KAC/BA) and 726 (Exxon).

⁴² Bulmer para 2.79 @ D5/20

amount of each share or signed line. The results were plotted and fitted with an appropriate distribution or probability curve.

- c. Mr Sanders endorsed the reasonableness of that approach, both as regards the use of the data available and the fitting of the distribution curves.⁴³ The resulting outwards programmes (eg H/194) will give a typical spread of outwards reinsurance programmes, based on that actual data, for the things that matter for the purpose of mixing.⁴⁴

- d. Insofar as it is suggested that the model should have used the actual reinsurance programmes of the relevant Syndicates, rather than representative programmes derived from this data,⁴⁵ it is wholly unclear how this approach could have accommodated those outwards programmes for (company) players which were unknown; or how it could have accommodated the inwards books of business for any players (Lloyd's or non-Lloyd's) which have been allocated on the basis of a realistic assumption that the largest buyers of outwards reinsurance will (generally) write the largest inwards lines,⁴⁶ subject to certain constraints as to player type (to achieve diversity).

- e. It is said that the modelled players would not correspond precisely with the characteristics of the actual Lloyds Syndicates whose claims are being presented to R&Q. Equitas agrees that it is most unlikely that the reinsurance programmes, inwards books of business or output UNL's for any modelled player will correspond exactly with the actual

⁴³ Sanders XX day 5 pp105-8 (use of the data) and day 5 p80 (fitting of the curves).

⁴⁴ The criticism that the limits have gone up in convenient mathematical steps (\$X, \$2X and \$4X) may not be so far from reality (e.g. the protections of Syndicate 745 on Contract 1 @ Core bundle tab 2/ p 24). However, when applied to different excess points, amounts of coverage and numbers of layers as derived from the actual data, the application of such steps will (realistically) produce different layers of cover for different players.

⁴⁵ As put to Mr Bulmer @ day 4 p57 (with the epithet 'hypothetical' which Mr Bulmer rightly did not accept)

⁴⁶ Sanders XX day 5 p115

reinsurance programmes, inwards books of business or UNL's of any actual Lloyd's Syndicate.

- f. However, it is going much too far to say that "*the chances of the model generating a model player that is remotely similar to a real spiral participant is extremely remote.*"⁴⁷
- g. On the basis of the model's reliance on actual Lloyd's data as described above, there is no reason to doubt that the models produce players with reasonably similar characteristics to those which would have been held by typical Lloyd's syndicates, including the relevant Syndicates in question. In fairness to Mr Sanders, it might be said that (as in other respects) in XX, he rather rowed back from the extreme statement in his written report and broadly endorsed that conclusion. His concern appeared to be the more hypothetical one that the 'averaging process' might render it unrepresentative of players with extreme characteristics.⁴⁸
- h. However, there is no basis for any suggestion that the relevant Syndicates had 'extreme characteristics' which might affect the degree of mixing of the Cat 90V or 89G losses. There is nothing exceptional about the Lloyd's Syndicates in question, insofar as might be relevant to the mixing of KAC/BA or Exxon losses. In particular, they all have relevant UNLs in excess of \$10m.⁴⁹
- i. Moreover, this 'averaging' process' is not understood, bearing in mind that the model randomly simulates results from the probability curves and thus can obtain and does obtain an appropriate cross-section of results to reflect the diversity in the underlying data.

⁴⁷ Sanders Final para 7.4 @ D4/29

⁴⁸ Sanders XX day 5 p109.

⁴⁹ See the tables at Opening paras 23 (KAC/BA) and 32 (Exxon)

18. Fourthly, it is said that the modelled output should somehow be applied to the UNLs of the Syndicates' cedants for the purposes of establishing whether the loss settlements fell within the terms and conditions of the inwards contracts.⁵⁰ However, this would be to distort the output of the models insofar as the models are to be applied to determine the true proportion of the KAC or recoverable Exxon loss sustained by the Syndicates; or the true ratio of KAC / recoverable Exxon loss to total loss sustained by the Syndicates in their UNLs.

- a. The modelled outputs already explicitly assume and take into account the application of underlying and inwards excess points in calculating the UNLs of modelled players. Thus the UNLs of the modelled players represent UNLs which already fall within the terms and conditions of a player's inwards contracts (as regards the KAC and recoverable Exxon elements thereof).
- b. Were one to do what R&Q are suggesting, and to apply (say) a 90% fraction to the Syndicates' cedants' UNLs and then apply excess points in the contracts between the Syndicates' cedants and the Syndicates, the result would be to reduce the Syndicates' UNLs by a considerably greater proportion than that indicated by the models; in other words, it would be to treat the Syndicates as if they were not typical players represented by the models, but atypical players, with atypical results, not because of idiosyncrasies peculiar to the Syndicates but on account of typical inwards contracts with typical excess points which the models already assume.
- c. Thus, in asking what proportion of the Syndicates' actual UNLs was made up of KAC / recoverable Exxon losses, the modelled output (as applied to the Syndicates' actual UNLs) gives the correct answer; applying the modelled output to the Syndicates' cedants' UNLs and then seeking to introduce excess points in inwards contracts to reduce the UNLs is not only mixing 'apples with pears' but is effectively

⁵⁰ Mr Lockey described this as 'a more promising way' of using the model to satisfy Equitas' burden of proof: day 2 pp 40-41.

‘double – dipping.’ The same is true for the alternative ratio approach; the modelled output (as applied to the Syndicates’ actual UNLs) identifies the effect on the actual UNLs of stripping out the irrecoverable element in those actual UNLs.

19. Fifthly, it is said that average discounts cannot be assumed to apply to each Syndicate’s UNL because the results of any two Syndicates, and the effect within their UNLs of the BA or irrecoverable Exxon loss, will never be exactly the same. Equitas agrees with this proposition but the argument misunderstands Equitas’ case. Equitas seeks to apply the average 10th percentile deduction to each of the relevant UNLs,

- a. not because it is to be assumed that each Syndicate had a KAC or recoverable Exxon proportion or ratio of exactly the relevant percentage reflected by the 10th percentile; but rather because the Court can be satisfied, on the balance of probabilities, that the relevant Syndicates must have had a KAC or recoverable Exxon proportion or ratio of at least the relevant percentage reflected by the 10th percentile; and
- b. because the 10th percentile is an actuarially⁵¹ and evidentially conservative tool for the assessment of the amount of the Syndicates’ recoverable loss, it being unlikely that the Syndicates would have incurred any lower proportion or ratio of recoverable loss in their actual UNLs.

Once that case is properly understood, there is no ‘causal gap’ between the output of the models and the Syndicates.⁵²

20. Sixthly, R&Q make a point on the cut-off dates of the models, 31 December 2000 (Exxon) and 30 June 2002 (KAC/BA).

⁵¹ Sanders XX day 6 pp76-7

⁵² Mr Lockey, day 2 pp96-102

- a. Those dates were selected for the stopping of the models because all relevant transactions (including inter-Syndicate transactions) had basically stopped by those dates. Company transactions had stopped at earlier dates and the models reflected these different dates by halting collections from or by company players at the relevant dates.
- b. Accordingly, to have carried the models on beyond 31 December 2000 (Exxon) and 30 June 2002 (KAC/BA) would actually have distorted the output by representing (contrary to the fact) that the spiral had continued to develop and the UNLs had continued to grow.⁵³
- c. R&Q asserts that the relevant UNLs must be the current UNLs and Equitas does not disagree. However, and subject to the two points which follow, the current UNLs have not developed beyond the cut-off dates of the models.
- d. First, UNCC refunds have been received by some Syndicates in 2004 and 2006. When that is the case, credit has been given for such refunds. (The treatment of UNCC refunds is dealt with below).
- e. Secondly, a few inwards commutations have been made by Lloyds Syndicates since 2000 (Exxon) or June 2002 (KAC/BA) respectively. These commutations do not warrant treating the spirals (contrary to the fact) as having continued beyond the modelled cut-off points; moreover, the amounts involved are relatively small: approximately \$70m in gross⁵⁴ terms for KAC/BA (H/12)⁵⁵ and approximately \$210m

⁵³ It would have been absurd to have carried on the models until the date of commencement of proceedings (Mr Lockey, day 2 page 69) on the false premise that the losses were still spiralling until that date. No doubt if this exercise had been done, it would have been said (with some force) that the models did not show the true mixing of losses as at the point in time when the spiralling had effectively come to an end and the UNLs had effectively crystallised.

in gross terms for Exxon (H/55).⁵⁶ These commutation payments do not form any part of the Syndicates' current UNLs for the purposes of the claim against R&Q.

- f. The argument that the claims fail altogether because of the chosen cut-off dates⁵⁷ is incomprehensible.

- g. So far as concerns any future losses which arise out of the 'kick-starting' of the spiral as a result of any decision in Equitas' favour in this litigation, the position will be that such losses will presumably already have been discounted to reflect the judgment of this Court. It will therefore be necessary to aggregate existing losses (discounted in accordance with the models) with future losses which (ex hypothesi) will already have been discounted and will not need to be discounted again. This should not present any conceptual or practical difficulty.

The Modelled Assumptions

21. The Appendix hereto sets out a detailed commentary on the various assumptions input into the models.

22. The principal assumptions are:

- a. Numbers of players – the Lloyds numbers are based on actual data and are not challenged; ⁵⁸ Mr Sanders agreed that Mr Bulmer was reasonable to exclude small players with UNLs of less than

⁵⁴ The figures for both payments of claims and refunds are gross amounts, inflated by the spiral effect of the claims or refunds (which is why the figures for refunds at H/12 are higher than the \$139m refunds in fact received by Equitas).

⁵⁵ The total UNL for KAC/BA is about \$7b so this represents about 1% of the total

⁵⁶ The total UNL for Exxon is about \$9b so this represents 2.3% of the total

⁵⁷ Mr Lockey day 2 p70

⁵⁸ Sanders xx day 5/p83

\$100,000;⁵⁹ the grossing up for the company market is partly based on data (albeit incomplete) and partly based on judgment; Sensitivity test no.1 shows the relative insensitivity of increasing the company participations.

- b. Types of players – diversity is achieved by seeking to create three broad types of marine player, writing (in crude terms) at the bottom, in the middle and at the top of the spiral. Although this is obviously a simplification, it reflects the different levels at which players were writing.⁶⁰
- c. The largest buyers of reinsurance write the largest inwards lines: this is obviously a reasonable assumption.⁶¹
- d. Leakage is assumed to be 0.5% (ie 95% of all layers are fully placed; 5% of all layers are only 90% placed). It should be noted that R&Q (and its experts) have been careful not to indicate an alternative figure for leakage; and sensitivity test 18 shows that increasing the amount of leakage to 10% (ie 90% of all layers are only 90% placed) makes a relatively insignificant difference to the output.

23. What is noteworthy is what is not assumed. In particular,

- a. The outwards reinsurance programme is derived from actual data of several thousands of contracts containing details of total amounts of coverage, number of layers, excess points, number of lines and size of lines. It was obviously reasonable for the model to utilise that actual data.⁶² Mr Sanders specifically confirmed that he had no issue with the

⁵⁹ Sanders xx day 5 p85

⁶⁰ These were targets, themselves allowing a further degree of diversity within each player type: Bulmer XX day 4 pp83-7.

⁶¹ As Mr Sanders confirmed: xx day 5 p 115.

⁶² As Mr Sanders confirmed: day 5 pp 105-8

plotting of the data or the fitting of the distribution curves to that data to enable a random simulation of entries based on that actual data.⁶³

b. The waiting times between successive collections were again derived from actual data, albeit the distribution curves were calibrated so as to fit with the development of the UNLs over time as well as the pattern of delays reflected by the data.⁶⁴ Again, Mr Sanders made no criticism of the use of the data⁶⁵ or, after intervention from Mr Lockey, of the fitting of the distribution curves to the data for the purposes of random simulation of waiting times.⁶⁶

c. The direct losses fed into the model are the actual sums which are allocated in their actual proportions.

24. Of course, there are other minor assumptions and simplifications which enable the model to avoid becoming too, or even more, complex. No doubt a 'shopping list' will be produced. But it is hard to see why reasonable assumptions⁶⁷ or simplifications⁶⁸ will have any material effect on the output of the models.

⁶³ Sanders XX day 5 pp80-1

⁶⁴ A process of judgement was required: the average waiting times were more influenced by the development of the COSS UNLs whereas the standard deviation (the level of dispersion) of the waiting times was based on the data: Bulmer day 4 pp60-1

⁶⁵ Sanders XX day 6 p21

⁶⁶ Mr Sanders' evidence at the start of his XX, which he volunteered, was perfectly general: day 5 pp 80-1. He then appeared to reconfirm that he was happy with the way in which the curves had been fitted to the relevant data: day 6 pp22-25 After he was given a further opportunity to consider whether he took issue with anything which Mr Bulmer had done on this subject (as set out at Bulmer Final report Appendix B @ D2/64-8 and Bulmer Supplemental Final @ D5/45-7, Mr Sanders specifically (re)confirmed that he had no issue with what Mr Bulmer had done: XX day 6 pp 28-9, though some of the curves did not fit as well as he expected.

⁶⁷ For example, that there will be a correlation between the amount of a player's direct writings and his specific reinsurance protections; or between the amount of his X/L on X/L and whole account protections.

The Criticism of the Modelled Assumptions

25. The Appendix sets out a more detailed discussion on the specific criticisms of the model and its assumptions. A number of principal criticisms are addressed in outline in this document.
26. First, there is criticism that the models are 'closed spirals', without making specific allowance for the fact that some reinsurance would have been reinsured overseas and not re-entered the spiral.
- a. One needs to distinguish two different aspects of this criticism: the first is that the closed spiral does not represent reality and has consequences (for the ratio of a player's outwards reinsurance to inwards writings) which do not themselves represent reality; and the second, which has scarcely been developed by R&Q, is that this lack of realism in some way undermines the output of the models.
 - b. As to the lack of realism, it is true that some business would have been reinsured overseas; but insofar as an overseas reinsurer itself sought reinsurance protections for its writings, the only market available was the LMX market so that the business would come back to London.⁶⁹ Overseas participants were (in effect) themselves members of and players in the spiral. The need to identify such players specifically should not be overstated.
 - c. Still dealing with the lack of realism in the model, the effect of a closed spiral meant that one man's reinsurance was another man's inwards writing and that the inwards and outwards programmes had to add up to 100%. This meant that some participants, more than there would be in practice, had excessively low outwards protections (ie less

⁶⁸ For example, that the layers of outwards protections go up in mathematically convenient proportions (\$X, \$2X and \$4X): a glance at the protections for Syndicate 745 @ core bundle tab 2/p24 shows that this is not as unrealistic as one might think.

⁶⁹ Berry para 2.15 @ D3/6; Emney para 2.6 @ D4/135

than 35%)⁷⁰ or had excessively high outwards reinsurance protections, although there would undoubtedly have been some players who (in reality) may have fallen into such extremes.

- d. The real question, however, is what effect does this under-reinsurance or over-reinsurance have on the modelled output. The answer is none.⁷¹
- e. So far as under-reinsurance⁷² is concerned, its only relevance would be if it gave rise to vertical exhaustion, as a result of which the development of the spiral and the mixing of the losses was impeded. It was this aspect of the model which concerned Mr Sanders.⁷³
- f. However, vertical exhaustion was not in fact a problem for the KAC loss, nor was it revealed to be a problem in terms of the model's output, at least for the larger players.⁷⁴ The fact that the modelled players had unused outwards and thus unused inwards cover does not affect the mixing of the losses under the cover which was used. As

⁷⁰ Mr Bulmer was criticised for removing this minimum ratio but he explained that it was no longer necessary for the purposes for which it was introduced, namely to avoid excessive vertical exhaustion, once the matrix had been introduced. A brief exercise (but not fully cross-checked) suggested that its reintroduction would not make much difference to average proportions and ratios: day 4 pp110-1.

⁷¹ Bulmer day 4 pp 101-3, 110. "*Unrealistic but it doesn't matter.*" Mr Bulmer was simply not challenged on the "*doesn't matter*" point.

⁷² Over-reinsurance, which was not used, is clearly not going to affect the degree of mixing; this is why the lack of congruence between modelled runs and Control Sheet data on the left hand side of Reasonableness test 3 graphs (D7/173,178), which are dealing with the ratio of the UNLs to outwards cover, does not matter for the purposes of the modelled outputs.

⁷³ Sanders Supplemental Final para 17(c) @ D7/166; and XX day 5 pp118-122; the statement that this lack of realism undermines the models' use as 'reliably representing the passage of losses through the spiral' (para 15 @ D7/164) seems to be a throwback to the search for the 'ideal' replica of the spiral for its own sake, rather than as relevant to the degree of mixing.

⁷⁴ Sanders XX day 5 pp122-8. Reasonableness test 3 shows vertical exhaustion based on the control sheet and the modelled output for the 52 largest, or 52 of the largest players of less than 5%. Mr Sanders' scattergram [D7/167] reveals that it is the smaller players with less reinsurance cover but there is no actual data for small players to compare the model with.

both Mr Berry⁷⁵ and Mr Bulmer⁷⁶ pointed out, the relevant question for vertical exhaustion (and thus mixing) purposes is whether the ratio of outwards reinsurance to the inwards UNL was very low, which it was not.⁷⁷

- g. Vertical exhaustion was more of a problem for Exxon, both in fact and as reflected by the model, being approximately 15% of the larger players (see Reasonableness test 3 @ D7/165). However, save in one respect (the fact that the model did not reflect the prior exhaustion of the Gooda Walker Syndicate 298) the model conformed with reality and the scattergram (D7/173) shows small players with a low ratio of outwards to inwards cover, which would be unlikely to have a significant effect on vertical exhaustion.⁷⁸
- h. The fact that the model does not reflect the prior exhaustion of Gooda Walker Syndicate 298 is irrelevant to the model's output.⁷⁹ Indeed, Gooda Walker's actual vertical exhaustion (on the basis of recoverable Exxon losses only, in 1993) means that when the irrecoverable losses hit the spiral in 1996-7, all those losses which would have spiralled through Gooda Walker would have been retained net. This would have dampened the passage of the irrecoverable losses and, if anything, the model may well exaggerate the spiral effect of the irrecoverable losses as a result.

27. Secondly, there is generalised, but unquantified criticism that the models fail to allow sufficiently for other forms of (non-vertical) leakage. These criticisms are misplaced.

⁷⁵ Mr Berry para 2.11 @ D3/5; day 3 pp 27-28

⁷⁶ Mr Bulmer day 4 pp 100-1, 105-8

⁷⁷ Mr Sanders confirmed the relevance of this question but had not done this exercise: XX day 5 p128

⁷⁸ Sanders XX day 5/pp129-130

⁷⁹ Sanders XX day 6 p11

- a. So far as coinsurance is concerned, the problem is limited to 1990 at the higher end of the spiral.⁸⁰ Mr Emney considered that the KAC loss had not reached the upper end of the spiral until the spares loss in 2000.⁸¹ An inability to place fully a high level X/L on X/L or whole account layer might also be matched by an inability to place fac/oblige covers which would otherwise have caused leakage: this would be 'swings and roundabouts.'⁸² A new point from Mr Sanders, not contained in any of his reports, that co-insurance would have accounted for the whole of the leakage, is not supported by the trial documents.⁸³
- b. So far as horizontal leakage is concerned, this was not a problem for Exxon and KAC/BA losses.⁸⁴ So far as KAC/BA is concerned, there were only two (or possibly 3) major losses in 1990⁸⁵ so Cat 90V would have amply been covered by the ordinary '1 loss/ 2 reinstatements' coverage, even without allowing for back-up and top and drop covers to step in and fill any gaps. So far as 1989 is concerned, although there were more major losses in 1989, this does not appear to have been a problem for Exxon losses.⁸⁶

⁸⁰ Emney para 4.10 @ D4/158; XX day 3 pp 88-9

⁸¹ Emney day 3 p91

⁸² Berry XX day 3 pp39-40.

⁸³ The H bundle shows very few placements of less than 100% for the KAC/BA loss: H/22 & H/45 (the latter document which Mr Sanders had not analysed).

⁸⁴ Berry para 2.17 @ D3/6

⁸⁵ Berry Re-X day 3/47; the figure might be three if the windstorms in January and February 1990 were treated as separate events (Admission of Facts para 20 @ Core Bundle pp128-9, 139).

⁸⁶ It may be, as Mr Berry indicated, that underwriters managed their reinsurance position carefully to avoid utilising cover on smaller losses: Berry xx day 3 p44

- c. Insolvencies occurred in the mid 1990's;⁸⁷ commutations occurred in the late 1990's and subsequently.⁸⁸ However, it is hard to believe that they had any significant effect on the spiral.
- d. Sanders' new leakage calculations are completely misleading as to KAC/BA on account of the inclusion of the 2000 spares loss: without that inclusion, it can be seen that the spiral as modelled was much more developed, having turned about 19 times and produced a net retention of almost double that set out in Mr Sanders' table.⁸⁹ The Exxon figures are also misleading on account of the different dates of loss, the spiral likewise having turned much more in the early years.
- e. There is no basis for believing that the 0.5% leakage allowance is unrepresentative of reality.

28. Thirdly, there is criticism that the models do not produce enough players with large UNLs (see Reasonableness test 2).⁹⁰

- a. One must be very cautious with Mr Sanders' scattergrams @ D7/172(Exxon) and 177 (KAC/BA) because, based on run 1 alone, they give a misleading impression. Across the runs as a whole, there are players with UNLs up to \$150m (Exxon) or \$140m (KAC/BA), as is apparent from the Reasonableness test 2 graphs @ D7/171 (Exxon) and 176 (KAC/BA). Moreover, it is not as if the COSS data (which forms the comparable) shows a large number of actual players with large UNLs. The highest it can really be put is that, so far as Exxon is

⁸⁷ Berry para 2.19 @ D3/7; Targett para 10 @ B1/3-4

⁸⁸ Bulmer Final Report para 48(B)(vi) of Appendix B @ D2/74

⁸⁹ Mr Sanders' figures are at D7/180. Mr Sanders was xx'd on these at day 5 pp 142-7 and day 6 pp 1-5.

⁹⁰ Although the Exxon model does not produce enough small players, this would not significantly affect the output of the model.

concerned, the model does not produce players with UNLs above \$150m.

- b. From the results of the models, and the limited range of outliers, there is no evidence that the output is different from players with larger UNLs or would be significantly different for players with UNLs (in the case of Exxon) in excess of \$150m.
- c. Indeed, despite Mr Sanders' sweeping generalisation – "*generally speaking, and other factors being equal, the larger a spiral participant's UNL (excluding direct losses) the more likely it is to have been inflated by the spiral effect at the higher end of the programme*"⁹¹ – the reverse is in fact the case and Mr Sanders' attempts both to justify and to row back from that statement were unimpressive. Thus,
 - i. The effect of the later Exxon losses was proportionately greater on players with small UNLs, not large UNLs, as Mr Bulmer convincingly demonstrated.⁹² Mr Sanders' attempt to dismiss those figures as mere averages and to argue that there was considerable variation in the position of individual Syndicates, as shown by his scattergram,⁹³ was completely misconceived: the scattergram shows that the individual Syndicates most effected by the later Exxon losses (ie with high ratios of 1999 UNLs to December 1995 UNLs) were all players with small UNLs [D7/172].⁹⁴

⁹¹ Sanders Final para 7.17.4 @ D4/35, repeated at paras 7.20.2, 8.33, 9.15 & 12.9 (D4/36, 49, 58 & 75).

⁹² Mr Bulmer's table was replicated by Mr Sanders @ D7/185.

⁹³ Sanders Supplemental Final para 50.a @ D7/185

⁹⁴ In XX, Mr Sanders accepted that the scattergram showed consistently that the players with the large UNLs have a lower proportion of the 1996-7 losses than players with low or medium UNLs: day 6 p66

- ii. The attempt to justify the generalisation by reference to the KAC/BA table of ratios [D7/187] was very misleading, bearing in mind that the development of the KAC/BA UNLs between 1993 and 1999 was greatly affected by the inclusion (before 1993) of \$0.4b of erroneous entries in the COSS database and the subsequent reversal of those entries, by negative entries, in 1995 and 1998.⁹⁵ COSS therefore exaggerated the actual development of the UNLs before 1993 and, significantly for the purposes of Mr Sanders' table, dampened the actual development of the UNLs after 1993. This obviously accounts for the decrease in the UNLs for the smaller players between 1993 and 1999, as revealed in Mr Sanders' own scattergram [D7/177] and the apparent trend of the figures @ D7/187 since the erroneous and negative entries were clearly most felt, in relative terms, by the smaller players.⁹⁶
- iii. The ultimate proposition for which Mr Sanders contended, and which was put to Mr Bulmer,⁹⁷ was the very different one that *"where a larger UNL is larger because it has been inflated by the spiral – because the spiral participant concerned wrote a large amount of 'later impacted' spiral layers, for example, ..."* the contribution of irrecoverable losses may have been higher. This is no more than the agreed proposition that the effect of the irrecoverable losses would be felt greater by the higher layers of the spiral,⁹⁸ a proposition which has limited relevance, given that the KAC losses did not reach the higher layers of the

⁹⁵ Paragraphs 40(D) and 51 of Appendix B (in the case of KAC/BA) [D2/67-68 & 77] and paragraphs 38(D) and 49(A) of Appendix D (in the case of Exxon) [D2/110-111 & 122] of the Final Report. See also the first Witness Statement of James Gregory, paragraphs 18, 45 and 46 [B1/Tab 2] and Bulmer XX day 4 pp29-31.

⁹⁶ Mr Sanders accepted this in XX: day 6 pp 68-71

⁹⁷ Sanders Supplemental Final para 50 d @ D7/186; Bulmer XX day 5 pp 68-9.

⁹⁸ Sanders XX day 6 pp. 66-7

spiral, at least until the introduction of the spares loss in 2000,⁹⁹ and the Exxon ratios suggest that the higher UNLs were in fact being largely incurred by players in the middle of the spiral, who were being proportionately more affected by the 1991 recoverable losses.¹⁰⁰

29. Fourthly, there is criticism that the models' development of the UNLs fails to match, or achieve a sufficient degree of congruence with the actual UNL development over time (Reasonableness test 1).

- a. The first point to make is that it was entirely reasonable for Mr Bulmer to use the information as regards UNL development over time as actual data which should be used for the purposes of constructing and fine-tuning the models and their assumptions. He was criticised for a form of 'reverse- engineering' but this criticism confuses the results of the models (the proportions and ratios) with the development of the UNLs which are an important evidential input.¹⁰¹ Mr Sanders accepted that Mr Bulmer was right to pay regards to the development of the UNLs¹⁰² and in this regard, he was obviously correct: witness the criticism when it is said (for Exxon) that the modelled UNLs do not reflect reality.
- b. It appears that this is no longer a criticism for the KAC/BA model. Once one takes into account the over-exaggeration of the COSS development (up to 1993) and the under-exaggeration of the COSS development between 1993 and 1999, on account of the \$0.4b erroneous / negative entries, the model's development of the KAC/BA

⁹⁹ Emney XX day 3 p91. The loss was a fairly modest one compared with some of the catastrophe losses in previous years.

¹⁰⁰ This is of course entirely consistent with the exhaustion of Gooda Walker's outwards programme for Syndicate 298 in 1993 on the basis of an Exxon UNL for recoverable losses of over \$200m.

¹⁰¹ In response to this charge, Bulmer XX day 4 pp45-8 described the real UNLs from the COSS database as "*an important piece of data which I need to take into account.*"

¹⁰² Sanders XX day 6 pp18-21

UNLs corresponds closely with reality. This is apparent from a visual inspection of the Reasonableness Test 1 graph [D7/174], from Mr Bulmer's explanation of what he considered to be 'a good fit',¹⁰³ taking into account the necessary adjustments to the data.¹⁰⁴ Mr Sanders accepted this view.¹⁰⁵

c. It is undoubtedly the case that the Exxon model develops the Exxon UNLs too slowly, up until about 1993. It probably accelerates the UNLs slightly too fast after 1995. The graph is at D7/169. The significance of this point, however, is not self-evident.

i. First, the differences are not quite as marked as visual inspection of the graph would suggest, particularly bearing in mind that the Exxon control sheet, for 39 of the largest Exxon-affected Syndicates, derived from actual Syndicate records, indicates that COSS is itself understated at the end of the period.¹⁰⁶

¹⁰³ In answer to the Court at day 5 p33.

¹⁰⁴ It should be noted that the COSS UNLs for Cat 90V are about 0%-5% below the UNLs revealed by the Control Sheets on 31/12/96 for KAC/BA; on average, the modelled UNLs for 1999 are approximately 6.7% higher than the COSS figures (grossed up for non-Lloyds players for the period when they were paying Cat 90V losses): sub-paragraphs 5.4(D) and (E) of Mr Bulmer's Supplemental Final Report [D5/45-46]. As Mr Bulmer explained, he regarded the Control Sheets as 'the key reference point' and 'the most reliable estimate of Syndicate UNLs' and he sought to ensure that the models UNLs exceeded COSS UNLs by the same order of magnitude as the Control Sheets exceeded COSS: day 4 pp 37-8.

¹⁰⁵ Sanders XX day 6 pp 4-5 (commenting on the table of figures put to him in XX on the true development of the spiral, discounting the spares loss); and p 104.

¹⁰⁶ The COSS UNLs for Exxon are about 5-10% below the UNLs revealed by the Control sheets on 31/12/00 for Exxon; on average, the modelled UNLs for 1999 are approximately 9.4% higher than the COSS figures (grossed up for non-Lloyds players for the period when they were paying Exxon losses): sub-paragraphs 8.4(D) and (E) of Mr Bulmer's Supplemental Final Report [D5/56]. See also: XX of Mr Bulmer, Day 5, pp. 7-12 where he explained that he was seeking to reproduce UNLs which were higher than COSS by about the same margin.

- ii. Secondly, the implication must be that there was more spiralling of the recoverable 1991 losses than the model in fact allows; and that the introduction of the 1996 and 1997 losses made less of a contribution to the final UNLs than the model in fact allows. If anything therefore, the Exxon model may end up overstating the effect of the irrecoverable losses.

The Modelled Output

30. Before turning to the figures, some general points can be made.

31. First, the output figures all fall within a relatively narrow range of results, narrower for KAC than Exxon and narrower for proportions than ratios, but nonetheless all relatively narrow.

- a. This is a positive feature, not a 'cause for concern' about inherent bias or lack of diversity of input.
- b. Each of the 75 runs of each model involves: a redistribution of the direct losses; a fresh set of outwards reinsurance programmes; a new set of waiting times; a fresh set of partly placed layers; and a fresh designation of player types.¹⁰⁷ The effect of these changes means that the losses spiral through the models by completely different pathways and in a completely different timescale on each run of each model.
- c. The idea that it was necessary to run the models 1000 times to establish their evidential robustness, or that if Mr Bulmer had done so, this would in any way have altered the criticisms of the models, is a 'pipe-dream.' The 75 runs (plus the original 50 runs) are quite sufficient to demonstrate the robustness of the models.

¹⁰⁷ Bulmer Final para 52 @ D2/124; XX day 5 pp73-4

- d. The sensitivities involve a further 21 (KAC/BA) or 23 (Exxon) runs of the models. Mr Bulmer tested certain key assumptions (eg numbers of players; adjustments to the generation of outwards reinsurance programmes; increases in leakage; and increases in waiting time), with no dramatic increases in the proportions of BA and irrecoverable Exxon losses or in the ratios. It has been said that he should have gone further and cross-checked each of the outcomes against the reasonableness tests; but from the results obtained, he had no cause to and this looks like a counsel of perfection.
- e. The fact that, notwithstanding such changes, the model runs produce broadly consistent results, demonstrates that the precise make-up of the spiral, ie the precise make-up of the inwards and outwards book and the precise chronology of collections is largely immaterial to the issues of mixing. And if one stops to think of it, this is unsurprising.
- f. If one takes KAC / BA, the losses went in together in a \$300m:\$43m ratio. For 11 years, that mixed stream circulated together, in ever-fragmented parcels, being passed from hand to hand. Even confining the period of mixing until December 1999 and ignoring the introduction of the spares loss which would have increased the KAC element slightly,¹⁰⁸ it is hard to see why the exact configuration of the spiral should have materially affected the mixing and the resultant mixture of KAC and BA losses in the UNLs of spiral players.
- g. As Mr Bulmer put it,

'I do think that the narrow distribution of the proportions ...is a reflection of how thoroughly the loss components in respect of Kuwait and BA had mixed by this stage. The original direct loss was round about US\$343 million excluding the spares loss. By 1996, say, that figure had increased to US\$6 billion, so the spiral had turned on average nearly 20 times. And I think it is worth considering what happens on each turn of the spiral. What happens is that a loss is passed on by a cedent to its reinsurers. Typically, a reinsurer will

¹⁰⁸

\$259m would have mixed with the then aggregate UNL of about \$6.5b

have 25 separate companies participating on the outwards reinsurance contract. So in the first turn of the spiral a portion of direct loss is split 25 times. Take one of those 25 components. It is amalgamated with other small portions of loss and then passed on to another reinsurer and it is split a further 25 times. And a further 25 times. The process continues through each turn of the spiral. So what happens is that the Kuwait and the BA losses are divided into what would seem to be microscopic portions or components by the time the spiral has turned nearly 20 times and the spiral UNL for Kuwait is US\$6 billion. It seems to me that the reason why the distribution of proportions is so narrow ...is because, by 2002, the Kuwait and BA losses would have been thoroughly mixed at that stage, and that is the reason why the distribution is narrow, to my mind.’ (Day 4, pp. 34-35)

- h. If one takes Exxon, undoubtedly more complicated on account of the timing, we still have 5 years of mixing (January 1996 – December 2000) of irrecoverable section 1 losses (\$303.5m) and 4 years of mixing (January 1997- December 2000) of irrecoverable section IIIB losses with a very much larger recoverable stream of Exxon losses (\$6b spiralled P&I losses as at December 1995; \$314m recoverable section IIIA introduced January 1997; \$72m recoverable BP/Atlantic Richfield introduced late 1997 / early 1998). Although there is evidence to suggest that the degree of mixing may not have been wholly complete by March 1998, when the company market stopped paying, the mixing and the resultant mixture of recoverable and irrecoverable are unlikely to be dramatically affected by the precise configuration of the spiral.

32. Secondly, so far as the calculation of the proportions of the mix are concerned, there is basically no challenge to the fact that the proportions of the mix are likely to be as found by the models. The challenge is really as to the legal appropriateness of using proportions (see below).

- a. The assumption that each player collects losses in the same proportion as he pays them¹⁰⁹ is the only realistic assumption to make where the losses are paid and aggregated as a single loss.
 - b. The only alternative assumption suggested by Mr Sanders (that the BA loss should be assumed to have been collected from the highest layer) has no basis in reality.¹¹⁰
 - c. The proportions' approach to the computation of loss has no evidential issues. It raises no counterfactual issues and thus any questions about the realism of the modelled spiral are even less relevant. Moreover, the range of results is narrower, with fewer outliers. Legal arguments apart, it is the more robust and certain measure of loss.
33. Thirdly, so far as concerns the calculation of the ratios of the recoverable element of the UNLs to the total (recoverable and irrecoverable) amounts of the UNLs, this posits a counterfactual scenario that the BA or irrecoverable Exxon elements of the loss had not entered the spiral. On the face of it, therefore, the structure of the spiral might be said to be relevant. However,
- a. The theoretical examples given by Mr Sanders (and accepted by Mr Bulmer)¹¹¹ as to how, if irrecoverable elements of the loss were removed, a player's losses on a single layer might be reduced to zero are just that: entirely theoretical. As Mr Sanders accepted, they depend on the key assumption that a reinsurer is only picking up a loss from one source, thus ignoring the interlocking nature of the spiral and the fact that in the real world, a single cedant might have thousands of inwards contracts and be making thousands of payments in respect of a

¹⁰⁹ Assuming that there is no separate issue of timing: ie a person paying a KAC only derived loss might be able to collect that loss before being called upon to pay a BA only loss.

¹¹⁰ Sanders Final para. 12.8.1 @ D4/74; XX Day 6 p53; Bulmer Supplemental Final paras 2.61-2.62 @ D5/17

¹¹¹ Sanders Final paras 7.7 – 7.15 @ D4/30-33

single loss. As he accepted, the prospects of a real spiral player reducing his actual UNLs to such low, theoretical levels, on account of the removal of the BA or irrecoverable Exxon loss, were "*minimal.*"

112

- b. Thus, reducing the amount of the loss going through the spiral might slow the development of the spiral down very slightly; and it might take slightly longer to reach the higher layers (or 'later-impacted' layers) of the spiral; but it is not seriously going to eliminate or dramatically reduce the UNLs of a player who writes 100's or 1000's of inwards contracts responding to Cat 89G or Cat 90V.
- c. Once again, this is demonstrated by the broad consistency of the modelled Scenario B results, both as regards the 75 runs and the various sensitivities.
- d. The only additional point on the ratio approach is the suggestion that, as regards the parallel (counterfactual) Exxon run, the waiting times would have been slower had the irrecoverable elements of loss not entered the spiral. There are a number of points about this.
 - i. First, the relevant suggestion is that the spiral would have gone faster in reality in 1996, on account of the introduction of the new section 1 losses, whereas it would have meandered on (until 1997) without such losses. As Mr Bulmer said, one simply does not know what would have happened in practice.¹¹³
 - ii. At Mr Sanders' suggestion, however, Mr Bulmer tested this scenario for the Exxon model in sensitivities 22 and 23,

¹¹² Sanders XX day 6 pp 55-7; see also Mr Craighead's article, cited by Mr Sanders Final para 4.9 @ D4/8

¹¹³ Bulmer XX day 4 pp132-5

increasing the waiting times on the parallel run by 10% and 25% for the period 1995-1997 respectively.¹¹⁴ This revised assumption reduces the 10th percentile (for all players) by 3.3% or 4.7% respectively.¹¹⁵ It should be noted that the illustration given by Mr Sanders at paragraphs 10.8 – 10.9 of his Final Report [D4/64] is highly misleading.¹¹⁶

- iii. One has to say that sensitivities 22 and 23 almost certainly overstate the effect which the introduction of the irrecoverable losses would have had on speeding up the spiral in 1996 since (in effect) they give a three year kick-start to the spiral and attribute it all to the irrecoverable losses. In reality, the kick-start afforded by the section 1 losses would have lasted no more than 1 year and the spiral would then have been invigorated in any event by the recoverable section IIIA and BP/Atlantic Richfield losses.¹¹⁷ The point that the counterfactual waiting times should have been extended beyond 1997 seems unrealistic.¹¹⁸

Scenario A or B?

34. The relevant question is how much loss have the Syndicates in fact suffered in relation to the reinsured KAC and recoverable Exxon loss. They have in fact suffered that which they actually paid out in relation to those reinsured losses. The proportions of their actual UNLs insofar as made up of KAC or

¹¹⁴ D6/4. Mr Bulmer chose a starting point of 1995 so as to catch all 1996 loss settlements.

¹¹⁵ Original run 1 has a Scenario B 10th percentile of 80.4%: the revised figures are 77.1% and 75.7% respectively.

¹¹⁶ Original Sensitivity 18 [D2/Appendix L/293,296] increased the delays for the whole period back to 1989, on both runs of the model, and is irrelevant for comparison purposes: Mr Bulmer was unable to explain the illustration: XX day 6 pp 40-1.

¹¹⁷ The table of the R&Q UNL development @ D4/46 neatly illustrates the point.

¹¹⁸ Sanders Supplemental Final @ D7/160 fn 2.

recoverable Exxon losses establish what they have actually paid out in relation to such losses. This is what Scenario A demonstrates.

35. Posing the question in terms of what the Syndicates were liable for does not alter that analysis: the Syndicates were liable for the amount of the loss made up of KAC or recoverable Exxon elements and not for the amount of the loss made up of BA and irrecoverable Exxon elements.
36. Scenario A therefore satisfies the relevant legal test, as well as providing a robust evidential solution.
37. Scenario B looks at the counterfactual 'but for' situation – what if the BA or irrecoverable Exxon loss had not been introduced into the spiral. Equitas' primary submission is that this is not the most appropriate way in which to assess the amount of the Syndicates' recoverable loss for the following reasons.
 - a. First, the causation approach does not seek to answer the right question of what loss has actually been incurred in relation to the reinsured loss; instead, it seek to answer a different question of what loss would have been suffered if underlying claims settlements had been handled differently.
 - b. Secondly, the causation approach tends towards the proposition that any error at an intermediate level as to the legal scope of cover, the effect of which was to cause a loss to circulate upwards by a particular pathway, would entitle a reinsurer to refuse to indemnify his reassured who had settled on a correct legal basis, merely because of that underlying vice in the chain. This would appear to introduce by the back-door a requirement that proof of liability at each underlying level

is required, a position which is wrong for the legal reasons set out previously.¹¹⁹

- c. Thirdly, almost by definition, the causation approach will pose greater evidential difficulties and give rise to greater commercial uncertainty.¹²⁰

38. If, however, a causation-style approach to the assessment of loss is most appropriate in order to demonstrate what amount of the losses the Syndicates were liable for, Scenario B fulfils that requirement by demonstrating the effect of the stripping out of the BA and irrecoverable Exxon loss. On that premise, it would present an appropriate basis for calculating the Syndicates' recoverable loss.

THE FIGURES

The use of the 10th percentile

39. As is clear from Mr Sanders' evidence, there is no actuarial challenge to the use of the 10th percentile; it is obviously a conservative measure (for example, when contrasted with the use of an average); and there is no actuarial case that an even more conservative percentile (eg 1st or 5th percentiles should be used).¹²¹ Although the appropriateness of its use, on the facts of a particular case, may depend on the range and frequency of values below the 10th percentile,¹²² an examination of the lower values (see below) gives no cause for concern.¹²³

¹¹⁹ *Hill v Mercantile* does not 'implicitly' endorse the causation approach to proof of loss: it does not deal with proof of loss on a correct legal basis at all.

¹²⁰ Hence the market approach to the correction of errors and (so it was suggested) to the present unique circumstances was for a top-down, rather than causation-based, approach to refunds.

¹²¹ Sanders XX day 6 pp 76-7

¹²² This can work both ways. For example, on the extreme (and frankly not very serious) example given by Mr Sanders that Mr Bulmer might (unnecessarily) have introduced

KAC

40. The average 10th percentile **proportion** of KAC loss for all players across all 75 runs is 90.2%.¹²⁴ Equitas is content for that figure to be rounded down to **90%**. The robustness of that result, as a conservative assessment of the minimum likely proportion of the amount of KAC recoverable loss in the Syndicates' UNLs, can be tested by the following data at D5/Appendix D:¹²⁵

- a. The lowest average 10th percentile proportion for any run was 88.8% for all players or 89.1% for Lloyds players only (run 7).
- b. The lowest outlier 10th percentile proportion for any single player on any run was 80% (runs 22 & 48).
- c. From the graphs, which begin at D5/91, one can calculate that out of a total of 24,285 individual player results (75 runs x 331 marine writers of spiral business), only 15 outlier 10th percentile proportions for any single player on any run (0.06%) fell below 87% and only 40 such outliers (0.16%) cumulatively fell below 88%. Even if it had been suggested (which it has not been) that that 10th percentile was not conservative enough, these figures illustrate the comparative insignificance of altering the discount to an even lower percentile.

a whole series of small non-spiral players into the model, the use of the 10th percentile would produce too low a result: see paras 11.11-11.13.3 (it is Mr Sanders who uses the word 'seriously') at D4/68-70. This was the same point about 'ranking' in Mr Sanders' XX:day 6 pp 78-80

¹²³ Mr Sanders appeared to indicate that he might want to see what was happening 'in the tail' in considering the robustness of the 10th percentile: day 6 pp 89-91

¹²⁴ The average 10th percentile proportion of KAC loss for Lloyd's players only is 90.4% and for Lloyd's players with UNLs in excess of \$5m is 90.5%.

¹²⁵ These are figures for all players: the Lloyds only results are materially similar at D7/215-9

They also demonstrate that there is not, lurking below the 10th percentile, a large corpus of much lower readings.

- d. Mr Bulmer tested 1 million times (the 'Monte Carlo' method) the robustness of the average 10th percentile over all 75 runs, ie 90.2%, as regards a random sample of 14 players (the number of Syndicates claiming in respect of KAC- affected contracts) and found that the average fell below 90.2% on only 11 occasions (0.0011%).¹²⁶

41. The average 10th percentile **ratio** of recoverable KAC loss to total Cat 90V loss across all 75 runs is 86.9% for all players and 86.8% for all Lloyd's players alone.¹²⁷ Equitas is content for the appropriate figure to be taken as **86.5%**. The robustness of that result, as a conservative assessment of the minimum likely ratios of the amount of KAC recoverable loss to total loss in the Syndicates' UNLs, can be tested by the following data at D5/Appendix D:¹²⁸

- a. The lowest average 10th percentile ratio for any run was 83.8% for all players or 83.6 % for Lloyd's only players (run 53).
- b. The lowest outlier 10th percentile ratio for any single player on any run was 52% (run 9).
- c. From the graphs, which begin at D5/91, one can calculate that out of a total of 24,285 individual player results (75 runs x 331 marine writers of spiral business), only 6 outlier 10th percentile proportions for any single player on any run (0.025%) fell below 60%; only 32 such

¹²⁶ Bulmer Supplemental Final para 7.2 @ p50. Mr Sanders accepted that this was a relevant actuarial cross-check: Sanders XX day 6 p 114

¹²⁷ If the results are limited to players with UNLs in excess of \$5m, as Mr Sanders initially suggested but now appears non-committal (Sanders Final para 11.13.3 @ D4/70; cf XX day 6 p), the average 10th percentile ratio across all 75 runs is increased to 87.5% for all players and 87.4% for Lloyd's players only.

¹²⁸ These are figures for all players: the Lloyds only results are materially similar at D7/220-4

outliers (0.13%) cumulatively fell below 70%; only 81 such outliers (0.33%) cumulatively fell below 75%; and only about 270 such outliers (1.1%) cumulatively fell below 80%. The range of results is obviously greater for the ratios as opposed to the proportions but these figures nonetheless put the outliers into context.

- d. Mr Bulmer tested 1 million times (the 'Monte Carlo' method) the robustness of the average 10th percentile over all 75 runs, ie 86.9%, as regards a random sample of 14 players (the number of Syndicates claiming in respect of KAC-affected contracts) and found that the average fell below 86.9% on only 2 occasions (0.0002%).¹²⁹

42. A high level reality check for the KAC loss is provided by the fact that the original losses entered the spiral in the proportions: \$300m KAC and \$43m BA (ie only 12.5% BA).¹³⁰

43. On the balance of probabilities, the Court can conclude that it is likely that Lloyd's Syndicates who are not said to have had and do not have any extreme characteristics as regards Cat 90V UNLs will have incurred at least a 90% proportion of their Cat 90V UNLs, alternatively at least a 86.5% ratio of recoverable to total Cat 90V UNLs, by reference to the recoverable KAC element of the loss; alternatively such lower % (on either basis) as the Court considers is justified by the above figures.

Exxon

44. The average 10th percentile **proportion** of recoverable Exxon loss for all players across all 75 runs is 81.2% and for Lloyd's only players is 79.9 %. Equitas is content for that figure to be rounded down to **79.5%**.¹³¹ The

¹²⁹ Bulmer Supplemental Final para 7.4 @ p52.

¹³⁰ The actual timing of the losses is at Bulmer Final para 4.8 @ D2/24: because the BA liability losses were paid slightly later, a percentage closer to 90% is not unexpected.

robustness of that result, as a conservative assessment of the minimum likely proportion of the amount of recoverable Exxon loss in the Syndicates' UNLs, can be tested by the following data at D5/Appendix H, as modified by the table of Lloyd's players only results at D7/tab 23/p225-9:

- a. The lowest average 10th percentile proportion for any run was 79.3% for all players or 77.6% for Lloyd's players only (run 23).
- b. The lowest outlier 10th percentile proportion for any single player on any run was 68% (runs 19, 22 & 63).
- c. From the graphs, which begin at D5/213, one can calculate that out of a total of 21,375 individual player results (75 runs x 285 marine writers of spiral business), only 3 outlier 10th percentile proportions for any single player on any run (0.014%) fell below 70% and only about 95 such outliers (0.44%) cumulatively fell below 75%. Even if it had been suggested (which it has not been) that that 10th percentile was not conservative enough, these figures illustrate the comparative insignificance of altering the discount to an even lower percentile. They also demonstrate that there is not, lurking below the 10th percentile, a large corpus of much lower readings for the Exxon recoverable proportions.

45. The average 10th percentile **ratio** of recoverable Exxon loss to total Cat 89G loss across all 75 runs is 80.6% for all players and 79.0% for all Lloyd's players alone; and 78.8 % for Lloyd's players alone with UNLs in excess of \$5m. Equitas is content for the figure to be rounded down to **78.5%**. The robustness of that result, as a conservative assessment of the minimum likely ratios of the amount of recoverable Exxon loss to total loss in the Syndicates' UNLs, can be tested by the following data at D5/Appendix H, as modified by the table of Lloyd's players only results at D7/tab 23/p230-4:

¹³¹ This rounding down would also take into account the fact that the average 10th percentile proportion for Lloyds players alone with UNLs in excess of \$5m is 79.7%.

- a. The lowest average 10th percentile ratio for any run was 77.8% for all players or 75.2 % for Lloyd's only players (run 35).
- b. The lowest outlier 10th percentile ratio for any single player on any run was 52% (run 63).
- c. From the graphs, which begin at D5/213, one can calculate that out of a total of 21,375 individual player results (75 runs x 285 marine writers of spiral business), only 7 outlier 10th percentile proportions for any single player on any run (0.03%) fell below 60%; only about 75 such outliers (0.35%) cumulatively fell below 70%; and only about 475 such outliers (2.2%) cumulatively fell below 75%. The range of results is obviously greater for the ratios as opposed to the proportions but these figures nonetheless put the outliers into context.

46. A high level reality check for the Exxon loss is provided by the following facts:

- a. by December 1995, before the introduction of the Section 1 loss, the Exxon UNL was already standing at about \$6b; one can see from the Exxon Control sheets that for the larger UNLs, this represented about 60% of the 2007 UNLs.¹³² R&Q had incurred about 68% of its Exxon UNL by this time;¹³³ Mr Sanders indicated that (left alone) this would have slowly developed to about 70-80% of the final UNL;¹³⁴

¹³² The figures are at H/tab 14/p47: the figures are 63% (for Syndicate 745) 59.5% (for Syndicate 185) and 56% (for Syndicate 299). Apart from the fact that the Gooda Walker Syndicate 298 had already vertically exhausted its cover with over \$200m worth of losses, the control sheet records other Syndicates having already incurred 75%-85% of their 2007 UNL's (eg Syndicates 2, 418 & 535). It is fair to say that Syndicates with smaller UNLs had incurred less than 50% of their 2007 UNLs by December 1995.

¹³³ Sanders Final para 8.26 @ D4/46-7

¹³⁴ Sanders XX day 6 pp 73-4

b. the introduction of the irrecoverable section I Exxon losses in 1996 (about \$300m) represented approximately 5% of the gross losses; the introduction of the irrecoverable Section IIIB losses in 1997 (about \$60m) represented at most¹³⁵ another 1% of the gross losses. Treating these irrecoverable losses as having circulated twice within the liability/rig layers before becoming combined in the spiral and thus as giving rise to a 13-14% element of irrecoverable loss does not appear unreasonable.¹³⁶ The development of the R&Q account suggests (in crude terms) a similar contribution of irrecoverable loss to the overall UNL.¹³⁷

47. On the balance of probabilities, the Court can conclude that it is likely that Lloyds Syndicates who are not said to have had and do not have any extreme characteristics as regards Cat 89G UNLs will have incurred at least a 79.5% proportion of their Cat 89G UNLs, alternatively at least a 78.5% ratio of recoverable to total Cat 89G UNLs, by reference to the recoverable element of the Exxon loss; alternatively such lower % (on either basis) as the Court considers is justified by the above figures.

¹³⁵ The Section IIIB losses (after facultative retentions) introduced another \$60m into a spiral which (i) would have continued to increase during 1996 in any event and (ii) also received the boost of recoverable Section IIIA and BP/Atlantic Richfield losses of \$372m at the same time or later during that year.

¹³⁶ Bulmer Supplemental Final para 2.111 @ D5/27, revising Final, para 7.8 @ D2/34

¹³⁷ Sanders Final para 8.26 @ D4/46-7. The recoverable losses had already reached 68% and would have continued up to 70-80%: Sanders XX day 6 p 73; but even ignoring that development, the section 1 losses contributed no more than 12% of the UNL; and of the additional 20% kick-started in 1997, only 12.5 % of the 20% or 2.5% of 100% would have been contributed by the Section IIIB losses.

UNCC Refunds

48. Equitas is none the wiser as regards the legal relevance of this issue to the present claims.
49. It is common ground between all the experts that the Syndicates only have to give credit for refunds which they have actually received.¹³⁸
50. Equitas has given credit, in its schedules, for all UNCC refunds received by the relevant Syndicates claiming on the KAC-affected contracts. There is no suggestion to contrary effect, let alone any counterclaim seeking recovery of any refunds which have not been passed on.
51. The refunds received by Equitas (some \$139m in total) have been processed to first tier reinsurers, Lloyd's and non-Lloyd's, including R&Q. There the process has stopped, no doubt awaiting the results of this litigation.
52. It is wholly unclear why it is said that the model should include refunds, on the artificial assumption that they have been received by the market (when, save as regards the first tier reinsurers, they have not been).
- a. The purpose of the model is to identify the mix of the KAC/BA losses, what proportion of the sums actually paid has been paid in relation to the KAC and BA elements of the loss, and what the ratio of KAC losses are to the whole of the Cat 90V UNLs actually paid.
 - b. Since the refunds have not been received by the spiral players, the fact that they may receive them hereafter, if the and to the extent that the process is 'kick-started,' is irrelevant to the above issues.
 - c. Thus, if the refunds were introduced at the direct level (where they have been received) and then spiralled through the model to see what

¹³⁸ Emney XX day 3 p77; Cornick XX day 3 p134.

the ultimate outcome might (hypothetically) have been, this exercise would not bear on the respective proportions of the sums which had actually been paid (without refunds) by the market; nor (as regards Scenario B), would it bear on the only relevant counterfactual situation which is what would have happened if the BA losses had not entered the spiral. It is not a relevant counterfactual to ask: what would have happened if refunds had been circulated through the spiral on the original presentation of the claim.

53. The question of UNCC refunds is a known factual issue which, as Mr Berry said,¹³⁹ requires no modelling at all.

54. Finally, the separate question of refunds of overpaid Cat 90V or Cat 89G losses reared its head in openings. There has never been any counterclaim by R&Q in respect of overpaid losses; the legal issues inherent in a claim for the recovery of sums paid under market-wide settlements are not necessarily the same as those involved in claims to recover unpaid losses; and above all, it should not be assumed that this is a 'one way ticket' for R&Q since R&Q, as reassureds, have themselves received plenty of settlements from Lloyd's Syndicates on the pre- *Scott v Copenhagen* / *King v Brandywine* basis.

The Relief Sought

55. The Court is referred to paragraph 85 of Equitas' Opening. No adverse comment has been made on the wording of the proposed declarations, which have been drafted to reflect the fact that Equitas claims herein for both KAC and Exxon losses and for other non-KAC/Exxon losses, which are said to be affected by underlying exhaustion issues.

30 June 2009
7 King's Bench Walk, Temple

ALISTAIR SCHAFF QC
SIMON KERR

¹³⁹ Berry XX day 3 pp22-3