Report of an inquiry into Lloyd's syndicate participations and the LMX spiral

June 1992

26th June 1992

D.E. Coleridge Esq
Chairman
Lloyd's
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Dear Chairman,

At the end of February, you asked me to inquire into allegations that syndicate participations at Lloyd's were arranged to the benefit of working names and to the disadvantage of external names; and into the operation of the LMX spiral, where it has been suggested that the business was primarily for the benefit of brokers and underwriters at the expense of members of syndicates. I formed a small committee to assist me in this task, and we now present our report.

The committee comprised the Rt Hon. Sir William Clark, John Lock, chief executive of Mercantile & General Reinsurance Group and an executive director of Prudential Corporation, Peter Mynors, senior partner in the insurance practice of Coopers & Lybrand, Leslie Lucas, chief executive officer of Norwich Winterthur Reinsurance Corporation, and Jonathan Foster of the solicitor's department of the Corporation of Lloyd's, who was seconded to act as secretary of the committee. My colleagues brought together an exceptional mix of professional experience and wisdom, and I am very grateful to them.

In undertaking the inquiry, the committee has had the benefit of advice and considerable technical analysis from Harold Clarke, a consultant actuary of Bacon & Woodrow, and enthusiastic technical and other help throughout from Roger Holmes and Edward MacKenna of the Corporation staff. We have also had ready assistance from all of the many other Corporation staff to whom we have turned.

Both the committee as a whole and individual members have had a large number of discussions with representatives of names' action groups, market practitioners and others. We have received and reviewed some 200 letters and submissions, inlcuding original and substantial analyses in some cases, from action groups, from those acting for them and from individual names. This input has been highly relevant for our deliberations, and we are very grateful to those concerned.

There is understandably great anxiety in the wake of the catastrophic losses sustained by many names. Our findings do not, of course, provide a panacea for the relief of such losses, and it was not part of the task of the committee to advise on possible remedies. The committee have, however, been impressed by the extent of concern that, despite the severity of difficulties for many individual names, it is of immense importance for Lloyd's to learn from the hards and sharps of recent experience and to find a way forward.

It is in this spirit that we have approached our task, and we believe that implementation of our proposals will greatly reduce the risk that comparable losses will ever be faced by names in future. While we find much to criticise, weaknesses that have been identified can be rectified, though the task needs to be approached vigorously. None of our proposals is inconsistent with the thrust of the Task Force Report, and follow-up action on most of them could be grafted on to the work programme that is already in hand on the Task Force recommendations.

Yours sincerely,

David Walker

Sir David Walker

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1 Introduction and summary

1.1 Unlike the reviews being undertaken into individual loss-making syndicates, involving a reconstruction of the detail of the activities and performance of these syndicates over an extended period, the committee has reviewed the operation of the London market excess of loss (LMX) spiral as a market-wide phenomenon, and its approach to the syndicate participation issue has been similarly broadly-based. The committee has sought and obtained sufficient information and evidence to give it a clear understanding of these matters and has reviewed points of concern raised in the many submissions that have been made. The report does not, however, identify specific individuals, agents or firms by name, although some syndicate numbers are referred to in chapter 5 and related appendices.

1.2 The committee did not in its own investigations form a view that there was any fraud or conspiracy to disadvantage particular groups of names or to advantage others. The committee was mindful that the losses sustained on LMX business were not confined to Lloyd's syndicates; as a result of underwriting judgements similar to those made by loss-making syndicates, a number of corporate reinsurers also lost substantial sums on their LMX exposures. We are aware of allegations relating to the manipulation of time and distance policies in the case of one syndicate, but these matters are for consideration elsewhere and we have not looked into them.

1.3 But while a substantial part of the differences in performance experienced in LMX business by different Lloyd's and corporate reinsurers reflected differing underwriting judgements, the committee viewed standards of professionalism, care and diligence on the part of a number of members' and managing agents and active underwriters as falling materially below best practice; the approach to fiduciary responsibilities, in the case of several members' agents, as lax, with an unattractive appearance of preferencing of brokers and of members' agents themselves in some cases; and certain aspects of regulatory policies, at any rate with hindsight, as insufficient to identify shortcomings in performance and concentrations of exposures in a timely way.

1.4 As part of the inquiry, a substantial analysis has been undertaken in respect of syndicate allocation and performance. It has been necessary to use approximations and estimated data for this purpose and the figures used for syndicate performance in 1989 were those available in mid-June and may thus be subject to change. On this basis, the analysis indicates that insiders have tended overall to fare better than external names though not, in general and in most years, on an immodest scale given the inevitably superior market knowledge available to many working in the market as against outsiders. Beyond this generalisation, however, the committee found that the proportion of new capacity allocated to external names in the 10 LMX loss review syndicates was slightly higher than that for the allocation of new external capacity to all syndicates taken together; and that, in some cases, insiders were substantially advantaged by their membership of certain syndicates while others, in particular certain members' agents, fared as badly as their external names through the recent phase of losses.

1.5 Looking ahead, we believe that there is need to underpin the duties of members' agents under the law of agency and existing Lloyd's byelaws with further and specific conduct of business regulation, designed to ensure fairness in syndicate allocation and to promote standards of advice and protection for names comparable with those for private investors under the Financial Services Act.

1.6 In the view of the committee, the growth of LMX business through the 1980s, with the catastrophic losses sustained in 1988 and 1989, is wholly explicable in terms of commercial factors and judgements, and we do not find the development of the LMX spiral to have been improper or to have been distorted by conspiracy or misfeasance. Equally, however, we were unimpressed by standards of performance achieved by some managing agents and believe that what proved to be seriously flawed underwriting judgements might have been constrained if active underwriters had been subject to more effective control by their managing agents. We attach particular importance in this respect to mandatory provision for peer group review through managing agents of the plans, policies and performance of every active underwriter.

1.7 In relation to regulation, we are particularly concerned at the inadequacy of premium income monitoring as a means of constraining high risk exposures to capacity, a problem which is of special seriousness in Lloyd's since insureds, including other Lloyd's syndicates, are under no commercial compunction to assess the credit-worthiness of a syndicate that is providing them with reinsurance protection. These factors together meant that neither regulatory nor commercial disciplines were sufficiently effectively brought to bear on syndicates with large unprotected exposures in relation to their capacity. The committee recognise the difficulty, not of course only for Lloyd's, in assessment of the riskiness of particular types of business and exposure. But assessments of such risks have to be made, and we believe that Lloyd's should undertake or commission research work so that it is at least as well informed on these matters as its competitors. We do not believe that the use of risk weights to be derived from such work should be prescribed centrally, but we propose that regard should be had to them in setting limits to the proportion of the total capacity of individual names that might be written in particularly high risk business.

1.8 The agency and regulatory problems as described above were both individually and, still more, cumulatively, serious in themselves. But it was the sequence of large loss events beginning with the North European storms in 1987 and Piper Alpha in 1988 that brought them and their consequences into prominence.

1.9 Developments over the last few years have done serious damage to the confidence of names. The damage is not only to names who have suffered large or catastrophic loss but also to those who, while more fortunate, will have to contribute in one way or another to the relief of the biggest losers and the maintenance of the central fund. That greater harm has apparently not been done to the confidence of the insureds and reinsureds who are Lloyd's clients around the world reflects the continuing robustness of Lloyd's reputation and the recognition by clients that the capacity of many corporate reinsurers was similarly eroded by the same set of catastrophes in the late 1980s.

1.10 The damage to the capital base provided by the membership is not, however, irreparable. The committee believes that confidence in Lloyd's conduct of its affairs can be rebuilt - necessary not only for the existing capital base but also for the prospect of introducing corporate capital as proposed by the Task Force - if firm and early action is taken. Most of the recommendations in this report, set out in individual chapters and comprehensively listed in Appendix A, are capable of early implementation, and all could be undertaken within the framework of self-regulation under which Lloyd's currently operates without need for any change in primary legislation.

1.11 The committee do not believe that the weaknesses that it has identified are significantly attributable to the constitutional arrangements under which Lloyd's is regulated. But we do welcome the proposal that regulatory responsibilities within Lloyd's should be exercised by a regulatory board which, though appointed by the Council, would have substantial autonomy in regulatory matters and would be chaired by a nominated member, who would have an independence that is not available to a working or external name.

1.12 With respect to regulation more generally, the committee make the following observations that are recurring themes throughout the report:

(a) We see the need for a deliberate change in Lloyd's regulatory approach in the direction of a more pro-active stance in the monitoring of compliance with standards set and more vigorous enforcement and disciplinary action in respect of regulatory breaches: a change on these lines will require unequivocal direction and support from the Council and, assuming it is put in place, from the new regulatory board.

(b) We believe that such a redirection of regulatory approach may call for additional resource but that, given a careful targeting of effort, any extra regulatory cost should be no more than modest: we recommend that, in addition to a strengthening internally, Lloyd's regulatory arm should have access to an advisory panel of practitioners, some but not all of whom may be retired, as a point of reference and guidance.

(c) Our recommendations relating to standards for the performance of their duties by managing and members' agents generally go with the grain of existing best practice to be found in the market; the challenge for Lloyd's as regulator is to ensure that the standards of the rest are consistently brought much closer to the standards of the best, and we believe that the proposed change in regulatory approach will be essential to achieve this.

(d) We believe that Lloyd's as regulator should be readier than hitherto to pursue cases where standards achieved by agents are inadequate, even where these do not involve misfeasance calling for disciplinary or criminal sanctions.

(e) Needless impairment in the flexibility available to active underwriters must plainly be avoided, but we warn against the unrealism of the apparently continuing sense in some parts of the market that underwriters cannot operate effectively unless their discretion is largely unfettered; in particular, we wish to stress the importance of proper discharge of their responsibilities by managing agents, in relation to the setting and monitoring of underwriting plans, though with peer group review among agency underwriters as a key part of this process.

(f) Throughout our inquiry, we have been reminded and are very conscious of the importance of the competence of underwriters, managing agents and members' agents. We do not address this subject in any detail but fully support the recommendations for strengthening professional skills as set out in the Task Force Report.

(g) Implementation of proposals designed to promote more consistently high standards of agents' performance should enhance both the suitability and equity of capacity allocation to names. But this should not be as passive and reactive a process for names as it has been for many in the past; we hope that the lively engagement of names in present disputes will be succeeded by a greater continuing interest on the part of names in their underwriting affairs in less unsettled times. A combination of better disclosure and more pro-active regulation can do a great deal to protect names' interests; but in common with private investors who enjoy protection under the Financial Services Act, names should not have unrealistic expectations as to what regulation can deliver, and should always be critically alert to their own interests, and not merely when things go wrong.

1.13 The remit of the committee called for a review of market-wide issues and we have thus had considerable recourse to data held centrally in Lloyd's. But some of this material was insufficient for our purposes: for example, Lloyd's does not hold data in readily retrievable form on the historic performance of syndicates and Lloyd's Policy Signing Office (LPSO) does not retain data in a format apt for analyses of business undertaken in the market such as LMX spiral transactions. We were able to use outside sources of data, including data from Financial Intelligence and Research Ltd., for part of our work, but we propose that Lloyd's centrally should, in future, be more attentive to the collection, quality and accessibility of data for the purposes of analysis such as that carried out by the committee and which is likely to be important on a regular basis in future.

1.14 The following chapters address the allegations that LMX spiral business in Lloyd's in the mid-1980s involved an improper trading of reinsurance contracts to the benefit of brokers, active underwriters and other market professionals with little or no prospective benefit for names. Chapter 2 describes the LMX spiral as it developed and operated in the London market in the 1980s: chapters 3 and 4 provide a critical appraisal with recommendations designed to minimise the risk of a recurrence of the negative features of such business of the kind that have been encountered recently. Allegations that members' agents "dumped" external names on what were known in the market to be both high-risk and badly-run syndicates are examined in chapters 5 and 6, in parallel with allegations that market insiders acquired participations on the most successful syndicates to the exclusion of external names. Chapters 7 and 8 review the role and performance of members' and managing agents respectively and set out recommendations designed to promote better performance and discharge of their obligations in future.

2 The development of the LMX spiral

2.1 In the period 1987 to 1990, insurance and reinsurance markets were impacted by an unprecedented number of major catastrophe losses, viz 1987, North European storms; 1988, Piper Alpha and Hurricane Gilbert; 1989, Hurricane Hugo, the San Francisco Earthquake, Exxon Valdez, and Phillips Petroleum; 1990, North European storms. The cumulative impact of these losses was severe on both companies and syndicates. For example, it is noteworthy that of the 10 leading sources of loss for a major LMX corporate reinsurer, 3 were claims from other companies and 7 were from Lloyd's syndicates. A major broker has estimated that for the 1987 Northern European storms, Piper Alpha, Hurricane Hugo and the 1990 Northern European storms, companies carried 69%, 45%, 64% and 64% of the liability respectively, but still leaving substantial losses for Lloyd's syndicates. But although 87 syndicates were writing significant LMX business in 1988 or 1989 - in one case 93% of that syndicate's stamp capacity - 95% of the losses attributable to those syndicates for the 1988 account were encountered on 12 of those syndicates and 79% of the losses of the LMX syndicates for the 1989 account were attributable to 14 of them. The table below shows the overall performance of LMX and other Lloyd's syndicates over the period 1987-89 in absolute terms:

Overall performance[1] of LMX and other syndicates in absolute terms, 1987-89

	1987		*1988*		*1989*	
	figures in £ million[3], losses in brackets					
14 major loss-making LMX syndicates[2] in 1989	(38.7)	(6%)	(197.4)	58%	(951.7)	51%
Other 73 LMX syndicates	119.4	18%	(18.3)	6%	(214.9)	11%
All LMX syndicates	80.7	12%	(215.7)	64%	(1,166.6)	62%
Total Lloyd's result[4]	692.4		(338.9)		(1,878.1)	

(1) Includes investment return and personal expenses
(2) LMX syndicates are defined in chapter 5, para 10 infra
(3) Percentages are of total Lloyd's market result
(4) These figures are for the underwriting year of account (ie excluding earlier run-offs) but include subsequent deterioration of accounts of that year if now in run-off.

2.2 LMX business is a form of reinsurance developed and largely transacted in the London market by both corporate reinsurers and Lloyd's syndicates. The basis of LMX business is essentially the same as that of mainstream excess of loss treaty reinsurance. Under an excess of loss reinsurance contract, the reinsurer agrees to indemnify the reinsured in the event of the latter sustaining a loss in excess of a pre-determined figure, the deductible. The reinsurer is liable for the amount of the loss in excess of the deductible up to an agreed amount, the deductible being the amount retained, or retention, for the reinsured's own account. The purpose of excess of loss reinsurance is thus to limit the exposure of the reinsured on any loss, whether this arises from a large individual risk or through an aggregation of losses from a number of risks affected by a single event or loss occurrence.

2.3 In providing cover to primary insurers, accepting reinsurers may themselves accumulate exposures higher than they wish to retain. To meet their requirements for protection, the retrocession of excess of loss reinsurance developed as a mechanism to spread exposures more widely. A new feature, however, emerged in the London retrocession market and developed rapidly during the 1980s, namely that many of those using the market to obtain reinsurance began to accept such reinsurance business themselves from other participants in the market. The LMX spiral was created through the interchange of business to which this led, involving a transfer of exposures within the market rather than their dispersal, as in the classic reinsurance mechanism, to an increasing number of reinsurers.

2.4 "Specific" LMX treaties provide protection in respect of certain specific portfolios of business accepted by the reinsured (e.g. hull, cargo, oil rigs); "whole account" LMX treaties (sometimes called "generals") provide protection for the total portfolio of business written by the reinsured. In both types of cover, a normal feature is that, within the portfolio of business protected, there can be acceptances of reinsurance portfolios on an excess of loss basis so that the LMX reinsurer is providing excess of loss reinsurance on excess of loss business. In this report, the general term LMX is used to describe both types of excess of loss business unless otherwise specified.

2.5 LMX business is excess of loss reinsurance which protects the whole or part of the portfolio of a Lloyd's syndicate or corporate reinsurer. Such reinsurances are arranged in a programme comprising layers of cover each in excess of another, with a limit to each and every loss, and limited to a number of reinstatements of cover. The "vertical" structure of the programme typically provides a maximum amount of cover to protect the syndicate against loss arising from a single occurrence or event. The occurrence or event which triggers the loss to the layer may arise from exposure in respect of damage to a single high-value property, such as Piper Alpha, or an accumulation of damage to a large number of properties affected by the same event, such as Hurricane Hugo. The cover available to the reinsured is limited both in the amount recoverable in respect of a single loss and in respect of the frequency of individual and separate losses. It follows that, in addition to the underlying net retention, the reinsured is exposed to those losses that exceed the cover provided by the reinsurance programme. In other words, when the programme is exhausted, losses thereafter fall to the syndicate or corporate reinsurer.

2.6 In determining the need for excess of loss reinsurance protection, a primary insurer will make an assessment of the exposures in his portfolio of business in respect of both a single risk and also of the accumulation of risks which are subject to the same peril. The same base of information is similarly used by the first-tier reinsurer to determine the limits and price of the reinsurance protection that he provides. When that reinsurer himself seeks protection, he is in turn able to make an assessment of his own book of inward reinsurance business made up of acceptances from a number of different insurers.

2.7 But the transparency of risk was eroded in the LMX spiral as successive reinsurers became more remote from the original insurance assessment and contract. The transfer of risk within the market meant that transparency virtually disappeared beyond the initial levels of the spiral because there was no practicable means available to an accepting LMX reinsurer to establish what size of original insurance loss would trigger a claim under a particular LMX contract. It followed that the only certainly known features of the LMX contract for the accepting reinsurer were the deductible or excess point, the money limit of exposure to the contract, and the premium. The committee were informed that this problem of diminishing transparency (or increasing opacity) in successive layers of the spiral led some LMX underwriters to determine, as a matter of policy, not to write LMX business above a certain level of excess. Equally, however, it seems that some underwriters who were readier to take on LMX business typically questioned the broker only about the premium rate on the previous layer.

2.8 In these circumstances, a prudent LMX underwriter would have monitored his aggregate exposures very closely, and would have rated his probable exposure to loss as a high proportion of the aggregate liabilities of the total portfolio of business written. Within this general statement, however, it is clear that the chance of a total loss on the exposures accepted was more likely in the case of specific LMX business than under whole account business, where it was improbable that all the business in the protected account would be involved in the same original loss. It was suggested to the committee that a prudent underwriter might assess his loss exposure at 100% in the case of specific excess of loss on excess of loss business and 80% in the case of whole account business. In practice, evidence shows, not surprisingly, that there were considerable divergences of underwriting approach and judgement among LMX underwriters in determining the extent to which they would retain or reinsure onwards their aggregate exposures. In any event, LMX underwriters were increasingly obliged to assess, in successively higher layers, whether the perceived increasing remoteness of the risk of loss justified the expense of taking a further layer of outwards protection.

2.9 The accumulation of largely commercial factors favourable to the development of LMX business, and the consequent spiral, was not seen, at any rate initially, to involve a separate market, but rather to be part of a responsive reinsurance chain, accommodating the increased size of risks requiring cover. These commercial factors prominently included: the opportunity to boost premium income and thus agency remuneration from apparently profitable LMX business in circumstances in which underwriting capacity was increasing rapidly and other underwriting business (above all marine, with the shrinkage in shipping tonnage) was sluggish or in decline; the interest of brokers in boosting their brokerage earnings on this business; and concern on the part of some underwriters to avoid long tail business.

2.10 More specifically, there was a significant growth in insured values during the late 1970s and 1980s, not least as a result of the exploration and development of North Sea oil and gas. There was also a reduction in traditional reinsurance capacity, particularly in the form of proportional treaty business, as a result of losses made in the early 1980s. Excess of loss business became more widespread and, because of the growing size of risks, excess of loss on excess of loss reinsurance increased. For the whole market, gross premiums for business written in the 1988 account showed a 61% increase by comparison with premiums for business written in the 1983 account, with a growth of 201% in premium income of the LMX syndicates over the same period. In the same period, the growth of marine business was relatively slow, with gross premiums as stated in the statutory statement of business increasing by only 33% for marine business.

2.11 Apart from these external commercial influences, participants in LMX business appear genuinely to have believed that the transactions that they carried out would lead to an improvement in the profit potential of their portfolio of business measured in terms of the ratio of revenue to exposure. This no doubt accounts for the development of a business which, to an outsider, would appear to consist largely of passing similar exposures around the market while the premium was successively reduced as the perceived riskiness of the higher layers diminished and through the deduction of brokerage.

2.12 In parallel with the situation in Lloyd's, the London company market also both provided capacity to and placed its exposures in the LMX market. There was, however, a check to the spiral as a whole as a result of the placing of outward contracts with reinsurers, whether syndicates or companies, who did not reinsure themselves further with other spiral participants. Moreover, premium rates for higher layers of reinsurance protection fell to very low levels and underwriters whose assessment of risk in the higher layers was such that they were ready to write at these low rates would not always have been able to secure outward protection on terms that left them with a prospective margin of profit.

2.13 Three features of the LMX spiral in the 1980s are particularly noteworthy. First, premium rates diminished in successive layers on the basis that the risk of a small loss, affecting only the lower layers, was greater than the risk of a large loss that would involve claims on the higher layers of the spiral. Second, as a consequence of the reduced opportunities for profitable marine underwriting, marine underwriters were increasingly drawn into writing LMX business, apparently without co-reinsurance. But this involved exposures and a need for judgements different from those with which even experienced marine underwriters were familiar: and the readiness of marine underwriters to reinsure LMX exposures for non-marine syndicates and corporate reinsurers may be interpreted, with hindsight, as at least partial evidence of their relative inexperience in such business.

2.14 Third, given the very large number of LMX contracts that were written, LMX reinsurers frequently reinsured at one layer risks that they had substantially transferred outwards in an earlier layer. LUCRO, the Lloyd's Underwriting Claims and Recovery Office, saw 43,000 claims on 11,500 excess of loss policies in respect of the Piper Alpha loss. A consequence of the spiralling of LMX business was that the claims turnover associated with an individual catastrophe greatly exceeded the amount of the actual loss. In the case of Piper Alpha, gross claims transactions have been estimated at $15 billion for the whole of the London market (including corporate reinsurers as well as Lloyd's syndicates), whereas the actual loss (ultimately borne about half within Lloyd's and half outside) was $1.4 billion. In other words, the spiral engendered a claims turnover of some ten times the actual loss. A similar multiple has been suggested to the committee for the spiral in relation to the Exxon Valdez claim.

2.15 It should be emphasised that the operation of the spiral in this way did not increase the net loss borne by reinsurers. It did, however, have two major consequences that were at least problematic. First, many underwriters retained a very low retention and bought reinsurance to improve their premium to risk position. The consequence was that a very large part of the market's exposures ended up with the underwriters of the higher layers of cover who, where rigorous assessments were made, presumably decided to retain a large exposed position on the assumption that the risk of a loss was remote and did not justify the cost of purchasing further reinsurance protection.

2.16 In respect of the assessment of risk, it was relevant that, unlike the non-marine market experience with Alicia in 1983, the marine market had not seen any major catastrophes for some years and was more familiar with a high frequency of small losses: no doubt this difference in experience was relevant to the writing of substantial LMX business by marine underwriters with a greater proportion of unprotected exposure. Through not purchasing further reinsurance, a reinsurer brought the spiral to an end and, in consequence a catastrophe such as Piper Alpha rapidly worked its way vertically through the retentions and lower layers of reinsurance programmes of syndicates in the spiral and crystallised the exposures at the higher layers of reinsurers who had not sought protection at the top. Whereas reinsurance is classically a means of risk dispersal, the spiral operated to concentrate risk on the unfortunate syndicates at the top or end of the spiral.

2.17 Second, the risk premium available in the LMX market had been substantially eroded over the years by price competition. On the question of price, it is relevant that the 20 years prior to the October 1987 storms and Piper Alpha in 1988 had been largely free of major catastrophe losses and, in consequence, the results of such business, particularly at higher layers, had been extremely favourable. In addition, it was clearly believed by some underwriters that the highest layers of cover were beyond the reach of any likely loss event. It is noteworthy also that, despite the losses sustained in the wake of the 1987 storms and Piper Alpha in 1988, reinsurers were still ready to accept LMX business in 1989 at low premium rates, no doubt partly on this assumption that similar catastrophes were unlikely to be encountered in the early future. The final factor in creating a seriously underpriced business was the market's acquiescence in allowing brokerage of 10% of premium in all LMX transactions.

2.18 For a time, in particular in the mid-1980s, the LMX syndicates that subsequently registered significant losses yielded positive returns. Seen in the light of subsequent events, the problem of LMX business has been not only the large losses suffered by some syndicates latterly but the inadequacy of returns, given the riskiness of the business, in these earlier nominally profitable years. Although many names have protested that they were not made aware by their members' agents of the risks involved in writing this business, it is clear that some underwriters whose syndicates subsequently suffered heavy losses drew attention in their annual reports to the riskiness of the LMX business that they were writing; and, in other cases, names who subsequently sustained heavy losses were enthusiastic (consistent in some cases with commercially-published views on syndicate performance) to join syndicates writing significant proportions of LMX business.

2.19 The gross capacity of the whole Lloyd's market grew by 168% between 1982 and 1988: capacity growth was then less than ½% between 1988 and 1990. Aggregate gross premium income of the Lloyd's market grew as a percentage of gross capacity from 66.8% in 1981 to 85.1% in 1984, before falling back to 45.8% in 1988 and rising again to 54.7% in 1990. Over the same period, gross premium income of the LMX syndicates as a proportion of Lloyd's total gross premium income rose from 13.1% for the 1983 account to 24.6% in 1988 and 26.4% in 1990. Gross intersyndicate reinsurance premiums as a proportion of Lloyd's total gross premiums passing through LPSO rose from 9.1% in 1984 to 14% in 1988 and 16.1% in 1990.

2.20 Alongside and associated with the rapid development of LMX business in the 1980s:

(a) Competition for business, accentuated by the intrusion into the LMX non-marine market of many marine underwriters with little or no experience of that business, led to the availability of cheap and plentiful reinsurance. As a consequence, many underwriters took the opportunity to reduce their own underlying retentions and were also able to obtain the removal of co-insurance participations from their reinsurance programmes. The effects of these developments were to increase the exposure of LMX reinsurers to low value as well as catastrophe losses and to accelerate the shifting of exposures up the LMX reinsurance chain or spiral.

(b) Premium rates for LMX business fell substantially. In circumstances of apparently reasonable profit levels (in the years between 1965 and 1987, the worldwide reinsurance market was relatively undisturbed by major catastrophes, thus generally leaving reinsurers with a 22-year span of profitable results) and rapidly increasing capacity, premium rates in 1987 and 1988 had fallen to only 10% of those being charged ten years earlier and were reduced in higher layers as a consequence of the perceived diminution in exposure.

(c) There was an apparent convergence of interest of names, active underwriters, managing and members' agents and brokers through the possibility of making money in LMX business in the good years. This was underpinned by the informal payback understandings between cedants and their reinsurers, whereby, in the event of a claim, the cedant would place continuing business with the reinsurer at a higher premium rate sufficient to enable the latter to recoup his loss over a subsequent period. The difficulty with these understandings in the event was that they were not designed to cope with catastrophes and concentrations of risk on the scale experienced in 1987 and subsequently, nor with circumstances in which the reinsuring syndicate no longer existed as a going concern.

3 LMX spiral business: critical appraisal

3.1 In this and the following chapter we seek to evaluate the impact of LMX business in the 1980s and make recommendations for policy initiatives that would substantially reduce or eliminate the prospect of a recurrence of the negative aspects of the spiral at some point in the future.

3.2 For market practitioners within Lloyd's, LMX business was attractive for a number of reasons in a phase when direct insurance and proportional reinsurance business was sluggish or in decline and LMX business was apparently profitable before the recent period of heavy losses:

(a) Managing agents and active underwriters are remunerated by reference to stamp capacity and profitability. The LMX market provided an opportunity to boost premium income through the acceptance of business which, in the absence of catastrophes, was profitable. The business was also relatively cheap to administer and produced an attractive initial cash flow. Past experience also indicated that the progress of a claim through the spiral did not start until long after the original event and was then slow, thus adding to the financial attractiveness of the business. Finally, for most participants substantial secure and cheap reinsurance protection was available for the exposures assumed.

(b) Members' agents are remunerated by reference to the capacity that they place on syndicates and through profit commission; syndicates writing LMX business were able to absorb the increase in underwriting capacity and thus enable members' agents to place their names.

(c) Brokers received brokerage commission at 10% of premia on all LMX business placed and thus had a keen interest in expanding the volume of business transacted in the LMX market.

3.3 The development of the LMX spiral within Lloyd's involved two major features. First, the aggregate underlying net retentions of the participants, that is, the amount of loss after excess of loss reinsurance recoveries which would arise in the event of a major claim, were substantially less than the total amounts of exposure retained by the participants. In other words, many syndicates were carrying a large unprotected exposure above the upper limit of their reinsurance protections. Second, these unprotected exposures were substantially concentrated in those syndicates writing at the top end of the spiral.

3.4 The latter phenomenon was akin to gearing up in any other business and - as in any other business - can be advantageous, within limits. It needs to be recalled that the function of underwriters is to assume risks where the rewards are judged to be commensurate with them. But in circumstances in which the recent track record had been good, the discipline on some underwriters to aggregate their exposures and adequately assess their risk-reward balance was weakened. As became painfully clear both for some syndicates and some corporate reinsurers in 1988 and 1989, a single event of loss could be conducted vertically and very quickly through the layers of the spiral, crystallising very high aggregate claims on an LMX reinsurer who did not have adequate outward protection in place. While there is plainly scope for differences of view and judgment among underwriters about the probable maximum loss involved in a particular exposure, or group of exposures, it seems that, in some cases, even their aggregate exposures may not have been properly calculated or appreciated by active underwriters, still less controlled by their managing agents.

3.5 Gearing up in the sense of a higher ratio of obligations to shareholders' funds or capital involves some risk in any business - for example, the risk that orders and revenues might fall away sharply so that the burden of debt service on a highly-geared balance sheet becomes insupportable. There is nothing intrinsically objectionable about a substantially exposed book of reinsurance business provided that probable maximum loss has been prudently assessed. But while there are commercial and other pressures to monitor and influence the extent of any rise in gearing, these pressures were much less present in Lloyd's for an LMX underwriter who wished to increase unprotected exposures without increasing the capital base of the syndicate.

3.6 In particular, levels of gearing (in the sense of the ratio of syndicate exposure to capacity) were and remain less visible and less constrained in the insurance industry than in other financial service business. The absence of any credit or counterparty risk constraint within Lloyd's in relation to the outward placing of risks, because valid policies are always paid, means that ceding reinsurers are under no commercial pressure to limit the amount of business placed with a particular accepting Lloyd's reinsurer. Although some of the syndicates that were loss-making were believed or known in the market to be retaining substantial exposures in relation to their stamp capacity and to be "soft" in terms of negotiation of premium, other underwriters, including corporate reinsurers, were ready to place outward business with them because this entailed no counterparty risk. The committee understand that the claimants of about half the incurred claims faced by one of the major loss-making LMX syndicates are corporate reinsurers, amongst whom six companies feature prominently.

3.7 Professional markets in which there is a clearing house function such as the London International Financial Futures Exchange and other futures exchanges provide assurance that the obligations of clearing members will always be met. Regulation of clearing members is accordingly designed to ensure, through capital or margin requirements, that each clearing member is always in a position to meet its obligations. The comparable regulation in Lloyd's is premium income monitoring, designed to ensure that the gross premium income of a syndicate does not exceed its allocated stamp capacity.

3.8 But whereas bank and securities supervisors seek to measure risks and to determine capital requirements for a business by reference to the portfolio of risks being run, there is currently no comparable evaluation of risks in Lloyd's for regulatory purposes, and reliance is placed exclusively on control of the aggregate business accepted as measured by premium income. One consequence is that when premium rates either soften or harden, then, in the absence of any compensating regulatory adjustment or of any change in policy terms, aggregate exposures that can be accepted by syndicates will respectively increase or diminish even with an unchanged allocated capacity.

3.9 It is noteworthy that, in the face of hardening rates generally in 1991 and a growing shortage of capacity, Lloyd's relaxed premium income limits by allowing quota share reinsurances up to a maximum value of 25% of gross premium income to be deducted in calculating premium income for premium income monitoring purposes. But while Lloyd's thus relaxed the weight of the premium income constraint when rates were hardening, there was no toughening in premium income limits in the phase, earlier in the 1980s, when premium rates for LMX business fell sharply, partly because the risk was perceived to be lower and capacity was growing rapidly. In the absence of such regulatory compensation, the present premium income monitoring system is arguably pro-cyclical, accommodating an increase in the ratio of exposures to capacity when rates are softening, and conversely.

3.10 Given also that Lloyd's in its regulatory function does not seek to assess risk and effectively removes the need for those obtaining reinsurance protection to make any commercial or counterparty risk assessment of the accepting syndicates, Lloyd's faces a problem of what in other financial service business would be known as moral hasard. This arises because external perceptions of what is delivered by premium income monitoring, widely seen as a means of relating syndicate exposure to capacity, exceed what such monitoring can in practice achieve. The fact that premium income monitoring takes place supports the perception on the part of names and others that aggregate exposures are being monitored, but this is not in fact the case.

3.11 It is noteworthy that the development of the average percentage of allocated capacity written by the 10 worst-performing LMX syndicates in 1988 differed very little from that of either LMX syndicates as a group or from that of all syndicates between 1985 and 1990. Since the regulators were dependent on these latter ratios for premium income monitoring purposes, any growth in the scale of unprotected exposures in certain syndicates is unlikely to have been tracked centrally. Premium income monitoring provides assurance to insureds that valid claims will always be met and impliedly, to names that overwriting is avoided, but the means of ensuring that these obligations are being met are plainly imperfect.

3.12 While the problem of finding a better means of relating aggregate underwriting risk or exposure to capacity is not unique to Lloyd's, the absence of a need for counterparty risk assessment where outward protection is sought from a Lloyd's syndicate makes the problem more significant for Lloyd's than for the regulation of corporate insurers. Regulatory reliance on premium income limits as operated by Lloyd's was insufficient to cope with the pressures on some syndicates to retain large unprotected exposures in the later years of the 1980s. The combination of reducing retentions by cedants and the absence of co-reinsurance in the marine market led to risk concentration in LMX business: the lower tiers or levels of reinsurance can be likened to an inverted pyramid, with risk being spread in the classical reinsurance pattern, but the higher levels are akin to the top half of a diamond, with risk being concentrated. Those underwriters who made profits on spiral business even after the catastrophe losses of 1987 and subsequently were those who had limited their exposures. One successful LMX reinsurer told the committee that he deliberately defensively wrote only 35% of his stamp in 1987-88 rather than incur further LMX exposure.

3.13 The search for additional premium income appears to have distracted the attention of some underwriters from the seriousness of the exposures that they were assuming. Thus, on a premium rate of 2%, a premium of only £1 million could well involve a whole account exposure of £50 million. It should be added that readiness to assume such aggregate exposures, where conscious, partly reflected a process of anaesthetisation to risk from the heady years of the earlier 1980s. And the fact that premium income limits did not differentiate for riskiness involved an element of adverse selection in the phase when the riskiest business was fairly profitable in nominal terms. As indicated earlier, a major difficulty of the LMX spiral is that, given that the receiving underwriter cannot have a fully transparent view of risk, the only prudent options are either to decline the business or only to take it on in the knowledge that the exposure can be ceded on at a lower rate. But where an LMX reinsurer takes on such a whole account risk without either fully knowing the risk or substantially reinsuring the exposure by reinsuring with another member of the spiral, then the development of LMX business (and the spiral) can be seen to have had the effect of concentrating rather than dispersing risk.

3.14 We note at this point that informal payback arrangements in reinsurance business have generally worked well as a means of ensuring that, over a period, a reinsurer who sustains sizeable losses is able to recoup his position through being able to levy higher premium rates subsequently. But while such balancing arrangements operate satisfactorily where the reinsurer continues in business, they cannot operate where the reinsurer is effectively wiped out by a catastrophe and cannot thus recoup his losses subsequently. None of this is of any consolation to names on the loss-making LMX syndicates, but the committee believe that it is relevant to appraisal of the right degree of regulatory tolerance for such business - a matter of judgement to which we revert in the next chapter.

3.15 In the context of a recent Court case, Mr Justice Saville said that "the names might be able to argue that the sort of business done by their agents in the LMX was so extraordinary that it fell outside the scope of the sort of underwriting business which the names had authorised the agents to conduct on their behalf, and that accordingly the Names were not bound by that business, that is to say - that it was not authorised by them at all, so that any payments made in respect of that business did not go to discharge any obligation of the Names". The committee is not competent to express any legal opinion on these matters, but the business or commercial factors adumbrated below are plainly relevant in appraisal of the operation of the LMX spiral.

3.16 First, relating to characteristics of the LMX market itself, the experience of most syndicates writing LMX business was that it was profitable: and even those that incurred heavy losses in 1988 and subsequently were at least marginally profitable in an earlier phase. Given this, and the way in which it developed, as described in the previous chapter, it does not appear that LMX business as such had features that rendered it uniquely different from other reinsurance business. That the risks involved were appreciated by some underwriters, and were capable of being correctly assessed, is evidenced by their cautious use of syndicate capacity in such business before the phase of catastrophic losses: the fact that other underwriters took a less cautious view and that the catastrophes caused large losses appears insufficient for the business itself to attract the epithet "extraordinary".

3.17 Second, relating to the adequacy of performance of individual underwriters, whereas some syndicates made continuing profits from this business, others lost catastrophically. This reflected a different evaluation of risks from that of more successful underwriters, with an apparent failure in some cases to understand the likely effect of a catastrophe on their aggregate exposure. In the event, this proved to be a serious misjudgement, but such misjudgements of risk are not uncommon in business, and certainly not confined to Lloyd's. Apart from the fact that many corporate reinsurers also made heavy losses on LMX business, there have been other examples of such judgements in insurance business in recent years. In the October 1987 storm in the UK, a number of UK insurance companies suffered aggregate losses substantially greater than the upper limit of their catastrophe reinsurance programmes; a similar outcome emerged for a larger number of Japanese insurers as a result of Typhoon 21 in October 1991. In other words, the fact that heavy losses were made by experienced underwriters outside Lloyd's should in the view of the committee be taken into account in appraisal of the performance of active underwriters on loss-making syndicates.

3.18 Third, in relation to excess of authority, there is a question whether LMX business within Lloyd's was so extraordinary as to fall outside the scope of the business that agents had authority to transact on behalf of their names or whether this business involved churning. But the authority under which a managing agent operates is a wide authority that enables the agent to write insurance business and to exercise powers that he considers necessary or desirable for this purpose. Unless LMX spiral business could be shown not to be insurance business, the writing of such business would not appear to exceed the agents' authority in this respect. The committee noted that such business involved: the acceptance and ceding of risk; the payment and acceptance of a risk premium; an insurable interest on the part of the cedant; and that a loss could only arise through the occurrence of an event outside the control of the participants. The committee can accordingly find no basis on which LMX spiral business would sensibly be regarded as other than insurance business, and do not therefore believe as a matter of fact that it was so extraordinary as to be outside the authority of managing agents.

3.19 As a separate but related matter, it has been suggested that there was a maximum degree of unprotected exposure beyond which the net risks being assumed so far exceeded what names would have been ready to contemplate as to render it in excess of the authority delegated to the managing agent. But as indicated above, the relevant criterion for this purpose is not the performance of the underwriter but whether the business was insurance. It should be underlined that insurance business is a balancing of risks: the assessment of probable maximum loss is at best an uncertain affair, and the question is thus whether the assessment of an exposed LMX position was, from a professional standpoint, an unreasonable judgement in all the circumstances.

3.20 In the committee's view, it is very desirable that Lloyd's should develop a better categorisation of the riskiness of different types of business: this is addressed more fully in later chapters. In this context, the committee observes that, whereas the Council of Lloyd's did restrict the writing of personal stop loss business (as especially risky) in 1990, it did not at that or any other stage take a similar view in relation to LMX business, and the question does not appear to have been considered by the Council itself. This no doubt reflected in part that, whereas outward protection was readily available for LMX exposures, it was difficult if not impossible to secure protection for personal stop loss aggregate exposures, so that writing personal stop loss business was effectively writing net business.

3.21 Fourth, the question arises - relevant to the churning allegation - whether LMX spiral business was undertaken to inure to the benefit of market insiders. Given that many names benefited from this business, it was plainly not a characteristic of the business as such that the only profit accrued to practitioners. The committee are not aware of the precise balance of considerations that led some active underwriters to elect for significantly incomplete protection of their exposures. But it is noteworthy that, while managing agents would have benefitted from having higher allocations of capacity to syndicates they manage, in part obtained by those syndicates writing a relatively high proportion of their stamp in an earlier account, the remuneration of active underwriters was only likely to have been enhanced as a result of writing a higher proportion of capacity where such underwriting was profitable.

3.22 Although several syndicates wrote many different layers of LMX business, and reassumed some part of the risks that they had previously ceded, we are aware of no evidence that precisely the same business was transferred in both directions between pairs of syndicates for the sole purpose of generating brokerage commission. The evidence points to the acceptance of business at one level of exposure and at one rate, which in part and together with other business was ceded on to another party at another (usually higher) level of exposure at a lower rate. There was a commercial motive for such business as part of the balancing judgements made by ceding or accepting reinsurers in relation to their overall premium and exposure positions. Such business, with a commercial motive, was not churning but rather to be compared with arbitrage transactions in securities or foreign exchange business, although the analogy is imperfect because of the dramatically shorter timescale for the crystallisation of profit or loss in the case of the latter.

3.23 Attention has nonetheless been drawn to the profitability of the brokers who placed spiral business and to suspicion that some LMX business was written at the initiative of brokers which, because in the event it involved profit only for intermediaries, amounted to churning. The committee have noted that in both the production of inward business and in the placing of outward reinsurance, some syndicates were heavily reliant on one or other of a relatively small number of brokers that were significantly involved in LMX business. But it is a matter of underwriting policy whether to write business and take outward protection. The committee have found no evidence, and has established that no such evidence was found by the General Review Department (GRD) in its reviews, that financial inducements were paid by brokers to underwriters personally to induce them to place or accept LMX business that they would otherwise have eschewed. Nor have we heard any allegations either from successful LMX underwriters or from brokers with a small involvement in LMX business that illegal payments were made to underwriters in loss-making syndicates. It is apparently quite common for commission to be rebated by brokers, but the committee are aware of no suggestion that such rebates have been applied other than for reducing the net cost of reinsurance for names.

3.24 Brokers are nevertheless capable of being very persuasive, and some underwriters are more likely to be influenced by their blandishments than others. The committee believe that active underwriters on several of the loss-making LMX syndicates were heavily influenced by LMX brokers. But in the absence of any evidence of impropriety on the part of these brokers, the committee believe that responsibility rests, and should continue to rest, with active underwriters.

3.25 The committee are aware that there has been criticism of rates of brokerage and of the earnings of brokers prominently engaged in LMX spiral business. These are, however, market matters, and in that important sense the committee would have no particular competence to express a view on brokerage rates determined in an open market. But the market is not, of course, totally open by virtue of the exclusive dependence of Lloyd's syndicates in this area on the business brought to them by Lloyd's brokers. It appears to the committee that this dependence, in circumstances in which other business flow was relatively weak, led to a situation in which underwriters were inadequately critical of rates being charged on transactions which largely involved transference of business within the market rather than the production of new business. We have no recommendation to make in this matter, but we do register concern at a process in which the pricing established for brokerage appears to have been quite unrelated to the scale of effort and risk involved for the broker.

3.26 In the light of these factors, we are not persuaded that LMX business in itself involved such exceptional or extraordinary features as to have been beyond the proper competence of active underwriters in Lloyd's. On this basis, there remains a question whether individual underwriters made judgements that were not unreasonable from a professional standpoint, even though they entailed substantial loss, or whether such judgments displayed incompetence or negligence. The committee has not sought to reach a view on this question in relation to individual syndicates but does not believe, even if such incompetence or negligence were established in one or more individual cases, that this would support a view that there was impropriety in LMX business as such. Nor does the committee believe that the characteristics of this business as experienced in the later 1980s mean that LMX business as such should be proscribed outright in future.

3.27 But our review has underlined the importance of training and competence for underwriters, and of effective managing agency involvement in the assessment and control of aggregate exposures and possible catastrophe scenarios. The committee accordingly considers that policy constraints should be introduced to moderate any future development of a spiral process; these are discussed in the next chapter.

4 The LMX spiral and regulatory policy

4.1 This chapter addresses specific policy issues that arise in relation to LMX business and makes recommendations for regulatory policy. Despite the degree of policy tolerance for LMX business that the committee draws from its review as set out above, there are aspects of this business, now much better understood in the light of hard and unpleasant experience, that are of concern:

(a) Although there have been frequent assertions that misjudgements of the kind that led to LMX losses will not recur, and that the market can be relied upon to take corrective action (for example, reinsurers are apparently now generally insisting on the exclusion of incidental non-marine business from the reinsurance cover they provide to marine syndicates), experience of other financial institutions and markets suggest that memories are short. The committee do not have confidence that problems of the kind experienced with LMX business could not recur and believe that protections need to be put in place to reduce the risk that such business will be undertaken so incautiously in future.

(b) Lloyd's arrangements for monitoring syndicate exposures indirectly through premium income monitoring were insufficient in respect of LMX business, especially in the light of the strong growth of capacity and the sharp reduction in premium rates. Coupled with the assurance that valid claims on a Lloyd's syndicate will always be met, these arrangements may entail substantial moral hasard for Lloyd's as regulator. In this context, it is noteworthy that the ratios of premium income to allocated capacity for the worst loss-making LMX syndicates in 1988 were not markedly different from the ratios for other LMX syndicates and for the whole market over the whole period 1983-1990. In other words, the data available to and being monitored by the authorities will not have revealed the extent of concentration of exposures in the worst-hit syndicates.

(c) Whereas there was apparently a view in the London market in the late 1980s that one or more major LMX underwriters were writing without adequate protection from a major catastrophe, and tended to be "soft", this intelligence may not have reached Lloyd's as regulator; if it did, it may have been regarded at that time as being beyond the regulator's proper competence to probe the matter in the absence of any evidence of misconduct or impropriety. We return to this important subject of market intelligence and regulatory response in paragraph 4.7(c).

(d) LMX spiral business, by its nature, can only generate a return for names in circumstances in which one or more underwriters at the end of the spiral are ready to go unprotected in respect of exposures that could crystallise in the event of large catastrophes. The relatively unprotected underwriter might be a corporate reinsurer but, to the extent that he might be responsible for a Lloyd's syndicate, it is plainly appropriate for Lloyd's as regulator to consider what limits should be put on the exposure of names in respect of such business.

(e) Lloyd's solvency requirements provide for no limit for the credit that may be taken for reinsurance ceded to another Lloyd's syndicate. It is clearly necessary for

Lloyd's to set limits in respect of reinsurance ceded to companies, but the committee regard it as unsatisfactory that the 100% limit applied within Lloyd's means that there is no solvency constraint on the recirculation of business within Lloyd's. Setting some such constraint would reduce the incentive for a syndicate to find its outward protection within Lloyd's, but the committee do not believe that this would be objectionable provided that the effect were limited.

(f) There was no practice of minimum co-reinsurance in the marine market and marine reinsurers, who became increasingly important in LMX business, did not insist on co-reinsurance when accepting such business. We have accordingly reviewed the case for introducing mandatory minimum co-reinsurance, not only as a means of checking the development of any future spiral but, also, to promote greater underwriter discipline since, with mandatory co-reinsurance, underwriters would no longer be able to reinsure outwards the whole of an exposure. But while we see considerable merit in the development of co-reinsurance as a more widespread market practice, we do not consider that this should be a matter for regulatory prescription, partly because such a provision would be difficult to enforce in practice. We thus attach greater importance to other approaches to moderating any future development of spiral business.

4.2 Against the background of these concerns, the committee have concluded that there is need for enhanced disclosure of the risks likely to be associated with particular categories of business and that a better means needs to be found for relating and constraining exposures arising on higher risk business to syndicate capacity. Whatever particular approaches are adopted, we believe that there is room for Lloyd's to develop techniques in this respect in line with developing management practice among leading corporate reinsurers. Such practice involves varying levels of solvency for different categories of business to reflect their volatility and riskiness. Also relevant here is that US insurance regulators are apparently seeking to develop a risk-based approach to setting capital requirements for insurance business which takes account of the riskiness of business written.

4.3 One approach would involve the estimation and application of different risk weights for different categories of business in setting premium income limits, on the basis - as set out above - that undifferentiated premium income limits are an inadequate means of relating exposures to capacity. While the analogy with credit, interest rate and market risk assessment in banking and securities business is imperfect, the committee believe, on the basis of preliminary work that we have commissioned, that appropriate volatility analysis in relation to reinsurance business is likely to be a feasible and fruitful means of estimating risk weights for different categories of business.

4.4 We do not exclude that differential premium income monitoring may be found appropriate at some point in the future, and Lloyd's needs to keep closely abreast of developing practice in both corporate reinsurers and in other regulatory jurisdictions in this respect. But we consider that the application of risk weights as a matter of central prescription by Lloyd's would be difficult, if not impracticable, in the immediate future.

Centrally-prescribed risk weights would set an undesirable straitjacket for reinsurance business, in particular given that the riskiness of different categories of business inevitably requires continuous reassessment; and the application of heavy weights to premium income limits in respect of the most risky business would inhibit the development of specialist syndicates with specialist underwriting capability for such business. In all this, the committee's conclusion is effectively the same as that of the Task Force.

4.5 Our preference would be to use risk weights as a basis for setting limits to the proportion of high risk business that a name may write in line with the present limit applied to personal stop loss, so that a name wishing to write a higher absolute amount of high risk business would be obliged to increase his or her commitment to Lloyd's to be able to do so. We envisage that such upper limits would be set for a limited array of higher risk business categories, and would be kept under regular review. This approach would appear to be the most practical regulatory means of constraining the ratio of exposure to capacity in the riskier areas where such constraint matters most, while leaving to members' agents to settle whether and how far still tighter advised or self-imposed limits would be suitable, given the circumstances of individual names.

4.6 We believe that the risk weights to be derived might also be used in a qualitative but, nonetheless, deliberate way by the Lloyd's regulator as presumptive indicators in regular premium income monitoring. Specifically, we envisage that closer premium income monitoring would be applied to syndicates writing business in the higher risk-weighted categories, with a correspondingly greater regulatory concern when such syndicates approach their limits and correspondingly less regulatory tolerance if these look set to be exceeded. Similar regulatory attentiveness and, where necessary, vigour should be directed at syndicates which are regarded in the market as "soft", and we hope that the regulators will be at pains to ensure that they are well informed in this respect.

4.7 **The committee accordingly make the following recommendations:-**

(a) Lloyd's should undertake or commission a volatility analysis and risk assessment aimed at the development of a set of risk weights for different categories of business. This will require the central collection of additional data, including in particular data on estimated outstanding as well as paid claims; and the analysis should be regularly updated to ensure that the indicative weights that are derived are adapted as necessary to the changing characteristics of business over time.

(b) On the basis of risk weights yielded by such an analysis, upper limits should be set for the proportion of the total capacity of individual names that might be written in specified high risk categories. Apart from the derivation of risk weights, further work will be needed to determine which categories of underwriting should be constrained in this way, but the committee do not envisage more than a comparatively small number.

(c) **The risk weights should be used indicatively in regulatory oversight of premium income monitoring, with closer attention to the monitoring of syndicates writing a substantial higher risk business and a stronger resistance by the regulator and, as necessary, timely sanction in the event of overwriting by such syndicates. Close regulatory attention of this kind should be directed at syndicates which are regarded in the market as writing business on a "soft" basis, and the regulators should look to ensure that they have access to good market intelligence in this respect.**

(d) **Lloyd's should liaise regularly with the market associations to evaluate the development of premium rates in particular categories of reinsurance business and be ready (as with quota share reinsurance in 1991) to adjust overall premium income limits inversely with premium rates where such adjustment would seem likely to provide for a better control of the ratio of total exposures to syndicate capacity.** (This recommendation is closely in line with the flexible premium income limit scheme commended by the Task Force.)

(e) **As a means of applying a regulatory constraint to the development of any future spiraling of reinsurance business within Lloyd's, permitted reinsurance limits allowed in the valuation of liabilities for the annual solvency test should include a limit on the permitted amount of reinsurance effected at Lloyd's, in adaptation of the present regime in which the allowance is unlimited. The committee believe that the most significant and desirable change is that some such limit should be introduced: it does not need to be severe.**

5 Syndicate participations: the experience of 1983-1990

INTRODUCTION 5.1 This and the following chapter address the allegations that

(i) market "insiders" obtained participations on successful syndicates, access to which was not, allegedly, easily available to external names ("preferencing"), and

(ii) members' agents "dumped" external names on what were known in the market to be both high-risk and badly run syndicates, that is they did not carry out their duties properly.

This chapter describes the participations by names in syndicates in the Lloyd's market in the 1980s, and is the result of the collation and analysis of computer-based data carried out for the committee by consulting actuaries instructed by it. The following chapter is a critical appraisal with recommendations designed to underscore the fiduciary responsibility of members' agents to allocate available capacity in an equitable way.

The structure of this chapter is as follows:

paragraphs 1 - 3	Introduction
paragraphs 4 - 11	Definitions
paragraphs 12 - 24	Results of analysis
paragraph 25	Conclusions

5.2 The analysis was approached by summarising the various allegations that have been made into general questions of principle as follows:

(i) Preferencing

(a) does any category of names appear to have done better than the rest?

(b) does any category of names appear to have been over or under represented in an area of the business?

(ii) Duties of members' agents

(a) do the fortunes of the directors of a particular members' agent follow those of their names?

(b) do members' agents provide a reasonable spread of capacity to their names in terms of risk and profits?

5.3 At the start of the committee's investigations, data on syndicate profitability was only available up to the end of the 1990 underwriting year with the data for 1989 and 1990 representing the position at the 2 year and 1 year position respectively. Almost at the end of our investigations, a further year's data became available, giving the final results for 1989 for almost all syndicates and 2 and 1 year figures for 1990 and 1991 respectively. This new data was incorporated, as far as possible, into the analysis. Also relevant is that syndicates writing life business only and syndicates that did not start writing business until 1989 have in general been excluded from the analysis. In all cases the reason is these syndicates that have been excluded from the analysis.

DEFINITIONS

5.4 In order to answer these questions, it was necessary to group the data in such a way that the results of the various analyses could be summarised in a meaningful way. Summaries were made of

(i) names by the category of their occupation in the market

(ii) syndicates by riskiness and profitability

An analysis was also undertaken of all syndicates that might be considered to be LMX syndicates. Details of the definitions of the groups are given in the remainder of this section.

Groupings of names

5.5 The categories into which the names have been grouped are given in Table 5.5 below, together with details of the capacity provided by each category in 1989. The relative amounts of capacity have not changed significantly since 1983.

TABLE 5.5

Groupings of names	*Capacity in 1989*	
	Amount (£million)	*Proportion (%)*
Directors and partners of members' and managing agents	398	3.7
Directors and partners of brokers	283	2.7
Other working names	363	3.4
Retired working names	72	0.7
Relations	642	6.0
External names	8,869	83.5

The first two categories are self-explanatory. Retired working names are only a fraction of working members. They have been listed separately in Table 5.13. The relations are the relatives of the groups above that group in the table, in so far as they could be identified. Further detail on the method used to identify relatives is given in para 5.6 below. The final category, external names, includes any name that does not work in the market and does not appear to be related to someone working in the market.

5.6 Since 1982, new names joining Lloyd's have been required to identify relatives who are already names. However the relatives of new names only started to be recorded on a computer system in 1988. It was therefore necessary to seek to identify relationships for names who joined before 1988. This was done by searching the existing membership to identify groups of between 2 and 8 names living in the same area. (It was thought that groups of more than 8 names would be common surnames and therefore probably not related.) Geographical areas used for this purpose were major towns and counties outside the towns, in the UK. In the rest of the world the areas were the whole country, or state level where appropriate. If any group of names contained a name who was working in any of the years 1983 to 1990, then the whole group was recorded as being related to a working name. A number of other definitions were suggested and considered by the committee. However it was felt that for common surnames the suggested alternatives would include as relatives too many names who shared the same surname but were not in fact related. The definition also had to be capable of being processed by a computer. The committee therefore settled on the definition given above.

Syndicate profitability

5.7 Syndicates have been grouped by calculating the average return (over the period 1983-1988 inclusive) on a £10,000 share. The change, in 1988, of moving from net capacity to gross capacity has been allowed for by defining the return on £10,000 share to be:

(10,000/Total gross capacity for syndicate) *Final profit for underwriting year 1988

(8,000 /Total net capacity for syndicate) *Final profit for underwriting years 1983 to 1987.

The effect of this definition is to allow for 20% of gross premium on average to be ceded as reinsurance. On the basis of this definition of profitability, the syndicates have been divided into 5 groups as shown in Table 5.7 below.

TABLE 5.7

Average return on £10,000 in 1983 to 1988 (in £)	*Group*
1501 and above	1
1500 to 1000	2
999 to 0	3
−1 to −999	4
−1000 and below	5

5.8 A categorisation of the top and bottom 40 syndicates has also been prepared, using a version of the definition given in para 5.7, extended to take into account the second and first year figures for 1989 and 1990 respectively. Those syndicates that stopped writing business in 1986 or earlier are excluded, as are known "baby" syndicates. A list of the top and bottom syndicates is given in Appendix C.1.

Syndicate riskiness 5.9 The committee sought to assess the relative riskiness of syndicates so that the capacity of particular name groups can be set alongside particular risk categories. The analysis was carried out by analysing claims development data for the various categories of business ("audit codes") into which Lloyd's in the past had subdivided its total business for the purposes, among other things, of collecting such data. The analysis allowed for both variation of the results that might arise from the business to be written in the current underwriting year as well as the variation that might arise from claims from earlier years deviating from the reinsurance to close. The data available was in a far from ideal form. As a result, only a very coarse division of non-marine business was available, and it was not possible to obtain separate analyses of LMX business. Further, the claims development data was for paid claims only and no details on case estimates were available. This will inevitably have introduced further error into the analysis of longer-tailed classes. The information on the categories of business written by the individual syndicates was not sub-divided by audit code, but by an alternative classification, and further problems were caused by the need to reconcile the two. However, on the basis of the available data it was possible to assign a risk coefficient to most syndicates based on the mix of business written in 1987 and 1988. The syndicates were then divided into 4 risk groups with group 1 containing the least risky and group 4 the most risky syndicates, with a few syndicates not being allocated to any risk group. Despite the deficiencies in the allocation of syndicates to risk groups the committee considered that an analysis was helpful. Further details of the analysis of syndicate riskiness are given in Appendix C.2.

LMX syndicates 5.10 In order to carry out an analysis of LMX syndicates a definition of an LMX syndicate had to be formulated. Given the quality of the information in some syndicate reports and accounts this proved difficult. In these circumstances, it was decided that the following definition, although somewhat arbitrary, was appropriate. A syndicate is deemed to be an LMX syndicate if in 1989 it:

(i) either wrote at least £1,000,000 of premium income or, if less, 10% of its capacity of excess of loss on excess of loss and/or LMX business; or

(ii) it wrote at least 50% of excess of loss business of all types and appeared from the latest report and accounts to have a material involvement in excess of loss on excess of loss and/or LMX business, which was not readily quantifiable as a percentage.

A list of those syndicates that on the above definition were considered to be LMX syndicates is given in Appendix C.3.

New capacity 5.11 Since syndicate capacities are not tradeable, it is not surprising that over time apparent anomalies have arisen in the allocation of total capacity. It was therefore important to investigate how new capacity has been allocated in recent years. For this purpose, the new capacity available on a syndicate in a given year was defined to be the absolute increase in the capacity of the syndicate since the previous year plus the amount of capacity released by names who had reduced their capacity on the syndicate since the previous year.

RESULTS OF ANALYSIS

5.12 The remainder of the chapter gives the results of the various analyses that were carried out. These have been split into three broad areas as follows:

(i) percentage returns by broad category of name

(ii) allocations of capacity and new capacity to the various categories of names by various subdivisions of names

(iii) certain miscellaneous analyses.

General conclusions in relation to the questions listed at the start of the chapter are given in para 5.25.

Returns by category

5.13 An analysis was made of the return on capacity in each of the years 1983 to 1990 for each of the category of names defined in para 5.5. The returns given for 1990 reflect the position as reported at the 24 month stage. The results are set out in Table 5.13. **It will be seen from the table that in 1983 and 1984 names working in the market made noticeably higher returns than those outside the market, that is, relations and external names. It is possible that this difference was due to the participation of working names on "baby" syndicates that were proscribed from the end of 1986. For the next three years (1985 to 1987) there is no evidence that any category fared particularly better than any other. However, this is not true of the latest three years given in the table and, in particular, 1989. For 1989 we also show the results if the 10 syndicates that wrote LMX business in that year and are the subject of loss reviews ("LMX Loss Review Syndicates") are excluded. The results of this additional analysis are shown in the column headed "1989 adjusted". It will be seen that removing these syndicates substantially removes the disparity between the results for the different categories of names for that year.**

TABLE 5.13

Percentage return by category

	1983	*1984*	*1985*	*1986*	*1987*	*1988*	*1989*	*1989 adjusted*	*1990*
Directors of managing and members' agents	6.2	5.3	3.8	12.4	8.7	−1.9	−14.4	−9.1	−9.9
Directors of brokers	8.9	5.3	2.7	11.9	9.3	−1.7	−12.1	−8.4	−9.2
Other working names	8.3	6.5	2.7	11.6	9.2	−1.8	−12.2	−8.8	−9.6
Retired working names	7.0	3.4	3.1	12.0	8.6	−4.0	−13.8	−9.9	−10.2
Relations	4.3	2.8	3.0	12.3	8.9	−3.3	−17.9	−9.9	−11.5
Non-working	4.5	2.4	2.7	12.3	8.9	−3.3	−18.3	−10.2	−12.0
MARKET AVERAGE	4.9	2.8	2.7	12.3	8.9	−3.2	−17.7	−10.1	−11.7

The column headed "1989 adjusted" excludes certain LMX syndicates which are subject to loss review, namely 164, 216, 255, 290, 298, 299, 540, 833, 847, and 1084.

5.14 An analysis has also been made of the results obtained by three specialist subcategories of names and by the external names in the different geographic areas where there is a significant amount of capacity, together with the rest of the world. The results are set out in Table 5.14. In the table, "Underwriters" are the active underwriters in the relevant years and "Committee members" refers to anyone who was a member of the Council or Committee of Lloyd's or any of their sub-committees in any relevant year. Shareholders are those members who have been identified as holding shares in Lloyd's members' or managing agents or Lloyd's brokers, or their holding companies, in any relevant year. In the table North America covers USA, Canada and Mexico. Oceania is effectively Australia and New Zealand. **It will be seen from the table that, in general, underwriters and committee members obtained a slightly better result than any of the broader categories in Table 5.13 above. The geographic analysis does not appear to have revealed that the names in any particular location have done consistently better than any other, except for North America in 1989 and 1990 where there is some evidence that the names have fared worse than the market average. A more detailed analysis indicates that this has been significantly influenced by the poor return for names of a small number of members' agents, which depressed the result for Canadian names in that year to −35.0%.**

TABLE 5.14

Percentage return by category

	1983	*1984*	*1985*	*1986*	*1987*	*1988*	*1989*	*1990*
Underwriters	7.0	5.9	4.3	12.3	9.4	−1.2	−12.6	−9.1
Committee members	7.4	5.5	4.4	12.7	9.7	−1.2	−10.7	−9.3
Shareholders	6.3	5.6	4.1	12.4	9.0	−2.0	−14.9	−10.2
EEC (including UK)	4.9	2.5	2.4	12.3	8.9	−3.3	−18.1	−11.8
North America	1.4	1.8	3.9	12.9	8.9	−3.6	−20.9	−13.2
Oceania	7.1	2.0	3.6	12.6	10.4	−2.0	−15.4	−10.7
South Africa	4.5	3.1	5.4	14.0	10.5	−3.6	−16.1	−11.3
Rest of the world	4.2	2.0	1.9	11.3	7.8	−3.2	−18.1	−12.1
MARKET AVERAGE	4.9	2.8	2.7	12.3	8.9	−3.2	−17.7	−11.7

Allocation of capacity

5.15 Analyses were made of the allocation of capacity and new capacity to syndicates grouped in the following different ways:

(i) Top and bottom syndicates (para 5.8) and LMX syndicates (para 5.10)

(ii) Syndicates split into the different profitability groups (para 5.7)

(iii) Syndicates split into the different riskiness groups (para 5.9)

(iv) LMX Loss Review syndicates (para 5.13).

Top and bottom and LMX syndicates

5.16 A summary of the analysis of the allocations of capacity to the various categories is shown in Table 5.16. The earlier years have been omitted from the analysis to avoid any possible distortions that might have occurred by inadvertently including baby syndicates. There were no significant differences between the different years. Therefore the results are shown for 1986 to 1988 combined and 1989 to 1991 combined. **It will be seen from the table that the representation of names working in the market decreased and that of external names increased in proportion as the syndicates became less profitable. There does not however appear to have been any particular bias in the allocation of capacity to LMX syndicates.**

TABLE 5.16

Average percentage capacity

	Directors of agents	*Directors of brokers*	*Other working*	*Relations*	*External*
1986-1988					
Top 10	4.3	2.5	3.9	5.4	83.9
Top 20	4.5	2.8	3.7	5.5	83.5
Top 40	4.1	2.5	3.2	5.8	84.4
Market Average	3.7	2.8	3.2	6.0	84.3
Bottom 40	3.3	2.3	2.3	6.2	85.9
Bottom 20	3.2	1.6	1.6	6.2	87.4
Bottom 10	3.6	1.1	1.1	6.3	87.9
LMX	3.9	2.6	2.7	6.2	84.6
1989-1991					
Top 10	4.2	2.4	3.5	5.8	84.1
Top 20	4.3	2.6	3.4	6.1	83.6
Top 40	4.0	2.3	3.2	6.2	84.3
Market Average	3.6	2.4	2.9	6.3	84.8
Bottom 40	3.8	1.9	2.5	6.3	85.5
Bottom 20	3.6	1.4	1.7	6.4	86.9
Bottom 10	3.1	1.1	1.4	5.9	88.5
LMX	3.6	2.2	2.6	6.5	85.1

Top and Bottom syndicates have been defined on the basis of the average over the period 1983 to 1990 inclusive, with the returns for 1989 and 1990 being at the 2 and 1 year period respectively.

5.17 As explained in para 5.11, the difference in the results between the different categories may have arisen from the fact that capacity is not freely tradeable at Lloyd's. Thus the same analysis as that given in para 5.16 has been carried out but for new capacity only. The results of this analysis are given in Table 5.17. **This table shows that even if one considers the allocation of new capacity only, the representation of**