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UNIVERSITY OF SOUTHAMPTON

FACULTY OF BUSINESS AND LAW

School of Law

Volume 1 of 1

The London Market Excess of Loss Spiral

by

Caroline Hélène Christiane Bell

Thesis for the degree of Doctor of Philosophy

July 2014

UNIVERSITY OF SOUTHAMPTON

ABSTRACT

FACULTY OF BUSINESS AND LAW

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THE LONDON MARKET EXCESS OF LOSS SPIRAL

Caroline Hélène Christiane Bell

This thesis explores the London Market Excess of Loss Spiral ("LMX Spiral"), a phenomenon based upon excess of loss reinsurance contracts that developed within the London reinsurance market of the 1980s. The unwinding of the LMX Spiral was a key factor in the crisis the Lloyd's insurance market had to face in the early 1990s. However, whilst the crisis resulted in a wave of litigation in the English courts, there is no legal appraisal of the additional element of risk brought by the LMX Spiral itself. The case law instead focuses on the duties of the underwriters and various agents that fuelled its development.

This situation is unsatisfactory for two reasons. Firstly, reinsurance spirals are a potential side-effect of XL reinsurance markets and therefore other spirals may develop in the future. Secondly, this thesis shows that once a reinsurance spiral reaches a certain point, it becomes unsustainable, generating instability within the relevant reinsurance market.

This thesis provides a detailed legal appraisal of reinsurance spirals and a new analysis of excess of loss reinsurance contracts. The first part sets out the relevant legal principles and describes the LMX Spiral and its impact; listing, for the first time, the "Spiral Effects" identified through reports and actuarial models. The second part reviews the case law and assesses the legal nature of the excess of loss "Spiral Contracts" at the core of any reinsurance spiral, concluding that the Spiral Effects can distort the Spiral Contracts to the point where they become simple contracts of indemnity. The third part explores the nature of excess of loss reinsurance in light of the review of the Spiral Contracts, submitting that excess of loss reinsurance contracts cover both the liability of the reinsured and the relevant insured peril.

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DECLARATION OF AUTHORSHIP

I Caroline Hélène Christiane Bell

declare that this thesis and the work presented in it are my own and has been generated by me as the result of my own original research.

The London Market Excess of Lloyd's Spiral

I confirm that:

- 1. This work was done wholly or mainly while in candidature for a research degree at this University;
- 2. Where any part of this thesis has previously been submitted for a degree or any other qualification at this University or any other institution, this has been clearly stated;
- 3. Where I have consulted the published work of others, this is always clearly attributed:
- 4. Where I have quoted from the work of others, the source is always given. With the exception of such quotations, this thesis is entirely my own work;
- 5. I have acknowledged all main sources of help;
- 6. Where the thesis is based on work done by myself jointly with others, I have made clear exactly what was done by others and what I have contributed myself;

7. None of this work has been published before submission:
Signed:
Date:

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The process has been a long one indeed, from 2008 when I enrolled as a part-time PhD student at Southampton University, to 2014 when I finally submitted the thesis. There are good reasons for this. One is that I have continued to work part-time at City law firm Addleshaw Goddard. I am grateful that the partners who employ me, particularly Richard Leedham but also more recently Mark Pring, have shown interest in my research and allowed me the flexibility I needed to progress the thesis.

The other reason the thesis has taken so long to come to fruition is very close to my heart. In 2008 when I started I was the proud mother of a two-year old boy called Anton. In April 2009 his little sister Amélie came along, followed by their baby brother Nathan in November 2012. I adore my three children. I also know that I would not have been able to find the time for the thesis were it not for the support of my husband, James, who took his fair share of the household and parental duties despite his full time job as a lawyer in the City. My biggest thanks go to him.

PART I: THE LMX SPIRAL

1 Thesis on the LMX Spiral: Overview

This thesis explores the London Market excess of loss Spiral (LMX Spiral), a phenomenon that developed within the London reinsurance market of the 1980s. Its collapse in the early 1990s caused serious difficulties to the reinsurance market in London generally and the Lloyd's insurance market in particular. Before delving into the detail of our analysis, we describe the methodology used to research and write the thesis and we set out the most authoritative legal depiction of the LMX Spiral from case law, which provides a useful starting point.

1.1 Thesis on the LMX Spiral: Methodology

The research question at the heart of this thesis is "what is the legal nature of reinsurance spirals", using the LMX Spiral as an example. Because this is a legal thesis, it is based principally on doctrinal research. Nevertheless, given the factual complexity of the LMX Spiral, non legal sources of information were used to establish the facts. The thesis only reports on the laws of England and Wales.

1.1.1 Establishing the Facts and the Law

This thesis initially set out to explore the LMX Spiral from a legal perspective and consider its impact on the Lloyd's crisis of the early 1990s. The starting point was the factual description of the LMX Spiral as it seemed fundamental to establish the facts accurately to be in a position to appraise the law. This aspect of the research proved to be difficult because of there is a paucity of contemporaneous documentation concerning the LMX Spiral. The case law describes the LMX Spiral to a certain extent but it gives limited information on the functioning of the spiral in practice. In order to gain better practical knowledge of the LMX Spiral, the author conducted a number of interviews with individuals who had an interest in, or who had been involved in the development of the LMX

Spiral and related case law. A list of interviewees is provided at the end of the thesis.

Other sources of factual information about the LMX Spiral included journal articles, speeches, expert and underwriting reports, studies from the insurance institute as well as a report commissioned by the Lloyd's insurance market, the Walker Report, which is described in some detail in this thesis. In addition, the author found several examinations of the LMX Spiral produced by a mathematician, an economist and several actuaries, including actuarial models. All these documents were reviewed, compared and cross-referred for accuracy before being synthesised and relied upon to describe and then to appraise the LMX Spiral.

The next stage was to locate all primary sources of law concerning the LMX Spiral. A total of 47 cases mention the LMX Spiral. The author read all of these cases and many of the 120 cases engendered by the Lloyd's crisis. The key judgments concerning the LMX Spiral were analysed to establish their findings and the most significant decisions were also categorised.

The LMX Spiral was built upon excess of loss ("**XL**") reinsurance contracts. There is no "XL reinsurance law" as such but XL reinsurance contracts are subject to a few specific rules applicable to insurance and reinsurance agreements. These rules are restated in the thesis, together with a short history of the development of XL reinsurance.

Another source of primary law reviewed for the purposes of this thesis are the statutes and secondary legislation that regulate the business of reinsurance in the UK. In addition, the author examined the mechanics of XL reinsurance contracts to identify their true nature. Once it became clear that the thesis would end with a wider study on the nature of XL reinsurance contracts, further academic studies, textbooks and cases on reinsurance generally and XL reinsurance specifically were reviewed and synthesized.

1.1.2 The Analysis and Hypothesis

The review of all of the documentation described above brought the following to light:

- 1. Reinsurance spirals are side effect of XL reinsurance and so new spirals may develop in the future.
- 2. Many of the documents, written by a wide variety of unrelated individuals at different points in time, acknowledged the same features the LMX Spiral and some proved that those features would apply to all reinsurance spirals. This enabled the author to produce a definitive list of the so called "Spiral Effects".
- 3. Once they reach a certain point, because of the Spiral Effects reinsurance spirals become unsustainable, generating instability in the markets they inhabit.
- 4. The sole source of law so far on reinsurance spirals has been the case law. The cases require disclosure of the spiral element and they prescribe prudential steps for underwriters to follow when they engage in LMX Spiral business. Those steps however are ineffective because they do not deal with the Spiral Effects. This is what the thesis refers to as the "case law conundrum".

Relying on analogy and further legal analysis the author sought to identify a better legal solution to deal with reinsurance spirals, considering for instance whether reinsurance spirals may be illegal or whether the law of negligence or the principles of good faith may provide a more effective legal tools, without success.

On the basis that the Spiral Effects have to be at the heart of any legal solution, the author analysed their impact first on the underwriting and then on the "Spiral Contracts" at the heart of reinsurance spirals. This lead to the first hypothesis presented in this thesis, which is that the Spiral Effects can distort the Spiral Contracts to the point where they become simple contracts of indemnity. The regulatory consequences of this are explored in the thesis.

The close examination of the Spiral Contracts made it clear that the nature of the risk being reinsured changes as it makes it way up an XL reinsurance tower. This is at odd with the current common law view of reinsurance contracts as further independent contracts providing cover for the risk insured under the primary insurance contract. The author examined the mechanics of a typical XL wording

and reviewed literature and cases concerning XL reinsurance and the nature of reinsurance contracts generally. This led to the second hypothesis presented in this thesis, which is that XL reinsurance covers the reinsured's liability arising from perils that have caused the original loss and that are covered under both the original contract of insurance and the XL reinsurance.

1.1.3 Overview of the Thesis

The first part of this thesis sets out the relevant legal principles and describes the LMX Spiral and its impact. It starts with this introductory chapter (Chapter 1); then describes the relevant rules of insurance and reinsurance law and provides a history of the development of XL reinsurance (Chapter 2) before giving a factual description of the LMX Spiral and its collapse, explaining how this has shaped the development of the Lloyd's insurance market (Chapter 3); and providing a factual appraisal of the LMX Spiral and identifying the Spiral Effect (Chapter 4).

The second part assesses the legal nature of reinsurance spirals. It starts with a detailed account of the Lloyd's litigation that gave rise to the many cases concerning the LMX Spiral (Chapter 5), before providing a detailed legal appraisal of reinsurance spirals and identifying the "case law conundrum" (Chapter 6). The final chapter of this second part (Chapter 7) sets out the first hypothesis presented in this thesis concerning the Spiral Contracts.

The third part explores the nature of excess of loss reinsurance in light of the review of the Spiral Contracts. It starts with an analysis of XL reinsurance contract wordings, both factual and legal (Chapter 8), before assessing the current legal view of reinsurance contracts in literature and case law (Chapter 9), submitting that excess of loss reinsurance contracts cover both the liability of the reinsured and the relevant insured peril, which is the second hypothesis presented in this thesis.

1.2 The LMX Spiral: Legal Definition

Whilst it relates to all reinsurance spirals, this thesis started with, and focuses on, the LMX Spiral. Therefore it is worth setting out at the outset the most authoritative legal account of the LMX Spiral, which was provided by Phillips J in the *Gooda Walker* case¹:

"The working of the LMX Spiral was complex, and whether by diagrams or in words it is only possible to attempt to describe it in a simplified form. My attempt is as follows. Many syndicates which wrote [excess of loss] cover took out [excess of loss] cover themselves. Those who reinsured them were thus writing [excess of loss] on [excess of loss]. They, in their turn, frequently took out their own [excess of loss] cover. There thus developed among the syndicates and companies which wrote LMX business a smaller group that was largely responsible for creating a complex intertwining network of mutual reinsurance, which has been described as the LMX Spiral. When a catastrophe led to claims being made by primary insurers on their excess of loss covers, this started a process whereby syndicates passed on their liabilities, in excess of their own retentions, under their own excess of loss covers from one to the next, rather like a multiple game of pass the parcel. Those left holding the liability parcels were those who first exhausted their layers of excess of loss reinsurance protection."

This definition provides a useful starting point to apprehend the LMX Spiral and in the next chapters we endeavour to explain and to provide a legal analysis of this unusual phenomenon. In the process, as set out above we will analyse the true nature of the excess of loss reinsurance agreements at the core of the LMX Spiral and we will evaluate current legal thinking concerning the nature of excess of loss reinsurance.

¹Deeny & ors v Gooda Walker Ltd (in voluntary liquidation) & ors. [1994] CLC 1224. This description is quoted and relied upon in several other cases, including the two other major decisions concerning spirals: Sphere Drake Insurance v Euro International Underwriting [2003] EWHC 1636 (Comm) and Equitas v R&Q Reinsurance Company (UK) Limited [2009] EWHC 2787 (Comm), [2010] Lloyd's Rep IR 600.

² Gooda Walker (n 1) 1231.

2 Insurance and Reinsurance

The LMX Spiral was based upon a specific type of reinsurance called "excess of loss" (**XL**). To understand XL reinsurance, it is necessary to explore some of the features that make insurance and reinsurance contracts different from standard commercial contracts. This analysis will also be relevant to our critical assessment of the LMX Spiral where we will consider the impact it had on the XL contracts that were at its core.

2.1 Insurance as a Risk Sharing Tool

2.1.1 Definition and Purpose of Insurance

Defining insurance is not an easy task³ and even though insurance business is regulated under the Financial Services and Markets Act 2000 (**FSMA**), the FSMA and relevant regulatory instruments describe rather than define insurance⁴.

There are, however, tentative definitions dotted within the case law. Those include the following:

"an agreement to confer upon the insured a contractual right which, prima facie, comes into existence immediately when loss is suffered by the happening of an event insured against, to be put by the insurer into the same position in which the insured would have been had the event not occurred, but in no better position⁵".

The above definition describes contractual rights that are triggered upon the happening of an event. A key element of an insurance contract is the event

³ Department of Trade and Industry v St Christopher Motorists' Association Ltd [1974] 1 All ER 395; Medical Defence Union v Department of Trade [1979] 2 All ER 421, 429.

The Financial Services and Markets Act 2000 (Regulated Activities) Order 2001 (the **Order**), SI 2001/544, art 3 and sch 1. Sch 1 provides a list of types of insurance contracts covered by the FSMA. In *Re Digital Satellite Warranty Cover Ltd v FSA* [2011] EWCA Civ 1413 [2012], [2012] 2 All ER (Comm) 38, the Court of Appeal noted *obiter* that the FSA was probably correct when it argued that the Order provides a complete code for the regulation of insurance contracts although it can be argued that this would only be relevant as far as the regulation of insurance is concerned. For more discussion on this, see *The Law of Insurance Contracts*, para 1-1(a) (R March 2014).

⁵ Callaghan v Dominion Insurance Co [1997] 2 Lloyd's Rep 541.

insured against: it must be uncertain in that it may or may not happen, or may happen at a time no one can predict. An insured obtains insurance because he does not want to carry the risk associated with the happening of the event. At its heart, insurance is about the transfer of that risk⁶. In fact "risk carriers" is a term often used in the insurance industry when referring to insurers or reinsurers. As a result, contracts of insurance have been described as aleatory contracts "depending upon an uncertain event or contingency as to both profit and loss".

Insurance and reinsurance business is intrinsically risky because it is based on uncertainty. Some of the underwriters who became involved in the LMX Spiral in the 1980s overlooked that element of risk, or at least miscalculated it. The LMX Spiral comprised principally XL contracts covering risks associated with catastrophes⁸. During the 1980s the market benefited from a few years with a relatively low level of catastrophes, making the business seem highly profitable. The business, however, still carried a high level of risk as many of the LMX Spiral participants found out to their detriment. The good years ended with a series of catastrophes between 1987 and 1992 which caused serious financial difficulties to those who were less well prepared.

2.1.2 Managing the Risk

Insurance is about the transfer of risk to an insurer. The insurer is better placed to manage risk because he benefits from the effect of mutualisation. At its most basic level, insurance works as follows: the insurer pools resources by charging a premium when taking on risks from a large number of insureds. Only a small portion of those insureds will suffer loss, and those losses will be paid for with the pooled premium. Insurance is, therefore, a risk sharing tool administered by insurers.

The transfer of risk is o

⁶ The transfer of risk is only one element of many that define a contract of insurance. A full analysis of what amounts to insurance is outside the scope of this thesis. For further reading on this a good starting point is the first chapter of *The Law of Insurance Contracts* (n 4) which famously states "The English courts know an elephant when they see one, so too a contract of insurance" para 1.1 (R March 2014) to make the point that there is, indeed, no definite legal definition of insurance under English law.

⁷ Colinvaux & Merkin's Insurance Contract Law, para A-0001 (R March 2011).

⁸ The relevant XL market also covered non catastrophic risks within its 'working layers'. For more details see section 2.2.4 below.

In practical terms, in exchange for receiving the premium the insurer assumes the risk of suffering losses associated with the risk materialising. Legally speaking, this works through the insurer undertaking to pay claims made by the insured within the parameters of the insurance policy. The insurer's liability under the contract of insurance arises regardless of its financial position. It is up to the insurer to ensure that its "pooled resources" are sufficient to pay the claims it is contractually obliged to meet. It has been said that "the entire insurance industry has existed for many years on its' (sic) ability to pay yesterday's losses out of tomorrow's premium"9.

The reality is obviously more complex as premiums are then invested and insurers' financial resources are used not only to pay claims but to meet running costs. The insurance industry nowadays is heavily regulated with insurers being required to keep appropriate amounts of capital reserves. To set those premiums and capital reserves at an adequate level, insurers must assess the risks they have underwritten and estimate the value of claims they may have to pay. They must also apply prudential risk management techniques to manage these risks. This includes spreading the risk to make it less likely the insurer will be overwhelmed with claims emanating from a single event (for instance widespread floods).

Risk can be spread geographically or by type or category. For instance, an insurer should balance a book of business so as to prevent large exposure to geographical areas prone to flooding caused by the same weather event. A balanced portfolio would include exposure to different areas (of the UK or elsewhere) which are unlikely to be affected at the same time by the same adverse weather. Another option is to offer different types of insurance, such as casualty or motor as well as property. In order to balance their portfolios, insurers must keep a close eye on accumulation of risk in one area or of one type.

The nature of the business that made its way to the LMX Spiral made it more difficult for underwriters to monitor their exposure to a particular risk or event. The relevant XL contracts covered entire portfolios of business and as such they did not identify the risks they covered. They also covered catastrophes which are a more difficult risk to balance, as will be seen later on in this thesis. However, some underwriters managed their exposure effectively. Much of the case law dealing with the losses caused by the LMX Spiral explores standards of care and the concept of the reasonably prudent underwriter. Ultimately, the issue was

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⁹ John Emney, 'The Spiral - 2 years on' (Insurance Institute, London, 16 October 1989).

whether the underwriters were collecting sufficient premiums to pay for the claims made to them. In many cases they did not and failed the balancing act.

2.1.3 Distinguishing Features of Contracts of Insurance

As they govern the transfer of a risk the law treats contracts of insurance as different from standard commercial contracts. Insurance policies are subject to the usual general contractual rules but in addition, there are a few legal principles that apply only to insurance and reinsurance policies. These are the principle of indemnity, the legal status of warranties and the doctrine of *uberrimae fides*¹⁰.

A Contract of Indemnity

Most commercial contracts of insurance are a subspecies of a contract of indemnity¹¹. A contract of indemnity is "a contract whereby the insurer undertakes to indemnify the assured, in the manner and to the extent thereby agreed, against losses."¹² The insured can only recover under the insurance to the extent that he has suffered a loss. In other words, the insured cannot make a profit. This close connection between the payment due under a policy of insurance and the actual loss suffered is an important aspect of insurance law¹³.

¹⁰ Colinvaux & Merkin (n 7) para A-0030.

Arguably contracts of life assurance or the so called "valued policies" are not contracts of indemnity since under those policies the assured receives a pre-agreed fixed sum upon the insured event happening. See *Colinvaux & Merkin* (n 7) A-0388.

¹² Colinvaux & Merkin (n 7) para 0003.

¹³ Such is this connection that the Law Commission and the Scottish Law Commission considered the view that the principle of indemnity in practice has the same effect as the requirement that the insured should have an insurable interest. It therefore proposed abolishing the requirement for an insurable interest for indemnity insurance contracts. See Law Commission and Scottish Law Commission, Insurable Interest (Insurance Contract Law, Issue Paper 4, January 2008) para 8.4. This however has now been abandoned in favour of a proposal that there should be a new statutory requirement for insurable interest. See Law Commission and Scottish Law Commission, Insurance Contract Law: Post Contractual Duties and Other Issues (Insurance Contract Law, Consultation Paper No 201, December 2011).

As will be seen later in this thesis, the LMX Spiral operated to disconnect payments made by reinsurers from the original loss. However, the payments made under the XL contracts that formed the LMX Spiral were based on the principle of indemnity: the reinsureds received payment based on their loss. The difficulty arose from the fact that the amalgamated losses of all reinsureds outweighed by far the original loss suffered by the primary insured. The gross amount of claims paid to all reinsureds could be 10 times higher in value than the original loss¹⁴. Some consider this gearing effect to be a harmless feature of the LMX Spiral¹⁵. Nevertheless, it added a sizeable administrative and financial cost to those who participated in the LMX Spiral.

Warranties

Warranties are not particularly relevant to this thesis but it is worth noting that the law of insurance warranties has developed to protect insurers against the risk of the adverse event becoming more likely to happen. A warranty is a term that goes to the root of the contract of insurance¹⁶. A breach of a warranty, no matter how trivial, automatically discharges insurers from liability¹⁷, even if there is no causal link between the breach and the loss in question.

The Doctrine of Utmost Good faith

The doctrine of *uberrimae fidei*, or good faith, has been developed to protect insurers because they are underwriting an unknown risk. The duty, which applies

¹⁴ For more information on the gearing effect see s 3.2.1 of this thesis.

¹⁵ Tony Berry, a leading XL underwriter takes the view that the LMX Spiral does not increase the loss but only redistributes it. See Tony Berry, 'TR Berry Marine Syndicate 536 Underwriter's Report' (1992).

¹⁶ The Marine Insurance Act 1906 s.33(1), which applies to all types of insurance contracts and not just marine insurance, defines a warranty as follows: "A warranty, in the following sections relating to warranties, means a promissory warranty, that is to say, a warranty by which the assured undertakes that some particular thing shall or shall not be done, or that some condition shall be fulfilled, or whereby he affirms or negatives the existence of a particular state of facts".

¹⁷ MIA, s 33(3).

to both parties to the insurance contract, requires them to act in good faith. It is enshrined in section 17 of the Marine Insurance Act 1906 (MIA) as follows:

"17 Insurance is uberrimae fidei

A contract of marine insurance is a contract based upon the utmost good faith, and, if the utmost good faith be not observed by either party, the contract may be avoided by the other party."

In practice the duty has been most significant at the pre-contract stage as it imposes on the insured a duty to disclose all "material circumstances" known to him, and circumstances are material if they "would influence the judgment of a prudent insurer in fixing the premium, or determining whether he will take the risk". Failure to comply with the duty of utmost good faith has drastic consequences: the insurer is entitled to avoid the policy of insurance ab initio i.e. act as if the policy never existed. The rationale behind this rule is that the insurer is taking on a risk he knows nothing about and therefore he must rely on the openness of the insured to decide whether he has the means to carry the risk and at what price²⁰.

Much has been written about the duty of disclosure and whether its rationale still applies today. The duty was developed at a time when a large proportion of insurance contracts covered perilous marine voyages. Insurers had no control over the voyages themselves or the ship or the crew, and potentially little knowledge of the perils of the sea. This does not necessarily apply today: insurers can gather information on the insured and the risk, and even direct the ways in which the insured will manage the subject matter of the insurance.

As will be seen later in this thesis, however, XL reinsurers are in a situation not dissimilar to their predecessors at the turn of the century which provided cover

¹⁸ MIA, s 18(1).

¹⁹ MIA, s 18(2).

This reasoning originates from the well known case of *Carter v Boehm* (1736) 3 Burr 1905 where Lord Mansfield said: "Insurance is a contract upon speculation. The special facts, upon which the contingent balance is to be computed, lie most commonly in the knowledge of the insured only: the under-writer trusts to his representation, and proceeds upon the confidence that he does not keep back any circumstances in his knowledge, to mislead the under-writer into a belief that the circumstances does not exist, and to induce him to estimate the risque as if it did not exist."

for marine voyages. XL reinsurers who became involved in the LMX Spiral reinsured large portfolios with minimal information concerning the individual risks they were taking on. Some blamed this lack of information for their poor performance although the more competent XL underwriters managed their portfolios successfully.

2.1.4 Insurable Interest

Another way in which contracts of insurance differ from standard commercial contracts is the requirement that the insured must have an insurable interest in what is being insured. What constitutes an insurable interest has been the subject of much case law as it varies depending on the subject matter of the insurance²¹. In their report on insurable interest²² the Law Commission and Scottish Law Commission (together **Law Commission**) describe the concept as follows:

"At its simplest, the doctrine of insurable interest requires that someone taking out insurance gains a benefit from the preservation of the subject matter of the insurance or suffers a disadvantage should it be lost."

The need for an insurable interest is usually justified on two grounds. Firstly, such interest distinguishes insurance from wagers. The Life Insurance Act 1774, also known, tellingly, as the Gambling Act 1774²³, made it a statutory requirement that the assured should have an insurable interest in the life being insured at the inception of the policy. Its aim was to prevent the use of life insurance as a means to gamble on people's life expectancy. Secondly, and certainly more critically nowadays, an insured without an interest may stand to benefit from the early destruction of what is being insured. This was recognised in the Marine Insurance Act 1745 which stated in its preamble:

"It hath been found by experience, that the making of insurances, interest or no interest, or without further proof of interest than the policy, hath been productive

Feasey v Sun Life Assurance Co of Canada [2003] EWCA Civ 885, [2003] 2 All ER (Comm) 587 para 71 per Waller LJ who said 'it is difficult to define insurable interest in words which will apply in all situations. The context and the terms of a policy... will be all important'.

²² Law Commission, *Insurable Interest* (n 13) para 1.8.

²³ See *Colinvaux & Merkin* (n 7) para A0387.

of many pernicious practices, whereby great numbers of ships, with their cargo, have...been fraudulently lost or destroyed".²⁴

The rationale behind the requirement for an insurable interest therefore is to reduce risks associated with fraud and, more generally, moral hazard. It has to be said however that moral hazard and fraud remain major issues for the insurance and reinsurance industry despite a long history of requiring insurable interest.

The law on insurable interest may have changed in 2006 following the implementation of the Gambling Act 2005 (**GA 2005**)²⁵. Those changes, however, are outside the scope of this thesis given that the LMX Spiral developed mainly during the 1980s and collapsed in the early 1990s. In the 1980s, insurable interest was required for all types of insurance under complex and sometimes inconsistent sets of rules. Under the MIA, which still applies today²⁶, the insured has an insurable interest in the "marine adventure" if "he stands in any legal or equitable relation to the adventure or to any insurable property at risk" which means that he may benefit from the safe arrival of the insured property, or may be prejudiced if it is lost, damaged or detained; or he may incur liabilities in respect of the insured property²⁷. This is a relatively restrictive view of insurable interest which requires the insured to hold legal or equitable rights or obligations concerning the subject matter of the insurance. The principles applicable to

²⁴ As quoted in *Colinvaux & Merkin* (n 7) para A0385.

²⁵ Prior to the Gambling Act 2005 gaming or wagering contracts were null and void under s 18 of the Gaming Act 1845. The GA 2005 repealed this section with effect from 1 September 2006. A new section 335 under the GA 2005 provides that gambling contracts are now enforceable but this is without prejudice to "any rule of law preventing the enforcement of a contract on the grounds of unlawfulness (other than a rule relating specifically to gambling)". The impact of section 335 on the various rules concerning insurable interest varies depending on the type of insurance being considered. There is, however, a view that many of those contracts still require something akin to an insurable interest because they are indemnity contracts and the insured cannot claim an indemnity until he/she has suffered a loss. This area is currently under review. See note on Law Commission proposals (n 13).

Note that arguably the sections requiring an insurable interest have been nullified by s 335 of the GA 2005. See *Colinvaux & Merkin* (n 7) paras A-0393 and A-0393/1 for a detailed analysis of the impact of the GA 2005 on s 4 of the MIA.

²⁷ MIA, s 5(2).

marine risks are seen as "broadly applicable to non-marine risks"²⁸. However, in some non-marine cases more tenuous connections between the insured and the subject matter of the insurance have been found to amount to an insurable interest. This includes being in possession of the subject matter of the insurance and being under a duty to exercise reasonable care in respect it²⁹, or being in close physical relation to it³⁰.

The significance of insurable interest for the thesis is that the requirement applies in the context of reinsurance. A reinsured is required to have an insurable interest which is identified by reference to the original policy. This chapter will show how this legal requirement is ill-fitted to the realities of XL reinsurance, where long chains of reinsurance disconnect the ultimate reinsured from the primary loss. Such disconnection was a typical trait of the LMX Spiral. The workings of the LMX Spiral thus challenged the suitability of a well established legal principle to XL reinsurance. The law concerning insurable interest is under review by the Law Commission. After considering whether it should be abolished, the Law Commission's current thinking is to retain the requirement that an insured should have an insurable interest in the subject matter of the insurance but to provide a clear statutory basis for this requirement³¹.

2.2 Reinsurance as a Spreading Mechanism

2.2.1 Definition and Purpose of Reinsurance

A well known definition of reinsurance is that it is the practice of "insuring insurers"³². More colloquially, it has been described as "insurance between

²⁸ MacGillivray, *MacGillivray on Insurance Law* (11th ed, 2008) 1-050.

²⁹ Sharp v Sphere Drake Insurance (The Moonacre) [1992] 2 Lloyd's Rep 501. Here the insured was in possession of a yacht and responsible for its upkeep but did not own it.

³⁰ National Oilwell (UK) Ltd v Davy Offshore Ltd [1993] 2 Lloyd's Rep 582, where subcontractors who supplied goods constituting part of the overall works were found to have an insurable interest in the entire contract works due to their close physical relation to the insured property.

³¹ See n 13 above.

³² R Kiln and S Kiln, *Reinsurance in Practice* (4th edn, Witherby & Co Ltd, 2001) 1.

consenting adults"³³. Reinsurance is a contract of insurance entered into by two insurers. The entity seeking the reinsurance, an insurer, is the reinsured, also called the cedant. The entity offering cover is the reinsurer. There is no limit on how many times the same risk can be reinsured. Beyond the first level, the reinsurance is sometimes referred to as a 'retrocession', with reinsurers called retrocessionaires and their reinsured occasionally referred to as the retrocedant. There is no rule concerning the terminology, such that the terms reinsurer, reinsured and cedant are also used at the highest levels of reinsurance. The only defining factor is that a retrocession is necessarily a reinsurance of a reinsurance. The contract being reinsured is sometimes referred to as the 'inward reinsurance' and the reinsurance contract that provides the cover is the 'outward reinsurance.'

The purpose of reinsurance is simply to spread the risk further amongst a larger number of players. As world economies have become more sophisticated, globalised and technologically advanced, the need for reinsurance has increased. Nowadays reinsurance has evolved from simple risk sharing to become a sophisticated financial tool for insurers, always with the aim of spreading the risk further. It has been said that:

"the reinsurance market is a secondary market which serves the primary insurance market as an avenue for expansion and a means of procuring a variety of services which reduce risk on insurance portfolios."³⁴

By way of a brief overview, below are three of the main purposes served by reinsurance³⁵:

- 1. Increasing the capacity of insurers to accept risks. Reinsurance allows the insurer to rely on the capital base of the reinsurer, thereby enabling the insurer to take on larger risks, or more risks than it would be able to if it only had its own capital to rely on.
- 2. Promoting financial stability. Reinsurance can be used to "take out the peaks" of an insurer's loss history by providing cover against the risk of accumulation of losses or of very large single losses due to a catastrophe. XL reinsurance is often used for this purpose.

³³ Reinsurance Practice and the Law, para 1-1 (R 39 February 2014).

³⁴ D E Ayling, *Underwriting Decisions Under Uncertainty* (Ashgate, 1984) 3.

³⁵ O'Neill and Woloniecki, *The Law of Reinsurance in England and Bermuda* (3rd ed, Sweet & Maxwell, 2010) para 1-02.

3. Strengthening the solvency of the insurer. As noted above, insurers must now follow strict capital solvency requirements. Reinsurance improves their solvency margin, which is calculated as a ratio of net premium income over capital and free reserves, because reinsurance frees capital.

Reinsurance can be used for other specific purposes such as "fronting" arrangements. These apply, for instance, where for regulatory reasons only local insurers are allowed to provide cover in a specific jurisdiction: they can then reinsure the entirety of the risk with the reinsurer. The local insurer is used as a "front" to enable the reinsurer to access the relevant jurisdiction.

At this point it is important to note that if the primary purpose of reinsurance is the spreading of risk, the LMX Spiral failed to achieve this by concentrating the losses amongst a few reinsurers rather than allowing their dispersal. Likewise, the LMX Spiral did not deliver on financial stability, instead causing turmoil within the reinsurance markets when it collapsed.

2.2.2 Types of Reinsurance Agreements

Reinsurance contracts come in many varieties. The usual way to categorise them is as follows:

- 1. firstly by reference to the two "basic" ways in which reinsurance contracts can be classified: proportional and non proportional;
- 2. secondly, by describing the two principal methods of effecting reinsurance: facultative reinsurance and non facultative reinsurance³⁶.

This thesis is only concerned with XL contracts, which are a type of non proportional and, for most of those in use within the LMX Spiral, non facultative reinsurance. However, it is worth explaining briefly how XL reinsurance fits within the general range of reinsurance products.

Proportional/non-proportional reinsurance

In proportional reinsurance the reinsurer underwrites a proportion of the risk and receives in exchange the same proportion of the premium. Thus a reinsurer who takes on 20% of a risk would receive 20% of the premium paid to the reinsured.

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³⁶ ibid para 1-11.

By contrast, in non proportional reinsurance the reinsurer agrees to underwrite a tranche of the risk written by the reinsured. The premium paid is not necessarily proportionate to the amount reinsured, as much will depend on the level of risk the reinsurer agrees to take on.

Facultative/non facultative reinsurance

Facultative reinsurance is understood to be the oldest form of reinsurance³⁷. A facultative contract of reinsurance usually covers one specific risk, although some contracts may cover several risks and will still be considered to be facultative contracts of reinsurance. The defining factor of facultative reinsurance is that the risk(s) subject to the cover are identifiable and the premium will be set specifically for those risks. The scope of cover is also usually negotiable. Facultative reinsurance is therefore 'tailor made', meaning that it is set up for a particular risk such as a large property, refinery, oil platform or a specific event (concert, festival), etc.

At the other end of the spectrum are reinsurance treaties, a form of non facultative reinsurance that provides cover for a multitude of similar risks. A treaty reinsurance contract for instance would cover a direct insurer's portfolio of motor insurance policies. Usually risks are automatically covered, so that the reinsurer does not necessarily know at any one time what risks are included within the treaty. In the above example, each time the direct insurer agrees to insure a new car, the new primary policy will automatically be covered by the reinsurance treaty.

Facultative reinsurances can be both proportional and non proportional and the same can be said of non facultative reinsurances, although some combinations are more common than others.

Most common types of reinsurance agreements: an overview

There is a wide spectrum of reinsurance agreements between the "pure" facultative policy and a straightforward treaty reinsurance. This section provides a brief overview of some of the most common types of reinsurance contracts.

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³⁷ Ayling (n 34) 6.

- 1. Quota Share: a quota share is a form of reinsurance where the reinsured cedes a fixed portion of each and every risk to the reinsurer who receives in exchange the same fixed portion of the premium. As such it is the archetypal proportional reinsurance contract where the reinsurer shares in the fortunes of the ceding company. It is also typically a non facultative type of treaty reinsurance³⁸.
- 2. Surplus Treaty: a surplus treaty is a form of quota share reinsurance where the reinsured only cedes a "surplus" liability over the retention the reinsured has set for itself. The Surplus treaty is a proportional form of reinsurance because it provides cover on a proportional basis over the retention. Since it is a treaty, it is a non facultative form of reinsurance.
- 3. Facultative/Obligatory Treaty also known as 'fac./oblig.'. A fac./oblig. is another variation of the Quota Share treaty, but in this case the reinsured selects either the risks he wants to cede and/or what proportion of his participation in the risk he intends to cede. This is the facultative element. The reinsurer is obliged to accept these cessions. This is the obligatory element. A fac./oblig. is a facultative but proportional form of reinsurance.
- 4. XL. This is the most common form of non proportional reinsurance contract where the reinsurer takes on losses above a certain monetary limit up to a maximum figure. XL can be facultative in which case it will cover only one risk; or non facultative where, for instance, the cover is in respect of any one event. This is explained later on in this thesis.
- 5. Stop Loss. A Stop Loss reinsurance is a form of XL reinsurance where the point at which the risk is ceded is not based on a fixed sum but on the cedant's loss ratio, calculated by applying losses to the cedant's total premium income. Only once the ratio exceeds a pre-agreed point will the reinsurer become liable under the policy, up to an agreed percentage of the cedant's premium income or up to a fixed monetary limit. Stop Loss reinsurances are non proportional, and since they cover the cedant's entire portfolio, they are non facultative.39

³⁸ The phrase 'quota share treaty' is often treated as synonymous with the phrase 'quota share reinsurance'. This is based on the assumption that a quota share reinsurance contract is necessarily non facultative.

³⁹ Stop loss policies are sometimes used as a technique to allow an insurer or reinsurer to go into run-off, that is, to cease active underwriting. The stop loss policy will reinsure the

6. Aggregate Excess of Loss. Aggregate Excess of Loss reinsurances are similar to Stop Loss policies but they provide cover once the losses exceed a specified amount. These are also non proportional and non facultative reinsurances.

The closeness of the relationship between the reinsured and reinsurer and amount of control the latter has over the risk in question will vary depending on the type of contract entered into. In the case of a proportional facultative reinsurance, for instance, where the reinsurer is underwriting 20% of a large refinery and receiving 20% of the premium, the reinsurer will certainly have some level of involvement once a claim is made by the underlying insured. Another reinsurer providing Stop Loss cover at a much higher level for the same refinery as part of a portfolio of risks will not be so concerned with the one individual claim.

2.2.3 The Use and Development of XL Reinsurance

As explained above, XL is a non proportional form of reinsurance where the reinsurer provides cover above a specified amount, usually up to a maximum figure. The sum below which no XL reinsurance is provided is called the deductible, priority, excess point or threshold. The purpose of XL reinsurance is to limit the exposure of the insured either to a large individual risk (e.g. a high-value property such as a refinery) or to an aggregation of losses caused by a single event (e.g. a natural disaster such as a hurricane)⁴⁰. Thus cover is provided in respect of any one risk, or any one event. The latter form of cover is more common nowadays. XL cover per risk is now mainly used in the property branches of the reinsurance companies⁴¹.

This form of reinsurance is considered to be relatively new although it is unclear when XL reinsurance was first used in reinsurance markets⁴². Its invention is

entity against all future liabilities. Those "run-off" policies are sometimes considered to be another form of reinsurance but they are, in truth, a type of stop loss policy.

⁴⁰ David Walker and others, 'Report of an Inquiry into Lloyd's Syndicate Participations and the LMX Spiral' (June 1992) para 2.2.

⁴¹ The Insurance Institute of London, 'Developments in Excess of Loss Reinsurance' (Advance Study Group Report 244, Insurance Institute of London, May 2000) 34.
⁴² ibid 23.

often attributed to Cuthbert Heath, a leading Lloyd's broker and underwriter. The story goes that after the devastating San Francisco earthquake of 1906, Heath was approached by Hartford Company of America with the request to provide cover for future catastrophes in a new format that would make the reinsurance simpler to administer. (Treaty reinsurance requires the submission of monthly bordereaux and accounts detailing risks attaching to the treaty, premium due, claims made etc.) It is said that Heath in response devised the first XL contract: a reinsurance that provided cover for catastrophes only and required less clerical work⁴³.

Whilst interest in XL reinsurance grew steadily over the next few years, it was not until after the Second World War that XL reinsurance became widely used. This was due to a combination of factors identified as follows:

- a) The change in nature of the risks being insured including the arrival of the jumbo jet, supertankers, offshore rig installations, nuclear power stations etc. All these required higher levels of insurance and, therefore, reinsurance cover.
- b) Increasing liability risks connected to innovations in chemical, industrial, pharmaceutical and surgical industries.
- c) An increase in administrative costs and court awards, and
- d) The extension of traditional cover (i.e. proportional cover) to include extraneous perils⁴⁴.

The above factors all point to an increase in the need for reinsurance, not all of which could be met by the providers of the more traditional proportional type reinsurance. XL reinsurance offered many advantages to those in need of additional cover: it was simple and cheaper to administer, the cedant could retain a larger proportion of the original premium whilst providing a maximum limit to the retained cost of claims for a particular event. There were disadvantages for the cedant too, one being the disassociation between its fortunes and that of the reinsurer. This meant that on a given year the cedant could suffer a loss due to a multitude of small claims whilst its XL reinsurer made a profit on the same contract. Another disadvantage of XL reinsurance is that the major part, or sometimes all, of the premium is payable at the outset, whilst in proportional

⁴³ ibid 24.

⁴⁴ ibid 25.

reinsurance payment is usually quarterly or half quarterly in arrears. The latter creates a positive cash flow for the reinsured as he receives the premium before some of it has to be passed on to the reinsurer. By contrast, XL reinsurance can create a negative cash flow by requiring the reinsurance to be paid up front, sometimes prior to receipt of the reinsured premium. Nevertheless XL reinsurance has grown steadily in popularity in the post-war years and it is now a major form of reinsurance used worldwide.

2.2.4 Specific Features of XL Reinsurance

An XL contract is a specialised form of reinsurance and, as such, it contains unique features, some of which became key elements in the development of the LMX Spiral. To facilitate our analysis of these features, this section includes a very simple example of an XL reinsurance programme as set out below.

The Reinsurex Programme

A reinsurance company called 'Reinsurex' holds a reinsurance portfolio and calculates its Probable Maximum Loss⁴⁵ as amounting to £100 million. The portfolio covers worldwide property risks. More specifically, it comprises reinsurance contracts covering primary insurers from various global locations including the US and the Caribbeans, the UK and Europe. Reinsurex decides to retain the first £10 million and to reinsure the remaining £90 million on the XL reinsurance market. Reinsurex places its £90 million exposure on a 'per event' basis as follows:

Reinsurance programme

XL reinsurer C - £20 million excess £80 million

XL reinsurer B - £30 million excess £50 million

XL reinsurer A - £40 million excess £10 million

Reinsurex - £10 million

⁴⁵ See definition in the section titled 'Vertical Exposure' later on in this section.

Reinsurex suffers three 3 losses during the currency of the policies in the following order:

- a) Loss 1: £60 million;
- b) Loss 2: £40 million; and
- c) Loss 3: £100 million.

The scenario below is based on the assumption that none of the policies contains reinstatement so the layers will pay up only once. In reinsurance parlance, once they have paid losses up to the limit of each policy, the layers have become 'exhausted'.

<u>Loss 1 (60 million)</u>: The first £10m is retained by Reinsurex with the balance of the loss being recovered under layers A (£40 million) and B (£10 million). This loss exhausts layer A. Layer B is still available to pay a further loss but this is limited to the £20 million cover remaining on that layer.

<u>Loss 2 (40 million)</u>: This loss would have had an impact on layer A but since it was exhausted by Loss 1 it is no longer available. This means Reinsurex has to retain this loss in full.

Loss 3 (£100 million): Reinsurex has to retain the first £50 million of this loss because layer A was exhausted by Loss 1. In addition, layer B only has £20 million available coverage due to Loss 1. Thus the £10 million that falls outside layer B will be retained by Reinsurex. This increases its retained loss to £60 million (£50 million + £10 million). Layer C will pay a total loss of £20 million and will become exhausted.

After Loss 3 Reinsurex has no available reinsurance for any further losses it may suffer on the relevant property portfolio.

The above is a much simplified example. In reality, Reinsurex would probably have a combination of proportional and XL reinsurances in place in addition to the above. It may also have sought cover of the lowest layers on a 'per risk' basis. The same risk would then be reinsured under the above reinsurance programme prior to being bundled with other parts of Reinsurex's portfolio (including, for instance, non property risks) to be protected by a Stop Loss reinsurance. Reinsurex's £10 million retention could well be reinsured in part too.

In addition, there may be several reinsurers participating in one layer, each taking what is called a 'line' which is a certain percentage of the risk. In our example

there could be reinsurers A1 with a 10% line (an exposure of only £4 million), A2 with a 20% line (£8 million) etc. A group of reinsurers participating in the same layer is often led by a specialist in the particular type of risk who takes the largest line and is normally empowered to make decisions on behalf of the other reinsurers (the **Leader**). Because they follow the Leader, the other reinsurers involved in the programme are referred to as 'the following market'.

Finally, each of the reinsurers involved will have its own reinsurance programme in place, most likely a mix of proportional and non proportional reinsurance covering their property and other exposures. Reinsurer A1 for instance may have its own XL programme as well as a Quota Share reinsurance in place.

The result is a very complex web of contractual relationships covering the same risks. However, despite the complexity of its arrangements, reinsurance usually works as an efficient spreading mechanism for the world's largest risks.

Layering

Each reinsurer provides cover for a tranche, or a layer, of Reinsurex's portfolio. A reinsurance programme of this type is sometimes called a "reinsurance tower". The layering enables the business to be placed more easily. More reinsurers will be able to participate in a smaller tranche, often because they follow an underwriting policy that imposes a limit on their level of participation in any one contract, known as the 'maximum line in any one contract'⁴⁶. In our example, more reinsurers could participate in a layer with a maximum liability of £40 million (e.g. layer A which is £40 million excess £10 million) than a layer with a potential liability of up to £90 million (this would be a layer covering the entire programme of £90 million excess £10 million).

Also, different reinsurers will be interested in providing cover at different levels thus widening the pool of interested parties. Some reinsurers for instance specialise in catastrophe cover and would only quote for layer C, whilst others may prefer to be involved at a lower layer such as layer A.

⁴⁶ This is according to Tony Berry who explained this during interviews with the writer of this thesis.

Working v Catastrophe layers

In the London reinsurance market the lower layers are often called 'working layers': they are the ones that are 'worked' the hardest because they are affected more often. Layers sitting higher up in the reinsurance tower are known as the catastrophe layers. As with so many things concerning reinsurance in the London market, there is no scientific or official definition of what a working or catastrophe layer is. As a rule of thumb, however, a layer would qualify as a catastrophe layer if it requires two or more of the original policies to be affected by the same event⁴⁷. It is worth clarifying here that 'per event' XL reinsurance will cover a section of a reinsurer's account or even its entire portfolio⁴⁸. This necessarily includes a multitude of policies. Facultative XL policies do exist (these would be 'per risk') but they are less usual as mentioned previously.

In the above example, layer A is a working layer (bearing in mind the relatively small retention of £10 million) whilst layer C is a catastrophe layer. Taking the above losses as an example, only Loss 3, at £100 million, was large enough to reach layer C. Such a large loss would have been caused by one event, for instance a hurricane, damaging properties covered by more than one of the Reinsurex policies (being the policies under which Reinsurex provides reinsurance to the primary insurers).

Premium

As shown in the Reinsurex example, the likelihood of a risk reaching a layer depends on the size of the original loss, with the upper layers being impacted only by the largest losses. Premiums are calculated accordingly: they decrease as the risk makes its way up the reinsurance programme, diminishing with each layer. Logically, working layers cost more than catastrophe layers. It is

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⁴⁷ The Insurance Institute of London, 'Excess of Loss Methods of Reinsurance' (Report by Advance Study Group 218, Insurance Institute of London, 1988) para 2.1.2. See also Ayling (n 34) 8. This has been confirmed by lead LMX underwriter Tony Berry during interviews with the author of this thesis.

⁴⁸ There are called, respectively, "specific treaties" (accounts that contain the same type of risks such as hull, cargo, oil rigs etc.) or "whole account" (entire portfolio). For a more detailed analysis of this type of XL coverage see s 3.2.2 of this thesis.

understood that at the time of the LMX Spiral, rates at the higher level of XL reinsurance tended to be similar⁴⁹.

In the context of the LMX Spiral, some brokers put together entire reinsurance programmes with pre-established fixed premiums based on 'rate on line' (ROL) calculations. The ROL was the ratio the premium bore to the line underwritten. Those ROLs were usually very crudely calculated by fixing a premium on the bottom layer and applying a discount for each layer up the chain of reinsurances. Whilst there is nothing wrong in principle with using ROL to fix a premium, pricing entire reinsurance programmes in advance based purely on the layering was inappropriate, because the price was unrelated to the amount of exposure taken on by the reinsurers. This approach overlooks the very nature of insurance and reinsurance set out earlier in this chapter which is all about quantifying and managing the risk being taken on.

Fixing the premium for an XL contract is a complex exercise dependent on much more than the position of the particular reinsurance layer. The premium should include provisions for the risk of loss, a reserve, provisions for catastrophe losses, brokerage, management expenses and a margin, including a contribution towards a solvency margin⁵⁰. There were also countless ways of charging a premium, all of which were well known in the mid 1980s when the LMX Spiral developed. These included the straightforward flat premium (a single figure covering the entirety of the life of the contract) or a variable premium based on changes in exposure, such variations to be calculated by reference to a fixed rate or a rate that varied in accordance with the claims experience. Some reinsurers also offered profit commission or rebates based on the claims experience, sometimes computed over a number of years⁵¹. At the time "payback" was also widespread. This was a practice whereby the reinsured would pay back over a number of years any claims monies received from the reinsurer. The amount to be repaid was added to the premium for the relevant years.

The premium would still, however, depend on the nature of the account being reinsured. For instance there would be little difference in pricing between two catastrophe layers protecting hull accounts, but a catastrophe layer protecting a property account would be priced differently.

⁵⁰ The Insurance Institute of London 1988 (n 47) para 2.3.4.

⁵¹ ibid para 2.3.5.

Balancing the portfolio

As explained above an insurer must ensure its portfolio is well balanced by avoiding over-exposure to a single loss. This requires risks to be spread by type and/or geographically⁵². XL business, however, is more volatile than traditional insurance: it is a high risk/high reward type of business where the balancing act is more difficult to achieve.

This difficulty is due to the fact that many XL contracts, particularly catastrophe layers, cover losses of low frequency but very high magnitude. The basic principle that premiums and other income earned must pay for the claims remains. However, profits can only be conceived over the long term: when there are no catastrophes the business is highly profitable, but one catastrophe can wipe out all profits achieved over a number of years. The balancing act therefore takes longer. In additions, reinsurers in the UK at the time of the LMX Spiral were discouraged from building up funds in the good years because rules concerning the tax treatment of reserves only allowed capital to be retained for outstanding claims or estimated future claims known as Incurred But Not Reported (IBNR) claims⁵³.

It was also more difficult for XL underwriters to spread the risk geographically because natural catastrophes tend to concentrate in a few specific areas of the world. For instance, the west coast of the US is a major source of hurricane losses whilst Japan is prone to earthquakes. It is difficult to balance those risks elsewhere. This was articulated by the defendant underwriters in the lead case on the LMX Spiral, *Deeny v Gooda Walker*:54

"It has always been the defendants' case that the type of balance that I have just described, achieved year by year, is not compatible with writing excess of loss business on any scale. In so far as it concerns the concept of achieving balance by dispersing the business written over different classes or geographical areas of risk, the defendants' stance on this point was supported by a number of witnesses including, most authoritatively, Mr Fryer. He told me that it was impossible to write an excess of loss account of any significance covering catastrophe perils and to achieve internal balance by such means. Most of the demand for excess of

⁵² See section 2.1.2 of this thesis.

⁵³ This was explained to the author of this thesis by Tony Berry.

⁵⁴ Gooda Walker (n 1)

loss cover came from the US and Europe and insufficient business could be written in other parts of the globe to balance exposure to those areas"55.

Vertical exposure

One of the aims of XL reinsurance is to smooth the cedant's results by taking the peaks out of the cedant's loss records. A well placed XL reinsurance portfolio should ensure that there is a line above which losses will be taken on by the XL reinsurers. However, XL reinsurers provide cover up to a certain point. This, in effect, creates a second line above which the particular XL policy offers no protection. It is up to the cedant to keep a close eye on its aggregated exposure to ensure that it has additional cover in the event a loss breaches its reinsurer's limit of liability. Such additional cover can be purchased in the form of another layer of XL reinsurance to sit above the one in question, or the wider Stop Loss or Aggregate Excess of Loss contracts. A reinsured's exposure to losses on a vertical basis is aptly called the vertical exposure⁵⁶.

Calculating a reinsured's maximum exposure is not as simple as putting together the aggregate sum of all liabilities it has taken on. If a reinsured has balanced its portfolio by spreading its risks, the likelihood of all policies turning into total loss due to the same event should be reduced. Thus underwriters instead calculate the "Probable Maximum Loss" (PML), based on their analysis of the risk of several policies being impacted by the same event. The PML is calculated by identifying those risks that may be exposed to the same catastrophe and applying a 'PML factor' to their cumulative value. Depending on the risk profile of the aggregated risks, the PML factor could vary from 30% to 100%⁵⁷. Based on its PML calculations, the underwriter would assess the level of reinsurance protection it required.

⁵⁵ ibid para 1240.

⁵⁶ This is the term used in the *Gooda Walker* judgment (n 1) 1244.

For a detailed analysis of how a prudent underwriter would calculate its PML, see Tony Berry, 'Expert Report on Underwriting Issues by Tony Robert Berry' (*Nederlandse Reassurantie Groep Holding NV v Bacon & Woodrow Ernst & Young* [1997] LRLR 678) para 8.2. Mr Berry's PML factors in the mid 1980s were as follows: 100% for "XL on XL worldwide", "London Market Hull", "London Market Cargo" as well as "Specie and Rigs worldwide". He increased his original PML for its London Market Whole Account from 60% to 80% in the late 1970s/early 1980s.

Failure to appreciate the risk of losses breaching the upper limits of an XL programme lead to the risk of a cedant having insufficient reinsurance to meet the larger losses. Those losses would then 'come out of the top' of the reinsurance tower and come back to the cedant. This lack of reinsurance 'at the top' was a major issue within the LMX Spiral.

Going back to our example, Reinsurex may have miscalculated its exposure, for instance by overlooking the fact that properties in the US and the Bahamas could be damaged by the same hurricane⁵⁸. Reinsurex's PML may therefore have been £150 million. Even if the programme had remained untouched with no layers exhausted, if a loss of £150 million had gone through the reinsurance programme, £50 million would have 'come out at the top' which would have had to be paid by Reinsurex in addition to its £10 million retention.

Horizontal exposure

As illustrated with the Reinsurex example above, a succession of losses may have an impact on the same reinsurance programme and exhaust XL layers, particularly the working layers. XL reinsurers can, however, provide additional cover by allowing the policy to be reinstated should a loss impact the layer. Once reinstated, the same policy can be used to cover another event provided it falls within the parameters of the policy. In the 1980s it was not unusual for XL reinsurance policies on the London market to contain one or two reinstatements⁵⁹. Usually an additional premium has to be paid when the policy is reinstated, although in the heyday of the LMX Spiral such additional cover was sometimes given for free⁶⁰.

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⁵⁸ This is what happened with Hurricane Andrew in 1992 which remains one of the costliest natural disasters to date. See section 3.3.2 of this thesis for more detail.

⁵⁹ D E A Sanders, 'When the Wind Blow: An Introduction to Catastrophe Excess of Loss Reinsurance' (C.A.S. Fall Forum 1995) p.158. See also *Arbuthnott v Feltrim Underwriting Agencies Ltd & Ors* [1995] CLC 437. At page 445 Phillips J states "It was the general practice of those writing marine catastrophe business to buy and sell cover that provided for two reinstatements."

⁶⁰ Tony Berry, 'The Effects and Lessons of Piper A to the Excess of Loss Market' (undated).

The additional exposure created by reinstatements is called the horizontal exposure⁶¹. Each reinstatement is, in effect, a new policy which requires its own reinsurance. The easiest way to obtain such additional cover for the cedant is to ensure its reinsurance mirrors the number of reinstatements contained in the cedant's own policies. This was not always done by those who participated in the LMX Spiral.

<u>Underwriting discipline</u>

The above shows that XL reinsurance is a specialist and more risky type of reinsurance business which requires specialist knowledge and underwriting discipline. In the context of the LMX Spiral such discipline was seriously lacking amongst a number of underwriters. The following have been identified as the three "important decision areas over which the underwriter may exercise skill and judgement" when writing catastrophe cover:

- 1. <u>Pricing</u>. Setting the premium right is paramount in the context of insurance and reinsurance as this will determine the profitability of the business. As we have seen, there are many sophisticated ways to set a premium for XL reinsurance. The pricing of XL reinsurance programmes using ROL based purely on the level of a layer, as described above, was clearly inadequate yet it gained in popularity in the mid 1980s when the LMX Spiral developed.
- 2. Portfolio construction. For the reasons stated above, achieving a balanced portfolio is more difficult in the context of catastrophe reinsurance. Catastrophe reinsurers must take a long-term, prudential view of their business but this was overlooked in the mid 1980s when few catastrophes made the business seem unrealistically lucrative.
- 3. Own reinsurance. This requires the underwriter to monitor its aggregated exposure and calculate its PML, decide on the level of risk it is able to retain and reinsure the rest. As shown above in the context of XL reinsurance such reinsurance must cover both vertical and horizontal exposure. Many underwriters who chose to dabble in XL business in the

⁶¹ This is the term used in the *Gooda Walker* judgment (n 1) 1244.

⁶² Ayling (n 34) 18.

mid 1980s, and fuelled the development of the LMX Spiral, lacked the specialised knowledge to aggregate their exposure and calculate their PMLs.

Case law concerning the LMX Spiral has explored how an underwriter using reasonable care and skill (the **Reasonable LMX Underwriter**) would have exercised its judgment when underwriting XL contracts. A Reasonable LMX Underwriter would have formulated an underwriting plan encompassing all of the above points, with particular focus on aggregation, a careful consideration of the PML figure and the adequacy of its reinsurance protection⁶³. This is explored later on in this thesis.

2.3 The Legal Nature of Reinsurance

2.3.1 Reinsurance as Further Insurance

We have described reinsurance as a contract of insurance between two insurers. The following definition by Lord Mansfield provided in the very early days of reinsurance law has been described as the "classic definition" for legal purposes:

"This contract, although it much resembles, yet does not fully amount to a reassurance, which consists of a new assurance, effected by a new policy, on the same risk which was before insured, in order to indemnify the underwriters from their previous subscription and both policies are in existence at the same time."65

Thus from a legal perspective the key components of a contract of reinsurance were as follows⁶⁶:

 A contract of reinsurance is a contract of insurance. This means the special insurance rules described above apply to reinsurance. By way of reminder, this includes the principle of indemnity, the importance of warranties, the duty of utmost good faith and the need for insurable interest.

⁶³ See Gooda Walker (n 1) 1258-74.

⁶⁴ O'Neill and Woloniecki (n 35) para 1-27.

⁶⁵ Delver, Assignee of Bunn v Barnes (1807) 1 Taunt 48.

⁶⁶ This follows the analysis by O'Neill and Woloniecki (n 35) para 1-27.

- 2. The contract of reinsurance is a separate contract which is distinct from the underlying contract of insurance. Thus the coverage offered by the insurance and reinsurance might differ in scope. The overlap in coverage is largely dictated by the type of reinsurance agreement entered into. A one off proportional facultative reinsurance contract is more likely to provide "matching cover" than catastrophe XL reinsurance covering a cedant's entire portfolio.
- 3. The contract of reinsurance is also a contract of indemnity which covers the "same risk" as the underlying insurance. In other words, reinsurance is not liability insurance triggered upon the liability the insurer to pay under the policy of insurance. It is another insurance of the underlying risk. This aspect of reinsurance is controversial and has been the source of recent case law which will be discussed later.
- 4. The contracts of insurance and reinsurance are "in existence at the same time". Given that the contracts may be entered into at different times, it may be more accurate to say that the contracts cover the same period of time.

Defining and identifying contracts of reinsurance was of paramount importance at the time because the Marine Insurance Act 1745 rendered contracts of reinsurance unlawful⁶⁷. This prohibition can certainly be explained by the then propensity of market players to use reinsurance contracts as a means of gambling. The legal prohibition on reinsurance was lifted in 1864.

As reinsurance has grown in popularity, its legal definition has remained unchanged. Most notably, the principle remains that reinsurance is not a form of liability insurance. This was already well established by 1925, when in the case of Forsikringsaktieselskabet National (of Copenhagen) v Attorney-General⁶⁸ the court noted that:

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⁶⁷ S 4 of the Marine Insurance Act 1745 provided that "it shall not be lawful to make Reassurance, unless the Assurer shall be insolvent, become bankrupt or die...".
68 Forsikringsaktieselskabet National (of Copenhagen) v Attorney-General [1925] AC 639, 642.

"It is now old law that by a contract of reinsurance the reinsurance party insures the original insuring party against the original loss, the original interest of the original insuring party being constituted by its policy given to the original insured".

The point was reiterated with some force in the well known case of *Toomey v* Eagle Star Insurance, where Hobhouse LJ stated that:

"The argument of Eagle Star both before the judge and before this court sought to equate reinsurance with liability insurance. This is not and never has been correct. Liability insurance is a species of original insurance whereby an assured insures the risk of becoming liable to others. A reinsurance contract is, properly defined, something different." 69

More recently, in *Wasa International Insurance Co Ltd v Lexington Insurance Co*⁷⁰, the House of Lords confirmed that a reinsurance contract is a further independent contract that provides cover for the "original" subject matter, that is, the subject matter of the underlying insurance.

Whilst well established in law, this point is not without controversy. The decision of the Court of Appeal in *Wasa v Lexington* clearly favoured the view that reinsurance is akin to liability insurance. In Sedley J's own words, the "need for the fiction that reinsurance covered the primary risk and not the insurer's own potential liability [was] long spent."⁷¹ Even the House of Lords, when reversing the CA decision on this point recognised that "there is much to be said for the view that in commercial reality reinsurance is liability insurance which provides cover for the reinsured in the event that the reinsured is liable to pay the original insured"⁷² but it declined to do so because of the regulatory implications this would have⁷³. Critically, the point would have made no difference to the outcome

 70 Wasa International Insurance Co Ltd v Lexington Insurance Co [2009] UKHL 40, [2010] 1 AC 180.

⁶⁹ Toomey v Eagle Star Insurance [1994] 1 Lloyd's Rep 516, 522.

⁷¹ Wasa International Insurance Co Ltd v Lexington Insurance Co [2008] EWCA Civ 150, [2008] 1 All ER (Comm) 1085, para 49.

⁷² Wasa v Lexington (n 70) paras 114 and 115 per Lord Collins of Mapesbury.

⁷³ Currently reinsurers are subject to regulation based on the class of business they engage in which is determined by the nature of the original risk (e.g. property, casualty etc). For a more detailed analysis of the regulatory view of reinsurance see Özlem Gürses

of the case and the House of Lords therefore felt this was the inappropriate forum to reconsider such a well established legal principle.

A number of renowned commentators take the view that reinsurance ought to be treated as liability insurance⁷⁴. Ascertaining the legal nature of reinsurance is important for regulatory reasons but also because it has an effect on the ease with which a reinsured may recover from its reinsurer. If reinsurance is a further insurance of the underlying risk, the reinsured must prove that the loss fell within the terms of both the inward contract and the outward reinsurance. This is cumbersome. By contrast, if reinsurance is a form of liability insurance, once he has established that the loss fell within the terms of the inward contract the reinsured enjoys a "more or less automatic link to the reinsurance"⁷⁵ because his liability under the terms of the inward contract is what is being covered by the reinsurance.

This issue is also significant for this thesis because, in the context of the LMX Spiral, the XL reinsurances operated in a way that made them more akin to liability insurance. This is explored in Part III of this thesis.

2.3.2 Insurable Interest in Reinsurance

A reinsurance contract is subject to the requirement that the reinsured should have an insurable interest in the subject matter of the reinsurance. As explained above, the subject matter of a reinsurance contract is legally deemed to be the original risk. This raises the question of the nature of the insurable interest of the reinsured.

Section 9 of the MIA provides that "The insurer under a contract of marine insurance has an insurable interest in his risk, and may re-insure in respect of it".

and Rob Merkin, 'Facultative reinsurance and the full reinsurance clause' [2008] LMCLQ 366, 371.

⁷⁴ See RL Carter, LD Lucas & N Ralph, *Reinsurance* (Guy Carpenter, 5th edition, 2013) ch 1, Introduction (b). See also Gürses and Merkin ibid; Özlem Gürses, *Reinsuring Clauses* (London: Informa 2009), ch 1 para 1.4; Özlem Gürses 'The Construction of Terms of facultative Reinsurance Contracts: Is *Wasa v Lexington* the Exception or the Rule?' MLR (2010) 73 (1) 119-130 and Malcolm Clarke, 'The Contractual Nature of Reinsurance' CLJ 2010 69(1) 24-25.

⁷⁵ Gürses and Merkin (n 73) 371.

The nature of that insurable interest is not necessarily obvious, given that the reinsured has no legally recognised proprietary rights or other direct interest in the original risk. In *Charter Reinsurance Co Ltd v Fagan*⁷⁶, Lord Hoffman commented that a contract of reinsurance:

"...is not an insurance of the primary insurer's potential liability or disbursement. It is an independent contract between reinsured and reinsurer in which the subject matter of the insurance is the same as that of the primary insurance, that is to say, the risk to the ship or goods or whatever might be insured. The difference lies in the nature of the insurable interest, which in the case of the primary insurer, arises from its liability under the original policy."

Given that the reinsured has no proprietary rights in the original risk, its interest can only arise from its liability under the (re)insurance it has provided to cover that risk. To distinguish this from liability insurance, however, the law treats the insurable interest of the reinsured as an interest in the underlying risk. This may work in the context of facultative reinsurance, where the risk being transferred is identifiable although doubts have been raised about the adequacy of this principle for facultative proportional reinsurance⁷⁷. In any case, this argumentation becomes tenuous in the context of XL reinsurance, where 10 or more layers may separate the reinsurer sitting on top of the reinsurance tower from the underlying risk.

This disconnection between the ultimate reinsurer and the primary insurance was recognised in the well known case of Hill and ors v Mercantile and General Reinsurance Company⁷⁸. Here, the House of Lords had to opine on a "follow the settlement" clause, a clause designed to compel reinsurers to follow the settlement of their reinsured. The case concerned losses emanating from the seizure and destruction of 15 aircraft during the invasion of Kuwait by Iragi forces in 1990. The aircraft had first been insured by Kuwaiti insurance companies (Level 1) before being reinsured on the London market (Level 2). The reinsurers under those reinsurance contracts had then entered chains of XL reinsurances. A dispute had arisen concerning the reinsurance of the penultimate XL contracts

⁷⁶ Charter Reinsurance Co Ltd v Fagan [1997] AC 313, [1996] 5 Re LR 411, 419. See also Skandia International Corp v NRG Victory Reinsurance Limited [1998] Lloyd's Rep IR 439.

⁷⁷ Gürses, Merkin and Clarke (n 74).

⁷⁸ Hill and ors v Mercantile and General Reinsurance Company [1996] 1 WLR 1239.

(Level 3) by the final layer of outward XL reinsurances (Level 4). The relevant reinsurances contained the following follow the settlement clause:

"All loss settlements by the reassured including compromise settlements and the establishment of funds for the settlement of losses shall be binding on the reinsurers, providing such settlements are within the terms and conditions of the original policies and/or contracts... and within the terms and conditions of this reinsurance."

The decision reaffirmed the independence of reinsurance agreements making it clear that establishing liability under the underlying insurance was not sufficient to impose payment obligations on the reinsurers. The basic principle is that a loss has to fall both within the terms of the underlying insurance and the terms of the reinsurance to become payable by the reinsurer. The follow the settlement clause did little more than restate this principle.

Of particular interest for our current purposes, however, are the comments made concerning the relevance of the original loss. Lord Mustill first noted that when considering whether a loss settlement fell within the ambit of the clause, the instinct was to consider the relevant settlement to be that of the original insurer i.e. Level 1. However, he went on to say that this was incorrect because the follow the settlement clause referred to the loss settlement of the reinsured. Thus, one only had to look at the settlement entered into at Level 3 to consider whether the reinsurers at Level 4 should be bound to pay.⁷⁹

This decision is clearly based on the actual wording of the follow the settlement clause set out above which expressly refers to the "loss settlements by the reassured". It is perfectly possible for a loss that falls within the terms of the original insurance policies to be outside the scope of a reinsurance policy. In fact, in this case there were discrepancies in the period clauses at Level 1 and Level 3 which meant that losses that fell squarely within the Level 1 insurance may have been outside the scope of the Level 3 reinsurances.

Lord Mustill's view made more commercial sense. Between Levels 2 and 3 the risk had been through the LMX Spiral: a complex web of XL reinsurances which we are told is now impossible to replicate⁸⁰. By way of illustration, the claimant in

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⁷⁹ ibid 1254.

⁸⁰ This is according to Mr R Bulmer, an actuarial expert who has created the most sophisticated actuarial model there exists of the LMX Spiral for the purposes of the

Hill v Mercantile had paid over 10,000 claims in respect of the Kuwait loss⁸¹. In practical terms, this meant a risk could not be "tracked down" the LMX Spiral. Nevertheless, Lord Mustill's decision to focus on the settlement at the level of the inward reinsurance, Level 3, sits uneasily with the legal view that what is being reinsured at Level 4 is the actual loss suffered at Level 1, and that the insurable interest of the reinsured links to the original property.

Lord Mustill's reasoning on this point was endorsed in the more recent case of *Equitas v R&Q*⁸². The case arose because irrecoverable losses had been erroneously paid and other losses wrongly aggregated whilst making their way through the LMX Spiral. This caused serious difficulties not only because the overpayments did not fall within the scope of the reinsurances, but also, and more critically, because those errors had caused excess points and policy limits to have been reached much earlier than they should have been. The reinsurers refused to indemnify without strict proof of liability under each and every underlying contract. Expert evidence established that such proof was impossible to provide because the LMX Spiral could not be reconstructed. The reinsurance contracts contained a follow the settlement clause in terms identical to those examined by the HL in *Hill v Mercantile* and set out above.

Relying on Lord Mustill's analysis, Gross J concluded that the relevant losses were those of the layer sitting just below the reinsurance in dispute so that the reinsured, to prove its losses, did not have to prove excess points and policy limits had been breached under each and every underlying reinsurance contract. Again, this decision can be explained by the specific difficulties presented by the LMX Spiral but Gross J clearly took the view that the analysis by Lord Mustill applied to all XL reinsurances, regardless of participation in the LMX Spiral.

It is submitted that the views of Lord Mustill and Gross J reflect market practice. A catastrophe reinsurer certainly feels very little connection, if any, with individual risk insured as part of its portfolio. In fact, many underwriters know little about the reinsurances that sit below the one they are concerned with. Considering that the insurable interest that is being reinsured somehow links back to the primary layer seems at odds with the way in which the XL market works.

Equitas (n 1) case. His model only represents some of the features of the LMX Spiral that were identified as key to quantify the losses in dispute.

⁸¹ Hill v Mercantile (n 78) 1245.

⁸² *Equitas* (n 1).

As with the 'orthodox view' that reinsurance is a further insurance of the original subject matter, the legal theory that the insurable interest of a reinsured links back to the original risk has been criticised by many commentators. This includes Professor Robert Merkin and Ozlem Gürses who wrote "Given that reinsurance and insurance contracts are independent of each other and that there is no privity of contract between the assured and the reinsurer, so that the assured cannot make a direct claim against the reinsurer, it is curious to see an explanation of insurable interest on the basis that the reinsurers have in fact insured the subject-matter of the original insurance contract."83

One view is that the rule concerning insurable interest fits better the facultative reinsurance contract scenario, and the question has been raised by O'Neill and Woloniecki whether the "facultative marine reinsurance contract of the kind contemplated by s.9 of the Marine Insurance Act 1906 should constitute the paradigm for all reinsurance contracts."⁸⁴ McGillivray suggests: "It may be that the subject-matter and insurable interest are sometimes for practical purposes identical, as in the case of reinsurance of a professional indemnity or public liability insurer, or that the subject-matter of the reinsurance cannot readily be equated with the subject-matter of the original insurance, as in the case of non-proportional reinsurance."⁸⁵

2.4 Concluding Remarks

The LMX Spiral comprised contracts of XL reinsurance. Such contracts are subject to the general rules of insurance law which apply indiscriminately to all types of reinsurances. This includes the rule that reinsurance contracts are further reinsurances of the risk insured at the primary layer and that the insurable interest of the reinsured links to that risk. It is submitted that the LMX Spiral put to the test those legal principles and raises the question whether all reinsurances should be subject to the same legal principles.

⁸³ Gürses and Merkin (n 73) 374-375.

⁸⁴ O'Neill and Woloniecki (n 35) para 1-29.

⁸⁵ McGillivray (n 28).

3 Factual Overview of the LMX Spiral

Now that we have set the legal background through our study of insurance law and XL reinsurance contracts, in this chapter we aim to provide a factual overview of the LMX Spiral. We first outline its key features before providing a history of its development, from its first appearance to its unwinding, the latter precipitating the near collapse of the Lloyd's insurance market.

3.1 The Lloyd's Insurance Market

Before we describe in some detail the LMX Spiral and consider how it developed, it is important to give a brief overview of the Lloyd's insurance market (**Lloyd's**) and explain its unusual structure. Although the LMX Spiral was a feature of the London market as a whole, Lloyd's was at the heart of it and the demise of the LMX Spiral was a major contributor to the serious crisis the market had to face in the early 1990s. The crisis forced some overdue changes within Lloyd's which will be explained in due course. For the purposes of this chapter however our description focuses on the era of the LMX Spiral which is the 1980s.

3.1.1 Origins of Lloyd's

The Lloyd's insurance market in London has an interesting and colourful history. Whilst describing it in minute detail would be superfluous to this thesis⁸⁶, a brief overview will explain some of its most unusual characteristics which are key to understand most of the case law that relates to the LMX Spiral, as will be seen later in this thesis.

Lloyd's origins date back to the late 17th century⁸⁷ at a time when some of the business in the City of London was transacted within coffee houses. One of those

⁸⁶ For the more detailed history see Julian Burling, *Lloyd's: Law and Practice* (Informa 2013) ch 2.

The Lloyd's website states that the first ever reference to the Lloyd's coffee house dates from 1688. It was an advertisement in the London Gazette for a reward concerning a stolen horse (<habelian left://www.lloyds.com/lloyds/about-us/history/corporate-history/the-early-days> accessed on 26 November 2013). In his book, Julian Burling specifies that the

coffee houses, owned by a certain "Edward Lloyd's", developed a reputation for insurance business, mainly marine insurance. Individuals willing to provide insurance cover would attend the coffee house and be approached by shipowners and merchants seeking insurance protection. As the insurance business developed, "office keepers" started to act as full time brokers on behalf of the shipowners. The brokers would walk around the coffee house with a short document providing summary information about the voyage and/or the ship to be insured and ask those interested in providing insurance to sign the document. The document became known as the slip and those who signed by "writing under" the text in the slip became known as the "underwriters". The Lloyd's coffee house also started publishing a list of shipping movements, now known as the "Lloyd's List" and which is still being published today. The Lloyd's insurance market quickly gained prominence in the world of insurance as it continued to develop in the 18th and 19th centuries, moving premises several times along the way.

In May 1871, Lloyd's, described as "the Establishment or Society formerly held at Lloyd's Coffee House"88, was incorporated under the terms of Lloyd's Act 1871. This was followed by more legislation⁸⁹ ending with Lloyd's Act 1982, the statute that still governs Lloyd's today. Incorporation created what is known as "the Society of Lloyd's" or "the Corporation of Lloyd's": an unregistered company with a separate legal entity distinct from that of its members. The Corporation of Lloyd's, however, is not an insurance company since it does no underwriting. Instead, it provides and regulates a marketplace where its members carry on business individually. This unusual set up is the direct result of the ways in which the market developed. From a coffee house, it became a sophisticated market place recognised by statute. Nevertheless, by the time of the Lloyd's Act 1982, the basic principles remained unchanged: Lloyd's was, first and foremost, a

earliest surviving reference to Edward Lloyd's coffee house was also an advertisement in the London Gazette dated 1688/9 offering a reward for the recovery of stolen watches (Burling (n 86) para 2.2).

⁸⁸ Lloyd's Act 1871 app 1.

⁸⁹ This includes Lloyd's Act 1911, Lloyd's Act 1951 (each as amended by Lloyd's Act 1982) and Lloyd's Act 1982 (as amended by the Legislative Reform (Lloyd's) Order 2008, SI 2008/3001). See Burling (n 86) para 3.2.

⁹⁰ This is still the current status of the Corporation of Lloyd's under s. 1043 of the Companies Act 2006.

market where individuals could provide insurance for their own account. The procedure to place risk was still exactly the same as in the early days: brokers would walk around what became known as "the Room", where underwriters sitting at desks, called "Boxes", would agree to take some of the risk by "scratching" or applying their stamp to slip presented to them by brokers. Brokers would "do the round" around the Room until they had obtained the requisite level of cover.

3.1.2 Lloyd's Members and their Agents

Lloyd's Members: the Names

We have just seen that whilst the Lloyd's insurance market evolved from being an informal market place in a coffee house to a corporation, its structure remained unchanged. At its heart were the individuals who chose to engage in insurance using their own funds. These individuals were the Lloyd's members, also known as the "Names". The underwriting, however, became more complex and therefore many of the Names delegated the underwriting to specialist underwriters. The Lloyd's Act 1982 introduced a distinction between "Working Members" and "External Members" of Lloyd's. The Working Members were the Names who worked within the Lloyd's market and the External Members were those who did not.

Names who became Lloyd's members did so as sole trader with unlimited liability. It is probably this aspect of Lloyd's that made it so unique: the way the market was funded by a large number of individuals who acted each for their own account. Thus even if several Names had underwritten the same contract of insurance, they had to do so with several liability. Whilst it may seem surprising that at the time of Lloyd's Act 1982 no attempt was made to modernise the insurance market, it must be remembered that Lloyd's unusual set up was perceived to be one of its strength. As we will see later in this chapter, the crisis of the early 1990 changed this view and it led to the acceptance of corporate capital within Lloyd's. In 1994, for the first time in its history, Lloyd's allowed companies to become members and, critically, to do so on the basis that their shareholders would only have limited liability. This was a significant change and one that was very successful. In 2012, corporate members represented 97 per cent of the underwriting capacity of the Lloyd's market⁹¹.

⁹¹ Burling (n 86) para 1.2.

The Syndicates

The early days of the coffee house over, Names started to group together to accept insurance business. The groupings became known as "**Syndicates**" and these have become the life blood of the market. Names are now prohibited from carrying out insurance business at Lloyd's other than through participation in a Syndicate⁹². The Syndicates, whilst recognised in law⁹³, have no legal personality. At the time of the LMX Spiral, each Syndicate was a grouping of individual sole traders. Nowadays, many Syndicates are owned by a single corporate entity. Thus whilst the reforms in 1994 allowed corporate capital within Lloyd's for the first time, companies could only join through participation in a Syndicate.

Syndicates are managed by **Managing Agents** whose job is to employ underwriting and other staff to accept insurance business on behalf of the Names (and/or, nowadays, companies) who are members of the relevant Syndicate (the **Syndicate Members**). The underwriters sit at the Box and use their Syndicate's stamp to accept risk on behalf of the Syndicate's Members. Each Syndicate Member becomes severally liable under the insurance contract entered into in shares determined by the Syndicate's constitution, also sometimes known as the "stamp" for the relevant year of account.

An important feature of Syndicates is that they are annual ventures. This means that, technically, every calendar year a Syndicate ceases to exist and is replaced by a new one even if its members remain exactly the same. The Syndicate is allowed a period of three years to settle its accounts. After those three years, any outstanding liabilities are reinsured under what is called "Reinsurance to Close" (RITC) by either the new members of the same Syndicate or by another Syndicate. RITC only works if the outstanding liabilities can be accurately quantified. As we will see later in this chapter, the inability of underwriters to properly appraise outstanding liabilities for RITC purposes was one of the early signs of the Lloyd's crisis.

⁹² See PRA Handbook INSPRU 8.2.1.

⁹³ Syndicates are referred to in the Lloyd's Acts 1871 and 1982 and in the Financial

The Members Agents and Managing Agents

We have just seen that Managing Agents are those in charge of managing the Syndicates. In the 1980s they were considered to be the agents of the Names although in many cases the agency relationship was indirect. The agents who had direct relationship with the Names were the Members Agents whose role was to advise the Names and look after their interests in the Lloyd's market. For External Names, the advice of the Members' Agent was crucial as it could be the only source of information they relied upon to invest in Lloyd's. The Members Agent would then appoint Managing Agents on behalf of the Names through subagency agreements. Some agents acted as both Members and Managing Agents in which case they were called "Combined Agents" and the Names they acted for were called the "Direct Names". The relationship between Names and both Members and Managing Agents was put under scrutiny in one of the early cases of the Lloyd's crisis⁹⁴. This is explored later in this thesis.

3.1.3 Lloyd's on the Eve of the LMX Spiral

One of the trademarks of the Lloyd's market throughout history and up until the Lloyd's crisis was its independence from regulatory oversight. The market self-regulated as it grew and this tradition was continued with Lloyd's Act 1982. The Act established the **Council** to "regulate and direct the business of insurance at Lloyd's". The Council was constituted of 16 Working Members and eight External Members, all elected by Lloyd's Members; plus three nominated independent members appointed by the Council. The introduction of the External Members and nominated members aimed to ensure Lloyd's would not be governed purely by those involved in its day-to-day business.

Nonetheless at the time of the LMX Spiral, it is fair to say that regulatory oversight was light. The Lloyd's market was still considered to be akin to a "gentlemen's club" where relationships were of paramount importance and the fear to lose one's reputation was deemed to be sufficient to ensure good behaviour. The key players all knew each other, including the Lloyd's brokers who were given exclusive access to the market once they had obtained the

⁹⁴ The Lloyd's Litigation: the Merrett, Gooda Walker and Feltrim cases [1995] 2 AC 145.

⁹⁵ Lloyd's Act 1982 s 3(1).

requisite authorisation from Lloyd's itself. Those who were part of the Lloyd's market believed in its motto "fidentia", meaning "confidence". This particular culture of trust within Lloyd's is evidenced by the fact that some indemnities were apparently being paid by Syndicates without too much scrutiny being placed on the actual wording of the policies. Recent case law has also shown how one of the largest Lloyd's broker at the time, Walsham Brothers, funded claims payments to assist Syndicate with their cash flow on the expectation that the Syndicates would reimburse the broker once they had recovered from their own reinsurers ⁹⁶. Another example is the ways in which Syndicates would sometimes club together to pay claims owed by a Syndicate in financial difficulties so as to maintain the market's reputation ⁹⁷. No doubt such informal arrangements provided unique strength and flexibility to Lloyd's and the market benefited from a world-wide reputation as a place of fair dealing ⁹⁸.

In the 1970s and the 1980s, however, Lloyd's had grown beyond recognition. From 6001 Names in 1970, the number of Names had grown to 19,000 in 1980 and it continued to grow to a peak of 34,218 in 1989. One of the reasons for the sudden growth was a relaxation of the rules concerning membership. Before the 1970s, Lloyd's membership was the reserve of the few since only the wealthiest could satisfy the means requirement to become a Lloyd's Member. Following a decline in membership in the late 1960s, the Lloyd's Council decided to lower the means test required to underwrite at Lloyd's 99. Given that bank guarantees

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⁹⁶ Equitas Ltd v Walsham Brothers & Company Ltd [2013] EWHC 3264 (Comm), [2014] Lloyd's Rep IR 12.

⁹⁷ A well know example of this practice is the "Harrison scandal" in the 1920s, named after the underwriter Harrison who had caused very large losses to his Syndicate through fraudulent activities. All underwriting members agreed to share the loss in proportion to their Syndicate's income. See Adam Raphael, *Ultimate Risk The Inside Story of the Lloyd's Catastrophe* (Four Walls Eight Windows 1995) p 34.

⁹⁸ This reputation had much to do with the decision of one of Lloyd's best known underwriter, Cuthbert Eden Heath (who is also credited with inventing XL reinsurance: see 2.2.3) to pay all claims presented to him as a result of the devastating San Fransisco earthquake of 1906. Cuthbert Heath sent a telegram to his San Francisco agent famously saying "Pay all our policy-holders in full irrespective of the terms of their policies".

⁹⁹ This was based on recommendations set out in the report of the Lloyd's Working Party chaired by Lord Cromer (December 1969).

secured on a prospective Name's property could be used to pass the means test, Lloyd's membership became accessible to a much wider population¹⁰⁰.

There was real prestige in being a Lloyd's member and individuals flocked to the market to become Names. Prestige was not the sole attractive feature of Lloyd's. Membership also offered tax advantages as underwriting losses could be offset against taxable income¹⁰¹ and the market offered a unique opportunity to work money twice. Names indeed were able to make a return not only on their underwriting at Lloyd's but also on funds or share they had deposited in support of their underwriting. Therefore, from a "cosy" gentlemen's club in 1970 the Lloyd's market grew into a very large commercial enterprise funded by over 30,000 Names, many of whom were of relatively modest means.

It is important to note here that Lloyd's was not the sole market trading in reinsurance in the 1980s. London was also home to the London Underwriting Centre (LUC), another insurance and reinsurance market set up by companies in 1983. At the time there was a large number of insurance and reinsurance companies in London that had no access to Lloyd's given its rules against corporate capital. Some companies therefore created the LUC as a direct competitor. Whilst the LUC could never match the unique reputation and busyness Lloyd's enjoyed, it was a viable alternative market.

In addition, there were insurers and reinsurers in London who did not participate in either Lloyd's or the LUC and dealt directly with brokers instead.

The corporate reinsurers active within the London market, whether within the LUC or individually, are significant for the purposes of our thesis. As we will see shortly, companies participated heavily in the LMX Spiral.

p 55.

The means test was lowered from £75,000 to £50,000 and a new category of "mini Names", requiring a deposit of only £37,500, was created. As reported in Raphael (n 97) p 53.

 $^{^{101}}$ The tax advantages were particularly attractive in the 1970s when the top rate of tax was 98 percent. See Raphael (n 97) p 44-45.

3.2 Key Features of the LMX Spiral

Now that we have set the scene by describing Lloyd's and other reinsurance markets within London, we can focus on the LMX Spiral. The spiral remains shrouded in mystery, partly because of its sheer complexity but also because it developed within a market that was very specialised and therefore not widely understood. The next few sections of this chapter aim to bring clarity.

3.2.1 The Nature of the LMX Spiral: Intertwining Reinsurances

The first chapter of this thesis sets out the description of the LMX Spiral by Philips J set out in the *Gooda Walker* case which we will not repeat here. Put very simply, the LMX Spiral was a cluster of overlapping XL reinsurance agreements. Those reinsurances were standard XL reinsurance contracts that provided cover, among other things, for catastrophic losses.

The LMX Spiral developed within the London XL market (the **London XL Market**) because XL reinsurers (First Tier Reinsurers) looked to protect themselves. Other XL reinsurers, principally from the London XL Market, provided the reinsurance (Second Tier Reinsurers). Those Second Tier Reinsurers also took reinsurance to protect their own liabilities, and the providers of the requisite reinsurance were, more often than not, London XL reinsurers (the Retrocessionaires). The Retrocessionaires also took reinsurance, and again, most of their reinsurers were to be found within the London XL Market. The demand for XL reinsurance grew rapidly in the late 1970s and the 1980s, partly due to a significant growth in insured values¹⁰². Despite the rapid expansion of the London XL Market in the mid 1980s¹⁰³, the number of XL reinsurers remained finite, and they all needed reinsurance for their own rising exposure. Inevitably, some reinsurers ended up reinsuring their own reinsurers. Using the terminology used above, the Retrocessionaire's reinsurers may well have been First Tier Reinsurers or Second Tier Reinsurers. At that point, a risk initially insured by a First Tier Reinsurer or Second Tier Reinsurer would have come full circle. XL reinsurers effectively recycled the same risks amongst themselves.

¹⁰² Walker (n 40) para 2.10.

¹⁰³ For detail of the sharp increase in Lloyd's membership see s 3.1.3 of this thesis.

Underwriters active in the London XL Market did not recognise the individual risks they had already taken on because the XL reinsurance contracts they were dealing with covered portfolios rather than single risks. There were two main types of XL contracts used within that market:

- a) "specific" treaties. Those reinsurances covered accounts that contained the same type of risks such as hull, cargo, oil rigs etc.
- b) "whole account" (aka "general") treaties. Those reinsurances protected the entire portfolio of business of the reinsured 104.

Within these contracts underwriters were unable to identify risks they had already underwritten. This was made worse by the multiple layering that became one of the trademarks of the LMX Spiral. As risks were being passed on to more and more XL reinsurers, sometimes being bundled further with other risks (for instance through the use of whole account treaties), they became more and more opaque. Opacity has been identified as one of the key features of the LMX Spiral. Once a catastrophe happened, the resulting loss would lead to a number of claims being made, some of which would reach the First Tier Reinsurers. Thereafter the claims would progress through the London XL Market, generating claims at each layer of reinsurance. Ultimately, the loss would come back to, say, the First Tier Reinsurer, who would have to pay again before making another claim to the relevant Second Tier Reinsurer. In this way, various claims relating to the one loss would circulate, or "spiral" around the same players within the London XL Market. This is the "pass the parcel" aspect of the LMX Spiral referred to in Phillips J's quote from the Gooda Walker judgment. At each turn of the LMX Spiral the total amount of all claims paid by all reinsurers from all layers (Gross **Claim**) would grow although the value of the original loss remained unchanged. As it spiralled around the LMX Spiral, the Gross Claim often became so large that it bore no resemblance to the original loss. This "magnifying effect" has come to be recognised as one of the major consequences of the LMX Spiral. Taking the Piper Alpha disaster¹⁰⁶ as an example, 43,000 claims were made on 11,500 XL policies within the LMX Spiral. The Gross Claim was estimated to have been as

¹⁰⁴ Walker (n 40) para 2.4.

¹⁰⁵ This was the term used to describe this feature of the LMX Spiral in the case of *Equitas* (n 1).

¹⁰⁶ Walker (n 40) para 2.14.

high as \$15 billion, when the original loss amounted to \$1.4 billion. In other words, the Gross Claim was more than 10 times the value of the original claim. Piper Alpha is not an extreme example: similar figures have been shown to apply to other losses that made their way through the LMX Spiral¹⁰⁷.

Ultimately, the loss would fall on the first XL reinsurer who ran out of reinsurance cover. How and why this happened will be explained later in this thesis. The result was that the risks were concentrated amongst the few rather than being dispersed. This concentration of risks is another major consequence of the LMX Spiral.

3.2.2 London: the Hub of the LMX Spiral

At the centre of the LMX Spiral was the London XL Market. Phillips J in the *Gooda Walker* case commented:

"The letters LMX stand for London Market excess of loss. The letters thus describe both the place where the business is transacted and the nature of the business." The London XL Market however was not the only place where the risks that were within the LMX Spiral were being traded. It is therefore important to define at the outset the exact parameters of the London connection.

Firstly, the risks transacted within the London XL Market originated from all over the world. Thus the London connection related to the place of underwriting, not the location of the risk. Secondly, risks underwritten in the London XL Market could be reinsured abroad, and still qualify as risks that were within the LMX Spiral. This is because reinsurers based outside London (Foreign XL Reinsurers) participated in the LMX Spiral. As will be explained later, their participation was minimal but it cannot be disregarded. They provided cover to underwriters from the London XL Market. It is well established that the XL reinsurance of an underwriter from the London XL Market is called "LMX Business"¹⁰⁸.

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¹⁰⁷ For instance, aviation losses relating to the 1990 invasion of Kuwait by Iraq amounted to \$343 million when they entered the LMX Spiral in 1991. By the year 2000, the Gross Claim was as high as \$6 billion. These figures are taken from the judgment in *Equitas* (n 1) [33], [34].

¹⁰⁸ Walker (n 40) ch 2. "LMX Business" is also the defining term used in the *Gooda Walker* case (n 1) and in the report of the LMX Working Party, 'Excess of Loss Reinsurance of Lloyd's Syndicates and London Market Companies' (General Insurance Convention, August 1988).

At Lloyd's request, a committee chaired by Sir David Walker was set up in 1992 to enquire into allegations of misfeasance concerning the LMX Spiral. The committee published its report in 1992 (the Walker Report). The findings of the Walker Report will be described later on in this thesis¹⁰⁹. For current purposes, it is interesting to note that the Walker Report describes LMX Business as follows: "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."110

The above quote confirms that the basis of LMX Business was standard XL reinsurances. It also makes it clear that both Syndicates and corporate reinsurers engaged in LMX Business. This is an important point, given that the LMX Spiral is often associated with Lloyd's, or Syndicates. In fact, many companies participated in LMX Business. Expert evidence in the case of Equitas v R&Q 111 establishes that there were nearly as many corporate reinsurers as there were Syndicates which would underwrite a risk on the London XL Market. In fact, it is possible that in the later part of the 1960s, the London XL Market comprised a majority of corporate reinsurers¹¹².

As explained above, Foreign XL Reinsurers from places such as Germany, Switzerland, France and Scandinavia engaged in LMX Business by taking on liabilities from the London XL Market. There were also large reinsurers which supported the London XL Market by providing quota share reinsurance to its underwriters¹¹³. Since those were not XL contracts, such reinsurances do not qualify as LMX Business¹¹⁴.

¹⁰⁹ See section 4.2 of this thesis.

¹¹⁰ Walker (n 40) para 2.2.

¹¹¹ *Equitas* (n 1).

Tony Berry, 'Expert Report of Tony Berry' (The Society of Lloyd's v John Stewart Clementson [1995] CLC 117) para 2.5.

¹¹³ It is understood that Eagle Star was one of the major providers of such quota share reinsurances.

¹¹⁴ There is a dissenting view. Richard Outhwaite, a leading marine excess of loss underwriter, has expressed the view that proportional reinsurance of XL business should be included in his definition of 'LMX'. Interestingly, he did however recognise that the term LMX 'should mean on the surface excess of loss reinsurance of London market underwriters'. See Richard Outhwaite, 'LMX - Mainspring or Vulnerability' (Reinsurance

It is slightly inaccurate to refer to *the* London XL Market as it contained, in fact, three distinct sections: the marine market, the aviation market, and the "non-marine" market. The latter meant everything that did not fall within either of the previous two markets. Although these markets had different characteristics, for the purposes of this thesis the term "London XL Market" encompasses all three markets unless otherwise stated.

A risk entered the London XL Market at the point when it was first reinsured on an XL basis. Whether the same risk had been reinsured previously was irrelevant. The key is the nature of the reinsurance: as soon as the risk was covered by XL reinsurance, it had crossed the threshold and made it onto the London XL Market regardless of how many times it had been reinsured previously.

It is important to clarify that the LMX Spiral was only a part of the London XL Market. As will be seen later the London XL Market has survived the collapse of the LMX Spiral. The First Tier Reinsurers who provided the first layer of XL cover were the "gatekeepers" of the London XL Market. The LMX Spiral could only be originated from the next level, when reinsurances were placed with the Second Tier Reinsurers. This is because the LMX Spiral could only start when the same risk was being reinsured a second time by the same reinsurer, which requires at least two reinsurances. From the second-tier level, reinsurances were colloquially known as "XL on XL", because they were an XL reinsurance of an XL account¹¹⁵. A common misconception is that the London XL Market started only when there was "XL on XL" reinsurance in place. In fact, experts agree that the London XL Market also included all those First Tier Reinsurers who provided the first layer of XL reinsurance¹¹⁶. This thesis uses the defined term "London XL Market" rather than the sometimes seen "LMX Market"117 to make it clear that the London XL Market and the LMX Spiral are related but distinct phenomena. The term "LMX Market" could be understood to suggest that (i) the LMX Market and LMX Spiral start at the same level of reinsurance (i.e. XL on XL) and that (ii) the LMX Market was the sole market where the LMX Spiral operated, both of which are incorrect.

Market conference, Insurance and Reinsurance Research Group Limited, 14–15 April 1988).

¹¹⁵ In the case of whole account treaties, the coverage may have included different types of reinsurances, only some of which were XL contracts.

¹¹⁶ This has been confirmed by former underwriters Jim Gregory, Tony Berry and John Emney during interviews with the author of this thesis.

¹¹⁷ For instance, Walker (n 40).

Not all risks that reached the London XL Market entered the LMX Spiral. Some First Tier Reinsurers did not seek XL reinsurances themselves. They might have had other types of reinsurance protections in place, such as quota share reinsurances, or facultative obligatory treaties¹¹⁸, or they retained the risks. Some of the XL risks made their way out of the London XL Market at the first tier level, sometimes abroad, and never came back. As explained above, a risk entered the LMX Spiral at the point when it was being reinsured on an XL basis by the same reinsurer for a second time.

A distinction also has to be drawn between the LMX Spiral and LMX Business although there is more correlation between the two. As it is the XL reinsurance of an XL underwriter (from London), LMX Business is necessarily XL on XL. This is the point where a risk may enter the LMX Spiral. However, not all XL on XL risks, and therefore not all LMX Business, entered the LMX Spiral. LMX Business entered the LMX Spiral only at the point where it was reinsured a second time by the same reinsurer. It is also important to note that some XL on XL was not LMX Business: for instance when a Foreign XL Reinsurer reinsured its liabilities onto the London XL Market, technically that specific reinsurance was not LMX Business (it was the reinsurance of a foreign underwriter, not of a London underwriter). This applies even though prior to going to the Foreign XL Reinsurer the relevant risk may have been LMX Business. This foreign element of the LMX Spiral prevents us from asserting that the LMX Spiral consisted solely of LMX Business¹¹⁹. In this thesis, LMX Business that entered the LMX Spiral will be referred to as **Spiral Business**. In normal circumstances, sending a risk abroad would have spread liabilities further, which is the key purpose of reinsurance. One of the features of the LMX Spiral, however, was that the risk still ended up being concentrated in the hands of the few. There were two principal reasons for this:

 Only a small proportion of the XL on XL liabilities made their way outside London because the London XL Market was by far the largest market for XL reinsurances; and

¹¹⁸ Berry (n 112) para 2.6.

¹¹⁹ It is possible that some experts consider the term "LMX Business" to encompass a risk from a Foreign XL Reinsurer that was LMX Business at the point when the Foreign XL Reinsurer had taken it on. The issue has never been explored.

2. LMX Business that had gone abroad, in any case, tended to make its way back to the London XL Market. This happened because the Foreign XL Reinsurers also needed protection for their exposure and, as stated above, the largest market for them to find reinsurance was the London XL Market.

The liabilities that entered the London XL Market therefore usually remained within that market, even if they were sometimes temporarily taken abroad by Foreign XL Reinsurers. This is illustrated by the case of *Equitas v R&Q*, where the expert actuary sought to calculate the extent to which risks found their way out of the LMX Spiral, or "leaked". His estimates shows that such "leaks" were minute, even though he included all forms of leakage and not just reinsurance abroad. His actuarial model was based on the assumption that 5% of reinsurance layers (of which they were hundreds) were only 90% placed. This means that 95% of all layers of reinsurance were 100% reinsured within the LMX Spiral, and only a small fraction (10%) of the remaining 5% had actually leaked.

We have so far defined many key terms and it is certainly worthwhile providing a final overview. The epicentre of the LMX Spiral was the London XL Market, that is, the market where a risk was first reinsured on an XL basis by a London underwriter. Those London underwriters obtained reinsurance, some of which could be proportional (at which point the risk would leave the London XL Market) and some of which was XL reinsurance. In the latter case, the XL on XL cover is commonly defined as LMX Business, and it was provided by other London underwriters or Foreign XL Reinsurers. The LMX Spiral started when a risk was reinsured again by the same reinsurer, be it a Foreign XL Reinsurer or a London underwriter, at which point the risk became a Spiral Business. The LMX Spiral developed principally, but not only, within the London XL Market and it was fed mainly, but not exclusively, from LMX Business.

3.2.3 The 1980s: an Era of Rapid Expansion

The LMX Spiral is associated with the 1980s although a spiral had been in existence within the London XL Market much earlier. It is possible that the London XL Market already contained a spiral in the 1950s – this remains

uncertain¹²⁰. In any case, the phenomenon became evident in 1965, when the losses caused by the then significant Hurricane Betsy "spiralled" amongst the London XL Market participants¹²¹. After Betsy, there were few major losses that had an impact on the London XL Market until Hurricane Alicia in 1983. The significant losses stemming from Alicia spiralled amongst LMX players for years. However, at the time, only knowledgeable underwriters were aware of the existence of a spiral within the London XL Market. The LMX Spiral was not generally known before 1988/1989¹²².

The LMX Spiral is associated with the 1980s because, towards the end of the decade, a series of catastrophes produced large losses that suddenly exposed the LMX Spiral to the outside world and led to its collapse. In addition, during that decade the LMX Spiral had grown exponentially. Whilst Lloyd's overall premium increased by 61% between 1983 and 1988, its XL premium leapt by 201% in the same years¹²³. The popularity of XL Business in the 1980s is further shown by the fact that 52 out of 80 Syndicates that commenced business between 1982 and 1988 chose to write XL Business. Inter-syndicate reinsurance premiums more than doubled in five years: from £547 million in 1985 to £1275 million in 1990¹²⁴. The rapid growth of the LMX Spiral during the 1980s was due, amongst other things, to a rapid rise in capacity within the London XL Market, caused by the increase in membership noted earlier¹²⁵. This led to an oversupply of XL reinsurance and a fall in prices. Faced with increased competition and declining rates in direct insurance, many underwriters took on more XL risks in order to secure more premiums in what was considered a profitable line of business. They did so because they felt safe in the knowledge that, with all this new capacity, they would always be able to reinsure their exposure. The additional reinsurance, however, was procured by other underwriters from the London XL Market, who themselves needed reinsurance. Thus the same liabilities were being passed around the same reinsurers.

Tony Berry, 'The Effects and Lessons of Piper A to the Excess of Loss Market' (undated). Mr Berry also confirmed this view during interviews with the author of this thesis.

¹²¹ LMX Working Party (n 108) para 1.5.

¹²² Brown v KMR Services Ltd and ors [1995] 2 Lloyd's Rep 513, 519.

¹²³ Walker (n 40) para 2.10.

¹²⁴ R Gilkes, 'Lloyd's and the changing marketplace' (5th International Reinsurance Congress, Bermuda, 7–9 November 1991).

¹²⁵ See section 3.1.3 of this thesis.

The fact that the number of reinsurers was much greater only served to accelerate the "spiral effect": risks were being transferred more often, amongst a larger, but still finite, number of players who reinsured each other. A number of good years with few catastrophes in the mid 1980s had made LMX Business attractive and seemingly safe, fuelling more demand, a more competitive market, and leading to a decline of underwriting discipline: retentions and co-insurance reduced, resulting in the rapid growth of the LMX Spiral.

3.2.4 LMX Market Participants

The exact number of reinsurers who engaged in LMX Business at any one time is difficult to gauge. The Walker Report set down some very specific criteria to identify those Syndicates that could be considered to be "LMX Syndicates". According to the Walker Report, in 1989 such a syndicate:

- 1. either wrote at least £1,000,000 premium income or, if less, 10% of its capacity of XL on XL or LMX Business; or
- 2. wrote at least 50% XL "of all types" and had a material involvement in XL on XL and/or LMX Business.

87 Syndicates matched those criteria¹²⁶. An important limitation of this analysis is that it only includes Syndicates. As mentioned above, many companies wrote LMX Business. The Walker Report acknowledges this by pointing to estimates that corporate reinsurers had carried 69%, 45%, 64% and again 64% of the losses that had arisen from, respectively, the 1987 Northern European storms, Piper Alpha, Hurricane Hugo and the 1990 Northern European storms¹²⁷.

More recently, in the *Equitas v R&Q* case, a sophisticated model was produced to represent key characteristics of the LMX Spiral (the **Equitas Model**). The exact number of syndicates who participated in the relevant risks could be established through data made available by Lloyd's. Experts agreed that "doubling up" that number was a satisfactory way to estimate the total number of participants, including those from the companies market¹²⁸. Thus as many companies as syndicates must have engaged in LMX Business in the 1980s. If one doubles the

¹²⁶ Walker (n 40) para 5.10.

¹²⁷ Walker (n 40) para 2.1.

¹²⁸ Equitas (n 1) [96].

figure set out in the Walker Report of 87 "LMX Syndicates", this produces a total of 174. This is significantly less than the 300 and 409 reinsurers who participated in the risks in *Equitas v R&Q*. However, the large discrepancy between those figures can be explained.

As the London XL Market developed throughout the 1980s, many syndicates and companies participated in the London XL Market without truly specialising in that business. Thus, whilst the number of underwriters who wrote LMX Business must have been in the hundreds, there remained few underwriters or even companies or syndicates who truly specialised in LMX. In 1989, one of the specialist LMX underwriters, Mr John Emney estimated that the non-marine market contained half a dozen Syndicates and similar numbers of companies who were considered to be LMX leaders, about 20 medium sized LMX players and a "larger number" of small players. He noted that the aviation market was similar, but then emphasised that the LMX marine market was much larger, with far more leaders and followers. In fact, he said most, if not all, marine underwriters at Lloyd's or within the companies market wrote at least a small volume of LMX Business 129. In the *Gooda Walker* case, another expert, Richard Outhwaite, gave specific figures for the same year, as follows:

	"those which made XL the major part of their books"	"those which wrote XL as an adjunct to their main book"	"those which wrote no XL business"
Marine syndicates	33	67	19
Non-marine syndicates	59	71	5
Insurance companies ¹³⁰	26	56	11
TOTAL	118	194	35

¹²⁹ John Emney, London Market Reinsurance (SAVA, Holland, June 1989).

¹³⁰ This figure includes only companies that are members of the Institute of London Underwriters and therefore the real number of companies involved in LMX Business may have been higher.

The above illustrates the difficulties in identifying who was and who was not a writer of XL Business at the time, and the discrepancies between the numbers set out in the Walker Report and those provided by Mr Outhwaite are noted in the *Gooda Walker* judgment. What is clear, however, is that many syndicates and companies wrote XL business without being true specialists and it is striking that, relying on the numbers provided by Mr Outhwaite, in 1989 nearly every reinsurer in the London XL Market (312 out of 347) wrote XL contracts.

For the purposes of this thesis, an LMX Player, be it a Syndicate, corporate reinsurer or a Foreign XL Reinsurer, is a reinsurer that engaged purposefully in LMX Business. The actual proportion of its premium income derived from LMX Business is not critical; what matters is that its portfolio contained LMX Business. At this point, it is important to specify that an LMX Player is a reinsurer that took on LMX Business although such business may or may not be part of the LMX Spiral. In this thesis, an LMX Player who became involved in the LMX Spiral will be described as a Spiral Participant.

3.3 The Demise of the LMX Spiral

3.3.1 A Series of Unprecedented Catastrophes

Prior to 1987, LMX Business was run on the assumption that the type of catastrophic losses that would reach the London XL Market followed a relatively regular pattern: about 5 major catastrophes would occur every 25 years¹³¹. The years 1987 to 1990 challenged this notion. During those three years, an extraordinary and unprecedented series of catastrophes produced large losses that had a significant impact on the London XL Market and, ultimately, lead to the collapse of the LMX Spiral.

Those catastrophes are described below. When available, the 2012 loss values¹³² are provided and these are extracted from the Sigma report produced by Swiss Re (the **Sigma Report**)¹³³. The Sigma Report, published every year, is the benchmark relied upon by the reinsurance industry and the judiciary to value insured losses.

¹³¹ John Emney, 'LMX - Farce or Futility?' (Insurance Institute, London, 11 October 1990).

¹³² These are the original loss figures indexed to 2012 values.

¹³³ Sigma Report, 'Natural catastrophes and man-made disasters 2012: A year of extreme weather events in the US' (No 2/2013) 37-38 (tables showing major losses 1970-2012).

The 1987 UK windstorms (16/17 October 1987)

This loss, which came to be known within the London XL Market as "87J", hit Southern England, the north of France, and neighbouring European countries in the night of 16/17 October 1987. It was the worst windstorm the UK had seen since the year 1703, causing the death of 18 people, and downing an estimated 15 million trees in England. The Sigma Report values the insured loss for this catastrophe at US\$6,264 million.

This was the first major catastrophe since Alicia in 1983, and it came after very profitable years for the London XL Market. Alicia, however, was still making its way around the spiral in 1987¹³⁴. Because it was a hurricane, Alicia should have been, in market parlance, a "short tail" loss. A hurricane causes the damage within a short period of time so most of the losses can be identified and quantified quickly after the event. The fact that the Alicia losses were still being settled 4 years after the hurricane had taken place illustrates another "spiral effect" which has come to be known as "long short tail" 135. The LMX Spiral delayed the final settlement of losses such that short tail losses were turned into long term losses.

This delaying effect was relied upon by some LMX Players who needed to collect monies under their reinsurances before they could pay claims made to them. Unfortunately for them, the catastrophes that hit the London XL Market in the late 1980s made their way through the LMX Spiral increasingly fast. In fact 87J progressed through the LMX Spiral relatively quickly. A typical payment would take two weeks to be made, and market experts noted at the time that this loss was "storming through" the LMX Spiral at far greater speed than Alicia¹³⁶. Nevertheless, there is plenty of evidence that in 1988 the London XL Market, already a soft market, was becoming weaker¹³⁷. Competition was still fierce and

ibid. This was partly due to the adoption of a simplified claims procedure, see Richard

¹³⁴ John Emney, 'Alicia – What is short tail?' (Insurance Institute, London, 14 October 1987). Alicia was still spiralling in November 1989, see Michael Stephens, 'Catastrophe Exposure and Reinsurance Today' (The Catastrophe Reinsurance Market Today, London, November 1989).

¹³⁵ Emney (n 134).

Nightingale, 'Settlement and Collection of Catastrophe Claims' (The Catastrophe Reinsurance Market Today, London, November 1989).

¹³⁷ Tony Berry, 'TR Berry Marine Syndicate 536 Underwriter's Report' (1988); Charles Catt 'Report on the Forum held on Thursday 3rd November 1988 on the 1989 Renewal Season'

clients were putting pressure on reinsurers to continue reducing their premium even though exposure was rising. Rates went down by as much as 25%.

Piper Alpha (6 July 1988)

On 6 July 1988 a North Sea oil production platform named Piper Alpha was destroyed by an explosion and resulting fire, killing 167 men. The total insured loss amounted to about £1.4 billion, making this at the time the largest insured man-made catastrophe. It was also the worst offshore disaster due to the number of lives lost, and the high impact it had on the oil and gas industry (the platform carried out about 10% of North Sea oil and gas production). This loss does not feature in the Sigma Report.

It was a human tragedy but in monetary terms this loss was not huge¹³⁸. However, it had a significant impact on the London XL Market, and most particularly the marine section, as it exposed the inadequacies of its rating. The reaction was extreme, with rates for marine XL contracts increasing by as much as 300%¹³⁹. The marine London XL Market became particularly hard in August 1988¹⁴⁰. However, other than the sudden rate increases, no attempt was made to mitigate the effects of the LMX Spiral. For instance, there was no change to the then extremely low retention levels, which some considered was a lost opportunity¹⁴¹. Some underwriters even took an optimistic view of the future, as they believed the market's ability to cope with losses of the size of 87J or Piper Alpha proved its resilience¹⁴².

Piper Alpha caused serious difficulties to some LMX Players. Within 15 months, that is by October 1989, the worst-hit syndicates had to make cash calls to their Names¹⁴³. This was partly due to the fact that the loss was ballooning as it was

(conference arranged by the Reinsurance Offices Association, London, 3 November 1988) 3.

¹³⁸ Berry (n 120).

¹³⁹ ibid.

¹⁴⁰ LMX Working Party (n 108) para 7.4.

¹⁴¹ John Emney, 'Report on the Forum held on Thursday 3rd November 1988 on the 1989 Renewal Season' (Forum held on Thursday 3rd November 1988 on the 1989 Renewal Season, Reinsurance Offices Association, London, 3 November 1988) 10.

¹⁴² Graham Potter, 'Report on the Forum held on Thursday 3rd November 1988 on the 1989 Renewal Season' (Forum held on Thursday 3rd November 1988 on the 1989 Renewal Season, Reinsurance Offices Association, London, 3 November 1988) 6.

¹⁴³ ibid.

making its way around the LMX Spiral. As mentioned previously, the value of gross claims ended up being 10 times the value of the initial loss.

In addition, new rules within Lloyd's meant Lloyd's Syndicates had to settle the claims within 7 days at a time when reinsurance recoveries would normally take about 28 days to be collected. The new settlement system pushed the claims around the LMX Spiral much faster, creating cash flow issues for the syndicates¹⁴⁴ which had to fund payment of the claims before they could recover on their own reinsurances¹⁴⁵. Some had to borrow money to pay the claims, and others simply ran out of money¹⁴⁶ and had to make cash calls to their members.

Exxon Valdez (24 March 1989)

1989 was a particularly bad year for LMX Players. The first major loss happened on 24 March 1989, when the Exxon Valdez oil tanker struck a reef in Prince William, Alaska, and spilled 260,000 to 750,000 barrels of crude oil into the sea and local environment. The oil covered 2,100 km of coastline, and 28,000 km² of ocean.

This loss does not feature in the Sigma Report. However ExxonMobil states it has spent US\$2.1 billion in the clean-up effort¹⁴⁷, which provides a rough indication of the scale of the costs involved. At the time Tony Berry¹⁴⁸, a leading underwriter within the marine London XL Market, noted that the projection for all insured losses exceeded \$1 billion, whilst the worldwide premium income for the marine

¹⁴⁴ Tony Berry, 'Expert Report on Underwriting Issues by Tony Robert Berry'(No 57) para 11.

¹⁴⁵ Other syndicates within the LMX Spiral would have had to pay within 7 days but syndicates may also have relied on reinsurances from LMX Players outside Lloyd's, or from reinsurances not within the LMX Spiral, such as quota shares for instance.

¹⁴⁶ Tony Berry, 'TR Berry Marine Syndicate 536 Underwriter's Report' (1991).

¹⁴⁷ Exxon Valdez Oil Spill Trustee Council, 'Questions and Answers'

http://www.evostc.state.ak.us/facts/qanda.cfm accessed 24 May 2011. The following figures are provided in the first instance decision of *King v Brandywine Reinsurance Co. (U.K.) Ltd*, [2004] EWHC 1033 (Comm), [2004] 2 Lloyd's Rep 670, 677: a loss of 258,000 bbls of crude oil and total clean-up costs of US \$800 million for Exxon Shipping Corporation (which became insolvent as a result) and US \$1200 million for Exxon Corporation.

¹⁴⁸ Tony Berry's syndicate No 536 made profits from its first year of trading in 1983 until 1998.

and energy market was then "only" \$6 billion¹⁴⁹. The loss was bound to have a significant impact.

The grounding of the Exxon Valdez has indeed made history for the London XL Market not only because of the number of claims it has produced, but also because settlement disputes between reinsurers have given rise to significant judgments¹⁵⁰.

<u>Hurricane Hugo (15-22 September 1</u>989)

The second major catastrophe of 1989 was Hurricane Hugo, which struck Guadeloupe, Montserrat, St Croix, Puerto Rico, Antigua and South Carolina between 15 and 22 September 1989. The hurricane caused an estimated 56 fatalities and was the costliest hurricane in the Atlantic at the time. The Sigma Report values the insured loss for this catastrophe at US\$8,467 million. Hurricane Hugo is said to have made its way through the LMX Spiral in just over 12 months, causing serious cash flow problems amongst the LMX Players¹⁵¹. A few things changed within the London XL Market after Hugo: 10% retentions became the norm in the non-marine London XL Market¹⁵². Retentions were seen as one of the ways to limit the effects of the LMX Spiral. In addition, the practice of "payback", whereby the reinsured would pay back over a number of years any claims monies received, diminished substantially¹⁵³. Nevertheless, the London XL Market remained a buyer's market, with some underwriters still reducing their rates¹⁵⁴.

Phillips Petroleum (23 October 1989)

1989 saw another major catastrophe when, on 23 October, a series of explosions and a fire caused substantial damage to a chemical complex then owned by Phillips Petroleum and situated in Texas, USA. The catastrophe led to the loss of

¹⁵² Tony Berry, 'Expert Report of Tony Berry in Relation to the LMX Spiral' (*Equitas* case (n 1)) para 2.14.

¹⁴⁹ Tony Berry, 'Talk to Names re The X/L Market Americana' (undated but understood to have been given in 1990).

¹⁵⁰ Equitas (n 1), King v Brandywine (n 147) and Commercial Union Assurance Co plc v NRG Victory Reinsurance Ltd [1998] 2 Lloyd's Rep 600.

¹⁵¹ Emney (n 131).

¹⁵³ John Emney, 'The Spiral - 2 years on' (Insurance Institute, London, 16 October 1989).

¹⁵⁴ Berry (n 149).

23 lives, and affected all facilities within the complex, causing \$715.5 million worth of damage plus an additional business disruption loss estimated at \$700 million. This loss does not feature in the Sigma Report.

There is some evidence that claims related to Hurricane Alicia were still spiralling amongst Spiral Participants in November 1989¹⁵⁵. To this has to be added the catastrophes listed above, and a myriad of smaller losses that were also part of the LMX Spiral. At the end of 1989, the LMX Spiral was starting to unwind but the London XL Market was still operational.

North European Windstorm (25 January 1990)

On 25 and 26 January 1990, one of the strongest storms on record swept across north-western Europe. As there is no official list of such events in Europe, the windstorm bears different names. It is known as the Burns' Day Storm (because it started on the birthday of Scottish poet Robert Burns) but also as Daria, or 90A within the London XL Market. The windstorm caused widespread damage and, according to the Met Office, was responsible for 97 deaths in the UK. Once it left the UK the storm tracked rapidly east towards Denmark, causing further damage, and 30 deaths in the Netherlands and Belgium. Sadly, casualties were much higher than those of the Great Storm of 1987 because the storm hit during the daytime. The insured loss for this windstorm is set at US\$8,205 million in the Sigma Report.

In 1990 the financial weight of all these catastrophes led to a contraction of the London XL Market as a whole¹⁵⁶. As a result, some LMX Players were unable to find reinsurance for all the liabilities they intended to protect. This phenomenon had started in 1989 but became worse in 1990¹⁵⁷. Rates were on the increase¹⁵⁸ but because London was still a buyer's market those increases were constrained¹⁵⁹ and retentions remained low, particularly in the marine London XL Market. The

¹⁵⁵ Stephens (n 134).

Tony Berry, 'TR Berry Marine Syndicate 536 Underwriter's Report' (1990). However, some brokers still held the view that the market was not shrinking. See Hady Wakefield, 'Is the Reinsurance Market Shrinking? – A Broker's View' (DYP Insurance and Reinsurance Research Group Ltd, Reinsurance Market Update, March 1990) 11.

¹⁵⁷ Berry (n 144) para 2.14.

¹⁵⁸ Berry (n 156).

¹⁵⁹ ibid. See also comments that underwriters did not realise how significant the losses were until 1991 in the case of *Nederlandse* (n 57) 793.

three-year accounting rule within Lloyd's meant the true extent of the losses listed above was still unclear in early 1990. Some underwriters, however, clearly understood that the London XL Market was then extremely vulnerable 160. By 1991 three years had elapsed since 87J and the effect of all the above catastrophes was becoming apparent. The year 1991 was reportedly the most difficult underwriting year since 1967 when Hurricane Betsy had resulted in a serious crisis within the London XL Market. In 1991 rates were up 1000% compared with 1988, which had been the point when rates had been at their lowest in the decade for LMX Business¹⁶¹.

The Collapse of the LMX Spiral 3.3.2

The six catastrophes listed in the previous section of this thesis triggered the demise of the LMX Spiral. Other catastrophes occurred between 1987 and 1990 but the ones described above were the most significant, as evidenced by the fact that they are the ones listed in the *Gooda Walker* case.

The accounting system within Lloyd's meant there was a three-year delay before the full impact of the catastrophes on LMX Syndicates could be felt. Since LMX Syndicates accounted for nearly half of the LMX Players, this certainly explains why no real change occurred within the London XL Market until 1990, when the market contracted, and rates started to increase. This continued in 1991 as explained above, and from then on the London XL Market entered a slow decline as the LMX Spiral started to unwind. This decline was made worse by another major catastrophe that hit the market in 1992: Hurricane Andrew.

Hurricane Andrew (16-28 August 1992)

Hurricane Andrew struck the north-western Bahamas, southern Florida and southwest Louisiana between 16 and 28 August 1992. It was the costliest hurricane in US history until Hurricane Katrina in 2005. The 2012 Sigma Report

¹⁶⁰ This includes Outhwaite who spoke about the risks inherent to the LMX Spiral as early as April 1988 (n 114); Catt who said 'there are times when I feel that this market is hell bent on its own destruction' in November 1988 (n 137) 5; R Riseborough who said 'there is no doubt that the LMX bubble has burst' in March 1990; see 'Is the Reinsurance Market Shrinking? - A Reinsurer's View' (DYP Insurance and Reinsurance Research Group Ltd, Reinsurance Market Update, March 1990) 26; and Emney (n 131).

¹⁶¹ Berry (n 146).

values the insured loss for this catastrophe at a very significant US\$26,180 million. In 2012, Hurricane Andrew remained the fourth most expensive catastrophe since 1970, ahead of the terrorist attack on the World Trade Centre on 11 September 2001.

By 1992 the London XL Market had changed: it was much smaller, due to some reinsurers having gone out of business and many others having stopped writing LMX Business. The increased competition amongst the few remaining LMX Players led to considerable rate rises, and more stringent terms and conditions for LMX Business. To avoid becoming involved in the LMX Spiral, some XL Retrocessionaires were using wording that excluded the coverage of LMX Business¹⁶².

The trend continued in 1993, when the London XL Market was described as being a "seller's market" for the first time in years¹⁶³. Some noted that at this point there was no more LMX Spiral as such¹⁶⁴. This meant new business did not reach a point where it would spiral but claims already in the LMX Spiral were continuing to circle amongst the Spiral Participants.

In 1994 many reinsurers were still seeking to prevent risks from entering the LMX Spiral. This was confirmed in the *Gooda Walker* judgment, dated October 1994, where Philips J noted that "*The London market no longer writes spiral business* — at least on the scale and in the manner which developed in the last decade" 165. Thus, from about 1991 the London XL Market was in crisis and the LMX Spiral collapsed. In practice, this meant some LMX Participants became bankrupt and many others fled the market by ceasing to write LMX Business. Amongst the LMX Players that remained, some were purposefully avoiding XL on XL cover to stay clear of the LMX Spiral. The LMX Spiral therefore stopped developing, but it was still in existence as far as the "old liabilities" were concerned. The LMX Spiral in fact still exists given that some of those old liabilities are being settled now through Equitas, as will be explained below.

The collapse of the LMX Spiral does not mean that it disappeared altogether.

Neither did it spell the end of the London XL Market or indeed LMX Business. The London XL Market still exists today. Insurers and reinsurers alike are still seeking protection for the substantial amounts of liability they are taking on and XL

¹⁶² Tony Berry, 'TR Berry Marine Syndicate 536 Underwriter's Report' (1992).

¹⁶³ Tony Berry, 'TR Berry Marine Syndicate 536 Underwriter's Report' (1993).

¹⁶⁴ ibid.

¹⁶⁵ *Gooda Walker* (n 1) 1255.

reinsurance remains an effective and popular way to offload some of those liabilities.

The collapse of the LMX Spiral did, however, play a major part in a very serious financial crisis faced by the Lloyd's market in the early 1990s which, at the time, threatened the existence of Lloyd's.

3.4 Reconstruction and Renewal

3.4.1 The Lloyd's Crisis

In the early 1990s, the financial position of the Lloyd's market deteriorated rapidly, as shown in the profit/loss figures set out below:

Lloyd's profit/loss figures (£millions) ¹⁶⁶							
1985	1986	1987	1988	1989	1990	1991	1992
195.6	649.5	509.1	(-549.00)	(-1,863.00)	(-2,319.00)	(-2,047.00)	(-1,193.00)

The cumulative losses faced by Lloyd's for the years 1988 to 1992 amounted to £8 billion. Those losses originated from two major sources:

- a) the collapse of the LMX Spiral described above; and
- b) "long tail" liabilities. Those liabilities arose under insurances or reinsurances providing cover for asbestos, pollution and other long term health diseases (together known as **APH**). The 1980s saw an explosion of asbestos litigation, and the passing of legislation in the US¹⁶⁷ that required companies who had caused pollution to meet astronomical clean-up costs. The resulting liabilities were mostly reinsured at Lloyd's. Lloyd's had traditionally issued "occurrence based" policies for such liabilities, that is, policies that provide cover for the liability when it occurs, regardless of the time when a claim is made. This

¹⁶⁶ Figures for the years 1985 to 1987 inclusive are from: Lloyd's, 'Statistics Relating to Lloyd's' (Lloyd's of London Press 1993), as reproduced in the book by Raphael (n 97) p285. Figures for the years 1988 to 1992 are from: P White, 'Lloyd's: Post Reconstruction and Renewal' (FT Financial Publishing 1997).

¹⁶⁷ Comprehensive Environmental Response Compensation and Liability Act 1980 (US).

provided, effectively, timeless cover for those long-term liabilities and exposed Syndicates to an explosion of claims of increasingly high value.

Those losses caused difficulties for two reasons. Firstly, the amounts claimed were unprecedented and expanding. Secondly, and critically, it was near impossible to value those claims at the outset or to ascertain how long they would take to crystallise. This led to uncertainty, and made it more and more difficult for underwriters to estimate the premium for the RITC. As explained earlier in this thesis syndicates are yearly ventures¹⁶⁸. Broadly speaking, at the end of each year every syndicate ceases and after a further two years all outstanding liabilities, including IBNRs¹⁶⁹, are reinsured into the successor syndicate (or another one). It falls to the syndicate's underwriter to fix a premium for the RITC. The premium is clearly affected by the value of the outstanding liabilities and IBNRs.

The three-year accounting rule was intended to assist the process by providing a sufficient amount of time for claims to come to maturity. This enabled the relevant underwriters to obtain tangible figures to fix the premium for the RITC, rather than having to estimate the value of future claims. However, as APH claims became more prevalent and unpredictable in their values through the 1980s, and the LMX Spiral started to unwind, it became more difficult for underwriters to set realistic premiums for the RITC. The Inland Revenue added to the pressure by enquiring annually into the levels of RITC of most syndicates. RITC premium indeed had to be based on a fair and reasonable calculation of the value of the liabilities that would ultimately arise, falling which under the rules of the Inland Revenue it may not be claimed as a deduction for tax purposes¹⁷⁰.

The underwriter charged with pricing the RITC was therefore faced with an impossible dilemma. Overvaluation brought tax consequences but the risk of undervaluation caused real difficulties. The premium for RITC was indeed the price paid by the Names of one syndicate year to the Names of the subsequent syndicate years or of another syndicate (the **Reinsuring Names**) to take over their liabilities. Should the premium be too small, the Reinsuring Names would make a loss as the value of the claims would be greater than the amount they had received to provide the reinsurance.

¹⁶⁸ See section 3.1.2 of this thesis.

¹⁶⁹ See section 2.2.4 for a definition of IBNR.

¹⁷⁰ M Voller, 'Taxation of Lloyd's Underwriters' (12th ed, Tottel Publishing, 2005) para 1.17.

In effect, Names on a syndicate took on two types of risks:

- a) the risks written by the syndicate in any given year using the Names' direct investment; and
- b) all outstanding liabilities of that syndicate, or other syndicates it reinsured, rolled over from previous years. Under this second type of exposure, Names could find themselves liable to pay for losses they had not, technically, written themselves. This included APH losses that had occurred before they had started investing in Lloyd's, or sometimes even before they were born.

In the 1980s, as the law changed in the US and APH claims exploded, it became apparent that APH liabilities had been grossly undervalued. Inevitably, it came to a point where the underwriters on the syndicates most exposed to APH liabilities felt unable to estimate the premium for the purposes of the RITC. If a syndicate year could not be reinsured, it was left open, that is, it was put into run-off until all liabilities had become extinct. For APH liabilities, this could take 50 years or more.

Before 1980 few Syndicates had been left unclosed. This changed when the full extent of the APH and LMX liabilities became apparent in the mid to late 1980s. By 1988, fifty-seven syndicates had left open ninety-seven years of account between them. When the year 1989 was closed, the point at which spiral losses from Piper Alpha and other disasters started to materialise, 103 syndicates had to leave 162 years open. When the 1990 year of account was closed, the number of open years had reached 317. In its 1992 *Guide to Syndicate Run-Offs* the independent Lloyd's analyst Chatset estimated that the costs of closing all open years would be £5 billion¹⁷¹.

Hence, by 1992 the Lloyd's market had suffered losses of £8 billion, which did not include potential liabilities of up to £5 billion locked up in open years. In addition, there remained many uncertainties caused by difficulties in evaluating both APH liabilities and the ultimate costs of the claims that were ballooning within the LMX Spiral.

¹⁷¹ As reported by Raphael (n 100) pp 186-187.

3.4.2 The Risk of Insolvency

In 1993 Lloyd's published its first ever business plan¹⁷² (the **1993 Business Plan**), which stated:

"Our current results are the worst in Lloyd's history. Many members have been brought to the brink of financial ruin, many more are fearful of the future. Confidence in the Society has been shaken. It is now time to take radical action."

At the time radical action was indeed needed not only to rescue the Lloyd's market but to put an end to the belligerent relationship that had developed between Lloyd's and the Names. In 1993 about half the Names were engaged in litigation against Lloyd's agents and underwriters¹⁷³.

The 1993 Business Plan put together by the new chairman David Rowland and a new chief executive, Peter Middleton, included a series of measures to return Lloyd's to profitability. This included two very significant changes:

- 1. Allowing corporate capital into Lloyd's with limited liability¹⁷⁴. Given Lloyd's history, this was a revolutionary idea.
- 2. Putting an end to the uncertainties of the liabilities from the "Old Years" (**Old Liabilities**), defined as "[b]usiness written in past years of account at least three years old for which liabilities are still emerging, whether currently closed or open¹⁷⁵". The novel idea was to ring-fence the Old Liabilities by reinsuring them into a new separately-capitalised reinsurance company¹⁷⁶.

In May 1995, Lloyd's published a document setting out the Society's plan for the reconstruction and renewal of Lloyd's (**R&R**)¹⁷⁷. It noted a marked improvement from the time when the 1993 Business Plan had been published. Between 1993

¹⁷² Lloyd's, 'Planning for Profit: a Business Plan for Lloyd's of London' (Lloyd's of London April 1993).

¹⁷³ Raphael (n 97) pp. 201-2. See also section 5.1.1 of this thesis for more detail of the wave of litigation that threatened to engulf Lloyd's.

¹⁷⁴ ibid ch 14.

¹⁷⁵ ibid Glossary of Terms.

¹⁷⁶ ibid ch 3.

¹⁷⁷ Lloyd's, 'Lloyd's: Reconstruction and Renewal' (Lloyd's of London May 1995) 8.

and 1995 the profitability of the market had been restored (the profit for the year 1993 was just over £1 billion). In addition, Lloyd's had received £1.2 billion of corporate capital in investment, with more expected to come. However, Lloyd's was still facing insolvency. At the time, Lloyd's had to pass two solvency tests:

- 1. A "global" test, comparing the aggregate eligible assets of the Lloyd's members taken together (including the Central Fund and other Corporation assets) with their aggregate liabilities and including a solvency margin.
- 2. A second, "individual" test, requiring each Name to be declared solvent. A Name's solvency status was established by comparing that particular Name's declared liabilities against his or her eligible assets. The rules were stringent: if a single name did not pass the solvency test, the Name in question would be treated under the Insurance Companies Act 1982 as if he or she were an insurance company that had failed to pass its solvency test, triggering regulatory powers of intervention and the members of Lloyd's taken together would be similarly treated. However, Lloyd's could earmark an amount in the Central Fund to enable Names to pass the individual solvency test.

In the R&R document, Lloyd's reported that the global test would be passed for the year 1994: the market then had £27.7 billion worth of assets to meet £21.1 billion of liabilities¹⁷⁸. It is the second test that was presenting difficulties. Despite the return to profitability, the Old Liabilities were putting mounting pressure on Names, some of whom were facing bankruptcy¹⁷⁹. Names owed Lloyd's £732 million at the end of 1994 in respect of unpaid cash calls, £2.2 billion remained due in respect of losses that had not yet been called, and it was estimated that further cash calls for the year 1995 could be as high as £1.5 million¹⁸⁰. As a result, the Central Fund was becoming engulfed in earmarking. To assist, Lloyd's had given each Name a solvency credit for the years 1993, 1994 and 1995 of, respectively, 5%, 3% and 3% of the relevant Name's Overall Premium

¹⁷⁸ ibid.

¹⁷⁹ About 4,000 Names were bankrupted by the Lloyd's crisis. See Charles Berry, 'The Political Risk insurance Market and the Current Crisis' (Political Risk Insurance Newsletter, Robert Wray PLLC, May 2009).

¹⁸⁰ Lloyd's (177) 8.

Limit (**OPL**)¹⁸¹. In addition, Lloyd's had obtained from its then regulatory supervisor, the DTI, the authorisation to disapply rules that resulted in double counting. The new rules allowed Lloyd's not to count a loss already incurred by a syndicate when the Name was then claiming for the same loss under a stop loss policy provided by another syndicate.

All this, however, was insufficient to safeguard the Central Fund, which was depleting rapidly, as shown below¹⁸²:

Net Central Fund Position (£millions)			
1992	1993	1994	1995
272	800	415	21

Lloyd's was concerned that the Central Fund would be exhausted by 1996¹⁸³.

3.4.3 Equitas

R&R was the furtherance and, in some cases, implementation of the strategy proposed in the 1993 Business Plan. The two key changes set out in the 1993 Business Plan – corporate capital and the ring-fencing of the Old Liabilities – were taken further forward.

The R&R document set out specific steps to reinsure the Old Liabilities into a new reinsurance company and pushed back the cut-off point to 1992 (as opposed to 1985 in the 1993 Business Plan). In practice, this meant that all liabilities relating to policies covering all years up to 1992 would be reinsured into the new reinsurance company, which was to be called Equitas. The purpose behind the Equitas project was not only to ring-fence the Old Liabilities for the benefit of all involved in the "renewed" market, but also to provide finality¹⁸⁴ to the Names.

¹⁸¹ This is defined as 'the maximum amount of business which a member may underwrite based on the level of funds at Lloyd's. The limit is allocated to syndicates in proportions agreed between the member and his members' agent'. See Lloyd's (n 172) 70 (Glossary of terms).

¹⁸² White (n 166) 42.

¹⁸³ Lloyd's (n 177) 9.

¹⁸⁴ "Finality" in this context, meant a final reckoning (the Equitas premium) for a Name's 1992 and prior liabilities, the opportunity to resign from Lloyd's and undertakings from agents, Equitas and Lloyd's that no further demands would be made on the Name. There

Finality would come at a cost, and the R&R document set out a detailed plan for the financing of Equitas, which required significant contributions from all involved in the market, including the Names themselves. Lloyd's estimated that, on a cumulative basis, the total amount due by all Names would be £5.9 billion¹⁸⁵ (the **Finality Bill**) to (i) settle all of their losses due to date, and (ii) contribute to the costs of setting up Equitas.

As an incentive, Lloyd's offered a £2.8 billion settlement offer¹⁸⁶ to the Names. This £2.8 billion would not be paid directly to Names, but £2 billion of it would be made available as credit against the Finality Bill, and a further £800 million of the Finality Bill would be paid by errors and omissions underwriters. This was in exchange for an undertaking on the part of the Names not to pursue any claim concerning the Old Liabilities against the Society or against other Lloyd's professionals who had contributed to the settlement (the **Equitas Settlement**). The Equitas Settlement was accepted by a sufficient number of Names for the project to be implemented. Equitas was authorised and commenced reinsurance business on 3rd September 1996. Some Names however rejected the deal and instead continued to seek redress as against their agents and the Lloyd's market through litigation (the Litigating Names). Their mainly unsuccessful legal battle went on until 2007¹⁸⁷. For the 95 percent of Names that accepted the Equitas deal, the establishment of Equitas marked the end of their dispute with Lloyd's. Equitas was owned by trustees appointed by the Council of Lloyd's and whose role was to protect the interest of those Names who had agreed to the Equitas Settlement. Three companies were in fact created for the purposes of running off all of Lloyd's pre-1992 liabilities: Equitas Holdings, Equitas Reinsurance Ltd (the reinsuring entity) and Equitas Ltd, the retrocessionaire of Equitas Reinsurance Ltd and responsible for the day to day running of the run-off. Many of the administrative tasks, including the run-off of some of the syndicates, were in fact subcontracted to various other companies. For instance if a syndicate was still trading, its managing agent might have the management of its pre-1992 liabilities sub-contracted to it. The project was funded through the following sources 188:

remained however a residual risk that Names might still be found liable under the relevant policies should Equitas fail. See Lloyd's (n 177) 12.

¹⁸⁵ Lloyd's (n 177) 5.

¹⁸⁶ Lloyd's (n 177) 17.

¹⁸⁷ See section 5.1.3 for more information on the Litigating Names.

¹⁸⁸ White (n 166) 43.

- 1. Sale and leaseback of the Lloyd's 1986 building, and a remortgaging of the Lloyd's 1958 building; and
- Sale of Lloyd's of London Press.The two above sources raised £270 million.
- 3. A contribution of £1 billion from the Central Fund, which included a £700 million write-off on earmarked funds;
- 4. Contributions from auditors of £116 million:
- 5. Contributions from E&O insurers of £800 million;
- 6. Contribution from Lloyd's brokers, over 6 years, of £100 million;
- 7. Contribution from members and managing agents of £200 million;
- 8. A 1.5% levy on OPL¹⁸⁹ from ongoing members raising a further £400 million; and
- 9. A syndicated loan of up to £300 million.

The above adds up to £3.2 billion. This amount was credited against the total amount of premium owed to Equitas by the Names who were reinsuring their Old Liabilities. The situation of each Name was analysed individually and a bill was produced for each Name of the final amount he or she had to pay Equitas to reinsure. This was the cost of Finality (although some Names received money). From then on, Equitas managed and paid the Old Liabilities of the Names who had accepted the Equitas Settlement. From a legal perspective, however, the Names were still liable to their policyholders to pay amounts due under the (re)insurances. Under the Equitas Settlement, there was no novation or assignment of the (re)insurance agreements: the contractual relationship between the Names who had underwritten the risk (through the Syndicates) and the policyholder remained unchanged. However, the Names now had an agreement with Equitas whereby Equitas had agreed to pay amounts due by the Names to policyholders under (re)insurances covering pre-1992 liabilities.

Equitas had to have large reserves to meet all those liabilities. When it was created, Equitas took over all pre-1992 syndicates' reserves and reinsurances. This, in addition to the sources listed above, gave Equitas a total fund of £14.7 billion. Given its role as the run-off provider of potentially very extensive liabilities, it was imperative for Equitas to establish its reserves at the appropriate level. As part of the preparation for the Equitas Settlement proposal, a reserving

¹⁸⁹ ibid. See n 181 for a definition of OPL.

group had been set up to determine whether there were enough funds in each syndicate's reserves to meet potential losses. This required a review of all relevant reinsurance policies and assessment of the strength of the relevant reinsurers. In order to do so, Equitas had to create and populate a database of over 5,000 reinsurers, 54,000 reinsurance policies and 664,000 lines of reinsurance¹⁹⁰.

The reserving exercise was particularly difficult given the elusive nature of the two main types of liabilities covered by Equitas: APH and LMX losses. For APH liabilities, unconventional methods of reserve estimation had to be used. This included having to estimate the total number of potential victims of asbestos-related diseases worldwide, the number and value of resulting claims, and Lloyd's share of those claims. LMX losses also presented difficulties as it was impossible to ascertain for each loss at the outset how many times it would spiral, bearing in mind that with each "turn" of the spiral the Gross Claim would increase. The reserving group instead took a view as to the exposure of the entire London XL Market to specific losses, and applied a share for each syndicate.

The aim of the reserving exercise was to discharge all of Equitas' liabilities over a period of 40 years. It seems the reserving was adequate as, in 2007, Equitas Ltd retroceded all its business to National Indemnity Company, one of the Berkshire Hathaway Group of companies, a sign that that business in run-off was perceived as a sound investment for a major conglomerate.

Equitas only provided a solution to LMX Syndicates. As explained above, the LMX Spiral comprised as many corporate reinsurers as it did syndicates. Corporate reinsurers had to finance the claims themselves and did not benefit from a mutual pooling of resources. Many LMX Companies suffered from the collapse of the LMX Spiral including Royal Re, Mercantile and General, Victory, Chancellor, and Charter Re¹⁹¹.

3.4.4 The LMX Spiral in Lockdown

Equitas was impaired in its efforts to unwind the LMX Spiral when judicial decisions cast doubt upon the ways in which some of the LMX Spiral losses had

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¹⁹⁰ ibid 52.

¹⁹¹ Berry (n 112) para 2.7.

been aggregated. This led to a lockdown of the LMX Spiral that lasted for nearly 10 years.

The losses in question emanated from two catastrophes: the grounding of the Exxon Valdez on 24 March 1989¹⁹² (the **Exxon Losses**); and the seizure of Kuwait International Airport and its fleet on 2 August 1990 by the Iraqi army and subsequent destruction of a BA aircraft around 27 February 1991 (the KAC/BA Losses, together with the Exxon Losses, the Losses). Difficulties arose because, years after the relevant events, it transpired that some of the Losses had been wrongly aggregated or were irrecoverable. In Scott v Copenhagen Re UK Ltd¹⁹³, the Court of Appeal held that the losses of the Kuwaiti aircrafts should not have been aggregated with the loss of the BA aircraft as they did not arise out of the same event. Then, in King v Brandywine Reinsurance Co194, the Court of Appeal decided that some of the Exxon Losses were irrecoverable and ought not to have been included in the losses that entered the LMX Spiral. The Losses had become so entangled as they were making their way up the LMX Spiral that it was impossible to identify the wrongly aggregated, or non recoverable, losses. Thus all claims relating to the Losses had ground to a halt for nearly a decade pending a decision on how Equitas could establish the liabilities of the relevant reinsurers.

Equitas' solution as previously explained¹⁹⁵ was to develop the Equitas Model, which was based on voluminous amounts of actual data taken from the London XL Market. The Equitas Model produced estimates of the recoverable amounts due under the relevant reinsurances, including substantial discounts for the wrongly aggregated or irrecoverable losses. The Equitas Models is the closest models ever produced of the LMX Spiral.

In November 2009, in the landmark case of *Equitas v R&Q*,¹⁹⁶ Equitas won the right to use the Equitas Model to verify LMX Spiral losses. The case was a test case brought by Equitas to end the lockdown of the LMX Spiral, so that it could continue unwinding the LMX Spiral, at least as regards the Exxon and KAC/BA losses.

¹⁹² See 3.3.1.

¹⁹³ Scott v Copenhagen Reinsurance (UK) Ltd [2003] EWCA Civ 688, [2003] Lloyd's Rep IR 696

¹⁹⁴ King v Brandywine Reinsurance Co [2005] EWCA 235, [2005] Lloyd's Rep IR 509.

¹⁹⁵ See section 3.2.4 of this thesis.

¹⁹⁶ Equitas (n 1).

3.5 Concluding Remarks

It took roughly a decade for the LMX Spiral to develop an incidental market occurrence to a very significant market failure that had a major impact on both the Lloyd's and the wider reinsurance market in London. By the end of the 1980s, the LMX Spiral encompassed hundreds of reinsurers who all played what has been described as a giant and allegedly careless "pass the parcel" game. Equitas' successor is still going through the unwinding process, some 25 years after the LMX Spiral showed its first signs of trouble.

4 Analysis of the LMX Spiral and its Effects

This chapter provides a critical appraisal of the LMX Spiral and its effects on the London XL Market. As noted in the previous chapter, the immediate trigger for the collapse of the LMX Spiral was a series of catastrophes. However, this chapter will show that the LMX Spiral was unsustainable and therefore bound to fail because of the ways in which it distorted the London XL Market.

4.1 The Paucity of Reports on the LMX Spiral

Around the time of the Lloyd's crisis the Lloyd's insurance market was the subject of three reports and one Parliamentary investigation¹⁹⁷. Even though Lloyd's was an independent institution that enjoyed little interference from the government, the crisis of the early 1990s impacted on individuals, the Names, many of whom became bankrupt. This inevitably lead to a certain level of public interest and prompted the government to investigate. Those reports and investigations into Lloyd's were concerned with the market as a whole and self-regulation, a singularity at the time when other financial markets were becoming subject to more regulatory scrutiny.

BY contrast, only one enquiry into the LMX Spiral was ever commissioned. The LMX Spiral was a significant factor in the crisis but it concerned only a specialised portion of the market of seemingly little interest to outsiders. The sole "official" report concerning the LMX Spiral commissioned by Lloyd's was the Walker Report, written by a committee chaired by Sir David Walker (the **Walker Committee**) set up at the end of February 1992 to inquire into allegations of misfeasance concerning the LMX Spiral within the Lloyd's market. The "Report of an inquiry into Lloyd's syndicate participations and the LMX Spiral" was published in June

¹⁹⁷ Report of the Committee of Inquiry chaired by Sir Patrick Neill QC, 'Regulatory Arrangements at Lloyd's' (HMSO January 1987); Report of the Task Force chaired by David Rowland, 'Lloyd's: a route forward' (Lloyd's January 1992); Report of the Working Party chaired by Sir Jeremy Morse, 'A New Structure of Governance for Lloyd's' (Lloyd's June 1992); Report of the Treasury and Civil Service Committee's inquiry, 'Financial Services Regulation: Self-regulation at Lloyd's of London' (HMSO 17 May 1995).

1992¹⁹⁸. Its findings are set out in more detail below but in short, the Walker Committee found no evidence of impropriety, conspiracy of misfeasance. Lloyd's also set up a number of loss review committees to enquire into individual LMX syndicates' losses, but all documentation relating to those reviews is being kept confidential by Lloyd's. There exist other analyses of the LMX Spiral which have not been commissioned by Lloyd's or the government or any authority with a view to understanding the spiral and improving the market in which it operated. These other analyses mainly come from actuaries. This is unsurprising, given the nature and complexity of the LMX Spiral; it is most probably an interesting phenomenon to study from a mathematical perspective. This chapter reviews some of the most significant of these actuarial investigations. 199 Other sources of information about the LMX Spiral and its effects include cases, speeches, expert reports relied upon in litigation, underwriting reports and articles from underwriters active in the LMX market at the relevant time. In addition, over the years the Chartered Insurance Institute has commissioned study groups to report on the London XL Market. Those study groups have published lengthy reports in the years 1976, 1988 and 2000. The reports clearly show the impact of the LMX Spiral during the relevant years. All these other resources are referred to in the relevant parts of this thesis.

4.2 The Walker Report

4.2.1 The Walker Report: Parameters

The Walker Committee²⁰⁰ was set up shortly after the collapse of the LMX Spiral and tasked with the duty to "inquire into allegations that syndicate participations

Wacek, 'The Spiral In The Catastrophe Retrocession Market' (1990).

¹⁹⁸ Walker (n 40).

¹⁹⁹ Actuarial analysis not reviewed in this chapter include White (n 166); D Sanders, 'When the Wind Blows: An Introduction to Catastrophe Excess of Loss' (Insurance Mathematics and Economics Volume 16, Number 3, July 1995, pp. 280-280(1)); J Stanard and M

²⁰⁰ The Walker Committee consisted of a cross-section of City professionals as follows: Sir David Walker, Deputy Governor of the Bank of England (also an independent member of the Lloyd's Council), the Rt Hon. Sir William Clark, then an MP, 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,

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.²⁰¹" The Walker Committee carried out a thorough review of the LMX Spiral and the ways in which it developed. This must have been a difficult task given that the information provided by Lloyd's was incomplete. For instance, because of the three-year accounting rule²⁰², syndicate results were only available up to the 1990 underwriting year for the most part of the review. Moreover, Lloyd's had no historic data on the performance of individual syndicates, available records did not identify which syndicates could be categorised as LMX Syndicates and neither did the data identify which of the Names could qualify as "working names" or "external names"²⁰³. The Walker Committee had to set out its own criteria and apply those as best it could to the information available.

The findings of the Walker Report are valuable given the paucity of contemporaneous information concerning the LMX Spiral. A significant amount of information relied upon in this thesis originates from the Walker Report. However, it is important to underline the restricted parameters of the review. The Walker Committee had to focus on allegations of churning mentioned above, limiting its appraisal to the impact of the LMX Spiral within the narrow confines of the Lloyd's market. As noted in the previous chapter, the LMX Spiral affected the whole of the London XL Market, which included as many companies as it did Syndicates.

4.2.2 The Walker Report: Key Findings

The Walker Committee found no evidence of impropriety but found much to criticise in the way LMX Business had been conducted. It concluded that the disastrous results of some LMX Syndicates were due to flawed underwriting,

Leslie Lucas, Chief Executive Officer of Norwich Wintertur Reinsurance Corporation, and Jonathan Foster of the Solicitor's Department of the Corporation of Lloyd's who acted as a secretary of the committee.

²⁰¹ Walker (n 40) letter to the Chairman of Lloyd's.

²⁰² See section 3.1.2 of this thesis.

²⁰³ See Walker (n 40) paras 1.13 and 5.4 - 5.11.

which had been allowed to flourish through lack of proper supervision. The Walker Report therefore made a number of recommendations for improvements.

No impropriety

One of the report's key findings is that the development of the LMX Spiral in the mid-1980s could be explained through commercial factors. It was not improper trading and the market had not been purposefully distorted by conspiracy or misfeasance. Likewise, the Walker Committee found no evidence of fraud or conspiracy to disadvantage external Names or advantage others. Market insiders fared better than outsiders but this was on a small scale and was understandable given the insiders' superior knowledge. The Walker Report points out that some Members' Agents suffered losses to the same extent as their external Names.

Low standards and inadequate monitoring

The Walker Committee, however, was unimpressed by the low standards of professionalism, care and diligence displayed by some of the underwriters, Managing and Members' Agents involved in LMX Business, finding that in some cases these fell "materially below best practice" 204. Some of the agents had a lax approach to their fiduciary duties, sometimes giving prominence to their relationship with brokers and other agents rather than focusing on the duties they owed to the Names they were representing.

The Walker Committee also felt that the regulatory oversight from Lloyd's over the syndicates was inefficient. The method then used to assess a syndicate's performance was premium income monitoring. This was a crude measure of how much business a syndicate was taking on which gave no indication as to the syndicate's exposure. In fact, since premiums declined rapidly as the LMX Spiral developed, less premium income could mean much higher levels of exposure.

Recommendations

The Walker Committee's recommendations broadly asked for (i) higher standards to be imposed on Managing and Members' Agents, (ii) tighter regulation and (iii) more proactive monitoring of the syndicates with vigorous enforcement and

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²⁰⁴ Walker (n 40) para 1.3.

disciplinary action. The Walker Report noted that underwriters ought to be subjected to more supervision too, commenting that this should "warn against the unrealism of the apparently continuing sense in some parts of the market that underwriters cannot operate efficiently unless their discretion is largely unfettered.²⁰⁵" It also recommended that in future Lloyd's should keep better data on syndicates. Interestingly, the Walker Report recommended that Managing Agents should set underwriting plans and monitor compliance with those plans. This is something that has been echoed in case law²⁰⁶.

The Future

Despite making for stark reading in parts, the Walker Report ended with a positive message. Many Names had lost confidence in the Lloyd's market but the same could not be said of insurers and reinsurers who still used the market. In addition, the damage to the Lloyd's capital base was not irreparable and its weaknesses were not attributable to its constitution. In other words, damage had been done but it was not irremediable and improvements could be implemented without the need for new legislation.

4.2.3 The LMX Spiral according to the Walker Report

The Walker Report made some important factual findings about the LMX Spiral which are set out below.

- The rates charged by LMX Spiral Participants diminished in successive layers²⁰⁷. This was in accordance with the ways in which XL reinsurance had been priced over the years: the higher the layer, the less chances of a claim being made²⁰⁸.
- In the mid 1980s the marine reinsurance market had been particularly competitive, making it more and more difficult for marine underwriters to make a profit. As a result, they were drawn to LMX Business which at the time was plentiful and seemingly profitable. However, marine underwriters

²⁰⁵ ibid para 1.12(e).

²⁰⁶ See section 5.3.3.

²⁰⁷ Walker (n 40) para 2.13.

²⁰⁸ See section 2.2.4.

lacked the necessary experience and LMX Business did require specialist skills²⁰⁹.

- Because of the very large number of XL reinsurance contracts, LMX reinsurers frequently reinsured risks that they had substantially transferred outwards in an earlier layer. As a result, the Walker Report notes that "A consequence of the spiraling of LMX Business was that the claims turnover associated with an individual catastrophe greatly exceeded the amount of the actual loss"²¹⁰.
 This is the magnifying effect mentioned previously. The Walker Report does however emphasise that the higher claim turnover did not actually increase the net loss borne by reinsurers.
- The combined effect of the high claims turnover and low retention was that a very large part of the losses reached the higher layers. The report suggests that the underwriters writing those layers may well have been less anxious to obtain full reinsurance for their exposure on the assumption that the risk of a claim reaching those layers was remote. Thus many syndicates were carrying a large unprotected exposure above the upper limit of their reinsurance protections and these exposures were concentrated on those syndicates writing at top end of the spiral²¹¹.
- Claims would spiral until an LMX Spiral Participant had run out of reinsurance cover. According to the Walker Report, a loss rapidly made its way through the lower layers and crystallised on the higher layers where reinsurers had not necessarily obtained full reinsurance (see above). This is the "concentrating" effect of the LMX Spiral noted previously. It is interesting that in this context the Walker Report again points to marine underwriters and their lack of experience of LMX Business, which tends to cover losses of low frequency but high magnitude. The marine underwriters were more familiar with smaller losses of high frequency. This may explain why they wrote more LMX Business with unprotected exposures²¹² at the top of their reinsurance programmes.

²⁰⁹ ibid.

²¹⁰ Walker (n 40) para 2.14.

²¹¹ Walker (n 40) paras 2.15 and 3.3.

²¹² Walker (n 40) para 2.16.

- LMX Business was seriously underpriced for two reasons. Firstly, the risk premium had been substantially eroded by price competition, due to the arrival into this sector of marine underwriters but also due to the dramatic increase in the Lloyd's Market capacity at the relevant time. Secondly the brokerage, which amounted to a 10% commission on all transactions, reduced profit margins. The inadequate pricing was made worse by the fact that, as noted above, most underwriters priced LMX Business in the same way as any other XL reinsurance by reducing rates on the higher layers (believing they were mostly out of reach) and keeping prices unrealistically low. Another important factor was the widespread practice of payback, which is explained earlier in this thesis²¹³.
- Syndicates did not accumulate sufficient reserves in the good years of the mid 1980s to meet the losses of the later years²¹⁴. Syndicates were however impaired in doing this because of their structure as yearly venture²¹⁵. The good years also had led to less discipline within the market. Many underwriters failed to aggregate their exposure and to adequately assess their risk/reward balance. They failed to have adequate protection because they did not realise how quickly a single event loss would make its way through the layers of the spiral all the way to the top²¹⁶.
- In the context of sluggish direct insurance and proportional reinsurance markets, LMX Business was seemingly attractive due not only to the low levels of catastrophes suffered during the good years but also because of the way those involved in the Lloyd's market were remunerated, as follows:
 - a. For Managing Agents and underwriters, LMX Business gave an opportunity to increase premium income. It was relatively cheap to administer and produced an attractive initial cash flow, notably because past experience showed that claims reached the XL layers long after the event and then made their way slowly through the spiral.

²¹³ Walker (n 40) paras 2.17 and 2.20. For a definition of payback, see section 3.3.1.

²¹⁴ Walker (n 40) para 2.18.

²¹⁵ This was also the result of prohibitive tax treatment according to Tony Berry.

²¹⁶ Walker (n 40) para 3.4

- b. For Members' Agents, whose remuneration depends on the capacity they place on syndicate, LMX Business presented a unique opportunity to absorb all the additional capacity brought to the Lloyd's market in the 1980s.
- c. Finally, as noted above brokers received a 10% commission on all LMX Business and therefore they had an interest in expanding the volume of business being transacted in the market²¹⁷.
- The Walker report states that "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". For instance, on a premium rate of 2%, which was not uncommon on the higher layers, a premium of £1 million would involve a whole account exposure of £50 million. This may be sensible if the layer is highly unlikely to be reached but as we know, the higher layers in the context of the LMX Spiral were the most exposed. The report notes this lack of appreciation of the risk was partly due to a process of "anaesthetisation to risk from the heady years of the earlier 1980s" 218.
- To conclude, the Walker Report describes the LMX Spiral as follows: it would have looked like an inverted pyramid at the lower levels of reinsurance, with the risk being spread in the classical reinsurance pattern, but with the higher levels being akin to the top half of a diamond because this is where risk was being concentrated."219

4.3 The LMX Working Party Report

4.3.1 The LMX Working Party

In October 1988, a report was published in the context of the General Insurance Convention, which appears to be a yearly convention organised by actuaries to discuss topical insurance issues. Working parties are set up to study specific topics and report on them. In 1988, the "LMX Working Party" was tasked with

²¹⁷ Walker (n 40) para 3.2.

²¹⁸ Walker (n 40) para 3.13.

²¹⁹ Walker (n 40) para 3.12.

looking into "Excess of loss reinsurance of Lloyd's syndicates and London market companies"²²⁰. In this thesis, the resulting report is referred to as the "LMX Working Party Report". However, because the chairman of the LMX Working Party was Graham Lyons, the report is also known as the "Lyons Report"²²¹.

The LMX Working Party Report was published in 1988, at a time when the existence of the LMX Spiral was only starting to become generally known²²². The report is not about the LMX Spiral, even though it touches upon it, but about the London XL Market. In the words of Philips J in the *Gooda Walker* judgment, the "aim of the working party was to set down the nature of the London market and the special considerations which apply to LMX business"²²³. The LMX Working Party Report gives real insight into the London XL Market as it provides contemporaneous and candid views on LMX Business, including a section on the then recent Piper Alpha disaster. It also includes an actuarial model of a real LMX property account that provides a much simplified but nonetheless revealing illustration of the effects of the LMX Spiral. In addition, the report contains useful market information, including an LMX Slip Policy and a copy of the questionnaire used by underwriters to assess and price LMX Business. The findings of the LMX Working Party Report are referred to in various parts of this thesis but below are some of its salient points.

4.3.2 The LMX Working Party Report: Key Findings

Co-reinsurance²²⁴

According to the report, one of the peculiarities of the London XL Market was the fact that "traditionally", market participants did not co-insure. In other words, risks within the London XL market were 100% reinsured, mostly within that market. The report, however, notes that "because of the spiral effect there has been a move to ensure some co-reinsurance and the current figure is normally 5%". This lack of co-insurance and the low retentions prevalent within the London XL Market is one of the factors that fuelled the development of the LMX Spiral.

²²⁰ LMX Working Party (n 108).

²²¹ This is how it is referred to in the case of *Gooda Walker* (n 1).

²²² See section 3.2.3 of this thesis.

²²³ *Gooda Walker* (n 1) 1248.

²²⁴ LMX Working Party (n 108) 1.3(a).

The move towards more co-insurance as the LMX Spiral started to unwind was unfortunately "too little too late", as explained earlier in this thesis²²⁵.

Long-short-tail losses²²⁶

Through the use of an example concerning Hurricane Alicia, which hit the East Coast of the US between 17 and 20 August 1983, the LMX Working Party Report demonstrates how the LMX Spiral turned what ought to have been short-tail losses into long-tail ones. The report explains that a hurricane is usually a short-tail loss given its brief lifespan and the immediacy of the damage it causes²²⁷. However, the report notes that "when a loss is large enough the effect of the operations of the [London XL Market] is to introduce a "spiral effect" and make it much longer tailed". The report then contrasts the claim experience of two reinsurers as regards hurricane Alicia: one with no retrocession business and therefore no involvement in the LMX Spiral (Reinsurer a) and a leading reinsurer in the London XL Market (Reinsurer b). Taking as the base figure the loss at 31 December 1983, which is four months after the event, the results are illuminating:

	Reinsurer a	Reinsurer b	
December 1983	82% total loss known	Loss = X	
June 1983	Loss increased by 20%	[No results given]	
December 1984	Thereafter loss fluctuates	Loss = 10X	
December 1985	by 2 or 3% only.	Loss = 24X	
December 1986		Loss = 37X	
December 1987		Loss = 40X	

²²⁵ See section 3.3.1.

²²⁶ ibid 1.5.

This is particularly true of physical damage. Loss of profit covered by business interruption insurances may take slightly longer to identify and quantify but nevertheless this can be done within a matter of months. This contrasts with the typical long-tail forms of insurance covering for instance asbestoses or pollution, where damage may appear years after the event.

The report points out that from Reinsurer b it may take up to 10 years for the loss to come to maturity. Thus in the context of the LMX Spiral, a three-day hurricane turns into an unpredictable 10-year loss. It is on that basis that the writers of the LMX Working Party report coined the phrase "long-short-tail" to describe losses that made their way through the LMX Spiral. This example also illustrates the magnifying effect.

In the report, the leading LMX underwriter John Emney had put forward a potential solution to this issue. He suggested requiring LMX Participants to estimate at the outset their aggregated exposure to a specific loss once it had hit the second layer of any relevant XL on XL reinsurance, then adding a predetermined percentage to that amount to establish the loss reserve for that loss. On that basis, loss advices could be submitted to all reinsurers on all layers affected. If it then became obvious that the estimate was too high or too low, adjustments could be made. The purpose of this exercise would not be to provide a precise forecast of the total loss but at least to give an indication at an early stage of the likely impact of a loss across the market. With the benefit of hindsight, it seems unfortunate that this suggestion, made as early as 1988, was never taken up within the London XL Market.

Rating issues²²⁸

The LMX Working Party Report also clearly highlights another fundamental issue with the London XL Market at the time: rating. As the report points out, because of its nature, catastrophe business is more difficult to rate than more traditional insurance and reinsurance business. Catastrophes are few and far between and each tends to have unique features. Thus actuaries may not be able to project with much accuracy the likely losses future catastrophes may bring. Underwriters faced the same problems. The specialist underwriters ought to have had the requisite knowledge and experience to set appropriate prices but they needed accurate information about the level of exposure they were taking on from their reinsureds to price risk accurately.

The main source of information LMX Underwriters were relying on seems to have been standard form questionnaires. The example set out in the LMX Working Party Report is titled the "General Questionnaire" (the LMX Questionnaire) and it

²²⁸ LMX Working Party (n 108) ch 2 and 7.5.

was used for non marine XL contracts. It is set out at Appendix A to this thesis. When reading through the LMX Questionnaire, it is evident that the focus is on the reinsured's premium income issued from different types of business and geographical areas. Yet premium income is not a good measure of exposure since the level of exposure may well increase if premium reduces due to market pressure. In fact, this is what happened within the London XL Market in the mid-1980s when overcapacity led to sharp declines in LMX Business rates.

The report also notes that the practice of payback, which was widespread at the time, made the rating more obscure. Since the payback element was passed on to the higher layers, at the retrocessional levels it was practically impossible to identify what portion of the premium was due to "payback" and what portion covered actual exposure. The addition of payback to the premium also narrowed profit margins: a major issue in a market driven by intense competition.

To encapsulate all of the above, the report states that "the major drawbacks to rating on catastrophe premium income are firstly that this is not a good measure of exposure and secondly that the constituent parts of the premium income are unclear (some reflect exposure, some may be "payback", some reinstatement premium)."

Finally, the LMX Working Party Report correctly points out that, once they enter the LMX Spiral, claims go "right through" the layers. Thus reinsurers at the higher layers of a reinsurance programme were as likely to have to pay claims as those situated lower down the chain of reinsurances. This meant that rates ought to have remained relatively flat as they were going up the reinsurance towers. Yet as pointed out by the Walker Report, within the London XL Market at the time rates quoted by underwriters did not reflect this: they diminished with each retrocession instead.

4.3.3 The Actuarial Model

The LMX Working Party Report includes a simplified actuarial model of a real reinsurance property account containing LMX Business²²⁹. Whilst the aim of the model was not to analyse the LMX Spiral, the results clearly show some of the "spiral effects" which will be discussed later on in this chapter. A number of different scenarios, each with varying parameters, were put through the model to

²²⁹ ibid ch 4.

analyse the effect of each of those parameters on the account and, by analogy, the London XL Market at the time. The varying parameters included claim sizes, retention levels and leakage. Below are the model's key findings for our purposes:

- The model shows that reducing the claim size by more than half did not significantly reduce the size of the LMX Spiral. In practice, this means a loss would take as long to be paid in full. Thus, once it had entered the LMX Spiral, the size of a claim did not determine how many "turns" of the LMX Spiral it would take for the loss to come to extinction. Bearing in mind that with each turn the gross amount being claimed increased, one can see how the magnifying effect was significant for claims of all sizes, and how the higher layers of reinsurance could be impacted by even relatively small losses.
- The LMX Spiral became apparent even for claims not much higher than the deductible. This finding corroborates the one above in that it shows that the LMX Spiral had an impact on even the smallest of claims.
- According to the model, the LMX Spiral reduced mainly through reinsurance programmes becoming exhausted. This means that losses stopped circulating only when a reinsurer had ran out of reinsurance cover. As will be seen later, that reinsurer then had to meet all claims that fell upon it, leading to a concentration of the losses upon the least protected reinsurers within the London XL Market.
- The LMX Working Party report also notes that the size of the deductible had a much greater impact on the length of the spiral than the overall size of the reinsurance programme and its upper limit.
- The model shows that the length of the LMX Spiral increased as the following two parameters were increased: (i) the percentage of a reinsurance programme placed in the London XL Market and (ii) the percentage of this placement that was retained within the London XL Market. The actual size of the reinsurance programme made little difference. This shows that reinsurance spirals are potential features of any "closed" reinsurance market, regardless of the size of exposures being reinsured in those markets.
- The model also shows that the magnifying effect of the LMX Spiral increased if all of the following three parameters were increased: (i) the percentage of a reinsurance programme placed within the London XL Market, (ii) the percentage of this placement retained within the London XL Market and (iii) the size of the reinsurance programme (as a percentage of the upper limit of

the programme). Thus the gross claim amounts would increase more for the larger reinsurance programmes that were placed within the London XL Market. This is the classic compounding effect: a higher figure (the original loss value) multiplied (claims turnover) produces higher amounts.

Also, the size of claim which would cause a reinsurance programme to be
exhausted would reduce proportionally as the above three parameters were
increased. This meant that small claims could burn through the entire
reinsurance programmes causing the relevant reinsurers to run out of cover.

The report concludes that reinsurance programmes would be exhausted by claims that are "not immense". In this context, those with the best chances of survival were the LMX Spiral Participants with the highest levels of reinsurance protection. Whilst this seems obvious, it is important to note that this does not relate to the actual levels of exposure. Hence reinsurers heavily exposed to the catastrophes listed in the previous chapter could still perform well if they had sufficient reinsurance in place. This demonstrates why an accurate assessment of a reinsurer's exposure, which would have dictated the level of reinsurance required, was of paramount importance.

4.4 Professor Andrew Bain

In an article published in 1999²³⁰ Professor Andrew Bain, an economist, sought to produce a model of a reinsurance spiral and to apply it to "the situation that existed in the Lloyd's and the London reinsurance markets in the second half of the 1980s". His analysis is more detailed than the model produced by the LMX Working Party because Professor Bain had access to additional information, including the reports of the Walker Committee and the LMX Working Party mentioned above, as well as that of the Gooda Walker Loss Review Committee²³¹. Professor Bain also had the benefit of hindsight: by 1999 the Spiral had collapsed, and he had been able to read some of the judgments concerning the LMX Spiral and referred to in the next chapter.

²³⁰ Andrew Bain, 'Insurance Spirals and the Lloyd's Market' (The Geneva Papers on risk and insurance Vol. 24 No 2 (April 1999) 228-242).

²³¹ The author of this thesis has not seen this document because it is confidential.

4.4.1 Some Key Features of Reinsurance

Professor Bain's article first explains some of key aspects of reinsurance from his perspective. He points out that the value of the PML²³² will depend on the nature of the risks being undertaken. The PML of a well diversified portfolio, where the degree of correlation between the individual risks has been controlled, can be much lower in value than the aggregate of the insured risks. However, he notes that in XL reinsurance the loss may be higher than the upper limit of a reinsurer's own reinsurance protection. In such case the reinsurer has to bear the losses that "come out of the top" of its outward reinsurances. Since the level of reinsurance cover would have been set according to the PML calculation, the author describes this situation as PML failure. When PML failure occurs for some reinsurers before others in the market, the distribution of loss will not reflect the reinsurers' intended exposure.

Professor Bain then goes on to explain that the magnifying effect referred to previously²³³ is a normal consequence of reinsurance. Indeed, once a loss is large enough to trigger a reinsurance claim, then two overlapping claims are made for the same loss (one by the insured and one by the primary insurer to its reinsurer) such that the total value of both claims – described as the gross claim value – is higher than the original loss. Professor Bain explains this in the following way:

"Suppose that a risk is placed by the subscription method amongst a number of insurers, that each primary insurer retains 50% of the cover granted as a deductible and reinsures the other 50% on an excess of loss basis, that each reinsurer does likewise, and that retrocessionaires retain 100% of the risk that they accept. A loss event resulting in insured losses of up to 50% of the cover granted will be retained entirely by the primary insurers: gross claims equal total insured losses. In the case of a loss event resulting in insured losses equal to between 50% and 75% of the cover granted, the excess over 50% will result in claims on the reinsurers. Thus the loss event gives rise to gross claims that exceed the insured losses by the amount of these reinsurance claims. For losses between 75% and 100% of the cover granted, reinsurers will seek to recover losses in excess of 75% from the retrocessionaires, adding a further round of claims. The result is that an insured loss amounting to 100% of the available

²³² See section 2.2.4 for an explanation of the term "PML".

²³³ See section 2.2.4.

cover would give rise to gross claims equal to 175% of the losses²³⁴. In general, even in the absence of a spiral, the relationship between the total gross claims generated by a loss event and the level of insured losses depends on the structure of the primary, reinsurance and retrocession contracts involved."

4.4.2 Professor Bain's Actuarial Models

In his article, Professor Bain explores the effects of reinsurance spirals through the use of two actuarial models, the second one of which is developed into three scenarios. His key findings are as follows:

Model 1.

His first model, which he calls a "general" model, provides a simplistic but nonetheless informative scenario. It includes a number of inside reinsurers who reinsure each other within a market and outside reinsurers who do not reinsure back into the market. As we know this was not the case within the LMX Spiral as the Foreign XL Reinsurers did reinsure back into the London XL Market. However, this model serves to show the importance of leakage. In the model, provided the insiders obtain sufficient reinsurance cover, the losses in excess of the insiders' deductible are borne by the outside reinsurers. However, because of the magnifying effect of the spiral, this only works if the outside reinsurers are willing to provide very high levels of reinsurances.

Model 2.

The second model is described as a "simplified model" but it is more complex. It includes two groups of insiders: a first group (Insiders 1) that reinsures up to a certain level (R 1) but underwrite beyond that level (R 2) and a second group (Insiders 2) that will only write risks and reinsure up to the same level (R 2). It is important to note that "R 1" is a lower level than "R 2" such that Insiders 1 have no reinsurance cover between levels "R 1" and "R 2". The model also includes outsiders who do not reinsure inside the market and who provide cover up to a level (R 0) that is lower than "R 1".

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²³⁴ He explains in his footnote: "losses of 100 would give rise to gross claims on primary insurers of 100, on reinsurers of 50, and on retrocessionaires of 25, with corresponding net claims (i.e. retained losses) of 50, 25 and 25 respectively."

The market is therefore as follows: R 0 (cover provided by outside reinsurers to all insiders) < R 1 (cover provided by Insiders 1 and 2 to all insiders) < R2 (cover provided by Insiders 1 and 2 to Insiders 2 only)

From this the following scenarios are devised:

- Scenario 1. This supposes that the amount of cover provided by outside reinsurers exceeds the size of the original loss (X). In mathematical terms: X <
 R 0. In this scenario, the spiral of claims continues "indefinitely" but it does become smaller on each round and, ultimately, the loss falls entirely on the outside reinsurers.
- Scenario 2. In this scenario the original loss is greater than the cover provided by the outsiders. In mathematical terms: X > R 0. This means that at one point the reinsurance provided by outsiders becomes exhausted. Subsequent claims fall on the insiders until Insiders 1 exhaust their reinsurance cover. Those insiders must thereafter retain any further claims made to them. Insiders 2, however, can continue to pass on claims to Insiders 1 until the limit of their own reinsurance cover, namely R 2, is attained. This second scenario clearly demonstrates how a reinsurance spiral "concentrates" the loss, in this case on Insiders 1, rather than spreading it.

An "illustrative example"

The above findings are illustrated through the use of a fictitious example based on the accidental destruction of an oil rig presenting a total loss of \$1,200 million. The market is then presumed to comprise the following:

- 200 inside reinsurers who provide \$6 million of cover each but retain the first \$1 million of loss. Thus those 200 reinsurers each obtain XL reinsurance cover of \$5 million (a total of \$1 billion)
- 100 outside reinsurers.

In addition:

• The first three layers of reinsurance of \$0.5 million each are spread equally amongst the 200 insiders and 100 outsiders. Thereafter outsiders do not participate in the market. Hence the cap on each of the outsiders' exposure is \$1.5 million (R 0).

• Of the 200 insiders:

- 50 "Insiders 1" reinsurers have reinsurance cover up to \$5 million (R
 1) but they carry exposures of up to \$10 million (R 2).
- o the remaining 150 "Insiders 2" reinsurers benefit from the same levels of reinsurance cover and exposure i.e. \$10 million (R 2)

Below are the results found by Professor Bain when putting the original claim of \$1200 million through the above model. Losses were distributed as follows:

Loss (\$ millions)	Loss bearers	Comments
200	Insiders	These losses are covered by the \$1 million deductibles retained by each insider.
100	Outsiders	Insiders recover claims above their deductible from the outsiders.
300 - 550	Insiders 1	These losses, which are above the Insiders 1s' \$5 million reinsurance cover, are involuntary.
550 -1200	Insiders 1 and 2	At this points Insiders 2 have also exhausted their \$10 million reinsurance cover and they also suffer involuntary losses.

The model also provides evidence of the magnifying effect, as follows:

Loss	Claims level	Comments
(\$ millions)	(\$ millions)	
200	200	The losses fall within the deductible so no reinsurance claims are made.
200 to 300	Up to 500	In this range only one third of claims are retained by outsiders with the balance leading to further claims.
300 - 550	Up to 2300	This is the range where the magnifying effect is the most significant as claims spiral amongst the insiders until Insiders 1 run out of reinsurance cover.
550 - 1200	Up to 3000	Whilst there is still a magnifying effect, the number of claims rises more in line with the level of loss as Insiders 2 also exhaust their reinsurance cover; thus limiting further the number of claims being made.

4.4.3 Features of Reinsurance Spirals

Based on the above findings, Professor Bain describes the characteristics of reinsurance spirals. He explains, as we already know, that reinsurance spirals are triggered when a reinsurer receives additional claims in relation to a loss it has already indemnified under a previous XL contract. He points out that once reinsurers have paid claims in excess of their deductibles, any additional claim will trigger further claims to their outward reinsurers. This continues until PML failure occurs²³⁵. Based on his analysis, Professor Bain's conclusions concerning reinsurance spirals are as follows:

²³⁵ This is unless there is another form of leakage, for instance via reinsurance with outside reinsurers.

- Reinsurance spirals are characterised by PML failure, which adds to the
 concentration of risk because those reinsurers whose reinsurance cover
 runs out first involuntarily end up retaining all losses that reach them,
 usually until they become insolvent.
- In addition, in a spiral the connection between the level of insured losses
 and the triggering of claims on the higher reinsurance layers is lost. This
 is because claims above the deductibles are passed on to the higher
 layers so that even a small claim can reach the catastrophe layers of XL
 reinsurance towers.
- As a result, the correlation between a layer of reinsurance cover and the
 probability of a claim being made is subverted. He concludes from this
 that premium should not reduce with each XL reinsurance layer but
 remain constant.
- Another aspect of this effect is that underwriters are unable to make an
 objective estimate of the probability of a claim reaching their layer. The
 only way they could make such an estimate would be to obtain detailed
 knowledge of the structure of all intervening reinsurance contracts. As
 we know, such transparency did not exist in the London XL Market of the
 1980s.

The article points out that the capacity of a reinsurance market is the sum of all deductibles within the market, plus layers willingly retained by reinsurers. Beyond this the risks are transferred amongst reinsurers. If a loss occurs that is greater than the sum of all deductibles and voluntary retentions, some reinsurers will run out of cover. Reinsurers calculate the level of reinsurance they require beyond their retentions and deductible through the use of PMLs, which are necessarily estimates. Accurate PMLs are therefore paramount and yet Professor Bain argues that "in the absence of the information necessary to calculate the PML with any precision in these conditions, it will hardly be surprising if some insurers get it wrong."

4.5 Spiral Effects

4.5.1 The Spiral Effects

This chapter would be incomplete without a final outline of the many ways in which the LMX Spiral distorted the London XL Market (the **Spiral Effects**), taken from the reviews described above plus all other relevant publications analysed by the author of this thesis.

The Magnifying Effect:

This is mentioned in all of the above reviews and it is now a well known effect of the LMX Spiral. To reiterate, once a loss had made its way through the LMX Spiral, the gross claim amount had become significantly larger than the initial loss. As noted in Professor Bain's article, a magnifying effect is a normal feature of any reinsurance market and the Walker Report specifies that it does not increase the net loss borne by reinsurers within that market.

Nevertheless, within the LMX Spiral the claims turnover was so high that the total value of claims sometimes bore no resemblance to the original loss. The sheer volume of claims must have added significantly to administrative costs.

Moreover, claims impact on deductibles and reinsurance protections. Thus the more claims were being made, the quicker reinsurers would exhaust their deductible. This had the effect of increasing further the claim turnover as once a deductible had been breached, claims would go straight back into the market in the form of further claims. This is clearly demonstrated in Professor Bain's model. Likewise, the increased number of claims would have caused reinsurers to exhaust their reinsurance cover, which leads Professor Bain to conclude that reinsurance spirals are characterised by PML failure. The issues raised by this are well illustrated by the *Equitas*²³⁶ case, where claims had been made on layers that may not have been reached but for the LMX Spiral.

Concentration

The concentration of losses upon the few is another well known effect of the LMX Spiral and again, all the above reviews refer to it. The Walker Report for instance

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²³⁶ *Equitas* (n 1)

notes that the vast majority of the very significant losses suffered within the Lloyd's section of the London XL Market in 1988 and 1989 were borne by only 14 of all 87 "LMX Syndicates"²³⁷. The actuarial models from both the LMX Working Party and Professor Bain provide cogent evidence that explains why and how this happened.

The concentration of losses upon the few was unintended. Those who ran out of cover first were the ones who had either failed to calculate their aggregates or those who believed a level of exposure at the "top end" of their reinsurance programs carried little risk of being reached. This was in itself a failure of the market. Moreover, the concentration of losses upon the few is diametrically opposed to the purpose of reinsurance. Reinsurance markets exist to spread exposure further so that the financial burden of a large loss can be borne by the many. A reinsurance market which concentrates losses is at best inefficient or, in the case of the LMX Spiral, seriously flawed.

Opacity

Opacity is a generally well known feature of the LMX Spiral and again it is noted in all the above reviews. In XL reinsurance the relationship between reinsurer and the primary insurer is more remote than in proportional reinsurance and this feature increases as layer upon layer of XL reinsurances is placed. In addition, given the ways in which risks were bundled together within the London XL market at the time²³⁸, it was difficult for any XL reinsurer to identify individual risks within the accounts it was reinsuring. Thus with or without the LMX Spiral, there would necessarily have been a level of opacity within the London XL Market.

The LMX Spiral however created such a complex web of interconnected reinsurance contracts that, according to the Walker Report, "transparency virtually disappeared". As a result the report goes on to say that there was no practicable means to establish at what size an original insurance loss would

²³⁷ For the definition of "LMX Syndicate" relied upon in the Walker Report see section 3.2.4 of this thesis. The exact figures are as follows: the 14 worst performing syndicates lost £197.4 million in 1988 (which represents 91% of the London XL Market total loss of £215.7 million), and the 14 worst performing syndicates lost £951.7 million in 1989 (which represents 81% of the London XL Market total loss of £1,166.6 million). See Walker (n 40) para 2.1.

²³⁸ See section 3.2.1.

trigger a claim²³⁹. The LMX Questionnaire would not have been of great assistance as it provided little information on the risks begin underwritten. This lack of transparency was made worse by the practice of marine underwriters to include increasingly large "incidental non marine" exposures into their LMX Business accounts. As those reinsurances were bundled and reinsured under "whole account" treaties, significant levels of non marine risks insidiously entered the marine section of the London XL Market.

According to the Walker Report, the only features of XL reinsurances an underwriter could be certain of in the market were the deductible; the limit of exposure to that particular contract and the premium. This is barely enough information to assess a risk accurately. In addition, in the context of the LMX Spiral two of these items were unreliable. We have just seen how the claim turnover caused PML failure and how it also caused deductibles to be exhausted much more quickly than could have been anticipated. We have also seen how the rating was inadequate and obscure so premium could be misleading. The LMX Spiral therefore rendered the London XL Market so opaque that underwriters wrote business without the basic information one needs to assess risk, as noted by Professor Bain.

Long short tail

This effect is explained in some detail above in the context of the LMX Working Party Report. Even though the larger claims made their way through the London XL Market much more quickly as the LMX Spiral started to unwind ²⁴⁰, the sheer volume of claims meant that a loss would take years to be fully paid. To a certain extent this effect was a welcome feature of the London XL Market in that it gave reinsurers more time to gather resources to pay. Given that XL premium is often paid at the outset, the long short tail effect created a positive cash flow for reinsurers, with premium being received prior to claims having to be met.

This however works when reinsurers can expect and quantify claims coming their way. The combined effect of all the features described above made this unlikely. Within the LMX Spiral, claims were magnified to unpredictable levels, exhausting deductible and causing unexpected PML failure along the way before falling

²³⁹ Walker (n 40) para 2.7.

²⁴⁰ See section 3.3.1.

seemingly randomly on the less well protected reinsurers. Until that point was reached, claims would circulate endlessly, increasing the long tail effect. The example set out in the LMX Working Party Report illustrates this perfectly: after four years the LMX Spiral Participant (reinsurer b) has to face potential claims of an unpredictable level for an unpredictable amount of time. By contrast, the reinsurer who was not involved in the LMX Spiral (reinsurer a) knows its exact exposure within about 18 months of the event.

Sum insured and layering rendered meaningless

In an XL reinsurance, the "Sum Insured" is the upper cap on the reinsurer's liability (**Sum Insured**) and it is the point above which there is no more reinsurance protection for the reinsured. In normal circumstances, the Sum Insured is unlikely to be reached by small claims and higher layers of reinsurance are much less likely to be triggered than the lower working layers.

In a closed spiral, that is, one with no leakage and reinsurers who do not become insolvent, claims circulate to infinity. In this context, the sum insured and the layering become irrelevant. Even though the LMX Spiral was not a closed spiral, it had features that made it akin to a closed spiral in some respects: the small deductibles were rapidly exhausted and the minimal amount of leakage meant that claims would circulate until a reinsurer had run out of cover. As a result, claims were being made on the higher layers for even the smaller losses. By the same token, Sum Insured were reached even though the initial loss may not have been that substantial. The actuarial models of both the LMX Working Party Report and Professor Bain demonstrate this.

Irrational rating structure

This Spiral Effect is also mentioned in all of the above reviews. Many underwriters priced LMX Business in the same way as any other XL reinsurance business, by reducing premium as the risk went up the layers. In addition, intense competition within the London XL Market in the 1980s had driven prices down. In the context of the LMX Spiral, claims were as likely to reach the higher layers as the lower ones. Thus a flat rating structure would have been more appropriate and yet it would probably have seemed absurd to many underwriters who wrote LMX Business at the time.

<u>Unpredictability</u>

Although it links in with many of the Spiral Effects mentioned above, the issue of unpredictability is not specifically mentioned in any of the above reviews. The point, however, was made cogently in case law²⁴¹ and it is worth setting out here. Fundamentally, within the LMX Spiral, an underwriter was unable to predict who would bear a loss as this depended on at least two parameters that were unknown to him, which are as follows:

- The level of protective reinsurance cover relative to exposure available to each LMX Spiral Participant; and
- the extent to which there was leakage (which also depended on the extent to which other LMX Spiral Participants had ran out of cover).

Viewed in a simplistic way, reinsurers did not know who would be the "weakest link" in the market yet this information was fundamental as it could impact on their own reinsurance protection. Indeed, a reinsurer may suddenly find that its reinsurers had become insolvent, leaving it without reinsurance cover and therefore with losses more likely to "come out at the top". All LMX Spiral Participants depended upon each other but they knew hardly anything about their respective strength and exposures.

4.5.2 Simply a Market Phenomenon?

This chapter sets out in some detail three reviews of the LMX Spiral carried out by a varied cross section of experts and professionals. They wrote at various points in time within a period of 11 years and based their analysis on different sources of information. In this context, the facts that their conclusions have much in common provides tangible evidence that the LMX Spiral did impact the market in the ways they suggest.

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²⁴¹ See for instance *Wynniatt-Hussey v RJ Bromley (Underwriting Agencies) plc and ors* [1996] Re LR 310, 319–2; *Arbuthnott v Feltrim Underwriting Agencies Ltd & ors* [1995] CLC 437, 487; *Berriman and ors v Rose Thompson Young (Underwriting) Ltd* [1996] 5 Re LR 117, 127; *Nederlandse* (n 57) 686.

The case law, which is analysed in the next chapter, acknowledges some of those Spiral Effects. However, English courts have confined their findings on the LMX Spiral to issues of facts to be used as a backdrop for their assessment of the underwriters' and agents' negligence. Courts are of course restricted by the choice of arguments made by parties to litigation. It is maybe unfortunate that the Walker Report had the effect of deterring parties from raising issues as regards the LMX Spiral in Court. Instead, the parties focused on underwriters' negligence claims and the legal position is now that the LMX Spiral was not, *per se*, unreasonable business.

On the one hand the LMX Spiral may be seen was as a relatively innocuous market phenomenon. The above reviews, however, particularly the actuarial models, provide solid evidence that the LMX Spiral had a distorting effect on the London XL Market. Regrettably, actuarial evidence was never used in case law to critically appraise the LMX Spiral. Actuarial evidence was heavily relied upon in the recent case of *Equitas v R&Q*²⁴² but the models served only to establish quantum rather than to appraise the LMX Spiral itself. It may be worth pointing out here that Professor Bain's models were created for the purposes of litigation but his evidence was inadmissible in court because some of the data he had relied upon was confidential.

The better view is that the LMX Spiral was not reasonable business because of the impact it had on the London XL Market. All that was required to trigger a market failure was for a few losses, not necessarily huge ones, to start making their way through the LMX Spiral. The magnifying effect would have led to PML failures thus concentrating the losses upon the few. This would necessarily have happened because some reinsurers were bound to have miscalculated their exposure and mis-priced their portfolios due to the opacity of the market, its irrational rating structure and its inherent unpredictability. Even the best underwriters would have found that some of the usual criteria they rely on to assess their exposure, for instance the Sum Insured or layering, had become meaningless. The long short tail effect also meant that reinsurers were unable to quantify the full extent of their exposure to a particular loss until years after the event. The LMX Spiral was a destructive force and many of the underwriters who engaged in the London XL Market at the time precipitated its collapse by fuelling it development.

²⁴² *Equitas* (n 1).

4.6 Concluding Remarks

Some of the underwriters and other professionals embroiled in the LMX Spiral debacle argued that the catastrophes of the late 1980s/early 1990s had caused its collapse. The catastrophes were the proximate cause of the very significant losses suffered by the relevant reinsurers. However, the LMX Spiral also played a part in the difficulties faced by the London XL Market because of its inherent flaws. The Spiral Effects listed above would have led to a crisis sooner or later. All that was required was for a few losses to start making their way through the LMX Spiral for its distorting effects to impact on the weakest reinsurers.

PART II: LEGAL APPRAISAL OF REINSURANCE SPIRALS

5 The Case Law

Given the many pitfalls of the LMX Spiral and the very extensive losses suffered by many Spiral Participants, it is unsurprising that its unwinding fuelled a wave of litigation in the English courts. This chapter reviews all of the cases that relate to the LMX Spiral and analyses their findings.

5.1 The Lloyd's Litigation

5.1.1 A Wave of Litigation

The vast number of losses and the near collapse of Lloyd's led to a wave of litigation in early 1993 that threatened to overwhelm the Commercial Court²⁴³. Most cases were brought by Names, often organised into "action groups"²⁴⁴, seeking to recover some of the sums they were liable to pay²⁴⁵ under the various contracts of insurance or reinsurance subscribed on their behalf. Because they had unlimited liability, many Names were being required to pay for losses much higher than their initial investment into Lloyd's²⁴⁶ and some faced serious financial hardship.

²⁴³ Barrow v Bankside Members Agency Ltd and ors [1996] 5 Re LR 1, 5.

²⁴⁴ For instance the Gooda Walker action group comprised Names who had joined the Gooda Walker syndicates. 3000 Names were claimants in the *Gooda Walker* case (n 1). This information is set out in the case of *Berriman* (n 241), which itself involved 1092 claimant Names.

²⁴⁵ The payments were due under cash calls made by the relevant Syndicates to replenish the Syndicate premiums trust funds for the purposes of paying claims.

²⁴⁶ For instance, losses to those Names who were members of the Rose Thompson Young (Underwriting) Ltd's marine syndicate would have amounted to between 315.9% and

If a Name was unable to pay a Syndicate cash call, the payment would be made from the Central Fund. In anticipation, the Central Fund might also be earmarked to match his or her outstanding liabilities taken into account in the annual solvency test. However, as explained earlier in this thesis, demands on the Central Fund were so high in the early 1990s that Lloyd's had to face the prospect of the Central Fund becoming exhausted by 1996²⁴⁷.

As cash calls continued to be made for increasing sums of money, there grew more and more resentment amongst Names who felt they had been deceived. Some alleged fraud; others just felt they had been misinformed by their Members' Agent, notably about the riskiness of LMX Business. The growing sense of mistrust led to some Names refusing to pay their cash calls until their grievances were heard.

The initial response by agents and by Lloyd's was to seek to force payment of cash calls, or reimbursement of Lloyd's where the Central Fund had been used to pay cash calls, by issuing court claims²⁴⁸ against the Names who were unable and/or unwilling to pay. In 1992, Lloyd's issued nearly 200 such claims and wrote a further 3,000 letters threatening to issue claims should the requisite liabilities remain unpaid²⁴⁹. Lloyd's also offered assistance to Names through its hardship committee which, under certain conditions, would provide an annual income to the Names most in need. In addition, upon taking his post in the autumn of 1992, Lloyd's new chief executive, Peter Middleton, put in place a 6-month moratorium on all legal action. Nevertheless, in the autumn of 1993, 6,100 Names had been threatened with legal action by Lloyd's²⁵⁰. In March 1993 it was reported that half of Lloyd's Names were engaged in litigation against Lloyd's agents and underwriters²⁵¹. A settlement offer sent to approximately

410.76% of the syndicate's stamp capacity in the year 1988 and between 434.9% and 704.92% of the same in the year 1989. Thus a Name who had committed a line of £40,000 to the syndicate would have lost between £126,000 and £164,000 in 1988 and between £174,000 and £282,000 in 1989. See *Berriman* (n 241) 122–23.

²⁴⁷ See section 3.4.2.

²⁴⁸ At the time these were called 'writs' so the contemporary literature refers to the 'Lloyd's writs'.

²⁴⁹ Raphael (n 97) 201-02.

²⁵⁰ ibid.

²⁵¹ ibid.

22,000 Names by Lloyd's in 1993 was rejected by the Names early in 1994²⁵². The Commercial Court was flooded with cases brought by the Names or related to the Lloyd's crisis which became known as the "**Lloyd's Litigation**". The vast majority of the cases ended with the implementation of R&R on 3rd September 1996²⁵³.

5.1.2 The Cresswell Order

It is not possible to know exactly how many claims were issued initially and how many Names were involved in the Lloyd's Litigation²⁵⁴. However, information can be found in some of the judgments. Thus, in the first instance decision of *Jaffray v Society of Lloyd's*²⁵⁵, Cresswell J noted that by the year 2000 the courts had considered 102 cases as part of the Lloyd's Litigation²⁵⁶. He also said that this was "the largest and most complex piece of civil litigation the Commercial Court has ever seen."²⁵⁷ Such extraordinary circumstances called for extraordinary measures. In the case of *Barrow v Bankside*²⁵⁸, Saville J, who was initially in charge of the Lloyd's Litigation, explained how in the summer of 1993 he produced a "management plan" to deal with all those cases, covering the period up to 1995. This plan was embedded in an order made on 29 September 1994 by Cresswell J (the **Cresswell Order**), who had by then inherited the duties of managing the Lloyd's Litigation. The aim of the management plan was to identify preliminary issues and "lead cases" to be heard first so as to provide guidance for other parties and establish principles relating to both quantum and liability. The

²⁵² Frederick Thomas Poole and ors v Her Majesty's Treasury [2006] EWHC 2731 app 1 'Statement of facts for First Trial'.

²⁵³ For more detail on R&R, see section 3.4.

This is because court files concerning those actions have now been destroyed. HMRC services informed the author of this thesis by telephone on 29 November 2011 that court orders and files relating to cases are systematically destroyed 5 years after the judgment is delivered.

²⁵⁵ Society of Lloyd's v Jaffray [2000] EWHC 51 (Comm).

²⁵⁶ ibid app 1.

²⁵⁷ ibid ch 5.

²⁵⁸ See n 243.

Gooda Walker dispute was thus specifically chosen as one of the lead cases and it has indeed set the benchmark for all disputes concerning the LMX Spiral²⁵⁹.

The Cresswell order identified the following six broad categories into which cases could be sorted²⁶⁰:

- a) LMX cases;
- b) long tail cases;
 - a. run-off contract cases:
 - b. reinsurance to close cases;
- c) personal stop loss cases;
- d) portfolio selection cases;
- e) Central Fund litigation cases; and
- f) other cases.

The relevant category for this thesis is obviously the first one, although the LMX Spiral is discussed in some of the other categories. For instance, in the portfolio selection cases it was often alleged that Members' Agents had fallen short of the standards of care they owed to clients by recommending LMX Syndicates to Names who wanted a safe investment and had no wish to engage in high risk/high reward business.

5.1.3 Litigating Names

At this point it is important to note that the Lloyd's Litigation cases certainly represent only the "tip of the iceberg". Many of them would have been the cases pre-selected by the court to provide guidance, and it is possible that some allegations or even entire cases were withdrawn once it became clear how courts would assess standards of care owed by the Lloyd's professionals. More significantly, Names who agreed to the R&R deal had to forego any legal action they had initiated or intended to issue against Lloyd's and Lloyd's professionals. R&R was accepted by about ninety five per cent of all Names and the settlement took effect on 3rd September 1996. Prior to that, Names seeking redress in the courts had organised themselves into 90 action groups. Many of these action

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²⁵⁹ See chapter 1 of this thesis.

²⁶⁰ Napier & Ettrick v Kershaw Ltd [1996] EWCA Civ 796, [1997] LRLR 1, 8.

groups would have ceased activity once R&R was implemented although 1,752 names rejected the deal and some chose to continue the legal battle²⁶¹.

The Litigating Names refused to pay the Equitas premium and questioned Lloyd's powers to impose R&R upon them making various allegations against Lloyd's in the process, including fraud, misfeasance in public office, conspiracy and misrepresentation²⁶². The implementation of R&R thus initially triggered more litigation. Because this new wave of cases focussed on the Society of Lloyd's itself and its duties to the Names, or on issues concerning R&R, LMX Business did not feature prominently.

Proceedings were issued against Lloyd's in the United States, Canada, Australia, Belgium and even before the European Commission. In some of these proceedings allegations of fraud were made against Lloyd's as regards the LMX Spiral but it seems that most of these cases were stayed through Lloyd's taking action to enforce the English exclusive jurisdiction clause agreed to as part of the so-called "General Undertaking" given by all Names when they join Lloyd's²⁶³.

5.2 LMX Judgments

5.2.1 Overview

Only a small number of cases within the Lloyd's Litigation mention the LMX Spiral and amongst these, a handful provide a legal verdict on the spiral itself. Appendix B to this thesis provides a list of all cases that comprised the Lloyd's Litigation, and a few others that are relevant²⁶⁴. Amongst these, the 42 cases that relate the LMX Spiral²⁶⁵ are indicated in bold.

²⁶¹ *Jaffray* (n 255) ch 5.

²⁶² See for instance the *Jaffray* first instance decision (n 255) and on appeal (*Jaffray v Society of Lloyd's* [2002] EWCA Civ 1101), or the cases of *Poole* (n 252) and *Stockwell & ors v Society of Lloyd's* [2007] EWCA Civ 930, [2008] 1 WLR 2255.

²⁶³ *Jaffray* (n 255) ch 6.

The appendix is based on the list of cases included in the *Jaffray* first instance decision (n 255) and other cases of relevance, for instance judgments delivered after *Jaffray* that relate to the Lloyd's Litigation, the LMX Spiral, the PA Spiral or R&R.

²⁶⁵ It is impossible to ascertain the exact number of cases that relate to the LMX Spiral directly or indirectly because there are a number of unreported judgments (some of which are listed in Appendix B) that may have some connection to the LMX Spiral.

Many decisions that relate to the LMX Spiral are not particularly relevant to the analysis set out in this thesis because the judgment focuses on issues unrelated to Spiral Business. The *Clementson*²⁶⁶ dispute is a good illustration of the point. Mr Clementson, a Lloyd's Name since 1976, alleged that the Central Fund at Lloyd's operated to distort competition and encourage moral hazard. These allegations, explored in no less than three full judgments, required a detailed review of the ways in which the Lloyd's market operated in the 1980s and early 1990s, which necessarily involved an analysis of the LMX Spiral. The findings, however, focus on anti-competition law.

Amongst the 42 cases that relate to the LMX Spiral, the author of this thesis has identified a list of 15 judgments that are particularly important for the purposes of this thesis (the LMX Judgments). The LMX Spiral does not necessarily feature prominently in all LMX Judgments but these have been selected on the basis that they contain interesting findings or comments about Spiral Business. The LMX Judgments are listed and described briefly in the next few sections (a more detail analysis of the relevant findings is set out later in this chapter). They have been split into categories and are presented in chronological order.

5.2.2 Core LMX Cases

In the first instance decision of *Jaffray*, Cresswell J listed the following as the cases that fell under the first category of the Creswell Order titled "LMX Cases". For ease of reference, these will be referred to as the "Core LMX Cases":

1. Deeny & ors v Gooda Walker Ltd (in voluntary liquidation) & ors [1994] CLC 1224

This is the first and still the leading case on the LMX Spiral heard by Phillips J. 3095 Names, organised into an "action group" successfully sued their Members' Agents and the Managing Agents who ran the Gooda

The Society of Lloyd's v John Stewart Clementson [1994] CLC 71. This was the first instance decision of Saville J, followed by the Court of Appeal decision ([1995] CLC 117) where it was decided that the issue of whether Lloyd's had infringed competition law could not be determined as a preliminary point (as Lloyd's had sought to establish) and therefore should proceed to trial. This led to the subsequent decision of Cresswell J in The Society of Lloyd's v John Stewart Clementson [1997] LRLR 175 where it was held that the Lloyd's Central Fund was not in breach of competition rules.

Walker syndicates, alleging that the vast losses they had suffered had been caused by the agents' negligence. The Gooda Walker syndicates specialised in LMX Business and they were heavily involved in the LMX Spiral.

- 2. Arbuthnott v Feltrim Underwriting Agencies Ltd & ors [1995] CLC 437 This was another action brought by 1,594 Names against their Members' Agents and the Managing Agents of the Feltrim syndicates for negligent underwriting. It was also heard by Phillips J who followed the principles laid down in his recent *Gooda Walker* judgment.
- 3. Berriman and ors v Rose Thompson Young (Underwriting) Ltd [1996] 5 Re LR 117

In this case Names sued their Members' Agents and Managing Agents for the negligent underwriting of Mr Bullen on the Rose Thompson Young syndicates.

4. Wynniatt-Hussey v RJ Bromley (Underwriting Agencies) plc and ors [1996] Re LR 310

This was another case raised by Names, focusing on the underwriting of Mr Bromley. The judge, Langley J, noted that by then, there was little dispute about the characteristics of LMX Business.

The following judgment is not listed in *Jaffray* because it is a more recent case that was not part of the Lloyd's Litigation. Nevertheless, it clearly qualifies as a Core LMX Case since it relates to the LMX Spiral and its effects on the market.

5. Equitas v R&Q Reinsurance Company (UK) Limited [2009] EWHC 2787 (Comm)

As set out previously in this thesis²⁶⁷, this case was issued by Equitas seeking recovery from reinsurers under XL contracts that were part of the LMX Spiral. The key issue was how Equitas could prove its loss fell within the outward reinsurances. It is an issue of fact but the judgment establishes that an actuarial model seeking to reproduce the effect of the LMX Spiral, even if imperfect, is acceptable evidence to verify Spiral losses. Expert evidence from the case also shows that it is now impossible to replicate the LMX Spiral in its entirety.

²⁶⁷ See section 3.4.4 of this thesis.

5.2.3 Portfolio Selection Cases

6. Sword-Daniels v Pitel and ors, Brown v KMR Services Ltd [1994] 3 Re LR 10 This judgment at first instance comprised two of the lead cases selected by the court at the time of the Cresswell Order. The claimants were two very different types of Names. The first one, Mr Sword-Daniels, was an inexperienced investor of limited means who, in the words of Gatehouse J, "should have been discouraged from joining Lloyd's" because his only asset consisted of a half share in the property of his house which had to be charged to enable him to join²⁶⁸. The second investor, Mr Brown, was a businessman who became a proactive and sophisticated Name, choosing his own syndicates and allocations. Both Names had instructed their Members' Agents to provide conservative investments but instead were advised to join LMX Syndicates. In both cases the court found that recommending LMX Syndicates to such investors was a breach of the Members' Agents' duties although in the latter case, Mr Brown was found contributory negligent, to the tune of 30%, reduced to 22% on appeal²⁶⁹, for choosing to remain on the LMX Syndicates.

These decisions are of relevance to this thesis because they illustrate how, even before the *Gooda Walker* judgment in the case of the first instance decision, courts identified LMX Business as a type of investment that was more risky. The cases also show how the nature of LMX Business has an impact on the duties of the relevant Members' Agents. This is explained later in this thesis.

5.2.4 LMX Spiral as a Fraudulent Device

Given the level of distrust between the Names and Lloyd's at the beginning of the nineties, it should come as no surprise that allegations of fraud were made concerning the LMX Spiral. As noted previously, however, the Walker Report, found no evidence of conspiracy or misfeasance as regards the development of

²⁶⁸ Sword-Daniels v Pitel and ors, Brown v KMR Services Ltd [1994] 3 Re LR 10, 14.

²⁶⁹ *Brown v KMR* (n 122).

the LMX Spiral²⁷⁰. It seems allegations of fraud were withdrawn from pleadings as a direct result of the Walker Report and thus the issue was kept away from the courts after it had made a short appearance in the following early decisions within the Lloyd's Litigation:

7. Boobyer v David Holman & co and the Society of Lloyd's (No 2) [1993] Lloyd's Rep 96

Names applied to court for injunctions preventing their Members' Agents from taking steps to pay cash calls from funds and assets Names had provided on trust to secure their liabilities at Lloyd's. Their application failed. However, in passing, Saville J commented that "there are undoubtedly features of the LMX Spiral which call for careful investigation"²⁷¹ before noting that the LMX Spiral was being investigated by Sir David Walker.

The Names were arguing that contracts covering Spiral Business had been entered into by the Managing Agents in breach of their fiduciary duties because the business was fraudulent, or because the contracts in question did not qualify as insurance or reinsurance contracts but as gambling. They alleged that the Spiral Participants were involved in the business of "churning" in that the purpose of the relevant transactions was not to create underwriting profit for the Names but to generate brokers' and profit commissions. Saville J concluded that the evidence before him did not substantiate allegations of deliberate churning. He also rejected a further argument put forward by the Names that the reinsurance contracts were void because underwriters engaging in the LMX Spiral were unable to assess the risk properly and set the premium. This has to be right. As he points out, an underwriter not assessing risk and premium correctly may be negligent but the contract is not rendered void through lack of due care and skill on the part of its writer.

Saville J however did not reject the Names' contentions as groundless; he simply pointed to a lack of evidence to substantiate allegations of fraud. He also suggested to the Names that they may be better off arguing that

²⁷⁰ Walker (n 40) para 1.6.

²⁷¹ Boobyer v David Holman & co and the Society of Lloyd's (No 2) [1993] Lloyd's Rep 96, 98.

"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 authorized 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 authorized by them at all, so that payments made in respect of that business did not go to discharge any obligation of the Names."²⁷²

This judgment is dated 16 April 1992. In June 1992, the Walker Report was published. It clearly ruled out the possibility of fraud, explaining instead that the LMX Spiral was a market phenomenon the development of which could be linked back to commercial factors²⁷³.

- 8. *R v Lloyd's of London ex parte Briggs and ors* [1993] 1 Lloyd's Rep 176 This judgment dates from 17 July 1992. Lloyd's had applied to court to set aside a leave obtained by Names to subject Lloyd's cash calls to judicial review. The leave for judicial review was set aside for a number of reasons that are outside the scope of this thesis. The interesting point, however, is that the judgment notes that Names dropped allegations of fraud as regards the LMX Spiral, probably as a direct result of the findings set out in the Walker Report²⁷⁴.
- 9. Deeny v Walker and ors and same v Littlejohn & Co and ors [1996] Re LR In the main Gooda Walker decision in 1994²⁷⁵ the Names succeeded in establishing liability on the part of their Managing and Members' Agents for the negligent underwriting of the Gooda Walker syndicates. However, out of losses totalling £295 million, the Names could only recover £75 from the relevant Errors & Omissions (E&O) insurers. This judgment represents an attempt by the Names to recover from other potential culprits. In this case they targeted brokers and auditors, arguing that Times and Distance reinsurance policies (the T&D Policies) entered into as early as 1983 and 1984 were fraudulent devices used to misrepresent the true profitability of

²⁷² ibid 99.

²⁷³ See section 4.2. of this thesis.

²⁷⁴ R v Lloyd's of London ex parte Briggs and ors [1993] 1 Lloyd's Rep 176, 179.

²⁷⁵ Gooda Walker (n 1).

the Gooda Walker syndicates thus enticing Names to join them. Maybe not surprisingly, this far-fetched argument failed. The obvious obstacle was causation: the court found that the losses suffered by the Names in 1989 and 1990 had been caused by poor underwriting, not the T&D policies.

This case illustrates how Names sought to raise arguments of fraud and conspiracy against other professionals in what was clearly an attempt to cast as wide a net as possible to recover their substantial losses.

10. *Sphere Drake Insurance v Euro International Underwriting* [2003] EWHC 1636 (Comm)

This is the seminal judgment concerning the so called "PA Spiral" that led to findings of dishonest breach of fiduciary duty and fraudulent misrepresentation against Euro International Underwriting and dishonesty against the broker SCB. The judgment explores XL spirals at length and its influence can be seen in the next couple of cases. It is described in some detail in the next chapter.

11. Society of Lloyd's v Henderson and ors [2005] EWHC 850 (Comm)

This judgment is dated 2005, nearly ten years after the implementation of R&R but only shortly after the decision in *Sphere Drake*. Some of the Litigating Names made an application to amend their pleadings against Lloyd's to raise the issue of misfeasance in public office. Andrew Smith J disallowed the amendments on the ground that they introduced new issues which should have been raised in the preceding *Jaffray*²⁷⁶ case.

More critically for our purposes, the judge also rejected a new argument raised by the Names that Lloyd's misfeasance extended to its failure to regulate LMX Business, notably by failing to prevent the development of another spiral, the PA Spiral. Andrew Smith J pointed out that "the LMX spiral was entirely different from the PA spirals: the latter cannot properly be presented as a recurrence of the former. The LMX spiral was not caused deliberately or dishonestly. The losses were caused when the results of major catastrophes had to be borne by underwriters who had failed to recognise their aggregate exposure and to protect themselves by

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²⁷⁶ Jaffray CA decision (n 262).

reinsurance. I cannot accept that there is any real prospect of the applicants establishing a complaint on the basis that their losses were the result of a recurrence of the problems experienced in the LMX spirals.

That suggestion is properly to be regarded as fanciful."277

Smith J's comments concerning the LMX and the PA Spirals set out above were upheld by the Court of Appeal in *Stockwell & ors v Society of Lloyd's*²⁷⁸.

5.2.5 LMX Business as a More Risky Type of Business

In the next series of judgments the LMX Spiral serves only as a background but the cases show the inherent risks of Spiral Business and the reasons why it had to be given 'special consideration' by underwriters.

12. Nederlandse Reassurantie Groep Holding NV v Bacon & Woodrow Ernst & Young [1997] LRLR 678

This is a long judgment concerning the acquisition of Victory Reinsurance Company (Victory) by Dutch reinsurance group Nederlandse Reassurantie Groep (NRG). Victory was a London based company heavily involved in LMX Business. It is one of the few cases in this selection that relates to a company rather than a Syndicate. The judgment itself is as between NRG and some of its advisers tasked with the duty of assessing Victory's financial standing: the actuary Bacon & Woodrow and accountants Ernst & Young. Their review took place between May and July 1990, a point in time when there was some awareness of the risks associated with LMX Business although the full extent of liabilities entwined in the LMX Spiral did not become apparent until 1991²⁷⁹. After Bacon & Woodrow and Ernst & Young had reported back to NRG, notably on the issue of Victory's reserves in light of its exposure to the LMX Spiral, NRG agreed to buy Victory for £140 million. This turned out to be a disastrous deal for NRG. At the time of purchase Victory's reserves amounted to about £24 million but losses from its marine, aviation and transport account which comprised Spiral Business,

²⁷⁷ Society of Lloyd's v Henderson and ors [2005] EWHC 850 (Comm), para 98.

²⁷⁸ Stockwell (n 262).

²⁷⁹ Nederlandse (n 57). See also section 3.3.1 of this thesis.

totalled £360 million. By March 1993, Victory's non-life business had to be put into run-off.

This case serves as a useful illustration not only of the scale of financial exposure one entity could have to the LMX Spiral, but also the difficulties even the best accountants and actuaries faced in quantifying that exposure. Indeed, having assessed the state of market knowledge at the time, the court came to the conclusion that Bacon & Woodrow and Ernst & Young had not fallen below contemporary standards of care and skill in assessing the adequacy of Victory's capital reserves²⁸⁰. At the time, there was an "imperfect understanding of the effect and potential impact" of the LMX Spiral²⁸¹.

13. Aneco Reinsurance Underwriting Ltd v Johnson & Higgins Ltd [1998] 1 Lloyd's Rep 565

This was a dispute between Aneco Reinsurance Underwriting Ltd and the brokers who placed Aneco's participation in a facultative/obligatory (fac/oblig) treaty covering the marine XL accounts of a number of Syndicates for the year 1988, all underwritten by Mr Bullen. Aneco alleged the brokers had misrepresented the nature of the so-called "Bullen treaty" by describing it as a quota share treaty rather than a fac/oblig treaty²⁸². The court found in favour of Aneco.

More interesting for our purposes is an argument presented by the defendant brokers, seeking to turn some of the negative effects of the LMX Spiral to their advantage. They contended that the nature of the treaty was immaterial because "XL on XL writing involves making essentially arbitrary judgments on the likelihood of a catastrophe occurring (...) The opacity of risk prevents the underwriter from making any informed assessment of it (see chapter 2 of the Walker Report). Writing catastrophe business is a huge gamble. (...) the spiral works in a manner which is capricious and

of the different types of reinsurance agreements.

²⁸² A fac/oblig treaty is less advantageous to the reinsurer because it allows the reinsured to pick and choose the risks he cedes to the reinsurer. See section 2.2.2 for a description

²⁸⁰ With one exception as regards Bacon & Woodrow.

²⁸¹ *Nederlandse* (n 57241) 797.

entirely unpredictable"283. This argument was unsuccessful. As will be seen below, in the courts' eyes the risky nature of LMX Business meant that the duty on underwriters who chose to write this type of business was, on the contrary, to ensure that they had a clear understanding of their syndicate's exposure.

The case went all the way to the House of Lords but the issues raised on appeal are not relevant for our purposes.

14. Norwich Union Life Insurance v Qureshi and Qureshi [1999] Re LR 263
In this case Mr Qureshi sought to recover from Norwich Union (NU) his very substantial losses as one of the Names, most notably from the Gooda Walker syndicate. The link between NU and the losses was tenuous. In November 1989 NU had provided My Qureshi with a "Property Backed Guarantee Plan" (the Plan) which provided a guarantee of his liability to Lloyd's, a mortgage over his home and a life policy. When Mr Qureshi started to receive cash calls, under the terms of the Plan NU paid up to the limit of the guarantee and then took action to repossess Mr Qureshi's home. Amongst other things Mr Qureshi argued that because some companies within the NU group participated in insurance and reinsurance business on the London market, NU had knowledge of, and should have disclosed to him, the fact that the Syndicate involved in the LMX Spiral might incur large losses. Mr Qureshi failed in establishing such a duty on the part of NU²⁸⁴.

15. Avon Insurance Plc and ors v Swire Fraser Ltd and another [2000] Re LR 535

This was a dispute between stop loss insurers and their coverholder brokers about alleged misrepresentation by the latter concerning the ways in which each Name would be assessed by the lead broker personally. The court found there was no misrepresentation, even though the sharp

²⁸³ Aneco Reinsurance Underwriting Ltd v Johnson & Higgins Ltd [1998] 1 Lloyd's Rep 565, 591.

²⁸⁴ This decision was upheld on appeal in the case of *Aldrich and Others v Norwich Union Life Insurance Co Ltd* [2000] LRIR 1.

increase in the number of applications for stop loss insurance meant the lead broker had to delegate some of his tasks. The relevant aspect of the case for our purposes is the fact that the broker had identified a number of syndicates engaging in XL business as potentially more risky. The court was convinced by the broker's argument that the list he produced of these syndicates aimed to assist with the overall assessment of a Name's portfolio but it was not a list of syndicates to avoid at all costs.

5.3 Legal Principles Pertaining to the LMX Spiral

Having established a definitive list of all cases that relate to the LMX Spiral, the next step is to analyse their findings. This section focuses on the *Gooda Walker* decision because it was the very first one on the subject, but the analysis incorporates findings from all relevant cases.

The legal principles identified by English courts pertaining to the LMX Spiral fall into three broad categories: (i) duties owed by the Lloyd's professionals (ii) findings on the LMX Spiral itself and (iii) the standard of care of underwriters who wrote Spiral Business. We will explore each of these in turn.

5.3.1 Duties Owed

As explained above, the LMX Spiral was the accidental side-effect of what can be described as excessive trading within the market. It had not been set up fraudulently as a scheme. Thus the court had no choice but to drill down to the minutiae of the individual reinsurance contracts and agency relationships that surrounded those contracts to establish liability for the vast losses that stemmed from Spiral Business.

With the exception of the *Nederlandse*²⁸⁵ case mentioned above, there is no judgment in the English courts where a corporate reinsurer sought to find another co-contracting party, or agent, responsible for its LMX Spiral losses. What happened however is that once the initial loss was paid, reinsurers rejected some of the claims for a number of technical reasons. In those cases the disputes then focused on the reinsurance wording rather than the LMX Spiral

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²⁸⁵ Nederlandse (n 57).

itself. Of course, it is also possible that some disputes concerning the LMX Spiral and involving corporate reinsurers were referred to arbitration, or settled before they reached court.

The Names at Lloyd's were in a very different situation in that their reinsurances had been entered into on their behalf by their Members' and Managing Agents. The Names turned to those agents to seek compensation. The situation, however, was not straightforward given the unusual structure of the Lloyd's Market. The Members' Agents were the ones who had a direct relationship with the Names and advised them on their portfolio choices but it was the Managing Agents who did the underwriting on behalf of the Names²⁸⁶.

Duties owed by Members' Agents seemed uncontroversial. In *Sword-Daniels*²⁸⁷ it was common ground that the duties owed included the following:

- 1. to advise the Name which syndicates to join and in what amounts;
- 2. to keep the Name informed at all times of material factors which might affect his underwriting;
- 3. to provide the Name with a balanced portfolio and appropriate spread of risk;
- 4. to monitor the syndicates on which the Name was placed and make recommendations as to whether to increase or reduce his share on a syndicate, join a new syndicate, or withdraw;
- 5. to keep regularly in touch with the syndicates to which the Name belonged; and
- 6. to advise and discuss with the Name the prospects and past results of syndicates.

The LMX Spiral losses, however, flowed from poor underwriting and this was the responsibility of the Managing Agents. Until 1990 Names had no contractual relationship with Managing Agents, unless the agent was a Combined Agent who performed the role of both the Members' and Managing Agent, in which case the Name was a Direct Name. When the agents were not combined, the Members' Agent would appoint the Managing Agent through the use of a sub-agency agreement. There was thus a chain of contractual agreements: an agency

²⁸⁶ See section 3.1 for a more detailed description of the Lloyd's insurance Market.

²⁸⁷ Sword-Daniels (n 268).

agreement between the Indirect Name and his Members' Agent, a sub-agency agreement between the Member's Agent and the Managing Agent, and finally a reinsurance contract entered into with a reinsured by the Managing Agent on behalf of the Name.

Prior to 1985, there was no prescribed form for the sub-agency agreement between the Members' Agent and the Managing Agent although standard wording was often used. This standard wording gave the Managing Agent unfettered discretion to underwrite on behalf of the Name and it contained no express duty of care and skill in the exercise of this function. However, in one of the first key preliminary issues to be considered by the courts in the context of the Lloyd's Litigation, the House of Lords in 1995 found that Managing Agents owed a tortious duty of care to both Direct and Indirect Names²⁸⁸. In addition, the HL also found that both the Managing Agents' contract with Direct Names and subagency agreement with Members' Agents of Indirect Names contained an implied term requiring the Managing Agents to exercise reasonable skill and care when underwriting. The tortious and contractual duty co-existed. As of 1st January 1987 a standard sub-agency agreement was introduced under a Lloyd's byelaw dated 1985 but the HL found the situation under this new regime remained unchanged; that is, there were tortious and implied contractual duties that coexisted. From 1990, Names entered into standard form contracts directly with their Managing Agents. These were not part of the decision as the HL was concerned with agreements entered into prior to 1990. The key findings of the HL decision can be summarised as follows:

Members' Agents

- owed contractual duties of care to Direct and Indirect Names.
- contractually liable for the performance of the Managing Agents' duties set out below until Names entered into contracts directly with the Managing Agents from 1990 onwards.

²⁸⁸ The Lloyd's Litigation (n 94).

Managing Agents

- owed tortious duties of care to Direct and Indirect Names.
- owed implied contractual duties of care to Direct Names.
- owed implied contractual duties of care to Indirect
 Names: (i) <u>before 1987</u>: under the standard wording
 used in the sub-agency agreement, (ii) <u>between 1987</u>
 <u>and 1990</u>: under the Lloyd's standard form sub-agency
 agreement.

Cause of action

the tortious and contractual duties were concurrent.
 Names were therefore free to pursue the Managing
 Agents in tort, in contract or both, depending on their circumstances.

Once the above principles were established, Names were free to pursue Managing Agents directly, which gave rise to the Core LMX Spiral cases listed above. Unfortunately for the Names, whilst they managed to establish negligence on the part of the Managing Agents, the sums awarded were much larger than funds available to the agents themselves and their E&O insurers. In the case of *Cox v Bankside Members Agency Ltd*²⁸⁹, the Court of Appeal confirmed that the principle of chronological priority, also known as "fist past the post" would apply as far as recoveries from the E&O insurers were concerned. Thus E&O monies would go to Names whose case had been heard first²⁹⁰.

Attempts to find others liable or in breach of duties failed on account of a lack of causative link or because the defendants owed no duties to the Names. As noted in the previous section, such defendants included accountants, auditors²⁹¹ and

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²⁸⁹ Cox v Bankside Members Agency Ltd [1995] 2 Lloyd's Rep 437.

²⁹⁰ See for instance the case of *Deeny v Walker and ors and same v Littlejohn & Co and ors* [1996] Re LR 276 as described in section 5.2.4(9).

²⁹¹ ibid

even life insurers²⁹². The Litigating Names also failed to establish any liability for the LMX Spiral on the part of the Society of Lloyd's²⁹³.

5.3.2 The LMX Spiral

We set out the description of the LMX Spiral from the *Gooda Walker*²⁹⁴ case earlier in this thesis²⁹⁵. *Feltrim*²⁹⁶, which came shortly after the *Gooda Walker* judgment and which was also decided by Phillips J, does not contain a detailed description of the LMX Spiral and its effects. Phillips J instead specifies that the *Feltrim*²⁹⁷ decision ought to be read in conjunction with his *Gooda Walker* judgment. The findings of Phillips J in *Gooda Walker* and *Feltrim* have largely been relied upon in subsequent cases on the LMX Spiral, even the most recent judgments²⁹⁸.

The views of Phillips J on the LMX Spiral are neatly summarised in the following passage from *Feltrim*:

"Spiral business was an aberration. Many, if not most, of those who engaged in it did so in the belief that the reinsurance that they were buying from their colleagues was providing a protection from exposure when this was largely illusory. The capacity that was provided by the market was involuntary. Had all members of the LMX Market correctly applied the agreed principles of competent excess of loss underwriting, the form and capacity of the market would have been radically different. The conduct of the individual excess of loss underwriter falls to be considered, however, having regard to the market that existed, even if this, (sic) was an aberration. Some underwriters succeeded in conducting business in this market that did not result in heavy losses. Neither in Gooda Walker nor in these actions have the plaintiffs alleged that it was negligent per se to write spiral

Norwich Union Life Insurance v Qureshi and Qureshi [1999] Re LR 263. See section 5.2.5(14).

²⁹³ Henderson (n 277). See section 5.2.4 (11).

²⁹⁴ Gooda Walker (n 1).

²⁹⁵ See ch 1 of this thesis.

²⁹⁶ Feltrim (n 59) 443.

²⁹⁷ ibid 443.

²⁹⁸ For instance in *Equitas* (n 1) or *Sphere Drake* (n 1). In *Berriman* (n 241) 123, the LMX Spiral was also succinctly and effectively described as the "mutual reinsurance of one syndicate by another and then upwards into higher layers, and round again..."

business. The allegations of negligence are freestanding charges of failure to follow fundamental principles of excess of loss reinsurance." 299

Phillips J's strong comments seem to suggest that the development of the LMX Spiral in itself is evidence of poor underwriting. Yet in both Feltrim and Gooda Walker, no allegations were made that writing Spiral Business was negligent per se^{300} . The difficulty with such an argument was that, as Phillips J recognises himself, some Spiral Participants had written Spiral Business successfully. This led him in Gooda Walker to conclude that a competent underwriter could write "a book which included spiral business". In reaching this conclusion, Phillips J seems to have been greatly influenced by the good results of Mr Tony Berry's syndicate 536 whose underwriting reports had been exhibited by Mr Von Eicken, one of the expert witnesses during trial. Mr Von Eicken, the judge and counsel for the defendant conjectured that Mr Berry had made use of arbitrage. In Phillips J's view, such good results "could only be achieved by someone who fully understood the spiral and who deliberately took advantage of the disparity of rate for low level and high level layers of business"301. Interestingly, My Berry, who had no involvement in the trial, has told the author of this thesis that he never engaged in arbitrage and his profits were achieved purely through the application of good underwriting discipline. Nevertheless, Phillips J's finding that participation in the LMX Spiral was not negligent per se was never challenged. From then on, the courts' focus was on establishing what a competent underwriter would have done in the context of the LMX Spiral.

By the time of the Gooda Walker judgment, courts had already recognised that LMX Business was high risk³⁰². Traditionally the reason for this had been the fact that LMX Business comprised the underwriting of catastrophes, a more volatile type of risk. In the 1980s, this was compounded by the way in which the LMX Spiral distorted the market. In Gooda Walker, the following were identified as undesirable effects of the LMX Spiral:

- a) the concentration of the risk in the hands of the few rather than dispersal;
- b) what has become known as the "magnifying effect" on claims;

²⁹⁹ Feltrim (n 59) 443.

³⁰⁰ Gooda Walker (n 1) 1237 and Feltrim (n 59) 443.

³⁰¹ *Gooda Walker* (n 1) 1254.

³⁰² ibid 1227. Phillips J was referring to the portfolio selection case *Sword-Daniels* (n 268).

- c) the fact that higher layers were at a much higher risk of being impacted than would usually be the case in XL underwriting;
- d) the transfer of a substantial proportion of premium to brokers;
- e) opacity;
- f) irrational rating because higher layers received a much lower rate even though they were, in fact, fairly likely to be impacted; and
- g) unpredictability. In *Gooda Walker* Phillips J explained this was due to the fact that it was impossible to work out what level of catastrophe would "burn through" the layers. This was further developed in subsequent cases. Courts noted that Spiral Participants could not predict when a loss would impact on their layers because this depended partly on the extent to which other reinsurers would first exhaust their reinsurance cover³⁰³.

The above list identifies the Spiral Effects but none of the judgments include legal findings specifically on these effects.

In the judgments that followed *Gooda Walker*, the description of the LMX Spiral, its effects on the market and the duties of the Reasonable LMX Underwriter were explored further and often amalgamated. This is illustrated by the following passage from *Bromley:*

- 1. "LMX business was reinsurance on an excess of loss basis underwritten in the London market. It could be the XL reinsurance of a direct underwriter (primary or first tier reinsurance) or of an XL reinsurer of the direct underwriter (second tier) or of such a second tier reinsurer (third tier).
- 2. At the second and third tiers the insurance could be written either as XL of XL or as a whole account cover. While the former would protect only the XL writings of the cedant, the latter (whole account cover) would protect the whole account of the cedant including but not limited to his own XL writings...
- 3. The purpose of acquiring such reinsurance was to protect the cedant from aggregate accumulations in his account in the event of a catastrophe loss whether from the loss of a high value risk such as an oil rig or an accumulation of losses from a single event such as a hurricane. It would take the form of a series of layers of protection up to the vertical limit

³⁰³ See for instance *Bromley* (n 241), 319-21, *Feltrim* (n 59) 487, *Berriman* (n 241) 127, *Nederlandse* (n 57) 586.

which the underwriter considered it prudent to acquire. While the lower or working layers could be expected to be impacted with some frequency the higher layers could be expected to be impacted only by major catastrophe losses. It was this perception that led to the higher layers (where there would be no or limited claims experience to rely on) being rated by way of a percentage of the exposure (rate on line) and to that rate itself being a percentage of the rate for the layer which underlay it. Thus the higher the layer in general the lower it would be rated.

- 4. There were a limited number of Lloyd's and company reinsurers which underwrote LMX business. In consequence, and as the market grew in the 1980s, many reinsurers were reinsured by those they were themselves reinsuring. Underlying retention tended to be small and, at least in the marine market, co-insurance was uncommon.
- 5. The further away the reinsurer was from the original business the less he knew or could know about the nature of or risk of accumulations on his cedant's business. It was not the custom for cedants or brokers to provide aggregate information or the level of their own protection on their accounts when placing their reinsurance.
- 6. The features in (4) and (5) in particular gave rise to what was called 'the spiral' or 'the spiral effect' which became greatly exacerbated by the late 1980s and had the effect of concentrating a catastrophe loss on the few and not spreading it among the many albeit the latter was the major rationale of reinsurance.
- 7. For the purposes of these proceedings, two feature of the spiral should be stated. First the consequence of claims arising from a particular catastrophe accumulating in the accounts of those who wrote LMX business and being repeatedly passed on as claims to their reinsurers was that the amount of the original insured loss was magnified as it passed within those accounts albeit of course actual payments to the original assureds could never exceed the total insured loss... The effect was not only that the higher layers of protection were impacted in the case of a catastrophe far more easily but also that the protection they were thought to provide was to a great extent rendered illusory as once a loss was in the spiral it would progress through the layers almost automatically subject only to the second feature of the spiral described in (8) below. It was also a

- consequence that the practice of rating the higher layer as a percentage of the underlying layer did not reflect the real risk undertaken.
- 8. The second relevant feature of the spiral was that the only significant way in which catastrophe losses would cease to spiral was as one or more LMX reinsurer exhausted the vertical level of their protections and so ceased to contribute to the spiral. Moreover ... there was no way an individual underwriter could tell whether he would exhaust his protections before others did and so assess whether a substantial part of the loss would fall on them rather than on his syndicate ... the fact is (as is now apparent) that many who thought they were running no or no substantial exposure were wrong and sadly disillusioned by events. No other underwriter could, as it seems to me, have known as much let alone more about other underwriters' accounts than those underwriters thought they knew about them nor could an underwriter properly have conducted his own account on the basis that others would exhaust their covers before he did and so cease to contribute to the spiral causing it to slow or stop. To have done so would be to rely on luck not judgment.
- 9. It follows, and on the evidence was or should have been understood at the relevant time by those writing LMX business such as Mr Bromley, that it was essential for a underwriter to protect and the only way in which he could protect the syndicate against serious losses arising from accumulations on his account was to take a number of steps. First he had to know the aggregate exposures which he had written (or was proposing to write) on his XL account and to keep them under review as might be necessary. ...
- 10. The second step required of the LMX underwriter was to assess the probable maximum loss (PML) to the syndicate in the event that the worst practical catastrophe occurred to which his account might be exposed. ...
- 11. The third and final step required of the LMX underwriter was to acquire reinsurance protection to a vertical level sufficient to protect the syndicate against the PML (...).
- 12.I would add that, while established at the time, the practice of presenting the accounts of LMX syndicates or information about them in terms of the level of premium income to be derived or in fact derived from the various parts of its business and of writing business against expected or hoped for levels of premium income could lead to misunderstanding. The key feature

of LMX business which the underwriter had to consider was the exposures he wrote and the level of protection he acquired to limit that exposure. While premium income levels may be an indication of exposure they are not necessarily so let alone a substitute for the procedures described above.³⁰⁴"

The above passage can be found under the heading "LMX underwriting" in the judgment, which shows that by then the focus was on the quality of the underwriting rather than on the LMX Spiral itself. This brings us neatly to the following topic: the Reasonable LMX Underwriter.

5.3.3 Reasonable LMX Underwriter

In *Gooda Walker* Phillips J first considered whether the underwriters, who held themselves out as LMX Business specialists, ought to have appreciated the "nature and effects" of the LMX Spiral³⁰⁵. Given that other underwriters were aware, and spoke of, the risks associated with the LMX Spiral³⁰⁶, he found no reason why the Gooda Walker underwriters should not have understood those risks. The underwriters in question were very experienced writers of XL business, but catastrophe business and the LMX Spiral required "special consideration". For instance, reliance on past experience when estimating risk was inappropriate in the context of the LMX Spiral: catastrophes do not conform to a pattern and in any case their impact on Spiral Participants was unpredictable. Having gathered evidence from expert underwriters, Phillips J identified a number of key prudential steps which seemed to be fundamental in the writing of a successful reinsurance portfolio comprising Spiral Business. His findings have been refined in the subsequent Core LMX Cases, including *Bromley* as set out above.

³⁰⁴ *Bromley* (n 241) 319-21.

³⁰⁵ *Gooda Walker* (n 1) 1252.

ibid 1249–52. Phillips J referred to the speech given by Emney, 'Alicia – What is short tail?' (n 134) and quoted extensively from the speech given by Outhwaite (n 114). Phillips J commented that the latter was prophetic. He also noted that the LMX Working Party Report (n 108) included insightful comments from an anonymous LMX Business underwriter, who clearly understood that the pricing structure then prevalent in the London XL Market was inadequate for Spiral Business.

Therefore, according to all these findings, a Reasonable LMX Underwriter would do the following:

- 1. <u>actively manage its portfolio's exposure and balance</u>: a balanced reinsurance portfolio is one where exposure is spread over different types of business and different geographical areas³⁰⁷. In the case of *Aneco*, the expert Tony Berry also gave evidence showing that XL accounts could be balanced across layers, for instance by including a mix of working, middle and higher catastrophe layers³⁰⁸;
- 2. <u>follow an underwriting plan</u>: a competent underwriter would have a plan setting out the amount of exposure his syndicate would run and beyond which reinsurance cover was to be required. This did not have to be in writing, but it had to exist;
- 3. <u>monitor its aggregates and PML</u>: keeping an eye on aggregates and calculating PML is good practice for any XL reinsurance underwriter but it was fundamental for those participating in the LMX Spiral;
- 4. <u>purchase the appropriate amount of reinsurance</u>: once an underwriter had calculated his syndicate's PML, he had to purchase reinsurance in accordance with his underwriting plan to limit the syndicate's exposure;
- 5. <u>match reinstatement</u>: the underwriter had to ensure there were no gaps in the reinsurance coverage by matching the number of reinstatements between the syndicate's inward and outward reinsurances. If this was not feasible, the Reasonable LMX Underwriter had a choice either to take the risk without reinstatement on the basis that his syndicate would be exposed to a second catastrophe, or decline to write the inward business³⁰⁹; and
- 6. <u>charge suitable rates</u>: although not listed within the same section of the *Gooda Walker* judgment, it is clear that rating formed a major part of Phillips J's assessment of the Gooda Walker underwriters.

It is interesting to note that the above findings address some of the issues identified in the various reports concerning reinsurance spirals described in Chapter 4 of this thesis. This is unsurprising given that the Walker Report and the LMX Working Party Report were both available to the courts at the time.

³⁰⁷ For more detail on managing exposure, see section 2.1.2 of this thesis.

³⁰⁸ *Aneco* (n 283) 592.

³⁰⁹ *Berriman* (n 241) 118.

The reasonable steps described above are elements considered in respect of all underwriters whose decisions were being scrutinised in the Core LMX Cases. In addition, in *Gooda Walker* Phillips J made the following findings of relevance to the issue of competent underwriting:

- 7. <u>Balancing profit over a number of years</u>: it is acceptable for an underwriter to write LMX Business on the basis that losses made in some years could be balanced by generous profits made in other years³¹⁰. However, Names had to be made aware of the risk that they were potentially exposed to loss on some of their underwriting years. In *Bromley*, expert evidence showed that in good years' returns could be as high as 20% but in bad years losses could amount to 100% of a Name's stamp capacity³¹¹. In *Gooda Walker* no time limit was specified for a balance to be achieved. In subsequent cases, courts suggested that seeking to balance an account over a period of 5 or even 10 years would be reasonable³¹².
- 8. Inter-syndicate and reciprocal reinsurance: Phillips J saw nothing wrong in principle with Syndicates mutually reinsuring each other. He recognised that, to the extent there were Names on both the syndicates, the risk would not be effectively transferred. However, he did not consider that inter-syndicate reinsurance in itself would establish a breach of the underwriter's duty. Likewise, he found that reciprocal reinsurance between two reinsurers, whether from Lloyd's or the company market, was not negligent *per se* even though this practice added to the incestuous effect of the LMX Spiral.

Whilst establishing that the Reasonable LMX Underwriter would do all of the above, courts emphasised that they were not looking for a paradigm³¹³. The standard was one of reasonableness, not perfection, and therefore courts were

Mr Philipps said: "There is no reason in principle why an underwriter should not write business on the basis that net losses will be made in some years that are balanced by generous profit levels in the other years. If, however, an underwriter is deliberately to expose his names to suffering losses from time to time, he must make sure that the names are aware of this and of the scale of loss to which they will from time to time be exposed." See Gooda Walker (n 1) 1241.

³¹¹ *Bromley* (n 241) 334.

³¹² See Feltrim (n 59) 49 and Berriman (n 241) 120.

³¹³ See *Bromley* (n 241) 313 and *Berriman* (n 241) 129.

only seeking to identify what a reasonably well informed and competent underwriter would have done. However, underwriters who chose to take on Spiral Business had to show they had the requisite specialist skills and they were deemed to have an understanding of the dangers of the LMX Spiral.³¹⁴ XL on XL business was considered to be "particularly difficult and dangerous" business: many in the market looked up to those who held themselves out as market leaders and followed them³¹⁵. In the later case of *Sphere Drake*, the court commented that "*spiral underwriting required special skills, knowledge and nerve*"³¹⁶.

In all Core LMX Cases listed above the Managing Agents and their underwriters lacked the special skills and they were found negligent. All were seemingly unaware of the pitfalls of the LMX Spiral, most did not have a plan and few calculated aggregates or PMLs. This meant pretty much all of them were unable to ascertain whether they had sufficient reinsurance in place. Those findings of negligence met the immediate needs of the Names seeking compensation. However, there remains the question whether the Reasonable LMX Underwriter would, in fact, have been an effective cure to the many ills caused by the LMX Spiral.

5.4 Concluding Remarks

The case law tells us that underwriters could choose to take on LMX Spiral business without necessarily being in breach of the duties of care and skill they owed to the Names. However, that decision carried with it the duty to ensure they had the requisite skills and specialist knowledge to navigate what was a treacherous market. These findings enabled the Names to obtain compensation but they do not address the Spiral Effects described earlier in this thesis. It is also noticeable that judges have expressed doubt as to whether Spiral Business was at all manageable, given that it was so unpredictable.

³¹⁴ See for instance *Bromley* (n 241) 313.

³¹⁵ Aneco (n 283) 577.

³¹⁶ Sphere Drake (n 1) para 171.

6 Legal Appraisal of Reinsurance Spirals

Many cases are issued from the unwinding of the LMX Spiral and resulting Lloyd's crisis. Yet there is a scarcity of legal principles concerning the LMX Spiral. As shown in the previous chapter, what we have is a series of cases that make it clear the English judiciary disapproved of the LMX Spiral but where the legal focus is on the underwriting and the duties of the Lloyd's agents and their underwriters. This chapter aims to provide, for the first time, a detailed legal appraisal of reinsurance spirals.

6.1 XL Reinsurance and Spirals

6.1.1 Reasonable Risk Taking?

In the case of *Feltrim*, Phillips J conjectured that the London XL market would have been very different had all underwriters exercised reasonable care and skill³¹⁷. It is certainly correct that the LMX Spiral would not have expanded as it did. None of the underwriters whose decisions were analysed in the Core LMX Cases³¹⁸ intended to have such high exposure. Had they understood more about Spiral Business, there is no doubt that they would have made different decisions so as to limit their exposure to more manageable levels. This would have curtailed the development of the LMX Spiral.

This raises an important question: if the effect of underwriters complying with their legal duty of care would mean a much diminished LMX Spiral, was it appropriate to consider the LMX Spiral as an acceptable form of business from a legal perspective? This was, after all, excessive trading that developed mainly through negligent behaviour. The question is even more acute when one considers that the Spiral Effects³¹⁹ made it more likely that Spiral Participants would suffer a loss. There was, therefore, a vicious circle: negligent underwriters fuelled the development of the spiral and as it grew, the spiral itself rendered the

³¹⁷ Feltrim (n 59) 443. See also Gooda Walker (n 1) 1287.

³¹⁸ The Core LMX Cases are set out in section 5.2.2 of this thesis.

³¹⁹ The Spiral Effects are set out in section 4.5.1 of this thesis.

underwriting more precarious. The actuarial models discussed in previous chapters³²⁰ demonstrate that the development of the LMX Spiral magnified the Spiral Effects to a point where the LMX Spiral became unsustainable. Individual underwriters, no matter how cautious, had no control over the underwriting of others and the development of the LMX Spiral. Bearing this in mind, could it still be said that engaging in Spiral Business was reasonable risk taking? This is an issue of importance because it is probable that further reinsurance spirals will develop in XL markets in the years to come. This is demonstrated below.

6.1.2 Reinsurance Spirals as a Side Effect of XL Reinsurance

One would hope that the LMX Spiral remains a unique occurrence in the history of reinsurance. However, reinsurance spirals seem to be a likely feature of XL reinsurance markets³²¹. XL reinsurance is a relatively new form of reinsurance³²² which only attracts specialist firms. Yet it requires a high number of reinsurance contracts to cover a single risk because the original risk is split into tranches to be spread across a number of reinsurers and this happens indefinitely. In a market that only includes a limited number of specialists, one can see how overlap can occur. By the same token, reinsurance spirals can develop in the smaller, more specialist reinsurance markets covering, for instance, satellite reinsurance. In fact, in such small markets a spiral may be inevitable as it could provide the only way to reinsure the risk a sufficient number of times. Moreover, after a few layers of reinsurance, the market can become opaque, making overlap more likely as market participants may not recognise the risk they have already taken on.

There is evidence concerning the existence of three spirals that have developed in XL reinsurance markets since the early twentieth century. The first is the spiral

³²⁰ See ch 4 of this thesis.

^{3.7}

³²¹ In Sphere Drake (n 1) at para 166 Thomas J said as follows: "Spirals can occur quite unintentionally in markets where companies write XL on XL of each other's business; indeed there is often likely to be some spiralling in a retrocessional (retro) market where insurers reinsured the same companies and then reinsure those risks within the same market. The existence of spirals is therefore an inevitable feature of such markets…".

³²² XL reinsurance dates from the early 20th century and only became widely used after the 1950s. See section 2.2.3 of this thesis for more detail on the history of XL reinsurance.

that developed in 1965 following Hurricane Betsy³²³; the second is the LMX Spiral and the third is the spiral that developed in the early nineties. The latter became known as the "PA Spiral" because it was built upon the reinsurance of Personal Accident (PA) insurance policies emanating from the US. As previously noted³²⁴, it has given rise to the seminal case, *Sphere Drake*³²⁵, which will be explored later in this chapter. It is possible, and even very probable, that reinsurance spirals other than the three mentioned above have developed in the global XL reinsurance markets. The London XL Market may have contained a spiral in the 1950s³²⁶ and hurricane Alicia arguably triggered a separate spiral in the early 1980s although it can be considered as being part of the LMX Spiral. The author of this thesis has also been told³²⁷ that losses concerning asbestosis did spiral amongst a number of reinsurers as well as, more recently, the losses concerning the terrorist attack on the World Trade Centre in New York on 11 September 2001³²⁸.

If reinsurance spirals are a likely feature of XL reinsurance markets, it is important to critically assess their legal status, most notably because use of XL reinsurance is likely to expand with the continued developments of international trade and commerce.

³²³ See section 3.2.3 of this thesis.

³²⁴ See section 5.2.4 of this thesis.

³²⁵ *Sphere Drake* (n 1).

³²⁶ See ch 3.2.3 of this thesis.

This information was provided during a discussion between the author of this thesis and a number of reinsurance specialists in a meeting of the Reinsurance Working Party of the "Association Internationale de Droit des Assurances" (AIDA) in Istanbul on 3rd May 2012.

The 9/11 spiral is described by Mr Patrick J. Shannon during the 2003 Washington Spring Meeting of the Society of Actuary (Patrick J Shannon, 'Managing Risk Concentration in the Post-9/11 Environment' (Washington D.C,. Spring Meeting, Washington, 29-30 May 2003). His description of the development of the catastrophe market prior to 9/11 bears striking resemblance to the lead up to the LMX Spiral described earlier in this thesis. For instance, he explains that over capacity in the market had led to premium being underpriced and "irrational"; retentions were small, allowing for lax underwriting discipline with the result that some policies contained unlimited reinstatements and few exclusions, etc.

6.1.3 The Need for Legal Principles

Our analysis of the LMX Spiral has identified a number of Spiral Effects³²⁹ that distorted the London XL Market and led to its demise. For ease of reference, the Spiral Effects are reiterated below:

- 1. the <u>magnifying effect</u>, whereby the gross claim amount by far exceeded the initial loss;
- 2. <u>concentration</u> of the losses upon the few;
- 3. greater opacity of the reinsurance market;
- 4. the <u>long short tail</u> effect that turned short tail losses into long term losses;
- the <u>sum insured</u> and <u>layering</u> became meaningless because small claims "spiralled their way up" the chain of reinsurances to reach the higher layers;
- 6. <u>the rating structure was irrational</u> as the usual correlation between the layering and level of risk was broken down; and
- 7. there was <u>unpredictability</u> due to the inability of reinsurers to work out who would run out of cover first.

It is submitted that those Spiral Effects would, to a smaller or greater extent, apply to all XL reinsurance spirals. This view is based on the fact that the data relied upon by actuaries to create the models of reinsurance spirals described earlier in this thesis³³⁰ did not originate from the LMX Spiral itself. Instead, the data was based on illustrative XL accounts. Thus, those actuarial models demonstrate what might happen in any XL reinsurance market that develops a spiral.

In this thesis, the phrase "Spiral Effects" means the effects any reinsurance spiral has on the contracts that are at its core (**Spiral Contracts**). It seems clear that the Spiral Effects increase the element of risk taken on by underwriters. Again, in this thesis this additional element of risk (**Spiral Risk**) is deemed to apply to any reinsurance spiral once it reaches a critical mass. If a reinsurance spiral continues to grow, the actuarial models show that it becomes unsustainable. Not

³²⁹ See ch 4.5.1 of this thesis.

³³⁰ See ch 4 of this thesis.

all reinsurance spirals may reach that point. In any case, at the very minimum the Spiral Effects make the work of the underwriter more hazardous, which is incongruous, given that the whole point of reinsurance is to reduce risk.

Since they carry more risk, the Spiral Contracts are more likely to fail, leading to more disputes. There have been relatively few cases concerning reinsurance spirals generally, the most recent being the Equitas case³³¹, which relates to the now "old" LMX Spiral. This could be explained by the fact that the spiral element may not come to light in a dispute as between two XL reinsurers who may choose to focus on other issues where there is more legal guidance. Indeed, whilst courts have acknowledged the fact that reinsurance spirals are a perilous form of business, no legal principles have been developed to address this issue specifically. This may be because XL is a relatively new form of reinsurance and the law has yet to catch up with some of its idiosyncrasies - the development of spirals being one of them. If reinsurance spirals are given consistent legal treatment by the English judiciary, this will provide more legal certainty. In addition, reinsurers may start to take notice and either (i) seek to identify spirals when they make a claim so the law develops further in this area; or (ii) avoid becoming involved in a reinsurance spiral in the first place. Indeed, the law ought to provide safeguards to ensure the spirals do not develop to the point where they become unsustainable.

The regulatory regime is another tool that can be used to ensure reinsurance spirals do not develop to the point where the Spiral Effects take hold. For instance the solvency requirements imposed on insurers and reinsurers in Europe³³² have no doubt resulted in reinsurer having to keep a closer look on the level of exposure they take on. Nevertheless, it seems that some reinsurance spirals have developed relatively recently³³³ when much tighter regulatory controls were already in place.

³³¹ *Equitas* (n 1).

This includes the Solvency I Directive (2002/13/EC) and the Reinsurance Directive (2005/68/EC). Although it has yet to be implemented, the Solvency II Directive (2009/138/EC) is probably having an impact on European insurers and reinsurers given the preparatory work that is already underway under the guidance of the European Insurance and Occupational Pensions Authority.

³³³ See s 6.1.2 of this thesis.

The power of regulatory control is limited because regulations do not necessarily have global reach whilst reinsurance markets work on a worldwide basis. Efforts are being made to develop global standards for insurers and reinsurers through the activities of the International Association of Insurance Supervisors. Moreover, regulation may well prove effective if regulators chose to focus on reinsurance spirals. For instance they could require reinsurers to keep track of the source of the risk they undertake so as to be in a position to recognise a risk they have already underwritten. In practice this may be difficult to achieve given the tendency of the market to use XL reinsurance to bundle risks. In any case it is outside the scope of this work to consider potential regulatory solutions in detail as the thesis is on the private law of reinsurance contracts. Nonetheless it is important to note the potential relevance of regulation as a tool to curb the development of reinsurance spirals.

XL reinsurance was created in the London market and English courts have been at the forefront of all legal developments concerning reinsurance generally. Therefore legal findings about reinsurance spirals ought to be made under English law. London contains a thriving reinsurance market and many reinsurance contracts in the world are governed by English law. If they are governed by another law, English judgments on reinsurance issues may still be relevant given that they are often used as guidance in other jurisdictions. The reinsurers who chose to do business under English law ought to benefit from legal certainty. They may be unaware of the bigger picture as they focus on the individual XL contracts they enter into. However, if those individual contracts are the building blocks of a structure frowned upon by the English judiciary; those reinsurers may find themselves in court bearing the consequences of legal disapproval.

Some may argue that reinsurers have learnt their lessons and that the regulatory framework has raised greater awareness of the need to keep a close eye on exposures. This may however not be sufficient to curb the development of reinsurance spirals in future. The reinsurers who had received appropriate training in the 1980s knew how to keep aggregated exposures under control and some clearly did this very carefully. Nevertheless the LMX Spiral developed. Also, despite the lessons learnt from the LMX and the PA Spirals a new reinsurance spiral did clearly develop prior to 9/11.

The need for positive action to be taken was highlighted by the Walker committee when, having analysed the Lloyd's market and considered the development of the LMX Spiral in great detail, it concluded:

"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 (...), experience from other financial institutions and markets suggests 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."334

For all these reasons, it is desirable to develop more specific legal principles under English law to deal with reinsurance spirals and reduce the Spiral Risk.

6.2 The Legality of Reinsurance Spirals

6.2.1 Illegality

The most radical tool courts have at their disposal to eradicate unwanted developments is to declare those to be illegal. Illegality, however, is a blunt instrument. The question of the legality of reinsurance spirals has not been explored in the English courts. It was not raised, as such, in any of the case law concerning the LMX Spiral although it came close in the context of the PA Spiral. In the *Sphere Drake* case, the claimant told the Court they would not raise issues of illegality concerning the relevant contracts because the other party to those contracts was not present at Court³³⁵. Thomas J endorsed this decision agreeing that "any issue of illegality should only be determined when both parties to a contract alleged to be illegal [are] present."

Could issues of illegality be raised as regards the Spiral Contracts? Under English law, contracts may be found to be illegal because they were entered into to commit a crime or civil wrong or they may be contrary to public policy. The latter is the more likely argument in the context of a reinsurance spiral. It is unlikely that reinsurance spirals or some of the contracts within may be found to have been set up to commit a crime. If fraud is involved, there is an argument that the

³³⁴ Walker (n 40) para 4.1(a).

³³⁵ Sphere Drake (n 1) para 322.

relevant contracts lead to a civil wrong. Given the Spiral Effects noted earlier³³⁶, however, the more likely argument is that reinsurance spirals are contrary to public policy because, once they develop beyond a certain point, they can lead to market collapse. This is a far-fetched argument based on the premise that English Courts are empowered to create new heads of public policy³³⁷, which remains a point of contention. Alternatively, it may be that one of the current grounds of public policy³³⁸ could be relied upon. Nevertheless, for the sake of argument, we may assume that this is a possibility.

A reinsurance market crisis is against the public interest because of the impact it would have not only on the world of insurance and reinsurance but also potentially on the public at large. To a certain extent, this was shown by the demise of the LMX Spiral: the resulting collapse of the London XL Market led to a serious crisis within the Lloyd's market and it caused a number of personal bankruptcies as well as insolvencies. Lloyd's may be a special case but there is a clear argument that allowing any portion of a market to experience a crisis is detrimental as it will have an impact on the economy at large. The recent subprime debacle has shown how damaging the knock on effects of a crisis can be. Reinsurance markets may not have the same function as financial markets in the world economy but their demise could still have a significant impact. For instance, the contraction of reinsurance markets can lead to increased premium being imposed on insurers and, ultimately, the primary policyholders. Reinsurance companies are also major investors worldwide because they hold a

³³⁶ See section 4.5.1 of this thesis for further details of the Spiral Effects.

This is an unsettled area of English Law. There are currently two conflicting positions set out in case law whereby either (i) the courts cannot create new heads of public policy (*Egerton v Earl Brownlow* (1853) 4 H.L.C. 1 and *Janson v Driefontein Consolidated Mines Ltd* [1902] A.C. 484); or (ii) they can (*Egerton v Earl Brownlow* (1853) 4 H.L.C. 1; *Wilson v Carnley* [1908] 1 K.B.729; *Initial Services Ltd v Putteril* [1968] 1 Q.B. 396 and *McLoughlin v O'Brian* [1983] 1 AC 410). The latter view is the most recent view and it seems to be generally accepted that courts may extend existing public policy to new situations (*Montefiore v Menday Motor Components Co* [1918] 2 KB 241). All of this however is subject to the public policy that supports contractual freedom. See *Chitty on Contracts*, Volume II para 16-004 (31st Edition).

³³⁸ One of the existing grounds of public policy is "objects economically against the public interest" which may apply in this particular case. See *Chitty on Contracts* (n 337) para 16-005.

large amount of capital. If several of them were to become insolvent this could have a knock on effect on investment markets too.

However, illegality is a very serious allegation and it would be unrealistic to argue that all reinsurance spirals are to be considered illegal. Such sweeping generalisation would go against the English courts' tradition to take into account commercial realities. More importantly, reinsurance spirals are not all alike, particularly when one considers the way they come into being. A reinsurance spiral that is purposefully and dishonestly set up could be subject to a finding of illegality but many reinsurance spirals develop within XL markets simply as a side effect of normal market trading. Courts ought to be slow to find illegality when only market forces are at play. This point is perfectly illustrated by contrasting the LMX Spiral and the PA Spiral.

As seen earlier in this thesis³³⁹, allegations of fraud concerning the LMX Spiral were raised in early court cases but they were not pursued once the findings of the Walker enquiry³⁴⁰ became public. Some brokers did extremely well out of Spiral Business³⁴¹ and there are still those in the market who believe there was some fraudulent intend behind the rapid expansion of Spiral Business. Even if there were some elements of fraud, it seems clear that the LMX Spiral was not purposefully set up to swindle XL reinsurers. There was no "master plan". Rather, the LMX Spiral was a cluster of overlapping standard XL reinsurance agreements that grew organically and randomly as individual contracts were being entered into by the Spiral Participants. Those participants had no overview and no purpose other than to reinsure their liabilities on an ad hoc basis. They often contributed to the LMX Spiral unwittingly. At worst some Spiral Participants or brokers fuelled the development of the LMX Spiral by seeking to take advantage of the more naive reinsurers. However this was at the level of the individual XL contract. Overall, the LMX Spiral was a market phenomenon that developed without any oversight from any of its participants.

³³⁹ See section 5.2.4 of this thesis.

³⁴⁰ Walker (n 40).

Bill Brown of Walsham Brothers reputedly earned a salary of £7.3 million in 1992. He was one of only a handful of brokers who derived all their revenues from LMX Business. See Nick Ryan, 'The Bashful Broker' *The Independent Magazine* (London 26 February 1994).

By contrast, the PA Spiral was set up by the insurer Euro International Underwriting (EIU) and a firm of brokers, Stirling Cooke Brown (SCB) to transfer the near totality of loss-making PA business to reinsurers at a premium that procured a profit to EIU and a commission to SCB. Only those who engaged in what is known as "arbitrage" or "net underwriting" could benefit from the business. Arbitrage is the practice of trading a risk and making a profit on the differential in rates and it is discussed at length below. The court found that arbitrage was acceptable provided that full disclosure had been made to the reinsurer³⁴². In the context of the PA Spiral there had not been full disclosure and this was one of the key factors that led to the findings of dishonest breach of fiduciary duty and fraudulent misrepresentation. The findings were made against EIU but a finding of dishonesty was also made against the brokers SCB. Comparing the LMX Spiral and the PA Spiral shows that the purpose behind the reinsurance spiral and the way it develops can vary from one spiral to the next. This could make all the difference as regards the legal status of the spiral. On that basis, establishing a ground rule that all XL reinsurance spirals are illegal would be erroneous.

Such a finding would also have undesirable consequences. Not only would the illegal Spiral Contracts be rendered unenforceable but their premium would also be irrecoverable³⁴³. This is not a good position to be in for reinsureds who would lose both their cover and the premium they paid for it. Moreover the illegality would taint entire chains of reinsurance contracts. Indeed, any contract up the chain of XL reinsurances that contains the spiral element would be illegal too. In addition, the illegality would affect any reinsurance providing cover to the illegal contract because indemnities paid under the illegal contract would necessarily be "ex gratia". Some reinsurances may expressly cover "ex gratia" payment but it is doubtful whether such wording is effective³⁴⁴. Given that the Spiral Contracts may be covered under countless other reinsurances outside the spiral, a finding of illegality would have a ripple effect on the market that would be far-reaching and

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³⁴² Sphere Drake (n 1) para 146.

This is because the spiral element would be part of the contract from the outset and therefore the illegality would attach from the point in time when the contract is entered into. See *The Law of Insurance Contracts* (n 4) para 24.9.A (R March 2014).

³⁴⁴ See for instance *John Robert Charman v Guardian Royal Exchange Assurance Plc and Another* [1992] 2 Lloyd's Rep. 607. In that case it was held that the words "liable or not liable" made no material difference to the effect of a follow the settlement clause.

very disruptive. The finding of illegality could also be made years after the event, once reinsurance payments have been processed. One can only imagine the chaos that would ensue if all involved reinsurers had to re-open their books to make adjustments for erroneous payments.

To conclude, it is submitted that participation in an XL reinsurance spiral should not, on its own, provide sufficient ground for a finding of illegality. This is partly because a finding of illegality would be extremely disruptive to reinsurance markets and also because some spirals may develop without any wilful wrongdoing on the part of its participants. This is also a far-fetched and not a particularly compelling argument but one which had to be explored in this thesis for completeness' sake. Parties will always be free to raise illegality when suing on the basis of individual XL contracts.

6.2.2 Pyramid Schemes

Whilst discussing illegality in the context of reinsurance spirals, it is important to consider whether analogies can be drawn between spirals and pyramid schemes. There are, at first sight, similarities between the two, and case law makes it clear that pyramid schemes are illegal.

A pyramid scheme is an unsustainable business model that produces no profit and instead relies on the investment of newcomers for its continued existence. Such schemes are usually set up dishonestly to enable those who join first to recoup the costs of joining and to make a profit by recruiting others to the scheme. In *Re Senator Hanseatische*³⁴⁵, the Court of Appeal held that such a scheme was illegal. In *Sphere Drake*, the point was made that the PA Spiral was

Re Senator Hanseatische Verwaltungs Gesellschatf mbH [1996] EWCA Civ 1344, [1997] WLR 515. At pp 524-525 Millett LJ commented "It is, however, another feature of the scheme which is far more pernicious and which gives much greater cause for concern. This is the certainty that the scheme will cause loss to a large number of people, and that the longer the scheme is allowed to continue the greater the number who will inevitably suffer loss...The scheme is merely a device for enabling the organisers and a relatively small number of early recruits to make potentially very large profits at the expense of the much larger number of those who are recruited later."

akin to a pyramid scheme. Thomas J acknowledged that the latter bore the following resemblances to a pyramid scheme³⁴⁶:

- i) "It was a mathematical certainty that the liabilities incurred by those participating in a reinsurance scheme in this market would far exceed the income that could be earned, as the gross losses would far exceed the premiums, particularly after commissions and brokerages had been taken by intermediaries who bore none of the risks. As the losses were passed on at each stage, there was less premium to pay for them.
- ii) It was inevitable that enormous losses would have had to be paid; in a pyramid scheme, these would fall upon the many new recruits. In this market, the losses would be concentrated; that did not make it any less pernicious.
- iii) As in a pyramid scheme, new recruits had to be found; to induce a participant to write gross loss making business, a person had to be found to take those losses. In such a way a chain was created, but it would never in practice be infinite and the losses would ultimately have to be paid by the person or persons in the chain left with the losses. Just as in a pyramid scheme, it did not matter that those persons could not be identified precisely.
- iv) The Court is, in pyramid schemes, astute to protect the interests of consumers against exploitation; there was a public interest in protecting the insurance and reinsurance market from abuse."

However, this point was not fundamental. Thomas J agreed there were analogies that could be drawn between the PA Spiral and pyramid schemes but then decided that he did not need to draw on those analogies to find that the brokers and relevant underwriters had acted dishonestly.

The issue whether the LMX Spiral may have amounted to a pyramid scheme was not explored in Court. The above quote from Thomas J in the *Sphere Drake* case, however, illustrates why, unlike the PA Spiral, the LMX Spiral could not really be compared with a pyramid scheme. Taking the above points one by one, it is true

³⁴⁶ *Sphere Drake* (n 1) para 327.

that, in the context of the LMX Spiral, a catastrophic loss would generate gross liabilities that would by far exceed gross premium paid, particularly at the higher levels of reinsurance (point i)). It is also true that such loss did concentrate upon the few (point ii)) although, as will be seen later, this was caused by negligent underwriting rather than a "scheme". Also, there was no "mathematical certainty" of a loss being suffered at the time of writing the business because there was always a chance that reinsurers could make a profit if no catastrophe were to occur. Moreover, within the context of the LMX Spiral, there was no need to recruit new participants to induce the primary insurers to write business (point iii)). Arguably the plentiful and cheap supply of reinsurance created by the LMX Spiral may have encouraged reckless underwriting at the primary level but this was an accidental side effect. The purpose of the LMX Spiral was not to generate loss making business artificially at the primary level. This point, certainly, is a key differentiating factor. The business that made its way to the LMX Spiral was genuine: all that happened is that the risks were being recycled rather than dispersed. Pyramid schemes usually contain no "real" business: they have no purpose other than to allow those who set them up to make money by recruiting other members to the scheme.

Thus, it is the opinion of the author of this thesis that had the issue been debated in court³⁴⁷, the LMX Spiral would not have been found to be contrary to public interest and therefore unlawful by analogy with a pyramid scheme. The same can probably be said of all reinsurance spirals that develop through market trading. Such spirals, no matter how unsustainable, contain genuine business. They are not purposefully set up as an artificial device to enable a few to make a profit to the detriment of others.

6.3 Legal Issues with Reinsurance Spirals

6.3.1 The Problem with Negligence

If reinsurance spirals are not illegal, is it then possible to argue that those who engage in this type of business are automatically negligent? Such a finding would be made on the basis that entering into a Spiral Contract must be in breach of the

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There was an unsuccessful attempt by Names do to this at a very late stage of the litigation process. See *Lloyd's v Henderson* (n 277) in section 5.2.4 of this thesis for more detail.

duty of care the law imposes on underwriters. Considering the Spiral Effects and how they make it more likely that the contract will fail, this seems an attractive argument.

The LMX Spiral was seen very unfavourably by the judiciary. However, because of the way the cases were pleaded, courts were unable to make findings on the adequacy of spirals, often regrettably so. The court's dissatisfaction in not being able to condemn the LMX Spiral in itself is evident in some of the quotes set out earlier in this thesis³⁴⁸ but also in the following passage from *Berriman*:

"there is no allegation in this case that Mr Bullen should not have engaged in the LMX market at all. There is much to be said in favour of such a contention, had it been made. It became quite apparent to me in the course of the evidence that the very nature of the way the market operated made it difficult for any underwriter to make soundly based judgments about the risk he was writing. It is a market which has, I believe, ceased to exist since 1991 because it was recognised to be an aberration. However, such a case would have had to take account of the fact that there were many syndicates and companies who participated in that market, some of whom appeared to do so quite successfully."³⁴⁹

The above quote identifies the major flaw in the proposed argument that participating in reinsurance spirals is negligent *per se*. Business from reinsurance spirals may be profitable. Negligence belongs to the law of tort, where a cause of action is only established if the claimant has suffered some form of damage. In the context of a commercial contract, the damage is usually a financial loss. Some reinsurers suffered disastrous losses under the XL reinsurance contracts that formed the LMX Spiral but not all did.

This issue was foreseen by Phillips J in the *Gooda Walker*³⁵⁰ case. The judgment contains a whole section devoted to answering the question: 'could a competent underwriter write spiral business? The court responded in the affirmative, pointing out that some underwriters involved in the LMX Spiral managed to make a profit³⁵¹. This thesis raises issues with Phillips J's reliance on the results of

 $^{^{348}}$ See the quotes from *Gooda Walker* (n 1) and *Bromley* (n 241) in section 5.3.2 of this thesis

³⁴⁹ *Berriman* (n 241) 127.

³⁵⁰ *Gooda Walker* (n 1) 1252.

³⁵¹ ibid 1254.

Syndicate 536 to make this finding³⁵². Nevertheless, the reasoning is difficult to challenge. Syndicate 536 was indeed not the sole Syndicate that benefited from Spiral Business. If some reinsurers managed to make a profit from Spiral Business, courts could not declare that anyone who became involved in the LMX Spiral did so negligently. The same must apply to all reinsurance spirals. No matter how flawed, if they contain genuine business reinsurance spirals may still bring profits to some participants.

6.3.2 The Case Law Conundrum

As noted in the previous chapter of this thesis, Courts seized of the legal disputes that concerned the LMX Spiral shifted their focus from the LMX Spiral to the duties of the Lloyd's agents and their underwriters who engaged in Spiral Business. The judges therefore established a specific set of skills applicable to LMX Business that enabled them to assess whether the relevant individuals had been negligent. It is useful at this point to remind ourselves of those skills. Using the case law terminology, the Reasonable LMX Underwriter was expected to:

- 1. actively manage his portfolio's exposure and balance;
- 2. follow an underwriting plan;
- 3. monitor aggregates and PML;
- 4. purchase the appropriate amount of reinsurance;
- 5. match reinstatements and
- 6. charge suitable rates³⁵³.

The above findings enabled courts to make appropriate findings as regards the cases they had to deal with. However, following those guidelines may not have been sufficient to protect against the Spiral Effects. In fact, it may have made little difference to the end result of the syndicate. This is explained below.

We now know that the LMX Spiral reached a point where it was not possible for an underwriter to predict what level of catastrophe would impact on its account

³⁵² See section 5.3.2 of this thesis.

³⁵³ See section 5.3.3 of this thesis.

because small claims would burn through the various reinsurance layers, rendering the layering and Sum Insured almost redundant. The magnifying effect contributed to this by turning small claims into large ones. Moreover the underwriter could not know whether other reinsurers would exhaust their protection first. This is the Spiral Effect named "Unpredictability" noted earlier in this thesis. These difficulties were made worse by the opacity prevalent within the London XL Market at the time. Finally, the irrational pricing may have added to the difficulties faced by the Reasonable LMX Underwriter by giving the misleading impression that the market functioned as a normal XL market with smaller rates at the higher layer being a true reflection of the reduced chances of claims reaching those layers³⁵⁴.

Therefore a Reasonable LMX Underwriter may have followed the steps required by case law to have a sound underwriting plan in place (point 2); a good grasp of its aggregate and PMLs (point 3), a decent level of reinsurance (point 4) with matching reinstatements (point 5) and he may have charged what seemed to be suitable rates (point 6). Yet all this could not protect against the risk that the layering and Sum Insured may have become redundant and that some of his reinsurance protections might in fact prove to be illusory. As a result, all the steps described above would have provided little-if any- protection: the contracts may not fit within his underwriting plan any more (point 2); his aggregate and PML calculations would be incorrect (point 3); and finally some of his reinsurance protection (point 4), including reinstatements (point 5), would be non-existent.

An underwriter's best protection against some of those risks, most particularly Unpredictability, may have been to spread his portfolio (point 1 above) so as to limit exposure to a market or reinsurer that might appear weak. However, this may not have worked if the risk in question could only be reinsured by a limited number of specialist reinsurers. Sometimes the weakest market also happens to be the main reinsurance market – as was the London XL Market at the time of the LMX Spiral. It is interesting to note that in the late 1980s, some saw the role of the underwriter in the London XL Market as being "entrepreneurial" because of the way the market operated Moreover, the point of Unpredictability is that the effect comes as a surprise and cannot be accounted for. Of course, all transactions contain an element of unpredictability and markets cannot be

 $^{^{354}}$ See section 4.5.1 of this thesis for the full list of the Spiral Effects described here.

³⁵⁵ LMX Working Party (n 108) 51.

expected to perform without some element of risk. The point about the Spiral Effects, however, is that they add an element of risk that would not exist but for the spiral. The Unpredictability within the LMX Spiral was much greater than the usual amount of uncertainty a reinsurer could have expected in a healthy reinsurance market.

The case law therefore leaves us with a conundrum in that the reasonable underwriting prescribed by the Courts is not an effective solution to reduce the additional Spiral Risk caused by the Spiral Effects.

6.3.3 The Use and Abuse of Arbitrage

We have noted earlier in this chapter that arbitrage was part of the PA Spiral. We also know that arbitrage was a feature of the LMX Spiral. In the LMX Working Party Report³⁵⁶, an anonymous underwriter is quoted as stating:

"There is a gearing element: it is worth writing if the premium rates are higher than the cost of outwards reinsurance. (...) If an underwriter can obtain an 'edge' (i.e. if his net position is such that he is expected to make a profit) he will exploit it. However, the margins for profitability are very small particularly when the brokerage of ten per cent each time is considered. Hence in general there can only be a very few winners in the market — most players will be losers."

This suggests that one of the ways to be a winner when engaging in LMX Business was to obtain "an edge" or, in other words, to arbitrage. This is echoed in the *Gooda Walker* case, where Phillips J seemed to believe that the only realistic way a competent underwriter could have made profits from Spiral Business was through the use of arbitrage³⁵⁷. Therefore, taking a narrow view of the judgment, it suggests that the Reasonable LMX Underwriter would have suffered losses unless he had engaged in arbitrage. This is troubling because the ability to arbitrage features nowhere on the list of requisite skills of the Reasonable LMX Underwriter. As noted earlier, Phillips J's decision seems to have been based on the wrong assumption that the success of syndicate 536 was due to arbitrage.

Nevertheless, this raises the issue: is arbitrage an appropriate way to seek to

³⁵⁶ ibid. See section 4.3 of this thesis for a detailed analysis of the report and its findings.

³⁵⁷ Gooda Walker (n 1) 1254 as quoted in section 6.3.3 of this thesis.

make a profit in the context of a reinsurance spiral? More generally, should its use be condoned by courts?

Some underwriters and reinsurance specialists358 take a strong view that arbitrage should not be used in reinsurance markets. They see arbitrage as a distortion of good underwriting discipline. If reinsurance is the insurance of an underlying risk, then premium ought to be based on an assessment of the underlying risk in the context of the XL contract³⁵⁹. There is an argument that relying on arbitrage turns reinsurance into a pure financial product and reinsurers into bankers. However, the practice described by Phillips J or the anonymous underwriter above is not quite the sort of arbitrage used in financial markets. A trader will arbitrage by buying a commodity at a discount in one market and selling it immediately for a higher price in another market. The trader makes an instant profit and the commodity in question is off his balance sheet. The same cannot be said of reinsurance. A reinsurer, even if he reinsures 100% of the risk at a profit, remains liable to indemnify his own reinsured. There is, therefore, a residual risk for the reinsurer. Moreover, the reinsurer in question may be out of pocket if its 100% reinsurer goes bankrupt. The risk of bankruptcy is small in a normal reinsurance market but it increases in the context of reinsurance spirals. Even if there is a residual risk, however, the reinsurer can still make a profit on the premium differential and, in most cases, he will benefit from the 100% reinsurance cover he has put in place. In practice, this means that if a loss occurs, the reinsurer pays his reinsured but he is then fully indemnified by his own 100% reinsurer. This leaves him in a neutral position as regards the loss but he will have made a benefit from the premium differential.

The possibility of making a profit purely based on premium differential can tempt some reinsurers to charge premium that would be too low to cover the costs of future claims. This type of "arbitrage" was prevalent in the PA Spiral. Thomas J in *Sphere Drake* describes it as follows:

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³⁵⁸ This includes Tony Berry. See also Timothy Brentall, 'One Man's Arbitrage Is Another Man's Poison'(1st June 2002) IQ

http://www.elbornes.com/downloads/pdfarticles/insurance/One%20Man%27s%20Arbitrage%20Is%20Another%20Man%27s%20Poison.pdf accessed 24 June 2014.

³⁵⁹ See section 2.2.4 of this thesis for an explanation of how premium is calculated in XL reinsurance.

"In a soft market, as existed in the late 1980s and 1990s, it was possible for underwriters to obtain reinsurance at such favourable terms that they could write insurance at rates where the premium would not cover the losses – or using a market phrase, they were writing "below the burn"; the losses would be paid by reinsurers who were prepared to write at a loss. (...) Those who obtained such reinsurance at below cost and who wrote their insurance on that basis were described as "net underwriting" or "arbitraging" because they were, in effect, trading a risk and making their profit on the differential in rates. Some did not like the term "arbitrage" as the participants were carrying a retention and preferred the term "net underwriting" instead; the latter was a term which [Sterling Cooke Brown] used during the trial to refer to any approach to underwriting which relied on outwards reinsurance to turn gross loss making business into business which was profitable when reinsurance recoveries were brought into account.

As we have noted earlier, Thomas J's finding was that arbitrage is an acceptable practice as long as it is done transparently. He further said that:

"Even though many may have disapproved of this practice, it was a practice of the market; it was not either objectively or subjectively dishonest to place or write such business provided that full disclosure was made." 360

Thomas J did express some doubt as to whether any reinsurer would agree to be at the losing end of a deal based on arbitrage. Undoubtedly the PA Spiral could not have developed had those involved been acting in good faith by disclosing its true nature. Should Thomas J have gone further and sought to outlaw arbitrage within reinsurance markets?

It is true that arbitrage in its purest form – as it is used in financial markets – has no place in reinsurance markets. However, it seems clear that there exist practices within reinsurance markets that are akin to arbitrage. These may be referred to as "net underwriting" or "obtaining an edge" but they are comparable with arbitrage in that the underwriters derive profit purely from rate differentials. Such practices may seem unsavoury in a market that relies on the long term

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³⁶⁰ Sphere Drake (n 1) para 1862(i).

because the reinsurer who relies on arbitrage is seeking immediate profit with no concern for the future health of the relevant account. Arbitrage also goes against the notion of trust as between the parties to a reinsurance contract.

Nevertheless, it is submitted that it would be unrealistic to outlaw arbitrage in reinsurance markets. Courts cannot control markets and prescribe how an underwriter ought to do business, other than to insist it should be done in line with the underwriters' legal duties. As the Court of Appeal rightly said in *Bonner v Cox*³⁶¹, "[T]here is nothing wrong in taking advantage of an advantageous contract"³⁶². In fact, not doing so would potentially put in the underwriter in breach of its obligations to his capital providers, be they the Lloyd's Names or reinsurance company shareholders.

Thomas J's ruling is therefore appropriate in that it focuses on underwriters legal duties by requiring transparency but it does not seek to interfere with the underwriters' business decisions. He also rightly noted that full and honest disclosure may curb the practice because few reinsurers would knowingly agree to be "arbitraged" against. Conversely, there will always be the few reinsurers who are willing to take a gamble, based on their own assessment of the risk. Others may also have equally valid reasons to agree to arbitrage to their detriment: for instance, because it is the most effective way for them to enter a market or to add a sought after client to their portfolio³⁶³. To conclude, whilst the use of arbitrage seems to be at odd with the principles of XL reinsurance, its use cannot realistically be outlawed by English courts.

6.3.4 Good Faith is Not the Answer

We have seen that acting in good faith by making the appropriate disclosure is what turns arbitrage into a legally acceptable form of business. Would good faith make any difference in the context of Spiral Business? By way of brief reminder, the duty of good faith *inter alia* requires reinsureds to disclose material circumstances to their reinsurers prior to the conclusion of the contract. In reinsurance what is material includes not only the original risk itself but also the

³⁶¹ Bonner and ors v Cox and ors [2005] EWCA Civ 1512. This case concerns post contractual duties of good faith as between reinsurers. It is discussed in more detail in the next chapter.

³⁶² ibid para 105.

³⁶³ See also Timothy Brentall (n 358).

activities of the reinsured³⁶⁴. This is particularly true when dealing with XL reinsurance where numerous risks are bundled together and the original risk may be extremely remote. In this context, the identity of the reinsured, its reputation and underwriting philosophy will be key in assessing the risk³⁶⁵. This raises the question: since the Reasonable LMX Underwriter understood the type of business he was carrying out, was he under a duty to disclose the nature of the business to his reinsurer? If so, what type of disclosure would have been sufficient? There is relatively little case law to guide us on these issues. Good faith was not raised in the cases concerning the LMX Spiral, which is explained by the fact that those who brought the disputes to court were not other reinsurers, to whom the duty was owed, but the Lloyd's Names. There is no duty of good faith between an underwriter and its capital provider. By contrast, good faith was an important part of the *Sphere Drake* decision but those involved were found to have acted with dishonesty which makes it an unusual case.

Under the MIA, the reinsured is required to disclose every material circumstance known to him³⁶⁶. In the *Sphere Drake* case, Thomas J took the view that specific disclosure had to be made of the fact that the business being presented had a "spiral content"³⁶⁷. The PA Spiral however was not a market phenomenon but a man-made spiral comprising only a few reinsurers engaged in a narrow and specific type of business. A reinsurance spiral that reaches critical mass would arguably become common knowledge, at which point no disclosure is required under the MIA³⁶⁸. Indeed, in *Gooda Walker*, Phillips J was clear that underwriters who specialised in LMX Business ought to have known about the LMX Spiral. In any case, the issue with a reinsurance spiral is not so much its existence but its effects. Some of the more experienced underwriters who wrote LMX Business understood the dangers of reinsurance spirals but some clearly did not and

³⁶⁴ Clyde & Co (n 33) para 10.6.

The well respected underwriter and author Robert Kiln makes the point cogently, stating that "...In essence, an assessment of the character, intelligence and experience of owners, directors, underwriters and managers is the first test of solvency of any reinsurance operation and can be more important than figures." See Kiln, R and Kiln, S (n 32) p 396.

³⁶⁶ Marine Insurance Act 1906, s 18(1).

³⁶⁷ Sphere Drake (n 1) para 8.

³⁶⁸ Marine Insurance Act 1906, s 18(3)(b).

could, in theory, be taken advantage of. Was there a duty on the underwriters who understood the business to explain what the "spiral element" might entail?

The short answer is "no". The duty of good faith does not require an underwriter to educate others as to the dangers of certain types of business. Case law makes it clear that it is up to the reinsurer to form its own judgment as to the risk presented to him and that a reinsured is under no duty to advise him whether or not to write the risk³⁶⁹. On that basis, disclosure that the reinsurance covered Spiral Business would have sufficed to comply with the duty of good faith. This is the extent of the disclosure required in *Sphere Drake*. Yet it is doubtful whether, in the context of the LMX Spiral, such disclosure would have made any difference for the following reasons:

- 1. Firstly, and most obviously, the other party may not have understood what this meant. We have seen in this thesis that even though some underwriters understood the risks associated with Spiral Business, those who were sued by the Names did not. This is despite the fact that from about 1988 the existence of the LMX Spiral was generally known within the London XL Market³⁷⁰.
- 2. Secondly, it is likely that those who took part in Spiral Business knew that they were doing so. From the second tier of reinsurance, risks within the London XL Market were XL on XL, and many within the market associated XL on XL with Spiral Business³⁷¹.

In Sphere Drake Thomas J was clear that if "the nature of the business was properly disclosed, then in my judgment no complaint could be made about the writing of gross loss making business on the back of reinsurance."³⁷² One cannot disagree with this statement. Once reinsurers have been warned, it is up to them to decide whether they decide to take on the business regardless. The law cannot prevent underwriters from making bad business decisions. On the same basis, it

³⁶⁹ Simner v New India [1995] LRLR 240.

³⁷⁰ See section 3.2.3 of this thesis.

This is illustrated by the following passage from *Sphere Drake* (n 1) at para 167 "The use of terminology was somewhat imprecise; spiral business was often referred to as "LMX incl retro" or as "retro LMX" or simply as "spiral"; as XL on XL reinsurance of companies in Bermuda and in the US could contain spiral business, there was no material distinction between international XL and LMX where there was a spiral element in it."

³⁷² *Sphere Drake* (n 1) para 329.

is unlikely that underwriters caught within the LMX Spiral could have relied on non-disclosure as a way to avoid the XL reinsurances. Whilst the LMX Spiral was opaque, the market in which it operated was transparent in terms of the nature of the business being transacted. The difficulties arose from underwriters not informing themselves about the peculiarities of that business. English courts take the view that those underwriters can only blame themselves for the losses their imprudence had engendered. Again, in Sphere Drake Thomas J noted that "No other participant in a market owes a duty to protect those who knowingly enter a market but who do not understand it, are imprudent, or who miscalculate; indeed, it is likely that a person who is imprudent or foolish or who miscalculates in any market will be ruthlessly exploited by those who understand the market; he is at risk of having dumped on him risks which no one else wants"373. For all these reasons, disclosure of the fact that the business included a spiral element would have been of little assistance to those imprudent reinsurers who chose to participate in the LMX Spiral without understanding the risks this entailed.

Nowadays things might be different. Many reinsurers active in the market remember or have heard about the infamous LMX and PA spirals. The London XL Market is also much more tightly regulated, making it less likely that reinsurers would willingly engage in a type of business they do not fully understand. Disclosure that the business being reinsured includes a "spiral element" as required in *Sphere Drake* may curb the development of a reinsurance spiral in the same way as it would arbitrage although the 9/11 spiral is proof that those involved in reinsurance markets can have short memories. In any case disclosure will be most effective if reinsurers understand how treacherous spiral business can be: another reason why it is important for English law to contain clear guidance on the legal consequences of engaging in such business.

³⁷³ ibid para 285.

6.3.5 Current Legal Position

Before moving on to the preferred legal solution, it is probably useful to remind ourselves of the key findings set out in this chapter. These are as follows:

- Reinsurance spirals are not automatically illegal. Depending on circumstances, however, it remains possible for a specific spiral to be tainted by illegality.
- 2. Participating in a reinsurance spiral is not, per se, a proof of negligence.
- An underwriter who chooses to engage in an XL reinsurance spiral must do so with the appropriate level of care and skills. This requires specialist knowledge and specific prudential steps to be followed.
- 4. Because of the Spiral Effects, however, an underwriter who dutifully takes all the reasonable steps outlined in the relevant case law is not protected against the risk of suffering very substantial losses. In other words, once the Spiral Effects take hold the prudential steps are ineffective.
- 5. Provided full disclosure is made, reinsurers can rely on arbitrage to make a profit. It would indeed be unrealistic for English Courts to outlaw such a practice.
- 6. Case law requires reinsurers to disclose the fact that their business includes a spiral element but not to explain the risks associated with this type of type of business. The impact of such disclosure will depends on the sophistication of the market players and their understanding of the Spiral Effects.

From the above summary, it can be seen that the only requirement of English courts concerning reinsurance spirals is that the "spiral element" of a reinsurance contract should be disclosed by the cedant and that underwriter must follow the prudential steps prescribed in case law. We have noted that when the Spiral effects take hold those prudential steps are ineffective. A better legal solution is therefore required.

6.4 Concluding Remarks

Due to the ways in which cases concerning reinsurance spirals have been pleaded to date, there is a scarcity of legal principles regarding reinsurance spirals. Yet it is important for English courts to provide clear guidance given that reinsurance spirals seem to be a likely feature of XL reinsurance markets.

In this chapter we have considered whether some of the more obvious legal tools, including illegality, negligence and good faith, may assist to curb the development of future reinsurance spirals, but only to conclude that these tools do not provide a satisfactory solution.

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7 The Preferred Legal Solution

Our analysis has exposed a gap in reinsurance law. Spirals may develop within XL reinsurance markets but there is no suitable legal tool to deal with the very specific challenges they present. In this chapter, we analyse the issue further to set out principles applicable to all reinsurance spirals that may develop in the future.

7.1 Spiral Contracts Defeat the Purpose of Reinsurance

7.1.1 Reinsurance Spirals Defeat the Purpose of Reinsurance

In the first chapter of this thesis we have set out the criteria that help define a contract of reinsurance. We have noted that at its heart, a contract of insurance is a contract for the transfer of risk from an insured to its insurer. A contract of reinsurance is a further transfer of that risk or a portion of it. The aim of transferring the risk further is to spread it amongst a larger number of reinsurers.

One of the better known Spiral Effect is the concentration of losses upon the few. This is totally contrary to the very purpose of reinsurance as set out above. If a reinsurance market does lead to concentration to a small extent, this may not be a cause for major concern. However, the concentration of losses in the context of the LMX Spiral was extreme and to these days, it remains one of its most striking features. The losses concentrated on the Syndicates that ran out of cover first and this happened to such an extent that several of them went into run-off.

This is what Professor Bain refers to as "PML failure". It is his view that such failure would happen in any reinsurance spiral. In fact, he believes that this is what characterises a reinsurance spiral³⁷⁴. The LMX Working Party came to a similar conclusion in its own actuarial study, where it found that in any reinsurance spiral the claims circulate until reinsurance programmes become exhausted, at which point the losses concentrate on the reinsurer who first runs out of reinsurance cover³⁷⁵. There is little doubt therefore that reinsurance

³⁷⁴ Bain (n 230) as discussed in section 4.4 of this thesis.

³⁷⁵ LMX Working Party (n 108).

spirals, by concentrating the losses on the few rather than dispersing them amongst the many, operate in a way that defeats the very purpose of reinsurance.

7.1.2 Spiral Contracts at the Root of XL Reinsurance Spirals

The concentration of loss is only one of the many Spiral Effects identified earlier in this thesis. We have seen that those Spiral Effects add an element of uncertainty and risk that increases exponentially as the spiral develops. It is for that reason that a reinsurance spiral is outside the control of individual underwriters. Underwriters can manage their own underwriting but not the underwriting of others and the ways in which a reinsurance spiral might expand. This is why the concept of the Reasonable LMX Underwriter does not really work.

Most of the case law concerning reinsurance spirals arises out of the LMX Spiral and related Lloyd's crisis. Thus the judgments have been shaped by the idiosyncrasies of the Lloyd's market rather than by the specificities of reinsurance spirals. The other major source of law on XL reinsurance spirals is the *Sphere Drake*³⁷⁶ case but it does not provide a useful precedent either because the PA Spiral was unusual in that it had been purposefully set up and it was tainted by dishonestly.

As noted earlier, it is not for English courts to control market behaviour and the judges were therefore correct not to seek to impose stricter rules around arbitrage or good faith to seek to curb the development of reinsurance spirals. In any case, these legal tools do not deal with the Spiral Risk. Skilled underwriters who comply with the rules on arbitrage and act in good faith may still find themselves outwitted by the unpredictability of a reinsurance spiral.

No suitable legal remedy has been provided to deal with the Spiral Risk because to date, the cases have focused on the wrong element of a reinsurance spiral, namely, the people. The judiciaries' hands were tied by the ways in which cases were pleaded. The Names who took their grievances to Court wanted justice from the agents they had entrusted with their money. However, the problem with reinsurance spirals does not lie in the people who built them. One would hope that the majority of these people act with good intentions and with skill. This must be particularly true of the more recent reinsurance spirals mentioned in the previous chapter.

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³⁷⁶ Sphere Drake (n 1).

The problem with reinsurance spirals is the Spiral Risk: that additional risk created by the spiral itself. The only effective way to tackle the Spiral Risk is not to focus on the people who create the spirals but instead to focus on the Spiral Contracts. So far, English courts have not had an opportunity to do so.

7.1.3 Are Spiral Contracts Truly Contracts of Reinsurance?

If the concentration of losses is a distinguishing feature of any reinsurance spiral it seems clear that those spirals preclude the Spiral Contracts from fulfilling their primary function, which is that of spreading the risk. This raises some questions about the true nature of the Spiral Contracts at the core of a reinsurance spiral. Given that they fail to further the primary purpose of reinsurance, can those contracts really be considered to be reinsurances?

At this point it is must be noted that XL reinsurance has yet to be given a definitive legal definition. We have seen in chapter 2 of this thesis that reinsurance is commonly defined as "the insurance of an insurer"377. This is based on the premise that there exists a fixed legal definition of insurance, which is not the case under English common law. In the same chapter we have relied upon a case that provides a possible definition of insurance: it referred to contractual rights being triggered upon the happening of an uncertain event, to be indemnified to the extent of the loss caused by the event³⁷⁸. This definition of insurance, whilst not definitive³⁷⁹, will suffice for the purposes of this thesis since we are focussing on the LMX Spiral and not on what defines insurance.

The above definition of reinsurance however is lacking in that it fails to accommodate the specific features that make XL reinsurance different from other types of reinsurance contracts. Earlier in this thesis we have identified the defining characteristic of XL reinsurance as the splitting of the risk into a 'tranche' (through the use of an excess point and Sum Insured) which allows for

³⁷⁷ This is the definition often used in textbooks (see section 2.2.1) but also in the European legislation under Directive 2005/68/EC on reinsurance. The Directive defines reinsurance as "the activity consisting in accepting risks ceded by an insurance undertaking or by another reinsurance undertaking...." (Article 2.1(a))

³⁷⁸ See section 2.1.1 of this thesis.

³⁷⁹ It must be emphasised for instance that this definition refers to indemnity insurance and it would not necessarily work for life insurance contracts.

layering and which, in turns, informs the pricing³⁸⁰. Whilst these are not "legal" criteria, they must form the basis of the legal definition of an XL reinsurance contract because what differentiate between the various types of reinsurance contracts are their commercial features and the significant differences between proportional and XL reinsurance ought to be legally recognised. In fact, we will see in the next chapter that, when opining on disputes concerning XL reinsurance contracts, English Courts have used the features listed above to legally appraise XL reinsurance contract³⁸¹, for instance by deciding that the legal trigger for the risk to attach under an XL reinsurance contract is the point in time when the excess point is reached. It is therefore submitted that XL reinsurance contracts are contracts of reinsurance (as defined above in terms of loss caused by an uncertain events triggering rights of indemnity) that cover a tranche of a risk (delineated through the use of excess points and usually a Sum Insured) for a price that reflects the level of risk thus undertaken.

It may seem far-fetched to query whether Spiral Contracts are XL reinsurance contracts but the issue whether Spiral Business is insurance business was considered by the Walker committee382 in the context of the LMX Spiral. The point arose because the committee was asked whether Managing Agents acted outside their authority when writing Spiral Business. Given the very wide ambit of the powers granted to the Lloyd's Managing Agents, such an argument could only succeed if one could prove that Spiral Business was not insurance business. The committee concluded that Spiral Business was insurance business because it involved: (i) the acceptance and ceding of risk, (ii) payment of a premium, (iii) an insurable interest and (iv) a potential loss the occurrence of which was outside the control of the parties to the reinsurance contract383. It is unclear on what basis the Walker committee used these criteria to define insurance business: no case law or other reference is pointed to in the report. In any case this chapter will demonstrate how the Spiral Effects distorted most of these criteria which means the conclusions of the Walker committee have to be re-considered.

³⁸⁰ See section 2.2.4 of this thesis.

³⁸¹ See section 8.2.2 of this thesis.

³⁸² Committee set up to enquire into Lloyd's Syndicate participations into the LMX Spiral. See section 4.2 of this thesis for more detail.

³⁸³ Walker (n 40) para 3.18.

There is no doubt that the underwriters who engaged in Spiral Business in the heydays of the LMX Spiral in their mind negotiated XL reinsurances and the entire market treated those contracts as such. This, however, does not require the judiciary to follow the label. There are many examples in case law where the terminology used by those who wrote the contracts was treated as indicative of their intention but it was not conclusive³⁸⁴. In fact, there have been several cases where contracts described as a contract of insurance or reinsurance were held to have been, in fact, something else³⁸⁵. Thus we need to appraise the true nature of the Spiral Contracts.

7.2 A Study of Spiral Contracts

7.2.1 How the Spiral Effects distort Spiral Contracts

We start our study of the Spiral Contracts by considering again some of the basic features of XL reinsurance touched upon in the second chapter of this thesis. We have seen that XL reinsurance is a mechanism to spread risk amongst a larger number of reinsurers by splitting large risks into smaller parts that can be transferred independently of each other. Its key characteristic is the way the risk is layered and sold in tranches. Each layer then acquires a different risk profile. At the two extremes of an XL reinsurance tower are the working layers and the catastrophe layers. The working layers sit at the bottom of the reinsurance tower and are expected to be subject to many more claims than the catastrophes layers that sit on top of the chain of reinsurances. Accordingly, the premium for working layers tends to be higher than the premium for catastrophe layers.

For instance in *Kler Knitwear Ltd v Lombard General Insurance Co Ltd* [2000] Lloyd's Rep IR 47, the court found that a term was a suspensive condition even though it was headed "sprinkler installations warranty". Conversely, in *HIH Casualty and General Insurance Ltd v New Hampshire Insurance Co* [2001] Lloyd's Rep IR 596, the Court of Appeal held that a clause which stated that six films would be made constituted a warranty even though it was not described as such in the contract of insurance.

In *Feasey v Sun Life Assurance Co of Canada* [2003] EWCA Civ 885 the reinsurer successfully argued that the underlying contract of insurance was illegal due to lack of insurable interest. Aside from the issue of illegality, arguably without an insurable interest the contract could not have been one of insurance. In *Toomey v Eagle Star* (n 69), the Court of Appeal found that a contract described as a contract of reinsurance was in fact a 100% stop loss policy.

Charging the appropriate rate is essential because, even though reinsurance products are becoming more sophisticated, the fundamentals remain unchanged: the reinsurer must ensure he has collected sufficient premium to pay claims and run his business.

The layering is not the sole criteria relied upon by reinsurers to set the premium. The identity of the reinsured, its underwriting policy and reputation will play a part too. The nature of the risk being underwritten is also key, as well as the specifics of the reinsurance policy itself such as reinstatements, the deductible and Sum Insured.

We know that within a reinsurance spiral, some of those factors are distorted. We have already demonstrated how the Spiral Effects make it near impossible for a Reasonable LMX Underwriter to properly assess a risk within a reinsurance spiral³⁸⁶. The same analysis leads to similar conclusions when one considers the impact the Spiral Effects have on Spiral Contracts.

The most significant Spiral Effect from our perspective is the fact that a reinsurance spiral renders Sum Insured and layering meaningless³⁸⁷. This is because, in a spiral with little leakage, even the smallest of claims can reach the catastrophe layers, causing claims to exceed the Sum Insured very quickly. It has been said that because of this, within reinsurance spirals the rating structure should be flatter³⁸⁸. When considering how significant the layering ought to be in XL reinsurance markets, the need for a flat rating structure suggests that the contracts are not functioning as XL reinsurances. This links in to the Spiral Effect titled the "irrational pricing structure".

Another Spiral Effect of significance is the Unpredictability point. This has been explained several times before but to put it simply, it is the effect whereby a reinsurer cannot know exactly which reinsurer within the spiral will first exhaust its reinsurances. Arguably this does not impact on the risk at the point when it is underwritten under the inward reinsurance. Nonetheless, the possibility that the reinsurer may not have reinsurance protection for that particular contract makes it more risky for him to write, which ought to be reflected in the premium charged.

³⁸⁶ See section 6.3.2 of this thesis.

³⁸⁷ See section 4.5.1 of this thesis.

³⁸⁸ See LMX Working Party (n 108) ch 2 sections 2.1 and 7.5.

Opacity is another Spiral Effect that is of importance for our purposes. Given that the relationship between the underlying risk and the reinsurer is more remote in XL reinsurance, XL underwriters place more reliance on factors other than the minutiae of the risk itself. Most of those other factors are listed above and they include, for instance, the identity of the reinsured and its underwriting policy, the state of the market, the situation of the contract within the reinsurance tower, etc. In the context of the LMX Spiral, there was such opacity in the market that it has been said the only information a reinsurer had at his disposal were the deductible, the Sum Insured and the premium³⁸⁹. We know that in a reinsurance spiral the Sum Insured is meaningless and premium misleading. This left the underwriter with virtually no reliable information, other than the deductible, to properly appraise the risk he was underwriting.

Where does this leave us in our analysis of the Spiral Contracts? They provided for a reinsurer to underwrite a risk at an agreed price. Other than that, they bore little resemblance to XL reinsurance contracts. In a usual XL contract, the risk is delineated by clear parameters including the nature of the risk, the retention, the Sum Insured and the layering. This enables the reinsurer to apprehend the risk he is underwriting and to charge an appropriate premium. It also enables him to consider how the contract fits within its underwriting plan. The Spiral Contracts within the LMX Spiral contained those elements. Nevertheless, the Spiral Effects rendered those parameters ineffective such that the scope of the risk being underwritten became indeterminate. The Sum Insured was meaningless and the layering irrelevant. The reinsured's retrocessionaires may turn out to be insolvent. There was such opacity in the market at that time that the exact nature of the risk being underwritten may well have been unknown³⁹⁰. The rating in the market was also irrational and therefore an unreliable source of information. All of this means that the reinsurer could hardly apprehend the level of exposure he had actually taken on.

Can a contract truly be called an XL reinsurance if the layering is illusory and the level of exposure is unknown? It is the view of the author of this thesis that the above analysis demonstrates how the Spiral Effects turned the Spiral Contracts into something other than XL reinsurance. It is also submitted that this would be

³⁸⁹ Walker (n 16) as discussed in section 4.2 of this thesis.

³⁹⁰ A good example of this is the way in which marine underwriters included non marine exposures into marine policies. See s 4.5.1 of this thesis for more detail on this practice.

true of any Spiral Contract within a reinsurance spiral that has developed sufficiently for the Spiral Effects to take hold.

7.2.2 How Spiral Contracts are at odds with Reinsurance Principles

We have argued that once a reinsurance spiral reaches a certain point the Spiral Contracts are not, in truth, reinsurance agreements. Those contracts may have the appearance of standard XL reinsurances but the distorting effect of the spiral is such that they are turned into something else. This is not an issue of semantics. In the first chapter of this thesis, we have exposed in some detail the key differences between the rules applicable to standard commercial contracts and reinsurance contracts. Because they relate to the transfer of a risk, insurance and reinsurance contracts are subject to specific legal principles that aim to render the transfer less hazardous by providing safeguards for the (re)insurer. This becomes apparent when considering these principles and their purpose.

- 1. The <u>indemnity principle</u> dictates that the reinsured can only recover to the extent that he has suffered a loss. This goes to the nature of the contract, which aims to give the reinsured protection against the risk of loss but not to enable him to make a profit.
- 2. A <u>warranty</u> in reinsurance is a term that provides safeguards surrounding the risk to ensure it is not unfavourably altered by the reinsured during the lifetime of the contract.
- 3. A major difference between a reinsurance contract and a standard commercial contract is the doctrine of <u>utmost good faith</u>. The most significant application of the doctrine is the duty on the reinsured to provide full disclosure of material circumstances prior to the contract being entered into. The rationale for the duty lies in the need to protect the reinsurer by ensuring he is told everything relevant about the risk before he agrees to take it on.
- 4. The requirement for an <u>insurable interest</u> is another legal requirement that applies to insurance and reinsurance contracts only. It aims to protect

reinsurers against moral hazard by requiring that the reinsured has an insurable interest in the subject matter of the reinsurance contract³⁹¹.

It can be seen that all the above doctrines and principles aim to provide legal protection to the reinsurer. The rules also point to a relationship of trust. It is no surprise that the Lloyd's market's motto is "fidentia", which means confidence. These notions of trust and confidence are inherent in insurance and reinsurance because of the nature of the business being transacted. It is a risk, an unknown quantity, and the parties rely on each other to diminish the impact that risk might have. The parties also enter into a relationship that may last for a number of years, depending on the type of cover provided and the nature of the risk being underwritten. A (re)insurance agreement is therefore not designed for short-termism and profiteering. Robert Kiln, a well known and respected underwriter in the Lloyd's market famously wrote in his reinsurance textbook: "Reinsurance depends on trust and untrustworthy people should not be a part of it." 392

This contrasts with some of the attitudes displayed by some of the Spiral Participants during the heydays of the LMX Spiral. At the time, the market developed partly through greed and a lack of understanding of the true nature of the market and of the potential magnitude of the risks being taken on. There were of course underwriters who knew what they were doing and who acted throughout with integrity. Yet the general "feel" one gets of the market from case law and other sources of information is one of carelessness and overtrading. This seems at odd with the principles of insurance and reinsurance law noted above. The Spiral Contracts were not entered into with a view to foster long term relationship around the sharing of a risk. This is not to say that the market was fraudulent. As we know, fraud was never established as regards the LMX Spiral although it is possible that some Spiral Participants acted fraudulently for instance by making representations about the risk they were placing in the market, particularly bearing in mind that recklessness can amount to fraud³⁹³. This, however, would have been in the context of a few transactions, not the entire market.

³⁹¹ See section 2.1.4 of this thesis for examples of what may constitute an insurable interest.

³⁹² Kiln, R. and Kiln, S (n 32365) p 396.

³⁹³ *Derry v Peek* (1889) 14 App Cas 337. See also Chitty (n 337) para 6-047.

If the Spiral Contracts are not contracts of reinsurances, the rules applicable to insurance and reinsurance contracts only do not apply to them. Taking this view resolves some of the issues raised in our legal appraisal of reinsurance spirals. For instance, the use of arbitrage becomes less objectionable in a market that would otherwise be governed by good faith. The use of arbitrage also makes more sense if there is no need to foster long term relationships. Considering that the Spiral Contracts are not reinsurances also means the reinsured is not required to have an insurable interest in the underlying risk. This makes more sense in the context of a spiral given the disconnection between the ultimate reinsurer and the underlying risk. The rationale underlying the strict consequences of a breach of a warranty also seems out of place in a Spiral Contract given that the reinsured has no control over the risk itself, although there may be some warranties concerning the coverage he is himself providing to the lower layers. Finally, considering that Spiral Contracts are not reinsurances is consistent with the point made earlier that, in the context of the LMX Spiral, full disclosure would have made little difference. In a normal reinsurance market disclosure is significant because it ensures the reinsurer is provided with the information he actually needs to price the risk. In the context of the LMX Spiral, no matter how prudent the underwriter was, he would have been unable to circumvent the Spiral Effects.

If disclosure would have made no difference, does that mean fraud becomes irrelevant? Would the fraudulent concealment of the true nature of the contract have made any difference if the underwriter would have written the contract anyway; or if he would have gone on to write another equally flawed Spiral Contracts on the London XL Market? The answer probably is yes, it would have made a difference, because fraud may have drawn in more capacity into the market from people who did not want to write LMX Business at all. At the time of the LMX Spiral there were some underwriters who refused to write London Market XL Business because they disagreed with the ways of the market³⁹⁴. When the LMX Spiral was at its height, even some specialist LMX Business underwriters chose to limit their exposure to the London XL Market³⁹⁵. They did not know of the Spiral Effects as such but they could recognise a market that had overheated. These underwriters would not have been caught by non-disclosure since they

³⁹⁴ This includes Mr Von Eicken then from Munich Re who gave evidence for the claimants in the *Gooda Walker* case (n 1) 1237.

³⁹⁵ This includes for instance Tony Berry who, in the underwriting year 1991 only used 35% of his stamp capacity.

would have known that the risk emanated from the London XL Market, if only from the identity of the reinsured. Fraud, however, could have drawn them into the very market they were trying to avoid, fuelling the LMX Spiral even further. Admittedly the difference this would have made to the LMX Spiral as a whole is probably limited as the London XL Market was rife with underwriters willing to write LMX Business. With or without fraud the LMX Spiral would most probably have developed albeit, potentially, at a slower pace in the latter case.

To conclude, Spiral Contracts make more sense as contracts that are not subject to the specific rules that define reinsurance contracts. There is one exception to this: the principle of indemnity. Indeed, all claims within a chain of XL reinsurance are initially issued from the claim made by the primary insured. This principle applies even as the gross claim amount growth and the reinsureds are becoming more and more remote from the original loss. Contracts of reinsurance are only subspecies of a contract of indemnity³⁹⁶. Thus the Spiral Contracts may well provide for an indemnity without being contracts of reinsurance.

7.3 The True Nature of Spiral Contracts

7.3.1 Spiral Contracts Distinguished from Wagers

Given that we are questioning the true nature of Spiral Contracts, it seems logical to consider whether they are, in fact, wager. The requirement for an insurable interest in insurance and reinsurance contracts is often justified on the need to distinguish those from wagers. This is less of an issue now that wagers are enforceable under the Gambling Act 2005. However, at the time of the LMX Spiral, wagers were unenforceable under the legislation then in force³⁹⁷ and the Gambling Act 2005 does not have retrospective effect³⁹⁸. If the Spiral Contracts

³⁹⁷ This included the Gaming Acts of 1710, 1835, 1845, 1892 and 1968.

³⁹⁶ See section 2.1.3 of this thesis.

³⁹⁸ Part 17 of the Gambling Act 2005 (the **Act**) came into force on 1 September 2007. Section 334(1) of the Act repeals the Gaming Acts of 1710, 1835, 1845, 1892 and section 334(2) makes it clear that those repeals do not have retrospective effect. Section 356 of the Act repeals the relevant parts of the Gaming Act 1968 and it is generally accepted that this is not retrospective even though there are no express words to this effect. See *Chitty on Contracts* (n 337) para 40-001.

were, in fact, wagers, the consequences could be very significant. The whole purpose of Equitas³⁹⁹ would be put into question, as well as most of the findings from the case law concerning the LMX Spiral.

There are no doubt similarities between reinsurance and wagers but to consider the issue, we need to understand clearly what constitutes a wager. The best known definition is to be found in the case of *Carlill v Carbolic Smoke Ball Co*⁴⁰⁰ where it was said that:

"A wagering contract is one by which two persons professing to hold opposite views touching the issue of a future uncertain event, mutually agree that, dependent upon the determination of that event, one shall win from the other, and that other shall pay or hand over to him, a sum of money or other stake; neither of the contracting parties having any other interest in that contract than the sum or stake he will so win or lose, there being no other real consideration for the making of such contract by either of the parties."

It must be noted that the definition of event is too restrictive. Even though the subject of a wager is often an uncertain future event, the parties may chose instead a past event or a fact that is not uncertain, provided they hold opposite views on it. For instance, the following have been found by courts to have been the subject of wagering contracts: which horse won the Derby the previous year⁴⁰¹, the price of a previous lot of rags⁴⁰² or even the question whether the earth is flat⁴⁰³. The parties to a wager are free to make a bet on everything and anything. We can see from this that wagers are of a wider scope than insurance and reinsurance contracts. They do not relate to the transfer of an existing risk from one party to another. Instead, wagers artificially create a risk of loss for the parties that would not exist but for the existence of the wagering contract. This is the point made in the above definition about the parties having no interest in the contract other than the sum or stake they may win or lose under the contract.

By contrast, in reinsurance a reinsured must have some sort of connection to the uncertain event. Legally the connection takes the form of an insurable interest

³⁹⁹ See section 3.4.3 of this thesis for more detail about Equitas.

⁴⁰⁰ Carlill v Carbolic Smoke Ball Co [1892] 2 Q.B. 484, 490;affirmed [1893] 1 Q.B. 256.

⁴⁰¹ Pugh v Jenkins (1841) 1 Q.B. 631.

⁴⁰² Rourke v Short (1856) 5 E. & B. 904.

⁴⁰³ Hampden v Walsh (1876) 1 Q.B.D. 189.

although we have seen in the second chapter of this thesis that, in truth, an XL reinsurer high up the chain of XL reinsurances has no real insurable interest in the item that was the subject of the primary contract of insurance⁴⁰⁴. Nonetheless, there remains a connection between the loss suffered by the original policyholder and the payment to be made by the reinsurer. This connection is the reinsured's liability to indemnify its own reinsured under the inward reinsurance agreement. We have seen previously that this very liability has been considered by English courts to fulfil the requirement of an insurable interest at the reinsurance level⁴⁰⁵. Considering that this is due to the existence of an "insurable interest" seems unduly artificial. It is submitted that this "connection" is better viewed as being a consequence of the principle of indemnity⁴⁰⁶.

Whichever label it is given, it is undeniable that this liability ties the fortune of the reinsurer to that of the original policyholder. If the event materialises, they both suffer loss. Critically for our purposes, this connection, through the principle of indemnity, is one key factor that differentiates XL reinsurance contracts from wagers. Another distinguishing point is the fact that parties to a reinsurance do not necessarily hold opposite views on the chances of the event happening. Moreover, the subject matter of wagering contracts is potentially much wider. Finally, as noted above wagers do not operate a transfer of risk but create a new one. Spiral Contracts, therefore, are of a different nature from wagers.

The Hypothesis: Spiral Contracts as Contracts of Indemnity

So far we have demonstrated that the Spiral Effects turn Spiral Contracts into something other than XL reinsurance. Our detailed analysis has also highlighted the importance of the principle of indemnity. This principle is a key factor that distinguishes the Spiral Contracts from wagers and it remains relevant when the Spiral Effects have rendered all other parameters of XL reinsurance redundant.

⁴⁰⁴ See section 2.3.2 of this thesis.

⁴⁰⁵ ibid.

⁴⁰⁶ This view is consistent with the initial report of the Law Commission and Scottish law Commission on insurable interest, where it was noted that the principle of indemnity in practice provides the same safeguards as the requirement for an insurable interest. See Law Commission and Scottish Law Commission (n 13) para 8.4. See also section 2.1.3 of this thesis for further discussion on the principle of indemnity.

Even if the gross claim figure in the context of a reinsurance spiral, being the cumulated sum of all indemnities paid, is higher than the original loss, there is an undeniable connection between the claims made under the many Spiral Contracts and the original loss. The loss payable under each contract is an indemnity for the reinsured' own loss, which is the indemnity he himself had to pay his own reinsured. From one indemnity to the next, going down the chain of contracts, we reach the original loss suffered by the policyholder under the primary contract of insurance. The exact parameters of the indemnity may not be those of a typical XL reinsurance contract and the Spiral Effects will make payments more random that would be expected in an orderly XL reinsurance market. The payments, however, are driven by the duty of the "reinsuring" party to indemnify the other party for its loss.

The proposition of the author of this thesis is therefore as follows: once a reinsurance spiral develops, from the moment the Spiral Effects take hold all Spiral Contracts are, from the outset, contracts of indemnity. It is not the case that those contracts may first be XL reinsurances that are turned into indemnities as the spiral develops. Rather, from the moment an underwriter is unable to rely on the usual criteria that define XL reinsurance to set an appropriate premium, the contracts entered into are indemnities because the duty to indemnify is the only effective clause of the contract.

At this point, the legal principles applicable to reinsurance contracts, such as the duty of good faith, have no more relevance and the Spiral Contracts are governed instead by the general rules of contract law. This is a simple proposition but it has significant consequences.

In practice there may be difficulties for courts to identify the exact point when the Spiral Contracts become contracts of indemnity. These practical difficulties, however, are not insurmountable. A possible solution would be to take one specific criteria, say the Sum Insured, and consider whether it is still, within the relevant contract, a reliable parameter. If small claims reach the Sum Insured in what ought to have been a catastrophe layer, this would be a good indication that the Spiral Effects have started to take hold. Of course, it is all a matter of degrees, and there will be grey areas where it is unclear whether the reinsurer can still rely on the layering and other information usually of relevance in the context of XL reinsurances. The law, however, is no stranger to grey areas; these are a necessary side-effect of seeking to apply uniform rules when the reality is diverse.

These difficulties ought not to detract from the fundamental point being made. XL contracts are a specific type of reinsurance defined by clear parameters. A reinsurance spiral blurs those parameters to the point where they become irrelevant and the contract stops functioning as XL reinsurance. Applying the usual rules and principles of reinsurance in such cases is flawed, as evidenced by the "case law conundrum" described in the previous chapter. A Reasonable LMX Underwriter who dutifully follows the steps set out in case law remains as likely to suffer substantial losses as a reckless underwriter. The "reasonable" steps are ineffective because they were prescribed by the courts on the presumption that the Spiral Contracts are XL reinsurance contracts. Recognising that Spiral Contracts are of a different nature makes it clear that the skills required to succeed in a reinsurance spiral are not specialist underwriting skills. Those underwriters who can identify the change when the contracts they enter into are not XL reinsurances any more are probably the ones most likely to succeed. This is what happened to some extent in the context of the LMX Spiral: the more sagacious underwriters chose to limit their exposure to the London XL Market to avoid the spiral.

Even though the parties to Spiral Contracts are not a reinsured and a reinsurer any more, for ease of reference throughout the rest of this thesis those terms will continue to be used to refer to the parties to a Spiral Contract.

7.4 Regulatory Consequences

7.4.1 The General Prohibition

Considering that Spiral Contracts are not contracts of reinsurances raises important issues from a regulatory perspective. Before exploring these in detail we need to set out briefly the regulatory background. As noted previously, insurance and reinsurance are regulated industries and reinsurers must be authorised by the regulator to carry out reinsurance activities in the UK. Currently the so called "General Prohibition" against carrying out insurance and reinsurance activities without authorisation is set out in section 19 of the Financial Services and Markets Act 2000 (FSMA). Previously, at the time of the LMX Spiral, a similar prohibition could be found in section 2 of the Insurance

Companies Act 1982 (ICA 1982) and, beforehand, under section 2 of the Insurance Companies Act 1974 (ICA 1974)⁴⁰⁷.

The reason the regulatory status of reinsurers is relevant for our analysis of Spiral Contracts is that the authorisation relates to a specific class of business. For instance, a reinsurer authorised to write marine business may not write motor or personal accident insurance unless he is also authorised to write these other classes of business. Likewise, a reinsurer's authorisation does not extend to agreements that are not reinsurance at all⁴⁰⁸. Thus if Spiral Contracts are only contracts of indemnity, the reinsurers who write them are acting in breach of their authorization. This is the case under the current legislation, the FSMA but the same reasoning also applies under the legislation in force at the time of the LMX Spiral, namely the ICA 1982 and, potentially, the ICA 1974. A breach of this nature entitles the regulator to take disciplinary action including, under Part XIV of the FSMA, public censure, financial penalties and the suspension of the authorization to write reinsurance business. More significantly from our perspective, the question is what are the consequences of such a breach on the legality and enforceability of the Spiral Contracts? This is explored below.

7.4.2 The Insurance Companies Acts 1982 and 1974

Under the ICA 1982, the consequences of a statutory breach were the same for authorised reinsurers writing the wrong class of business as for unauthorised reinsurers. Initially, there were conflicting authorities as to the effect such a breach might have on the rights of the parties to the contract. In 1984, in *Bedford Insurance Co. Ltd v Instituto de Resseguros do Brasil*⁴⁰⁹, Parker J held that insurance contracts entered into in contravention of the ICA 1982 were illegal and void *ab initio*. Therefore the unauthorised insurer/reinsured in the case could not recover from its reinsurers. Alternatively Parker J held that the insurer ought not to be allowed to rely on its own illegality to claim against the reinsurers. By contrast, the same year in *Stewart v Oriental Fire and Marine Insurance Co Ltd*⁴¹⁰

⁴⁰⁷ The ICA 1974, ICA 1982 and the FSMA refer to "insurance" but it is well established that under English rules all regulatory obligations of insurers also apply to reinsurers.

⁴⁰⁸ See section 16 of the ICA 1982 and section 20 of the FSMA.

⁴⁰⁹ Bedford Insurance Co. Ltd v Instituto de Resseguros do Brasil [1984] 3 All E.R. 766.

⁴¹⁰ Stewart v Oriental Fire and Marine Insurance Co Ltd [1984] 3 All ER 777.

Legatt J decided that a reinsured could recover under a reinsurance from an unauthorised reinsurer on the basis that the purpose of the ICA 1982 was not to invalidate contracts but to impose criminal penalties on the perpetrators of the breach. The reinsured in that case was the innocent party who was therefore entitled to recover.

The conflict was seemingly resolved in the first instance decision of *Phoenix General Insurance Co of Greece SA v Halvanon Insurance Co. Ltd*⁴¹¹ where the judge took the view, *obiter*, that a contract entered into in breach of the ICA 1982 was illegal but an innocent party ought to be able to enforce its terms. The unauthorised insurer, however, could not do so for reasons of public policy. This view reconciled the *Bedford* and *Stewart* cases. In the latter, the reinsured was the innocent party and he was therefore able to recover under the unauthorised reinsurance but in *Bedford*, the reinsured was the guilty party without authorisation and therefore he could not enforce the reinsurance. The Court of Appeal, however, reversed the position by saying, also *obiter*, that neither party to an illegal insurance contract had any rights under it⁴¹². This latter judgment is dated 1987, the year of the UK windstorm known as "87J": the first catastrophe in a long line that lead to the demise of the LMX Spiral.

The Court of Appeal's view on illegality was followed in the 1989 case of *Re Cavalier Insurance Co Ltd*⁴¹³ in which policyholders found they had no right to claim under policies issued by an unauthorised insurer. In 1989 therefore for a time it seemed that both party to a reinsurance contract entered into in breach of the General Prohibition could not enforce that contract. Under this analysis, Spiral Contracts entered into in the context of the LMX Spiral were unenforceable. This is obviously a finding that is difficult to reconcile with the practices of the London XL Market and the whole purpose of Equitas.

⁴¹¹ Phoenix General Insurance Co of Greece SA v Halvanon Insurance Co. Ltd [1986] 1 All ER 908.

⁴¹² Phoenix General Insurance Co of Greece SA v ADAS [1987] 2 All ER 152.

⁴¹³ Re Cavalier Insurance Co Ltd [1989] 2 Lloyd's Rep 430.

7.4.3 The Financial Services Act 1986

The Financial Services Act 1986 (**FSA 1986**) brought some welcome changes to the law. Section 132 provides that a contract written in breach of section 2 of the ICA 1982 is not void but unenforceable by the reinsurer⁴¹⁴. This is subject to the court's power to allow the reinsurer to enforce the contract if the court is satisfied that (i) the reinsurer reasonably believed he was not contravening section 2 of the ICA 1982 by entering into the contract and (ii) it is just an equitable to do so⁴¹⁵. The innocent reinsured had a choice. He could either enforce the reinsurance contract or treat it as unenforceable. In the latter case, he was entitled to recover payments he made to the reinsurer under the contract and he could claim compensation for loss suffered as a result of having made such payments but he had to return any sums received from the reinsurer and he could not claim any more benefits under the contract⁴¹⁶. Thus under the FSA 1986, illegal contracts were enforceable at the option of the innocent party but not the guilty party. This is similar to the first instance decision of *Phoenix v Halvanon* described above.

The FSA is dated 1986 but section 132 was held to have retrospective effect⁴¹⁷ and to apply irrespectively to breaches committed under the ICA 1982 and the ICA 1974⁴¹⁸. This regime was in place until the FSMA came into force on 1 December 2001. It is therefore a reasonable assumption that the legal status of nearly all Spiral Contracts within the LMX Spiral, which dates from the 1980s, is governed by s 132 of the FSA 1986. Some of the Spiral Contracts may have expired but it seems likely that the provisions of section 132 also apply to contracts that have expired⁴¹⁹. Finally, it is worth noting at this stage that section 132 expressly states that a contravention of the ICA 1982 does not invalidate the reinsurance⁴²⁰ of the unauthorised contract. Thus a Spiral Contract subject to the

⁴¹⁴ Financial Services Act 1986 s 132(1).

⁴¹⁵ ibid s 132(3).

⁴¹⁶ ibid s 132(1) and (4).

⁴¹⁷ Bates v Robert Barrow Ltd [1995] 1 Lloyd's Rep 680.

⁴¹⁸ See *Colinvaux &Merkin* (n 7) para A-0109 (R August 2002) for a more detailed discussion on the retroactive effect of s. 132 of the Financial Services Act 1986.

⁴¹⁹ ibid para A-0108.

⁴²⁰ Financial Services Act 1986 s 132(6).

FSA 1986 would not necessarily break a chain of reinsurances⁴²¹. This is of course relevant only as far as the reinsured may choose to enforce the Spiral Contract, in which case the reinsurance of the Spiral Contract would be unaffected by the illegality. If the Spiral Contract is treated as unenforceable, then the reinsurance does not come into play.

We have established that the legal status of the Spiral Contracts from the LMX Spiral is governed by s. 132 of the FSA 1986 whether the contracts contravene the General Prohibition under the ICA 1982 or 1974. Does this mean that reinsureds can now rely upon section 132 to make claims for restitution against reinsurers (or Equitas) for premium or other sums paid under Spiral Contracts? Could those reinsureds even claim compensation? Such claims could be tactical: a reinsured who had received no indemnity under the relevant contract may then decide to recover the premium paid. However, those claims are likely to be timebarred. Under the Limitation Act 1980, the aggrieved party has six years to bring a claim from the date a cause of action accrues. In XL reinsurance the six-year period starts running from the date the reinsured's liability is ascertained. We know from the Equitas⁴²² case and others like Wasa v Lexington⁴²³ and CX Re⁴²⁴ that reinsurance claims can reach the upper layers of reinsurance towers many years after the event. This is even more so for losses that went through the LMX Spiral given the "long short tail" effect described earlier in this thesis.

Nonetheless, the rules of reinsurance law on limitation are irrelevant because we are arguing that the Spiral Contracts are contracts of indemnity. Under standard contract law principles, the cause of action accrues when the breach occurs. The breach, here, is the reinsurer writing a contract without the requisite regulatory authorisation. Thus the cause of action accrued on the date the contract was entered into. As noted above, the Spiral Contracts that were part of the LMX Spiral date from the 1980s and in some cases the early 1990s, which is well over 20 years ago. The Limitation Act 1980 gives no limitation period for claims in restitution but if it seems unlikely courts would allow such claims to be brought

⁴²¹ In the context of the LMX Spiral this may have happened if the reinsurance of the Spiral Contract was, for instance, a quota share reinsurance and not an XL reinsurance, or if the provider of the XL reinsurance cover was not a Spiral Participant.

⁴²² *Equitas* (n 1).

⁴²³ *Wasa v Lexington* (n 70)

⁴²⁴ IRB Brazil Resseguros SA v CX Reinsurance Company Ltd [2010] EWHC 974 (Comm), [2010] Lloyd's Rep IR.

more than 20 years after the relevant breach has been committed⁴²⁵. In the very unlikely case that such a claim could be made, it is submitted that courts ought to use their statutory power to allow the reinsurer to enforce the contract. Whilst some of the underwriters were reckless, it is clear from the case law and other contemporaneous documents that in their mind they were underwriting XL reinsurance business. There is a strong argument that the reinsurers reasonably believed they were not in breach of the statutory obligations and it would be just and equitable to enforce a reinsurance contract in the circumstances we have just described.

7.4.4 The Financial Services and Markets Act 2000

The FSMA applies to all reinsurance contracts entered into on or after 1 December 2001. This means that its provisions will govern Spiral Contracts that are part of the more recent reinsurance spirals. The provisions of the FSMA are very similar to section 132 of the FSA 1986 except that the FSMA makes a clear distinction between contracts of the wrong class of business entered into by authorised reinsurers and contracts entered into by unauthorised reinsurers. This seems fair given that it is less objectionable for a reinsurer to make an error as to the type of reinsurance he is allowed to write as opposed to not having any authorisation in the first place. Since we are focusing on Spiral Contracts, which is the earlier scenario, we do not need to dwell on the consequences of a reinsurer having no authorisation at all. Suffice is to say that under the FSMA an unauthorised reinsurer commits a criminal offence if he writes reinsurance contracts⁴²⁶. Any such contract is unenforceable by the reinsurer and the reinsured can recover the premium and other monies paid under the agreement as well as compensation (he must also return monies received from the reinsurer)⁴²⁷. Courts however retain a discretionary power to allow the insurer to enforce the contract on grounds similar to the ones set out above in the context of the FSA 1986428.

⁴²⁵ One view is that in the case of a restitutionary claim based on a breach of the duty of good faith, which renders the (re)insurance contract void, time would start running on the date which the right to avoid arose, which is likely to be the date the contract was entered into. See Clyde & Co (n 33) para 42.10.

⁴²⁶ FSMA s 23.

⁴²⁷ ibid s 26(2).

⁴²⁸ ibid s 23(3), (4) and (5).

Of more relevance to us are the rules that apply when an authorised reinsurer writes the wrong class of business, including, according to our analysis, Spiral Contracts. The sanctions in such as case are less severe: not only is the reinsurer not committing a criminal offence but also the contract is not rendered void or unenforceable and the reinsured has no cause of action for breach of statutory duty. There is a carve out however: the FSMA provides that in "prescribed cases" a person who has suffered loss as a result of the breach may have a cause of action against the reinsurer⁴²⁹. This raises interesting issues from our perspective. Could a reinsured claim it has suffered a loss as a result of Spiral Contracts being in breach of the FSMA? This seems unlikely given the court's findings in the recent case of Re Whiteley Insurance Consultants (A Firm)⁴³⁰, where an intermediary had written insurance policies without authorisation. We have just seen that under the FSMA this is considered to be a more serious breach than the scenario we are concerned with and the intermediary in this case had committed a criminal offence. In Re Whiteley, David Richards J nevertheless held that the policyholders had not suffered loss because (i) the policies were enforceable and (ii) in any case they would have had to pay similar premium to obtain similar cover from other insurers. This is probably true of many reinsurance contracts unless the reinsurer is specialised. For instance, in the context of the LMX Spiral, there is no doubt reinsureds could have sourced alternative reinsurance given how much overcapacity there was in the London XL Market at the time.

The *Re Whiteley* ruling makes it difficult to imagine a situation where a reinsured could obtain compensation on the ground that a reinsurer was in breach of the FSMA when entering into the Spiral Contract. Moreover, if the reinsured himself entered into the contract at a point when it was a Spiral Contract he is himself in breach of the FSMA. It may also be argued that the reinsured is in a better position than if he had entered into a reinsurance agreement, given that the duty of disclosure will not apply and neither will the reinsurer be able to rely on a breach of a warranty to escape liability. Presuming that the reinsured is most concerned with being paid the indemnity when it is due, our view that Spiral Contracts are not reinsurance contracts is to the reinsured's advantage.

⁴²⁹ ibid s(20)(2).

⁴³⁰ Re Whiteley Insurance Consultants (A Firm) [2008] EWHC 1782, [2009] Lloyd's Rep IR 212.

For completeness' sake it is worth noting here that the FSMA is silent as to the effect of the breach on reinsurance agreements but it is probable that the position would be as it is under the FSA 1986 so that a Spiral Contract would not necessarily break a chain of reinsurance contracts⁴³¹.

7.4.5 Duties as Between Reinsurers

We have established that a reinsurer writing Spiral Contracts is in breach of his statutory obligations. However, there is very limited scope for a reinsured to seek any form of compensation for the breach given that the contract remains enforceable and the reinsured will struggle to show a loss. In any case, the reinsured is likely to have committed the same breach. This does raise the question: is the reinsured himself in breach of his obligations if he is asking the reinsurer to underwrite a contract tainted by illegality? Given the concepts of good faith and the traditional view of reinsurance as long-term business based on trust, it seems counter-intuitive to consider that reinsurers can enter into contracts that contravene legislation without warning each other. We have set out in the previous chapter the views of Thomas J in Sphere Drake that it is acceptable for the more astute reinsurers to take advantage of the lack of knowledge of some of the other participants⁴³² in a reinsurance market. We have also noted that the case law does not require a reinsurer to educate others as to the dangers of the business he is offering⁴³³. This can be justified on the basis that reinsurers are specialists who ought to have enough understanding of the business of reinsurance to protect their own interest. Yet here the Spiral Contract is tainted by illegality. The duty of good faith requires disclosure of the fact that the contract includes a "spiral element" but this is not the same as warning the reinsurer that the contract is not one of reinsurance and that it has been entered into in breach of the FSMA. Arguably the latter is a material fact that has to be disclosed. Realistically however most reinsurer will be unaware of this fact unless the law develops in this area. More significantly, since Spiral Contracts are not contracts of reinsurance the duty of good faith does not apply.

⁴³¹ For more discussion on this point see *Colinvaux & Merkin* (n 36) para A-0111.

⁴³² Sphere Drake (n 1) para 285.

⁴³³ Simner (n 369).

What happens however once the contract has been entered into? Case law makes it clear that beyond the duty of good faith, reinsurers do not have to look after each other's interests. In some circumstances English courts have implied duties into contracts of reinsurance requiring the reinsured to act prudently so as to protect the reinsurer's interest. In the relevant cases the reinsurances were proportional and they included an element of compulsory cover, where the reinsurer's hands were tied to the decision-making of the reinsured. The first case, *Phoenix v Halvanon*⁴³⁴ concerned a facultative obligatory contract that empowered the reinsured to choose the risks that would be ceded to the reinsurer; whilst in the second case, *Economic v Le Assicurazioni*⁴³⁵ the reinsurance was a quota share reinsurance which meant that the reinsurer had a share of every single risk underwritten by the reinsured. In both cases, the court agreed to imply a term requiring the reinsured to conduct its business "prudently, reasonably carefully and in accordance with the ordinary practice of the market".

We know that XL reinsurance is different from proportional reinsurance and this is clearly demonstrated by *Bonner v Cox*⁴³⁶. The Court of Appeal had to consider whether, in the context of the XL reinsurance contract, a reinsured should be under an implied duty to (i) not accept risk if they were indifferent as to whether the risk would be profitable without taking into account the reinsurance and (ii) exercise the ordinary skill and care of a prudent underwriter when writing risks under the cover. This latter argument is similar to the implied duties described above. The CA however distinguished *Phoenix v Halvanon* and *Economic v Le Assicurazioni* on the basis that those cases concerned proportional reinsurance as it creates a relationship akin to a joint venture as between reinsurers, which cannot be said of XL reinsurance.

In *Bonner v Cox* the reinsured Lloyd's Syndicates had written the inward reinsurance of an offshore oil and gas contractor (**Oceaneering**) shortly after the aggregate excess under the syndicate's outward XL reinsurance had been exhausted. This meant the XL reinsurers were bound to pay the first \$10 million of any loss emanating from the Oceaneering contract. The CA rejected the contention that the reinsured owed duties (i) and (ii) (described above) to their reinsurers, noting that in XL reinsurance, each reinsurer owes duties first and

⁴³⁴ *Phoenix v Halvanon* (n 411).

⁴³⁵ Economic v Le Assicurazioni d'Italia (unreported 27 November 1996).

⁴³⁶ Bonner v Cox (n 361).

foremost to its capital providers and that, as quoted in the previous chapter of this thesis "[T]here is nothing wrong in taking advantage of an advantageous contract"⁴³⁷. The CA nevertheless noted that in some cases reinsurers may be entitled to reject risks on grounds of "dishonesty", "wilful misconduct" or "recklessness" on the part of the reinsured. Such rejection would be enforceable on the basis that the risks do not fall within the terms of the reinsurance⁴³⁸. The CA felt that the duty of disclosure and a reinsurer's ability to control the type of risk it would cover through contract wording provided enough protection. It also pointed out that it would be nonsensical for a reinsured not to be able to take into account its reinsurance protection when deciding whether or not to write inward contracts⁴³⁹. Yet the CA commented that a cedant who betrays the trust of its reinsurer would damage its reputation and would probably lose business as a result⁴⁴⁰. In other words, market forces act as a deterrent for bad behaviour where the law will not interfere, at least in markets dealing in non-proportional reinsurance⁴⁴¹.

⁴³⁷

⁴³⁷ ibid para 105.

⁴³⁸ ibid para. 110. In Clyde & Co, Reinsurance Practice and the Law, (n 33) para 19.22 the authors point out that the decision of the CA in Bonner v Cox that dishonest or reckless behaviours might fall outside the contract of reinsurance sits uneasily to the findings in Sphere Drake (n 1) that arbitrage is an acceptable business practice provided it is disclosed. These comments are based on the three examples given by the CA in Bonner v Cox of what conduct may qualify as dishonest or reckless, namely (i) an underwriter not exercising any judgment at all in accepting a risk, (ii) not caring whether the risk was good or bad or (iii) deliberately writing a risk knowing of a loss which would necessarily fall on its reinsurers as a result. Arbitrage properly defined is none of these things: it is instead about taking advantage of rate differentials. This is unlikely to be achieved without the underwriter exercising judgment (point (i) above). However, arbitrage may result in the underwriter not caring about the quality of a risk (point (ii)) or deliberately passing on a loss to reinsurers (iii) and to this extent there is, potentially, a discrepancy between the findings of Sphere Drake and Bonner v Cox. Where the cases concur is when arbitrage is done dishonestly, as was the case in Sphere Drake, the relevant transaction is unlikely to be enforced by the Courts.

⁴³⁹ ibid para 112.

⁴⁴⁰ Ibid paras 99 to 101.

ibid para. 111. The CA declined to decide whether its findings should apply to proportional reinsurance in light of *Phoenix* (n 411) and *Economic* (n 435).

Arguably, a reinsured who commits a statutory breach by entering into a Spiral Contract and then seeks reinsurance for the contract may be reckless. If he is aware of the statutory breach, he may even be guilty of wilful misconduct. However, as with the duty of good faith, the ruling of Bonner v Cox is beside the point because it applies to XL reinsurances and not to contracts of indemnity such as Spiral Contracts. There is some circularity in this argument: seeking to obtain reinsurance for a Spiral Contract may be reckless but the Bonner v Cox ruling does not apply because the contract in question is a Spiral Contract. Nevertheless, the case law described above is relevant to our analysis because it shows how the level of additional legal protection provided to parties to reinsurance contracts declines as the contracts change in their nature. In proportional reinsurance, the closeness of the relationship between the reinsurers justifies the heavier burden imposed by the law in terms of the reinsured's behaviour. Since Bonner v Cox, it is clear that in non-proportional reinsurance, the reinsured can only be challenged if he has acted with dishonestly, recklessly or with wilful misconduct. We argue that in the context of an XL reinsurance spiral, there is a further disconnection between the underlying risk and the reinsurer that leads to even less cooperation between reinsurers. Logically, this means an even lesser legal burden needs to be imposed on the reinsured. There is therefore a sliding scale of duties imposed on reinsurers that ends with Spiral Contracts. It is therefore submitted that our analysis of Spiral Contracts as contracts of indemnity fits well with the current legal view on reinsureds' duties.

On that basis, the current position can be summarised as follows:

- 1. In proportional reinsurance, where the relationship between reinsurers is at its closest, in addition to the duty of good faith the law implies duties on the reinsured to act prudently so as to protect the reinsurer's interest.
- 2. In XL reinsurance where reinsurers do not cooperate as closely, the reinsured's duties are limited to the bare essentials in reinsurance terms i.e. good faith, honesty, avoiding misconduct and not acting recklessly.
- 3. In a reinsurance spiral, where the relationship between reinsurers is stretched even further and the XL reinsurances become Spiral Contracts,

the duty of good faith and other additional duties fall away to the point where only the usual contractual doctrines apply. Contract law provides some protection to the parties to a contract⁴⁴² but not as extensively as reinsurance law.

7.5 Concluding Remarks

Our analysis shifts the focus from the people who build reinsurance spirals to the Spiral Contracts. It shows that they take hold, the Spiral Effects distort the Spiral Contracts to the point when those contracts, when entered into, are contracts of indemnity rather than contracts of XL reinsurance. This is a significant finding: it means that the specific rules applicable to contracts of insurance and reinsurance do not apply to the relevant Spiral Contracts.

Moreover, under the current and recent regulatory regimes, reinsurers writing Spiral Contracts are in breach of their statutory obligations even though the contracts remain enforceable. Such a finding, if known within XL reinsurance markets, would probably curb the development of spirals because underwriters would seek to avoid writing contracts that are not true contracts of XL reinsurance, if only to ensure that they are not putting themselves at risk of being subject to disciplinary action by the regulator.

⁴⁴² For instance this would include the laws of misrepresentation or the general rules governing illegality.

PART III: THE NATURE OF XL REINSURANCE

8 Analysis of Excess of Loss Reinsurance

Our detailed analysis of the LMX Spiral has revealed a number of issues to do with reinsurance spirals that have been addressed in the previous chapters of this thesis. A close review of the Spiral Contracts has also exposed features of XL reinsurance that challenge the traditional legal views of reinsurance as further insurance. This is explored further in this chapter.

8.1 The Mechanics of XL Reinsurance

It is important to note that at this point of the thesis, the term "risk" is used in the wider sense of the term. It may refer either to the risk of an adverse event happening; or the actual subject matter of the insurance, for instance the ship or property that is being insured at the primary level of insurance. The terminology, which is a key aspect of our analysis, will be explored later in this chapter.

8.1.1 XL Reinsurance Makes the Underlying Risk More Remote

In the previous chapters, we have seen that reinsurance spirals seem to be a side effect of XL reinsurance. Even though it is possible for a spiral to develop within proportional reinsurance markets, it is difficult to imagine a spiral of the same magnitude as the LMX Spiral being created through the use of proportional reinsurances. For a spiral to grow, there have to be numerous contracts overlapping. This is less likely to happen with proportional reinsurance. XL reinsurance is a more effective tool to spread risk: it renders the risk more fluid by putting it into a format that makes it more readily transferable. It is this effectiveness that makes XL reinsurance more prone to developing spirals. The risk is spread to many reinsurers, bundled with other risks and transferred countless times again. The result is the creation of complex webs of reinsurance

agreements. The following description of the LMX Spiral could indeed apply to many mature XL reinsurance markets:

"...a contained space with all the reinsurers in it connected to each other by multiple lines, representing a multiplicity of relationships on a multiplicity of covers at a multiplicity of levels."443

This complexity is not an issue in itself, unless the market develops a spiral that reaches the point where Spiral Effects start to take hold.

Every time the risk passes hands, the relationship between the reinsurer and the underlying risk becomes more remote. We may now ask the question: what connection does the ultimate reinsurer retain to the risk itself? Given that there are no limits to how many times a risk can be reinsured, the issue would arise in a straightforward scenario where the whole risk is being transferred from one reinsurer to the next, for instance through the use of facultative reinsurance. This question however is particularly acute in the context of those complex webs of reinsurance we have just described, where the risk has been combined with other risks. In the 'straightforward scenario' where a single risk is transferred under facultative contracts, the risk remains identifiable. This is not necessarily the case, as we have seen, in the more complex scenario. The LMX Spiral provides good illustration of what happens in the most extreme circumstances where the market becomes opaque and the Spiral Effects start to take hold: the reinsurances at the heart of the spiral are turned into simple contracts of indemnity. With each turn of the spiral, the contracts shed an attribute of XL reinsurance until their sole remaining feature remains the duty on the reinsurer to indemnify the reinsured.

Not surprisingly, as we have already noted in the first chapter of this thesis, when faced with the evidence, Courts have acknowledged the disconnection between the ultimate XL reinsurer and the primary insurance. In Hill and ors v Mercantile and General Reinsurance Company⁴⁴⁴, the House of Lords has held that the relevant settlement to consider for the purposes of a follow the settlement clause was not the settlement of the original claim made by the original insured but the settlement made at the level just below the reinsurance being litigated. In practice, this means that a reinsurer sitting on the 10th layer of an XL reinsurance

444 See n 78. The case is described at length in section 2.3.2 of this thesis.

⁴⁴³ Ipe Jacob, 'Project Corkscrew' (London: Grant Thornton, 2001) para 13.

tower needs to assess the settlement made at the ninth layer to decide whether he is under a liability to pay. This aspect of the judgment was endorsed in *Equitas*⁴⁴⁵ and, more recently, in *CX Re* ⁴⁴⁶. These decisions establish that the settlement made by the original insured is, in law, irrelevant to establish the liability of the XL reinsurer. In fact, the loss of the original insured remains fundamental: without it, there would be no liability payable at the ninth layer. However, there is no legal appraisal of the settlement of that original claim or of any claim below the 'ninth layer' to use our example. In *Equitas v R&Q*, the fact that sums had been wrongly aggregated in the lower layers was a relevant factor but only as far as it impacted on the sums recoverable under the layers of the reinsurance that were in dispute. Clearly, this view sits uneasily with the principle that the reinsurance is an independent contract covering the subject matter of the original contract of insurance.

The level at which the settlement remains relevant in an XL chain of reinsurances was most recently explored in the case of *Tokio Marine Europe Insurance Ltd v Novae Corporate Underwriting Ltd*⁴⁴⁷. This is an interesting case in that it analyses a facultative XL reinsurance that was only one step removed from the primary insurance contract. The dispute arose from property damage suffered by a subsidiary of Tesco as a result of the severe floods that had occurred in Thailand in 2011. The reinsurer Tokio Marine had subscribed a share to the proportional facultative reinsurance (the **TM Reinsurance**) of the primary insurers who were local companies from the ACE European group (ACE). The TM Reinsurance had then been placed with Novae under a facultative XL reinsurance (the **Retrocession**). This situation is very different from the ones described above in the context of the LMX Spiral where there were layer upon layer of reinsurances. In fact, when considering the impact of the "follow the settlement clause" in *Tokio Marine*, Hamblen J distinguished *Hill v Mercantile* on the basis that the latter "concerned a reinsurer under the LMX Spiral who was truly remote

⁴⁴⁵ See n 80.

the Arbitration Act 1996. Some of the grounds for appeal centred on a double proviso "follow the settlement" clause and the standard of proof required to establish liability under the *Hill v Mercantile* and *Equitas* cases. The court concluded that the arbitrators had made no error in law.

Tokio Marine Europe Insurance Ltd v Novae Corporate Underwriting Ltd [2013] EWHC 3362 (Comm).

from the direct insurance and at the end of a long chain of reinsurances. In this case Novae was only one step removed from ACE...⁴⁴⁸.

Tokio Marine had paid its share of the settlement for the losses agreed by ACE but Novae was disputing its liability to follow that settlement. Hamblen J found, inter alia, that (i) the Retrocession reinsured Tokio Marine in respect of its liability to the ACE companies both under local policies and under the Master Policy; (ii) the term "Loss Occurrence" in the Retrocession had to be construed in the same manner as the term "Occurrence" in the primary policy (not the TM Reinsurance); (iii) Novae had agreed to follow the settlement of ACE under the primary insurance policies (rather than that of its reinsured Tokio Marine); (iv) the burden of proof was on Tokio Marine to show that the claim so recognised by ACE was one that arguably fell within the terms of the Retrocession as a matter of law and that (v) Novae was bound by a determination by ACE as to issues of aggregation. Those findings show a close correlation between the Retrocession and the primary insurance at the expense of the TM Reinsurance. Not only is the meaning of the word "Occurrence" imported directly from the primary insurance into the Retrocession but also decisions taken by the primary insurer ACE as to settlement and aggregation bind the retrocessionaire Novae.

This decision, however, was based on the very specific facts of the case. Firstly, as noted above the Retrocession was only one step removed from the primary insurance. Critically, it was a facultative contract that was expressly intended to follow the "original policy wording" rather than the TM Reinsurance and which identified "Tesco" as the insured, as opposed to Tokio Marine. Thus whilst Hamblen J agreed with Tokio Marine that "follow settlement clauses often refer to an obligation on a reinsurer to follow his immediate reinsured", in this case he found that this was overridden by the clear language of the Retrocession⁴⁴⁹. Moreover, the "follow the settlement" clause in *Tokio Marine* was not the same as the "double proviso" clause used in *Hill v Mercantile*. The latter expressly requires the reinsured to prove that the claim is covered by both the insurance and the reinsurance. In *Tokio Marine*, the "follow the settlement" clause in the Retrocession that was similar to the one examined in the case of *Insurance Company of Africa v Scor Reinsurance*⁴⁵⁰, described by Hamblen J as the

⁴⁴⁸ ibid para 111.

⁴⁴⁹ ibid para 69-70.

⁴⁵⁰ Insurance Company of Africa v Scor Reinsurance [1985] 1 Lloyd's Rep 312.

"unqualified" clause. The judge felt bound to follow the finding in the case of *Generali*⁴⁵¹ that under such a clause the determination of the claim by the primary insurer establishes liability under both the primary insurance and the reinsurance (this provides the ratio for point (v) above).

Some may argue that *Hill v Mercantile* and *Equitas* can be distinguished on the basis that the losses could not be tracked down to the original insurance because they had been through the LMX Spiral. However, the case of *CX Re* concerned an XL reinsurance programme covering US liability policies that had no connection to the LMX Spiral⁴⁵² and yet it follows *Hill v Mercantile* and *Equitas* by finding that the relevant settlement to establish liability is that of the inward reinsurance. A key differentiating factor between those cases and *Tokio Marine* was the type of follow the settlement clause being used. Another significant factor was the much greater distance between the XL reinsurer and the primary insurer. The more remote the XL reinsurance, the more difficult it is to connect legal findings made at the level of the primary insurance and liability under the XL reinsurance.

Difficulties in tracking down risks arise in XL reinsurance towers whether or not a spiral develops. This seems unsurprising when considering the "complex webs of reinsurance" that are created within reinsurance markets. In the context of a large number of overlapping contracts with remote connections to the underlying loss, the current legal view that every single one of the reinsurances is, in fact, a further insurance of the subject matter of the original insurance seems archaic. It is worth pointing out here that the only recent case on the nature of reinsurance was *WASA v Lexington* which concerned a proportional facultative reinsurance and not an XL treaty. XL reinsurance, by its very nature, makes the underlying risk more remote to the reinsurers sitting on top of the reinsurance tower. There are situations as in *Tokio Marine* where the XL reinsurance does, in fact, connect to the primary insurance but these are unusual, as Hamblen J himself pointed out.

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⁴⁵¹ Assicurazioni Generali SpA v CGU International Insurance plc ("Generali") [2004] 2 All ER (Comm) 114.

⁴⁵² The XL programme covered a worldwide casualty book of business for the years 1976 to 1983. Syndicates were involved which suggests the programme made its way to the London XL Market but this was before the critical years when the LMX Spiral developed.

8.1.2 A Typical XL Contract

In order to consider the issue we have just raised, we need to understand exactly how an XL reinsurance contract works. There is, at Appendix C of this thesis a typical slip policy and abbreviated policy wording from the London XL Market in the heydays of the LMX Spiral (the **Example**). The Example does not set out a full contract wording but it contains some of the key information we require for our analysis. The Example was the one attached to the LMX Working Party Report⁴⁵³ which is dated 1988. As such, it may be a little outdated but it still reflects current practices as regards XL reinsurance. Wordings may evolve but XL reinsurance has not changed fundamentally. It is also important for us to review a wording from that era since in this thesis we set out to analyse the LMX Spiral. Our analysis of the Example will therefore inform us as regards XL reinsurance generally, not just XL reinsurance as it was in the late 1980s.

For ease of reference, some of the key clauses of the Example are set out below in italics, together with comments explaining the overall structure of a typical XL Reinsurance.

"STANDARD XL REINSURANCE WORDING

REINSURED:

(As Appropriate - the Reinsured)"

The purpose of the above clause is self evident. Any XL slip policy will then set out some of the key parameters of the risk, including the **period** of cover (usually 12 months) the **type** (XL) the **territorial scope** and the number of **reinstatements**, as shown in the Example.

"CLASS:

To indemnify the Reinsured for all losses of whatsoever nature in respect of all business allocated to their (sic) Casualty Account."

In the Example, what is called "Class" is also what is often termed the "Reinsuring Clause" of the "Insuring Clause" in other wordings. This is a key provision as it is the basis upon which the reinsuring liability arises.

⁴⁵³ LMX Working Party (n 108) Appendix 4.

"LIMIT:

£125,000 or US or C\$250,000 each and every loss

IN EXCESS OF AN ULTIMATE NETT LOSS OF

£75,000 or US or C\$150,000 each and every loss."

The limit, also sometimes known as Sum Insured is, as we have seen, a key parameter in XL reinsurance as it caps the reinsurer's liability. In the Example, the excess is also set out in the same clause and again, this is a key piece of information as is represents the bottom line below which there will be no liability for the reinsurer.

PREMIUM

Premium hereon shall be calculated at 10.20% of the Reinsured's Nett (sic) Premium Income on the business protected "accounted for" during the period of this reinsurance. Subject, however, to a Minimum and Deposit Premium of £10,938 plus US\$70,000 payable in four instalments as follows:

25% at 1.1.88

25% at 31.3.88

25% at 30.6.88

25% at 30.9.88

To be adjusted no later than 90 days after expiry.

The premium is, of course, a key element of an XL reinsurance agreement. The above shows that the premium charged in this case was a premium based on the reinsured's earnings during the period of the reinsurance subject to a minimum deposit as set out above. This is one of the many ways in which a premium could be charged at the time of the LMX Spiral⁴⁵⁴.

The Slip in the Example then lists General Conditions by reference to standard clauses in use in the London XL Market at the time. This includes the Ultimate Net Loss (UNL) Clause (UNL Clause) which is set out below.

⁴⁵⁴ See section 2.2.4 for more information on how premium could be charged in XL reinsurance.

"ULTIMATE NETT (sic) LOSS CLAUSE.

This is defined as the sum actually paid by the Reinsured in settlement of losses or liability after making deductions for all recoveries, all salvages, and all claims upon other reinsurances, whether collected or not, and includes all adjustment expenses arising from the settlement of claims (other than employees' salaries and the Reinsured's office expenses)."

The UNL is a standard clause that can be found in most XL Reinsurance. It is key in understanding how XL Reinsurance works as it is the clause that delineates the liability of the reinsured. The UNL Clause is discussed further below.

The Example then sets out a number of clauses from the wording, including the following:

"Definition of "Each and Every Loss"

Each and every loss and/or occurrence and/or catastrophe and/or disaster and/or calamity and/or series of losses and/or occurrences and/or catastrophes and/or disasters and/or calamities arising out of one event."

The above is a typical aggregation clause. Its aim is to clarify how a multitude of losses potentially covered by the reinsurance may be aggregated together until the total sum reaches the excess point. In this particular case, aggregation is only allowed for losses/occurrences/catastrophes/disasters/calamities or series of any of those provided they all arise out of the same "event"⁴⁵⁵.

What does our Example tell us about a typical XL reinsurance? The reinsurance provides cover for losses arising from the reinsured's casualty account that exceed £75,000, up to a cap of £125,000. The policy also contains temporal and geographical limits so as to restrict the reinsurer's exposure. The "Each and Every Loss" clause indicates how the losses may be aggregated and the UNL clause sets out how it is to be computed. Neither clause however tells us what the "loss" actually is. We therefore need to rely on the clause headed "Class" that

⁴⁵⁵ What constitutes an event is a complex area of reinsurance law which is outside the scope of this thesis.

refers to losses suffered by the reinsured arising from its casualty account. From this, we can deduct that the policy works as follows: the reinsured's loss materialises when he receives a number of claims from his own casualty policyholders. The net amount of those claims will be aggregated as per the "Each and Every Loss" clause and calculated in accordance with the UNL Clause. Once those aggregated claims exceed £75,000, presuming they otherwise fall within the terms of the reinsurance, the reinsured can seek to recover from its XL reinsurer. Once the aggregated claims reach the upper limit of £125,000 then there is no more cover under this particular policy.

Casualty insurance is usually liability insurance but this is irrelevant for our analysis of XL Reinsurance. If the cover provided were first party insurance, such as property, the Example would work in exactly the same way. The word "casualty" in the clause titled "Class" could be replaced by the word "property" so that it would read: "To indemnify the Reinsured for all losses of whatsoever nature in respect of all business allocated to its Property Account." The loss would materialise as the multitude of claims received by the reinsured from the policyholders in his property account. The point is, even if the law regards the "loss" covered as being somehow the original loss, in reality the loss reaches the XL reinsurance layer indirectly through the medium of claims being made against the reinsured. Is this still the same "loss", as some say, "looking for a home", or does the loss undertake some form of transformation in the process?

8.1.3 A Mathematician's Perspective

Reinsurance spirals have been studied by a number of professionals, including the American mathematician Dr Thomas Kabele. He published an article in August 2000⁴⁵⁶ touching upon a number of issues concerning reinsurance, one of which was reinsurance spirals. His article refers to both the PA Spiral and the LMX Spiral but he rightly points out that reinsurance spirals, which he calls "circles", may develop in any reinsurance market. His article refers to the Walker Report⁴⁵⁷ and some of the case law referred to earlier in this thesis⁴⁵⁸. Thomas Kabele notes some of the Spiral Effects, most particularly the magnifying effect

⁴⁵⁶ Thomas G Kabele, 'Reinsurance Problems' http://kabele.net/papers.html (11 August 2000)

⁴⁵⁷ Walker (n 40).

⁴⁵⁸ Including Hill v Mercantile (n 78) and Berriman (n 241).

and the fact that within a reinsurance spiral, the layering and Sum Insured become meaningless. The point of significance for our purposes, however, is his proposed solution to prevent the development of future reinsurance spirals. His proposal is perfectly logical if one considers that the loss being reinsured is the original risk. Being a mathematician, Dr Kabele simply seeks to give effect, in practice, to the legal principle by ensuring the XL reinsurances do provide cover directly for the underlying loss. The fact that his proposed solution does not work illustrates neatly why, in reality, XL reinsurance is not a further insurance of the subject matter of the original insurance policy.

In his article, Dr Kabele reviews a number of standard XL reinsurance clauses, described as the "LMX PA.1.1992" and concludes that the wording does not achieve the intended result. In his own words: the "author believes that the circle arises from what is not in the LMX.P.A.1.1992. The author could find no clause which ties the reinsurance claims-amounts into the primary claims-amounts."⁴⁵⁹ He therefore suggests some changes to make it clear that the reinsurance provides cover for the underlying loss. These are set out below⁴⁶⁰.

"Article 6. Reinsuring Clause. The Agreement subject to its provisions is to indemnify the Reinsured for all losses which may be sustained by the Reinsured in excess of an Ultimate net Loss of the Retention specified in the Schedule attached hereto . . ."

Dr. KABELE: "In Article 6, replace "for all losses" with "for the cedent's share of all primary losses.""

Article 9. Ultimate Net Loss Clause. The term "Ultimate Net Loss" shall mean the sum **actually paid** by the Reinsured in settlement of **losses** or liability after making deductions for all recoveries, all salvages and all claims upon other

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⁴⁵⁹ Kabele (n 456) p 9.

⁴⁶⁰The wording of the policy relied upon by Thomas Kabele is set out in the order in which it would appear on the policy, and the comments he makes are set out directly below the relevant clause. This does not follow the presentation of those arguments in his article but this makes our analysis easier.

reinsurances whether collected or not and shall include all adjustment expenses arising from the settlement of claims. (...)

Dr. KABELE: "Article 9 should be improved. It should say "in settlement of the cedent's share of the original primary loss amounts or liability.""

"Article 12. Settlements Clause. All **loss settlements** by the Reinsured including compromise payments shall be unconditionally binding upon Reinsurers provided that such settlements are within the terms and conditions of the Original Policies [meaning primary and reinsurance assumed business] ... and Reinsurers shall pay the amounts due from them upon presentation of reasonable evidence of the **amounts paid** by the Reinsured. (emphasis added)"

Dr. KABELE: "That clause needs clarification. It should say "Reinsurers shall pay the amounts due from them upon presentation of reasonable evidence of the amounts paid for the cedent's share of the original primary loss." The first sentence should say "within the terms and conditions of the Original primary policies and reinsurance contracts – except that "circle" claim amounts resulting from the same primary claim being ceded and reassumed shall be regarded as zero.""

Whilst Dr Kabele is not a lawyer and therefore not the best qualified person to comment on contract wording, his viewpoint is of interest. He is clearly seeking to propose a practical solution to what he considers to be a real problem faced by reinsurance markets. His idea does not work under English law partly because it falls foul of the principle of indemnity. We have seen that this principle requires the XL reinsurer to indemnify the reinsured (**Reinsured A**) for his loss. It is irrelevant for the purposes of the XL reinsurance whether another indemnity has already been paid to another reinsured (**Reinsured B**) as regards the same insured event. If the reinsurer does not indemnify Reinsured A for the entirety of Reinsured A's loss under the terms of the XL reinsurance, then the reinsurer is in breach of the XL agreement. The loss suffered by Reinsured A is not reduced by any payment made to Reinsured B for the simple reason that it is not the same loss.

Dr Kabele further proposes to include a clause in reinsurances requiring all claims to be "traced to and measured by the primary claim amounts, even claims covered by aggregate or catastrophe covers" to ensure that the gross claim amount does not exceed the "primary claim-amount" or the "cedent's share of the primary claim-amount". The clause would also specify that "the claim amount [would not] increase as it passes from cedent to cedent". This is not, of course, how reinsurance works. We have seen earlier that an increase in the gross claim value is a normal feature of reinsurance⁴⁶¹. This is because two claims (one by the insured and one by the primary insurer to its reinsurer) will be made as regards the same loss and these necessarily overlap. This aspect of reinsurance is inevitable and generally not considered to be detrimental unless the number of claims goes to such extremes that, as was the case in the LMX Spiral, the gross claim amount ends up bearing no resemblance to the original loss figure.

As noted above, Dr Kabele's ideas are interesting because they show how reinsurance would work if what was being reinsured truly were the subject matter of the underlying insurance. Dr Kabele's purpose is to somehow connect the amount of the claim made at the reinsurance level with the actual loss suffered by the primary policyholder. His suggestions are unsuitable because they treat reinsurance as a form of co-insurance. Reinsurance, in reality, is not a mean to split the underlying loss horizontally but it is a way to share the loss vertically, causing several overlapping claims to be made as regards the same loss. Dr Kabale's article illustrates with some cogency how the traditional legal view that reinsurance is a further insurance of the underlying subject matter is untenable. It is, at best, a legal fiction.

8.2 XL Reinsurance Wordings: the Case Law

As noted on several occasions in this thesis XL reinsurance is a relatively new form of reinsurance. English Courts, however, have had to analyse XL wordings. How did the Courts reconcile the traditional view of reinsurance as further insurance and the reality of the "loss" reaching the reinsurance in the form of "claims" against the reinsurer? This is explored below.

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⁴⁶¹ See for instance Professor Bain's analysis in section 4.4 of this thesis.

8.2.1 Charter Re v Fagan

There are very few cases where English Courts have had the opportunity to opine specifically on issues concerning XL reinsurance wording. One of the few cases that focuses on XL wording is Charter Reinsurance Company Ltd v Fagan⁴⁶², which went all the way to the House of Lords. The issue in this case was whether the word "actually" in the UNL meant that the reinsured Charter Re had to have paid its own policyholders before he could claim under the relevant XL reinsurance. The reinsurers, a number of Syndicates represented by Fagan, contented that the words "actually paid" in the UNL created a condition precedent to liability. Charter Re was in liquidation and therefore unable to make the requisite payments. The House of Lords found against the reinsurers and held that Charter Re could make a claim under the reinsurances. Based on a close analysis of the wording (the Charter Reinsurance), its history and its commercial background, the Lords concluded that the primary purpose of the UNL was not to require payment by the reinsured but to provide a measure of the indemnity payable. This was an important decision for the market at the time because it came just after the collapse of the LMX Spiral when many reinsurers were having financial difficulties and the UNL Clause was standard wording used in most XL reinsurances. A finding that actual payment by the reinsured was required would have brought many recoveries to a standstill. For our purposes, the decision is significant because their Lordships and the preceding courts analysed the Charter Reinsurance in great detail.

Before going any further, it is worth setting out the key clauses that are at the heart of the decision. Whilst the headings and configurations of the clauses in the Charter Reinsurance are different from the Example, it will be seen that both reinsurances are in fact nearly identical.

"1. REINSURING CLAUSE

This Reinsurance is to pay all losses howsoever and wheresoever arising during the period of this Reinsurance on any Interest under Policies and/or Contracts of Insurance and/or Reinsurance underwritten by the Reinsured in their Whole Account.

Subject however to the following terms and conditions.

⁴⁶² Charter Re v Fagan (n 76).

2.(a) LIABILITY CLAUSE

The reinsurers shall only be liable if and when the Ultimate Net Loss sustained by the Reinsured in respect of interest coming within the scope of the reinsuring Clause exceeds £3,000,000 or U.S. or Can. \$6,000,000 each and every loss and/or Catastrophe and/or Calamity and/or Occurence and/or Series of Occurences arising out of one event and the reinsurers shall thereupon become liable for the amount in excess thereof in each and every loss, but their liability hereunder is limited to £2,000,000 or U.S. or Can \$4,000,000 each and every loss and/or Catastrophe and/or Calamity and/or Occurence and/or Series of Occurences arising out of one event.

(...)

ULTIMATE NET LOSS CLAUSE

- (c) The term 'Net Loss' shall mean the sum actually paid by the Reinsured in settlement of losses or liability after making deductions for all recoveries, all salvages and all claims upon other Reinsurances whether collected or not and shall include all adjustment expenses arising from the settlement of claims other than the salaries of employees and the office expenses of the Reinsured.
- (d) All Salvages, Recoveries or Payments recovered or received subsequent to a loss settlement under this Reinsurance shall be applied as if recovered or received prior to the aforesaid settlement and all necessary adjustments shall be made by the parties thereto. Provided that nothing in this clause shall be construed to mean that losses under this Reinsurance are not recoverable until the Reinsured's Ultimate Net Loss has been ascertained."

Lord Mustill, who gave one of the two speeches that comprise the judgment, analysed the Charter Reinsurance as follows:

Clause 1. Lord Mustill held that the "Reinsuring Clause", together with other terms of the policy, described the nature and geographical scope of the "perils insured against". The Charter Reinsurance provided "Whole Account" cover which is of a particularly wide ambit. Lord Mustill explained that the Charter

Reinsurance covered losses by perils insured under the "original policies" provided these fell within the scope of the period clause.

Clause 2. Lord Mustill pointed out that this was a key clause because it helped "establish the measure of indemnity" once a loss by an insured peril has materialised. Each sub-clause had a particular purpose, as set out below.

Clause 2(a). His Lordship described this clause as the one that fixed "the level at which financial prejudice suffered by Charter under the inward policies in consequence of a loss by a peril insured under [the Charter Reinsurance] cause[d] a liability to attach." This is, in simple terms, the layering. The loss, calculated in accordance with the UNL, had to exceed £3 million to fall under the terms of the Charter Reinsurance, but cover was only provided up to a maximum of £2 million.

(...)

Clause 2(c). Lord Mustill found that this clause gave "meaning to clause 2(a) by defining ultimate net loss". Its purpose was to make it clear that the loss was to be calculated net of all recoveries, salvage and the like "when ascertaining whether, and if so by how much, the relevant liabilities of Charter cross the boundary into the layer covered by [the Charter Reinsurance]." It is interesting here that Lord Mustill refers to the liabilities of Charter Re and not its losses.

Clause 2(d). His Lordship then commented that the first sentence of clause 2(d) simply aimed to make it clear that calculations concerning the UNL were provisional and open to re-computation should the need arise. The second sentence specified that once it reached the bottom of the layer covered by the policy (£3 million in this case), the UNL became recoverable "even if a subsequent recalculation when all the figures are in may lead to an upward or downward adjustment, or even to the elimination of any recovery at all."

Lord Mustill's overall conclusion was that the policy required the satisfaction of only two conditions before an indemnity fell due: (i) the occurrence of an insured event within the period of the policy (Clause 1) and (ii) a loss of sufficient magnitude for the UNL to breach through the relevant layer (Clause 2).

The decision was based on the premise that the Charter Reinsurance was a further insurance on the original subject matter rather than a form of liability insurance. Lord Mustill contended that this added strength to his argument. The fact that the Charter Reinsurance covered the underlying risk in his view meant that the liability of the reinsurers could not depend on any actual payment made by Charter to its own policyholders. Conversely, Lord Mustill recognised that there was some doubt concerning the nature of reinsurance when he opined that this case was "not the place to discuss the question, perhaps not yet finally resolved, whether there can be cases where a contract of reinsurance is an insurance of the reinsured's liability under the inward policy or whether it is always an insurance on the original subject-matter, the liability of the reinsured serving merely to give him an insurable interest."⁴⁶³

The other significant speech, by Lord Hoffman, is not so pertinent because it focuses on what his Lordship considers to be the meaning of the words "actually paid". Lord Hoffman concurs with Lord Mustill that no payment is required to trigger the reinsurers' duty to indemnify under the Charter Reinsurance. He only refers to insurance as being an independent contract on the same subject matter as the primary insurance in the context of the re-telling of the history of reinsurance to set the development of the UNL clause in context.

On a cursory reading, *Charter Re v Fagan* seems to reinforce the view that XL Reinsurance works in the same way as the traditional forms of proportional reinsurance. The decision is clearly based on the premise that the Charter Reinsurance is a further insurance of the subject matter of the primary insurance. However, their Lordships did not need to delve into the issue of the true nature of XL reinsurance to deal with the very specific point raised in the case.

It is submitted that, on a closer look, *Charter Re v Fagan* supports an alternative view of XL Reinsurance. Firstly, the House of Lords did not specify the nature of the risk being reinsured. Lord Mustill noted that the payment by the reinsured was not the insured event under the Charter Reinsurance⁴⁶⁴. Instead, he said the policy covered "the occurrence of a casualty suffered by the subject-matter insured through the operation of an insured peril". It is correct that the loss at the XL reinsurance level will only materialise if the peril insured under the underlying insurance, an earthquake for example, does occur. The point that is

⁴⁶³ ibid 416.

⁴⁶⁴ ibid.

not addressed in his Lordship's judgment is the mechanism through which the "casualty suffered" reaches the XL reinsurer. The original loss itself does not make its way up the chain of reinsurances. As we have seen, this occurs through claims being made by reinsureds to their reinsurers. The judgment therefore sets out the parameters for a loss to be covered under the Charter Reinsurance but it does not consider what the very essence of that loss might be.

8.2.2 Further Case Law on XL Reinsurance

Whilst few English law judgments contain detailed analysis of XL reinsurance wordings, what it clear from a number of cases is that, when considering liability under XL contracts, the focus of the court has been on the liability of the reinsured and not on the underlying loss.

We have already set out how the findings of Hill v Mercantile465 and Equitas466 make it clear that the relevant loss at the reinsurance level is the liability of the reinsured and not the original loss suffered by the original insured. This view was endorsed in the case of IRB Brazil v CX Re⁴⁶⁷. This was an appeal of an arbitration award on a number of issues concerning an XL reinsurance programme. Burton J found that the arbitrators had not erred in law as regards the "follow the settlement" clause since they had followed the relevant principles set out in case law, including Hill v Mercantile and Equitas. Burton J therefore confirmed that to recover under an XL reinsurance that contains the double proviso "follow" clause, a reinsured only needs to prove that its own liability under the inward claims has been established on the balance of probabilities. The case also confirms that proof of loss is established on the "basis of the claim as compromised"468 and therefore there is no need to re-investigate the underlying facts. The case therefore very clearly draws the line below the inward claim as settled by the reinsured. Burton J also endorsed the following passage from the arbitrators' award:

⁴⁶⁵ Hill v Mercantile (n 78).

⁴⁶⁶ *Equitas* (n 1).

⁴⁶⁷ CX Re (n 424).

⁴⁶⁸ This is often referred to as the "arguable claim" after the case when this test was first articulated by Mr Kealey QC in *Assicuraziono Generali SpA v CGU International Insurance plc* [2003] Lloyd's Rep IR 725 (first instance decision) affirmed on appeal (n 451).

"...in the present context, being excess of loss reinsurances, the "perils insured against" are the reinsured suffering a claim (from the portfolio of business protected) in excess of the priority..."

Allegedly, the quote was included in the context of a discussion on what constituted a "single event" for the purposes of the XL programme. The arbitrators' comments are therefore probably "obiter dicta" in the context of the judgment. The point of interest is that Burton J did not seek to contradict the arbitrators' clear statement that the peril insured against in XL reinsurance is not the underlying loss, but the risk of the reinsured suffering loss through claims from its policyholders.

Other cases too point to the liability of the reinsured as being the focus of the court's attention when deciding on liability issues under XL reinsurances. Thus in North Atlantic v Bishopsgate⁴⁶⁹, the court had to consider exactly when the excess point had been reached⁴⁷⁰. The reinsured had to establish that the excess point had been reached prior to the expiry of the relevant limitation period. In theory, there are several possibilities: from the very latest, being actual payment by the reinsured; to the earliest possible trigger, being the occurrence of the peril insured against. Timothy Walker J held that the issue had to be determined by reference to the date when the reinsured's liability to pay the inward claim had been established. His decision was based on the fact that under English law, for time to start running, the cause of action of the claimant has to be complete and it was established law that a reinsured's cause of action arises as soon as its liability has been ascertained by means of a judgment, arbitral award or agreement⁴⁷¹. The focus, therefore, was on the liability of the reinsured. The parties never contemplated the possibility that the claims sitting below the inward layer may have any relevance. This makes sense given the mechanics of XL reinsurance: the reinsured can only claim under the reinsurance when it has suffered losses and those losses take the form of its liability to pay claims to its policyholders. The fact that time starts running when his liability has been

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⁴⁶⁹ North Atlantic Insurance Co Ltd v Bishopsgate Insurance Ltd [1998] 1 Lloyd's Rep 459.

⁴⁷⁰ The case also raised issues of construction concerning an adjustable net premium income clause which are irrelevant for the purposes of this thesis.

⁴⁷¹ See for instance *In re Eddystone Marine Insurance Co., ex parte Western Insurance* Co. [1892] 2 Ch. 423; *Daugava Versicherungs und Transport A/G v. Henderson* (1934) 49 LI L Rep 252 and *Halvanon Insurance Co. Ltd. V Compania de Seguros do Estado de São Paulo and Others* [1995] L.R.L.R. 303.

ascertained is a legal acknowledgement that the relevant trigger for the reinsurance to attach is the reinsured's liability and not the occurrence of the peril insured against.

Another enlightening case concerning the workings of XL insurance is *Teal v Berkley*⁴⁷², a recent decision of the Supreme Court on allocation of losses. Teal was seeking recoveries under a "top and drop" policy that sat on top of three XL insurances, all four policies underwritten by Teal. The issue was that some of the claims made to Teal were covered under the XL insurances but not the "top and drop" policy because the latter excluded claims from the USA. The defendants reinsured 50% of the "top and drop" policy. The Supreme Court affirmed the decisions made in the lower courts, that Teal could not chose the order in which it would allocate losses to the various insurances so as to maximise recovery. Instead, the losses would be allocated in the order that Teal's liability had been ascertained. In this case, this meant Teal had to pay for the non-US claims that were first ascertained and fell within the XL insurances but it could not recover for the US claims that were ascertained later and which would have fallen under the "top and drop" cover had they not been excluded⁴⁷³.

As with *North Atlantic v Bishopsgate*, this decision clarifies the exact point at which the loss attaches to the relevant XL insurance layer and again, this was found to be the point when the insured's liability is ascertained. It is interesting to note here that Teal was not a reinsurer but an insurer, providing XL cover above a self insured retention and a primary insurance layer placed with Lexington. Teal, therefore, was not one step removed from the loss as XL reinsurers typically are. Yet despite the relative closeness with the underlying risk, still the relevant trigger for liability to attach was found to be the point when Teal's liability to his policyholder was ascertained. Again, this is logical given how XL reinsurance works: Teal had to suffer a loss itself before it could claim under its own reinsurance.

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⁴⁷² Teal Assurance Co Ltd v W R Berkley Insurance (Europe) Ltd and Another [2013] UKSC 57, [2014] Lloyd's Rep IR 56.

⁴⁷³ Although the context is different, this decision is in line with *Cox v Bankside* (n 289), where the Court of Appeal confirmed that recoveries from the E&O insurers of the various Syndicates being sued by Names would follow the order in which the claims had been established by a Court judgment.

One case seems to contradict our analysis is Allianz v Frankona (the "Treasure Bay")474. The point in dispute in this case was whether a US\$5 million deductible had to be applied to the gross settlement figure (US\$17,857.90) or the reinsured Allianz's 45.238% share of the settlement figure (US\$8,078,557) under an XL reinsurance contract. The Court decided that the deductible ought to be applied to the gross settlement figure, allowing Allianz to recover the highest amount of US\$5, 816,657.74. The decision was partly based on a review of the "follow the settlements" clause which stated "To follow the original settlement of the reassureds in all respects (...) but only to pay claims in excess of USD 5,000,000 each vessel, each accident". A key issue for the court was whether the word "claims" referred to (i) the original claims of the insured on its insurers or (ii) the claims by the reinsured Allianz on its reinsurer Frankona. If the XL reinsurance covered the Allianz' liability, then option (ii) would have to be the correct one. The judge, Christopher Clarke J, concluded instead that the "claim" being referred to was the original claim. His decision, however, was based on the fact that in all the 80 declarations that had preceded this one as between the same parties, references to "claim" were understood to refer to the original claim. Interestingly, the judge commented that he would have hesitated to reach this conclusion had there not been such a history between the parties. Therefore this decision is very much based on its own facts.

The same can be said about the recent case of *Tokio Marine* which is discussed at length earlier in this chapter⁴⁷⁵. Hamblen J found that the retrocessionaire was in fact bound to follow the settlement of the primary insurer (ACE) rather than that of the reinsurer (Tokio Marine) that sat in between the primary insurance and the retrocession. However, the judge himself acknowledged that this aspect of the decision is based on its unusual facts (a "back to back" facultative XL retrocession) and on the clear wording of the relevant clauses. Moreover, the first finding from Hamblen J is that the XL Retrocession reinsured the Tokio Marine in respect of its "liability" to its policyholder ACE which suggests that in his view the retrocession was akin to liability insurance rather than being an independent contract covering the subject matter of the primary insurance contract.

⁴⁷⁴ Allianz Marine Aviation v GE Frankona Reinsurance Ltd (the "Treasure Bay") [2005] EWHC 101 (Comm), [2005] Lloyd's Rep IR 437.

⁴⁷⁵ Tokio Marine (n 447). See section 8.1.1.

To conclude, there is a growing body of cases on XL reinsurance that is consistent with our description of the workings of XL contracts where the focus is on the liability of the reinsured under the inward policies.

8.2.3 Concluding Remarks

XL reinsurance contracts make the risk more remote which puts into the question the traditional view of reinsurance as a further insurance of the subject matter of the primary insurance. When analysing XL reinsurance wordings it seems undeniable that what is being covered is, in fact, the liability of the reinsured to its policyholders. This is reflected in the case law concerning XL reinsurance wordings as English Courts cannot give complete disregard to the realities of the contracts they are dealing with. Yet none of the cases reviewed in this chapter go as far as providing a new analysis of the nature of XL reinsurance.

9 The Nature of XL Reinsurance

Despite our findings in the previous chapter of this thesis, the current legal view remains that all reinsurances are a further independent insurance contract of the underlying risk and reinsurers are legally deemed to provide cover for the underlying risk, as opposed to reinsuring the liabilities of the reinsured. In this chapter we make the case for an alternative view of XL reinsurance.

9.1 Challenges to the Traditional View

9.1.1 Facultative Reinsurance as Liability Insurance

English Courts consider that reinsurance cannot be equated with liability insurance⁴⁷⁶. This may work in the context of the more traditional forms of proportional reinsurance where the reinsurer actually shares the risk with its reinsured. However, this view seems out of step with the ways in which XL reinsurance markets operate as described in the previous chapter.

A number of leading academics have raised doubts about the suitability of this legal doctrine. Some of these criticisms have been set out in the first chapter of this thesis, including comments from Professor Robert Merkin, O'Neill and Woloniecki, McGillivray and Dr Özlem Gürses. Those doubts concern not only the suitability of the legal view in today's complex international reinsurance markets but also the legal grounds upon which the legal fiction rests. Thus in her book "Reinsuring Clauses", which is based on her doctoral thesis, Dr Gürses makes a compelling argument that facultative reinsurance is in reality a form of liability insurance.

She points out that:

1. This view was more or less endorsed by English courts in a couple of cases, namely *DR Insurance Co v Seguros America Banamex*⁴⁷⁷, where the court rejected the traditional view of reinsurance as described above and

⁴⁷⁶ See section 2.3.1 of this thesis for further discussion on the point.

⁴⁷⁷ DR Insurance Co v Seguros America Banamex [1993] 1 Lloyd's Rep 120.

- Home Insurance Company of New York v Victoria Montreal Fire Insurance Company⁴⁷⁸ where the court described reinsurance as liability insurance.
- 2. In reinsurance contracts there is no **privity of contract** between the assured and the reinsurer. This means that the original insured has no cause of action against the reinsurer and, by the same token, the reinsurer cannot obtain a declaration of non liability as regards the reinsured's liability to the original policyholder⁴⁷⁹.
- 3. The reinsured has no **insurable interest** in the subject matter of the original insurance. As noted earlier in this thesis, the case law treats the reinsured's liability under the inward reinsurance as its insurable interest⁴⁸⁰. In line with the argument also deployed in this thesis, Dr Gürses considers that, in truth, what is reinsured under a facultative reinsurance is the reinsured's liability⁴⁸¹.
- 4. Dr Gürses further points out that if reinsurance were a further insurance of the original subject matter, then arguably it would be a form of **co-insurance** or **double insurance**. The fact that this is not the case proves that the reinsurance cannot be intended to provide cover for the original risk⁴⁸².
- 5. The early cases that established reinsurance as a further insurance were decided at a time when **legislation prohibited reinsurance**. Parties were therefore actively seeking to draft reinsurance contracts as "further insurances" to ensure they would be legally enforceable⁴⁸³.
- 6. Dr Gürses notes that under current reinsurance law the reinsured's **cause of action** against the reinsurer arises only once the reinsured's liability to its policyholder has been ascertained: something we have explored in the previous chapter of this thesis. She argues that therefore the reinsured is

⁴⁷⁸ Home Insurance Company of New York v Victoria Montreal Fire Insurance Company [1907] AC 59.

⁴⁷⁹ Dr Özlem Gürses, 'Reinsuring Clauses' (1st edition, 2010) 2.04-2.07.

⁴⁸⁰ See section 2.3.2 of this thesis.

⁴⁸¹ Gürses (n 479) 2.53-2.59.

⁴⁸² ibid 2.65-2.66.

⁴⁸³ ibid 2.72. Dr Özlem Gürses points out that in *Delver v Barnes* (n 65), the policy was a marine policy and at the time the Marine Insurance Act 1745 section 4 banned marine reinsurance.

- only concerned with the original loss because it established his liability, rather than because he has an insurable interest in the loss.⁴⁸⁴
- 7. One of the key factors leading to the conclusion that reinsurance was a further insurance of the original loss in *Wasa v Lexington* was the House of Lord's **construction of the clauses** in the reinsurance titled "INTEREST" and "SITUATED", which both referred to the original insured's property rather than the liability of the reinsured. Dr Gürses disagrees with this approach, arguing that the above clauses were not meant to define the subject matter of the reinsurance. She also points out that the review of the reinsurance as a whole shows the parties intended to achieve back to back cover. She emphasizes that when reviewing a reinsurance it is important to consider the entire wording and not just clauses in isolation.
- 8. When computing limitation period in reinsurance, time starts running from the date when the reinsured's liability has been established and quantified. Dr Gürses believes that if the reinsurance provided cover for the underlying loss, time would start running from the same date for both the original insured and the reinsured⁴⁸⁵.
- 9. Finally, Dr Gürses notes that if a reinsurance really were to be a further insurance of the original risk, then a cancellation of the original insurance contract would not impact on the reinsurance. By contrast, because reinsurance is a form of liability insurance, such a cancellation automatically renders the reinsurance redundant⁴⁸⁶.

All of the above arguments are valid in the context of XL reinsurance and the author of this thesis gratefully adopts them. Dr Gürses' analysis, however, focuses on facultative reinsurance and nowadays XL reinsurances tend to be treaties rather than facultative contracts⁴⁸⁷. As she points out, in proportional facultative reinsurance, there is a presumption of back to back cover, as was the case in *WASA v Lexington*. This presumption does not usually apply in XL

⁴⁸⁴ ibid 2.73.

⁴⁸⁵ ibid 2.75.

⁴⁸⁶ ibid 2.78.

⁴⁸⁷ There are exceptions. For instance in *Tokio Marine* (n 447), the XL Retrocession was facultative.

reinsurance⁴⁸⁸. This was made clear in the case of Axa Reinsurance (UK) Ltd v Field⁴⁸⁹ where Lord Mustill in the House of Lords disagreed with the views taken by the Court of Appeal when he stated:

"[There] is an assumption that where a direct insurer takes out reinsurance, and where both policies contain provisions enabling the amount of losses to be added together, the parties are likely to have intended their effect to be much the same. This assumption may very well be correct where the reinsurance is of the proportionate kind, under which the reinsurer is sharing the risk assumed by the direct insurer. In such an event it is indeed likely that the treatment of multiple losses, and hence the outcome of the parallel contracts, was meant to be the same. But where a reinsurer writes an excess of loss treaty for a layer of the whole account (or the whole of a stipulated account) of the reinsured I see no reason to assume that aggregation clauses in one are intended to have the same effect as aggregation clauses in the other. The insurances are not in any real sense back-to-back. Thus, for example, a direct insurer may issue many policies on terms as to deductible and limit of liability which he can fix according to his knowledge of the policyholders and of the likely size and incidence of the kind of casualties which are insured. (...)

The strategy of the underwriter who takes a line on a layer of an excess of loss treaty is not necessarily the same. He cannot rate the individual policyholders and individual risks directly, and must take a much broader view. For him, the relationship between the inward and outward policies is essential to profitability."

The above quote highlights the disconnection between the primary insurance and the XL reinsurance that will apply in most situations. It also explains why in such a case the XL reinsurer necessarily focuses on the inward reinsurance rather than the primary insurance.

⁴⁸⁸ Again *Tokio Marine* (n 447) is an exception: the XL retrocession was clearly intended to be "back to back" with the reinsurance.

⁴⁸⁹ Axa Reinsurance (UK) Ltd v Field [1996] 1 WLR 1026.

Because Dr Gürses wrote about proportional reinsurance, her theory does not fully resolve our issue. We still need to clarify the nature of the loss being covered by an XL reinsurance to assess whether XL reinsurance ought to be equated with liability insurance.

9.1.2 The Case Law Terminology is Confused

We have established in the previous chapter that the subject matter of an XL reinsurance is not a direct share of the underlying loss. This is illustrated by Dr Kabele's flawed suggestion. Nevertheless, the case law states that what is covered by an XL reinsurance is, somehow, the subject matter of the underlying insurance all the way down the chain of reinsurances. How can these two propositions be reconciled?

The first instance decision of *Teal v Berkley*⁴⁹⁰ includes some comments on XL reinsurance as being the insurance "of the same risk as the original insurance, in which the insurer had an insurable interest because of his exposure under the original insurance"491. Yet in the same judgment Andrew Smith J also confirms the principle that reinsurance losses arise when the reinsured's liability to the assured have been established and quantified so that in XL reinsurance the reaching of the excess point depends on the date when the reinsured's liability has been ascertained492. It is arguable that those two statements are not inconsistent. The first concerns the nature and purpose of the reinsurance contract, the second is simply about the practicalities of finding the exact point in time when the loss attaches to the reinsurance. One is conceptual and purposive, the other sets out practical guidance to deal with a specific issue. It is perfectly possible to contend that whilst a reinsured only needs to establish its liability to its own policyholder (and the ascertainment of that liability starts time running and governs allocation of losses), the loss still links back to the original insured peril. Whether on abides by this view depends on what is the actual "loss" under consideration: is it the reinsured's liability or the loss of the primary insured? Interestingly the case law brings no clarity on this issue: the terminology used by the judiciary to date has been inconsistent. This lack of exactitude makes it

⁴⁹⁰ *Teal v Berkley* (n 472).

⁴⁹¹ ibid para 30.

⁴⁹² ibid para 38.

difficult to understand exactly what the English judiciary has had in mind all these years when seeking to define reinsurance.

The most recent case on the point is the House of Lords' decision in *WASA v Lexington*, where their Lordships refers to the "subject matter" of the original reinsurance being the same as the reinsurance of the language also found in *Charter Re.* In the early case of *British Dominions General Insurance Co Ltd v Duder* the court simply referred to "the thing originally insured" which seems consistent with the idea of a "subject matter". In fact, in *WASA v Lexington* Lord Phillips of Worth Matravers used similar language when stating that "under English Law a contract of reinsurance in relation to property is a contract under which the reinsurers insure the property that is the subject of the primary insurance". Therefore in those cases the item that is being insured and reinsured in parallel under the independent contract of reinsurance seems to be the property or asset or even liability that is being insured under the original contract of insurance.

Yet Sedley LJ in the Court of Appeal decision on the same case referred to the "fiction that reinsurance covered the primary risk"⁴⁹⁵. In Charter Re v Fagan, Lord Hoffman also talked of the "subject matter" of the primary insurance being the "...the risk to the ship or goods or whatever might be insured."⁴⁹⁶ "Risk" is also the term used in the first instance decision of Teal v Berkley and in the very first case on the point, Delver⁴⁹⁷. Risk in its natural sense means an exposure to dangers or the potential for suffering a loss⁴⁹⁸. This is clearly the meaning intended in the above quote from Charter Re v Fagan. The "risk to the shop or

⁴⁹³ Wasa v Lexington (n 70). Lord Phillips of Worth Matravers described a contract of reinsurance as a contract "under which the reinsurers insure the property that is the subject of the primary insurance" (para 2); Lord Mance referred to the "well recognised analysis" of reinsurance as "an independent contract, under which the subject-matter reinsured is the original subject matter" (para. 33) and Lord Collins of Mapesbury recognised that "for historical reasons the subject matter of reinsurance is treated as being the same as that of the original insurance" (para 113).

⁴⁹⁴ British Dominions General Insurance Co Ltd v Duder [1915] 2 KB 394.

⁴⁹⁵ Wasa CA decision (n 71) para 49.

⁴⁹⁶ See n 76, 419.

⁴⁹⁷ See n 65.

⁴⁹⁸ In the Oxford dictionary, the word "risk" is defined as "a situation involving exposure to danger".

goods" here means the potential for loss. However, in insurance and reinsurance the term "risk" is also sometimes used to refer to the subject matter of the contract, usually when it is a tangible asset such as a property. For instance a refinery being insured and then reinsured may be described as "the risk". This may be what Sedley LJ had in mind in *WASA v Lexington* when referring to the "primary risk" being also covered by the reinsurance. In this second scenario, the use of the term "risk" is not necessarily inconsistent with the "subject matter" phraseology noted above. Regardless, these views are only conjectures on what the courts meant and the cases offer little clarity.

To confuse matters further, the Court of Appeal in *Toomey v Eagle Star*⁴⁹⁹ defined reinsurance as the "insurance of an insurable interest in the subject matter of an original insurance⁵⁰⁰". Likewise, section 9 of the Marine insurance Act refers to the "risk" of the insurer but then goes on to specify that it is the insurer's insurable interest in the risk that may be reinsured. Here we have shifted from the item that is the subject of the original insurance to move onto the interest of the insurer. In a way this seems closer to liability insurance which is ironic, given that in *Toomey v Eagle Star*⁵⁰¹ the Court of Appeal empathetically rejected the contention that reinsurance could be equated with liability insurance.

Finally, in another early case, *Forsikringsaktieselskabet National (of Copenhagen) v Attorney-General*⁵⁰², the court referred to the original "loss" being reinsured. Likewise, Lord Mustill, in *Charter Re v Fagan*, said the policy covered "the occurrence of a casualty suffered by the subject-matter insured through the operation of an insured peril". Did his Lordship mean "casualty" in the sense of "loss"? The terms casualty implies some sort of damage or injury having actually happened which seems closer to the concept of loss than that of risk where the casualty is only a mere possibility. Once more, the judgments themselves provide no clarification.

We now need to consider the various options highlighted above in turn. Taking first the concept of the same "subject matter" being reinsured or the "risk" used in the wider sense⁵⁰³, it is difficult to imagine how this could be covered by two

⁴⁹⁹ *Toomey v Eagle Star* (n 69).

⁵⁰⁰ ibid 522.

⁵⁰¹ See n 71.

⁵⁰² See n 68, 642.

 $^{^{503}}$ This would be the "risk" in the sense of a tangible asset or a property e.g. a refinery.

policies without it being co-insurance. We have already explained that a claim made on the reinsurance contract necessarily overlaps with the insurance claim so that the gross claim amount increases with each reinsurance claim. This is because reinsurance, unlike co-insurance, operates transfers up a chain of contracts where the loss is spread "vertically". As noted by Dr Gürses, the primary insured has no direct cause of action against any of the reinsurers. There is also the limitation point: time would start running as soon as the event causes the loss if the reinsurance were truly an insurance of the property or subject matter insured at the primary level. Our review of Dr Kabele's work in the previous chapter also shows that in truth the reinsurers are not providing direct cover for the property of the original insured.

As regards the insurable interest being the item that is reinsured; in the first chapter of this thesis, we have pointed out that the reinsured cannot be said to have an interest in the property insured at the primary level given that he has no proprietary or other rights in that property. His interest can only arise from his liability under the inward reinsurances. This is also the view of Dr Gürses and it has been recognised in case law⁵⁰⁴. If the insurable interest of the reinsurer arises from his own liabilities to his own policyholders, the parameters will change from one reinsurer to the next. The insurable interest therefore cannot be the item covered by both the primary insurance and the reinsurance simultaneously because each (re)insurer will have a different interest.

This leaves us with the notion of "loss" which is discussed below.

9.2 The Preferred View

9.2.1 The Parameters: Loss and Insured Event

In *Charter Re v Fagan*, it was said that a typical XL reinsurance required the satisfaction of only two conditions before an indemnity fell due: (i) the occurrence of an insured event within the period of the policy and (ii) a loss of sufficient magnitude for the UNL to breach through the relevant layer.

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For instance in Fagan v Charter Re (n 76), it was said that the difference between a contract of insurance and its reinsurance "...lies in the nature of the insurable interest, which in the case of the primary insurer, arises from its liability under the original policy." per Lord Hoffman, 419. See also Skandia International v NRG Victory (n 76).

Starting with the latter criteria: what is that "loss" which is covered under the reinsurance? We have already seen that it is not a share of the original loss suffered by the underlying policyholder. If it were, reinsurance would be coinsurance and XL wordings would have to be completely re-drafted as per Dr Kabele's suggestions. North Atlantic v Bishopsgate and Teal v Berkley provide some guidance: both cases confirm the basic principle that the loss in question attaches to the reinsurance from the date when the reinsured's liability has been ascertained by way of an agreement, arbitration award or judgment. This is consistent with the point made earlier in this thesis that the "loss" materialises in the form of claims being made to the reinsured by its policyholders. The loss is therefore the reinsured's liability under those claims: the reinsured's cause of action indeed arises only when he has suffered damages which is the loss caused by his liability to his policyholders. Hill v Mercantile, Equitas and CX Re further confirm that there is no need to look beyond that liability. In fact, CX Re may even go further in stating that the insured peril is in fact the risk of a claim being suffered by the reinsured although in truth the judge did not opine on this particular point.

Now we move on to the first point, the requirement under the ruling of *Charter Re*, that there be the occurrence of an "insured event" within the period of the policy. This event, being for instance the earthquake, is also covered by the original policy of insurance. It is important to emphasize here that the event is not the loss suffered by the primary insured. We have seen in the first chapter of this thesis that a contract of insurance has been defined as:

"an agreement to confer upon the insured a contractual right which, prima facie, comes into existence immediately when loss is suffered by the happening of an event insured against, to be put by the insurer into the same position in which the insured would have been had the event not occurred, but in no better position."505

Under this definition, the happening of the event presents a risk of loss to the insured and it is that risk of loss that is being transferred to the insurer in exchange of the payment of the premium. The insurer's duty is then to indemnify the insured for any loss suffered as a proximate cause of the happening of the event. The aim of the indemnity is to put the insurer in the same position he would have been had the event not occurred. This payment triggers the chain of indemnities that will ultimately reach the reinsurer. Lord

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⁵⁰⁵ Callaghan v Dominion Insurance (n 5).

Hoffman in *Charter Re* was therefore correct to identify the event as one of the conditions for an indemnity to fall due under the reinsurance.

Whilst it triggers the chain of indemnities, however, the happening of the event is not what is actually being insured under both the primary insurance and the reinsurances. As explained above, the event causes loss and it is that loss which is covered under the insurance policy. If for some reason no loss is caused by the happening of the event, the insured is not entitled to recover anything from his insurer. The extent of the indemnity, which is the measure of the loss, is also very personal to the insurer because it is the amount of money required to put that insurer into the position he would have been had there been no adverse event. It is submitted that it is not the insured's "loss" that is being reinsured. This is consistent with the point we have just made that the term "loss" in the XL reinsurance wordings is the loss of the reinsured under the inward reinsurance and not the primary loss. To answer a question posed earlier in this chapter⁵⁰⁶, the loss that is being reinsured under an XL reinsurance is not the loss of the underlying insured "looking for a home". It is the loss of the reinsured that is made of the reinsured's liabilities to its own policyholders. The loss, therefore, does undergo a transformation as it makes its way up the chain of XL reinsurances.

This view is consistent with the findings of Hamblen J in *Tokio Marine* which is the most recent case of relevance for this thesis. When analysing the wording of the XL Retrocession, Hamblen J found that it covered Tokio Marine's *exposure* to losses suffered by the primary policyholder Tesco. The judge quite rightly did not say that Tesco's loss was the loss of Tokio Marine but rather that Tokio Marine was exposed to the loss suffered by Tesco and that this exposure was, as noted previously, based on Tokio Marine's liability to its own policyholder ACE under the terms of the TM Reinsurance.

9.2.2 The Proposition

Before developing our analysis, it is important to ascribe a specific meaning to each of the following terms to ensure clarity.

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⁵⁰⁶ See section 8.1.2 of this chapter.

- 1. The **subject matter** is the item insured under the primary insurance e.g. the property, ship or good⁵⁰⁷ in which the primary insured has an insurable interest.
- 2. For consistency with case law, as previously noted, the term **risk** is used in the wider sense i.e. as the property or asset insured at the primary level. However, when the context indicates it is also used in its more natural meaning i.e. as the uncertainty.
- 3. The **peril** is the potential dangers insured against e.g. the earthquake.
- 4. The **event** is the happening of the earthquake.
- 5. The term **loss** has been described above. This is an obvious term which does not require a definition other than to specify that by "loss" in this thesis we mean an amount that is unique to the insured and each insurer and reinsurer in the chain of XL reinsurances.

Having clarified the terminology, we now need to consider the legal position. Where have we got to, in terms of the connection between the original insurance and the reinsurer further up the chain of XL reinsurances? We have established that the subject matter or risk or loss covered by the primary insurance is not the same as the subject matter, or risk or loss covered by the XL reinsurance. Neither does the reinsured have an insurable interest in the subject matter of the primary insurance that could be covered by the XL reinsurance.

There are, however, a couple of items listed above that are relevant to both the primary insurance and the reinsurance, namely, the peril and the event. It is indeed the happening of the peril, in other words the event, that may cause loss to the primary insured, the payment of which triggers the chain of indemnity. We have argued that the event is not what is actually being insured but we must recognise that it causes the primary loss, which is at the start of everything. Lord Mustill's analysis in *Charter Re v Fagan* is therefore nearly correct because it requires an insured event as well as a loss. However the loss referred to in *Charter Re* is that of the primary policyholder whilst we have demonstrated that the loss must be that of the reinsured.

The English Courts' reluctance to discard the traditional doctrine is understandable. It would seem odd to consider reinsurance as being totally

⁵⁰⁷ In case of liability insurance at the primary level, the subject matter is the insured's liability to third parties.

disconnected from the original loss. After all, for the reinsurance to come into play, the event insured against at the primary level of insurance has to happen. It is only then that the claim of indemnities will be triggered. Nonetheless, the chain depends on each (re)insurer suffering a loss within the parameters of its own (re)insurance cover. Even at the primary level, the original insured will only be indemnified to the extent of his own loss. Thus arguably it is not the happening of the event that is covered but the risk of the insured suffering loss as a result of the happening of the event. The event may be the subject of the insurance, but the extent of the coverage is dictated by the level of loss suffered by the (re)insured. This analysis favours the reinsured's loss as being the key factor of the two identified in *Charter Re*, suggesting the "insured event" may not be as pertinent.

At first sight the above analysis seems particularly apposite in the context of XL reinsurance. Facultative XL reinsurance contracts, that would cover for instance one specific property such as a refinery, do exist but they are few and far between. More usually XL contracts provide cover for an entire portfolio of business or for "whole account" covering the entire book of business of the reinsured. In such case a multitude of original insureds, who might suffer loss from a large amount of events, are bundled together and ultimately reinsured under the reinsurance. In this context, can it still be said that there is an insured event at the primary layer that operates as a unifying factor?

Maybe surprisingly, the answer is yes. There is often a recognised event, or catastrophe, that will be identified in claims made under XL reinsurances. Taking the LMX Spiral as an example, many of the catastrophes that caused the demise of the London XL Market were given a code recognised throughout the market, such as "87J" for the 1987 UK windstorm or "90A" for the North European Windstorms of January 1990. The aggregation clauses in XL Reinsurance Contracts require a unifying factor for losses to be aggregated be it a "cause", an "event" or "occurrence". The reinsured can obtain cover for unrelated risks as long as they belong to the portfolio covered under the XL reinsurance (for instance "hull" or "cargo"). However, when it comes to making a claim to his reinsurers, he can only aggregate claims that originate from the same event.

Therefore, considering that it is a loss unique to each reinsurer which is being covered by each (re)insurance is not necessarily inconsistent with the idea that there is an over-reaching factor that unifies all the reinsurance contracts with the

primary layer of insurance. It is submitted that the unifying factor is the peril that happens to be covered by the XL reinsurance. The aggregation clauses in XL reinsurances refer to an "event" or an "occurrence" but an event as stated above is only the happening of the peril and it is more usual to think of a (re)insurance policy as providing protection against a peril. Thus the "peril" is a more obvious parameter to use though "insured event" would not be entirely incorrect.

The peril or insured event is not necessarily what courts had in mind when they referred to the reinsurance being a further insurance of the same "subject matter" or "risk" as the original insurance policy. They usually meant the property, for instance, as per the quote in *Charter Re*, the "risk to the ship or good or whatever might be insured". This is unrealistic in the context of XL reinsurance. XL contracts usually cover a multitude of "properties" but the common point those "properties" have is their vulnerability to whatever peril the reinsurance covers. It is interesting that the XL reinsurance does not necessarily identify the peril. It may refer only to the nature of the business or portfolio (e.g. "hull" or "cargo" or "whole account" as noted above) in which case coverage is not restricted to a specific type of event (e.g. earthquakes). It is the aggregation clause that requires a unifying event, usually a catastrophe, for a claim to be made. The nature of the portfolio of business being covered by the XL reinsurance will probably dictate the type of perils the reinsurance may respond to. For instance, a "whole account" protection of a reinsured exposed to the American East Coast will cover windstorms.

Hence even in XL reinsurance, where the underlying risk is extremely remote, there remains a link between the original insurance and the XL reinsurance in the form of the peril that is covered by the reinsurance. It is important to note here that the relevant peril has to be the one covered by the reinsurance, which may be different in scope from the range of perils covered under the original insurance and intermediary reinsurances. An overlap is sufficient for the link to operate. For instance, the primary insured may have property cover for its own buildings which happens to cover damage caused by earthquake. The reinsured further up the chain may have obtained XL reinsurance for his whole account and, under the XL wording, he is entitled to aggregate claims from several original insureds caused by the same earthquake, defined as the "event" or "occurrence" or "cause" whether the claims relate to property damage or, say, business interruption.

9.2.3 The Case for the Unifying Factor

Is it necessary to focus on the unifying factor? Arguably, the principle of indemnity operates as a link from the original loss as it is that original loss that leads to claims being made to the reinsurers. The reinsurers' payment of those claims causes the reinsurers' loss which turns into further claims on the retrocessionnaires and so on. No indemnity will fall due at the reinsurance level without an indemnity having been paid at the primary level of insurance. However, stripping down the concept of insurance and reinsurance to the principle of indemnity is not particularly satisfying. As set out in the first chapter of this thesis, insurance and reinsurance contracts are not distinguished simply on the basis that they are indemnity contracts.

At the heart of insurance and, therefore, reinsurance, there is the transfer of a risk, an unknown quantity. Allegedly, this could be the risk of financial loss. Thus we could simply say that XL reinsurance is akin to liability insurance in that the risk being covered is that of the reinsured being liable to his policyholders. This argument is not new and the market, if it had agreed, could easily have redrafted reinsurances as liability insurance contracts. Yet it has not done so. Many underwriters still consider that they underwrite a risk other than the reinsured's exposure to its policyholders. This is why XL reinsurance underwriters specialise in different types of risk, such as marine or property. They spend time analysing the risks based on other criteria relevant to their areas of specialism. Surely a marine whole account of a reinsured exposed to the American East Coast is not the same as the reinsurance of a cyber risk specialist? Those underwriters active in the market would more likely agree with the statement that they underwrite the risk of the reinsured's exposure to claims resulting from a peril insured under both the reinsurance and the original insurance contract.

To conclude, the preferred view of the author of this thesis is that the XL reinsurance contracts provide coverage for the liability of the reinsured arising from perils that have caused the original loss and are covered under both the original insurance contract and the XL reinsurance. This hypothesis is consistent with the case law on XL reinsurance described above which makes it clear that the relevant loss is that of the reinsured and that parties do not need to look beyond the inward reinsurance to establish liability or to deal with issues of allocation of losses or limitation. Nevertheless, it is legitimate for reinsurers to

consider that the peril which caused loss to the original insured remains relevant. The loss did not occur in a vacuum, and since insurance and reinsurance is all about the transfer of a risk, it remains important to retain the notion that coverage at all levels of XL reinsurance still relates to that original insured event: the earthquake that started it all.

9.3 Concluding Remarks

XL reinsurance is more akin to liability insurance. However, this does not mean that an XL reinsurance contract is totally divorced from the loss suffered by the original insured. The original loss is "personal" to the original insured but it triggers the chain of indemnities that ultimately reaches the XL reinsurance. In addition, it is the view of the author of this thesis that the insured peril acts as a unifying factor between the primary insurance and the ultimate reinsurance.

10 Conclusion

This thesis initially set out to explore the LMX Spiral from a legal perspective and consider its impact on the Lloyd's crisis of the early 1990s. The research showed that spirals are a potential side effect of XL reinsurance markets and therefore the thesis provides a legal appraisal of *all* reinsurance spirals. The last couple of chapters also propose an alternative legal analysis of XL reinsurance contracts.

Part I sets out the legal and factual background to the LMX Spiral. The LMX Spiral was built upon XL reinsurance contracts, a relatively new form of reinsurance that became more prominent from the 1950s onwards. The traditional legal view of reinsurance under English law, which still prevails today, is that reinsurance contracts are further independent contracts of insurance covering the same subject matter as the primary insurance. This means that all the specific legal rules applicable to insurance contracts under English law also apply to reinsurance contracts. These are the principle of indemnity, the importance of warranties, the duty of good faith and the need for an insurable interest. The distinguishing factor between insurance and reinsurance is that in the latter the insured is an insurer or a reinsurer.

The London XL Market has been at the heart of the development of XL reinsurance and a number of reinsurance spirals have developed within that market. The LMX Spiral, which grew in the 1980s, is by far the most significant: its collapse in the early 1990s caused major disruption to the London XL Market and it precipitated the Lloyd's crisis.

Some of the underwriters and other professionals embroiled in the LMX Spiral debacle argued that a number of catastrophes in the late 1980s/early 1990s caused its collapse. The catastrophes were the proximate cause of the very significant losses suffered by the relevant reinsurers. However this thesis demonstrates that the LMX Spiral was unsustainable because of its inherent flaws. All that was required was for a few losses, not necessarily very significant ones, to start making their way through the market for the LMX Spiral to start unwinding. This is because of the Spiral Effects, which apply to all reinsurance spirals once they reach a certain point. The Spiral Effects distort the relevant XL reinsurance markets, creating an additional Spiral Risk that would not exist but for the reinsurance spiral.

Part II provides the detailed legal appraisal of reinsurance spirals. With one exception, all of the cases concerning reinsurance spirals relates to the LMX Spiral. A review of the case law shows that there is a scarcity of legal principles concerning the LMX Spiral itself. English Judges were very critical of its development but because of the ways the cases were pleaded, the judgments focus on the duties of the underwriters and agents who engaged in, or advised on, Spiral Business. The case law therefore created the concept of a Reasonable LMX Underwriter who would follow certain prudential steps. These steps however are ineffective because the Spiral Effects make it near impossible for an underwriter, *inter alia*, to assess the risk he is undertaking and to price it accordingly.

There is therefore a gap in English reinsurance law: reinsurance spirals are a potential side effect of XL reinsurance markets but there are no legal rules to deal with the very specific challenges they present. The thesis applies a number of legal tools to seek to fill the gap including illegality, negligence and good faith, but only to conclude that these tools are equally ineffective because they do not reduce the Spiral Risk.

The proposed solution is to shift the focus from the people who create reinsurance spirals to the Spiral Contracts at the heart of those spirals. A scrutiny of the impact of the Spiral Effects on the Spiral Contracts shows that once they take hold, the Spiral Effects turn Spiral Contracts into something other than contracts of XL reinsurance. This is based on the premise that XL reinsurance can be legally defined by reference to the commercial features that differentiate XL from other types of reinsurance contracts, namely the splitting of a risk into tranches that allows for layering and which informs the pricing. Once they have fully developed the Spiral Effects render those features redundant, at which point the duty to indemnify remains the sole effective feature of the contract. The thesis therefore submits that once the Spiral Effects take hold, the Spiral Contracts are contracts of indemnity rather than contracts of XL reinsurance. This applies from the outset to all contracts entered into from that point in time.

This is a significant finding: it means that the specific rules applicable to contracts of insurance and reinsurance do not apply to the relevant Spiral Contracts. Furthermore, even though the contracts most probably remain enforceable, reinsurers writing Spiral Contracts are committing a statutory

breach, putting themselves at risk of being subject to enforcement action by the regulator. For these reasons, this finding may curb the development of reinsurance spirals if it becomes known within XL reinsurance markets.

Part III expands the field of analysis to consider the true nature of XL reinsurance. Whether or not a spiral develops, XL reinsurance contracts make the risk more remote than other types of reinsurance, which puts into the question the traditional view of reinsurance as further insurance of the underlying risk. A close review of XL reinsurance wordings shows that what is being covered is, in fact, the liability of the reinsured to its policyholders. The duty of the reinsurer to indemnify under an XL reinsurance contract is indeed triggered when the amount of payments the reinsured must make to its own policyholders under the relevant inwards contracts reaches the excess point of the XL reinsurance. The case law concerning XL reinsurance wordings confirms this.

This does not mean, however that XL reinsurance is simply a form of liability insurance. The difficulty is in finding what links the primary insurance to the reinsurance because of inconsistencies in the terminology used by English courts when seeking to identify what aspect of the primary insurance is being reinsured. Is it the subject matter, the event, the peril, the insurable interest or the loss?

This thesis submits that the element of the primary insurance that is being reinsured is the peril. The peril causes the loss to the original insured that triggers the chain of indemnities which will ultimately reach the XL reinsurance in the forms of the reinsured's liability to its own policyholders. More significantly, the nature of the peril remains relevant to the underwriting exercise at the reinsurance level. Given that insurance and reinsurance is all about risk: it seems apposite to consider that the coverage offered at all levels of XL reinsurance still relates to the original insured event which is the source of the uncertainty insured against. This thesis therefore submits that XL reinsurance is the insurance of the reinsured's liability arising from perils that have caused the original loss and that are covered under both the original contract of insurance and the XL reinsurance.

Conclusion

To conclude, this thesis proposes two new ideas relevant to the field of reinsurance law. The first, which concerns the legal view of the contracts at the heart of reinsurance spirals, may curb the development of reinsurance spirals in the future by acting as a deterrent. The second, which is about the true nature of XL reinsurance contracts, may impact on the ease with which reinsureds can recover under XL reinsurance contracts, since it is easier for a reinsured to prove its own liability than to prove the liability of the insured sitting much further down the chain of reinsurance contracts. This thesis also highlights the risk of spirals developing in XL reinsurance markets in the future and it illustrates the need to apprehend XL reinsurance contracts differently from other more traditional forms of reinsurance contracts.

Appendices

Appendix A The LMX Questionnaire

Appendix B The Lloyd's Litigation

Appendix C Typical LMX Wording

Appendix A

THE LMX QUESTIONNAIRE (from LMX Working Party Report)

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56.
                                                              Appendix 3
   General Questionnaire
             NON MARINE GENERAL EXCESS OF LOSS CONTRACTS
      Syndicate Numbers covered
2.
      Stamp Capacity
                      1984 Account
                      1985 Account
1986 Account
1987 Account
                      1988 - Account
      Overall Syndicate Premium Income
before all Reinsurance Costs
                                                    (indicate currency
                                                     & R.O.E.
                6 mos.
                              12 mos.
                                             24 mos.
                                                            36 mos.
      1982
      1983
1984
      1985
      1986
                                                                      (est.)
                                                                      (est.)
                                                                      (est.)
     Give approximate Nett Premium Income percentage split
     a) Sterling
                                     US$
                                  bl
                                                          c) C$
     Give approximate split
      a) Short Tail
                                  b) Long Tail
     P.I. derived from U.S. Company Physical Damage Catastrophe Reinsurances, in USS
6A
                6 mos.
                              12 mos
                                                            36 mos.
                                             24 mos.
     1982
     1983
      1985
     1986
                                                                      (est.)
     1987
                                                                      (est.)
     1988
                                                                      (est.)
```

```
P.I. derived from Canadian Company Physical Damage
Catastrophe Reinsurances in CAN $
                                                                                         36 mos.
                                             12 mos.
                                                                  24 mos.
                        6 mos.
        1982
        1983
        1984
        1985
                                                                                                       (est.)
        1986
                                                                                                        (est.)
        1987
                                                                                                       (est.)
        1988
        US$ Risk Excess P.I. in US$ (Not included in 6A)
6C
                                                                                       36 mos.
                                                                    24 mos.
                                             12 mos.
                        6 mos.
        1982
        1983
        1984
        1985
                                                                                                       (est.)
        1986
                                                                                                        (est.)
        1987
                                                                                                        (est.)
        1988
        Do you write Fire Dept Excess of Loss Reinsurances of American Professional Reinsurers? (Not included in 6A)
6D
        If so, please state P.I. in US$
                                                                   24 mos.
                                             12 mos.
                                                                                       36 mos.
                        6 mos.
        1982
        1983
        1984
        1985
                                                                                                       (est.)
         1986
                                                                                                        (est.)
        1987
                                                                                                        (est.)
        1988
                        Certain U.S. and non-U.S. professional XL covers do not exclude L.M.X. business. It should be understood that the L.M.X. Exclusion Clause (when Inserted) also relates to retrocessions of L.M.X. business and therefore the L.M.X. proportion of any loss on U.S. and non-U.S. professional XL covers is excluded.
        N.B.
```

```
7A. Non-USS Physical Damage Catastrophe Premium Income In £
                                                               36 mos.
                               12 mos.
                                                24 mos.
                6 mos.
      1982
      1983
      1984
1985
      1986
                                                                     (est.)
      1987
                                                                     (est.)
      1988
                                                                     (est.)
     Non-Dollar Risk Excess P.I. In E (Not included in 7A)
                               12 mos.
                                                               36 mos.
                6 mos.
                                                24 mos.
      1982
      1983
      1984
      1985
                                                                     (est.)
      1986
      1987
                                                                     (est.)
      1988
                                                                     (est.)
7C. Do you write Fire Dept Excess of Loss Reinsurances of Non-American Professional Reinsurers? (Not included in 7A)
    If so, please state P.I. in £
                6 mos.
                               12 mos.
                                              24 mos.
                                                               36 mos.
     1984
1985
     1986
                                                                     (est.)
     1987
                                                                     (est.)
     1988
                                                                     (est.)
Please state whether U.S. Exposures are included - if so, please
give details:-
```

If protected hereunder please give L.M.X. P.I.
(State Currency

12 mos.

6 mos.

1987

1988

24 mos.

36 mos.

(est.)

(est.)

(est.)

っ	1	ς
_	7	J

Please state "Accounted for" Premium Income in respect of questions 6A, 6B, 6C, 6D, 7A, 7B, 7C & 8 (and/or as applicable).

2 USS Can\$ 1984

1985 1986 (est.) 1987 (est.) 1988 (est.)

10. What is your maximum known line any one Reinsurance Programme in respect of:

6A? 6C7 7A? 7B?

Please schedule any specific protections you carry which wholly or partially INURE TO THE BENEFIT OF the general excess programme.

(Please indicate if such coverage contains an E.C.O. Inclusion Clause)

Please state minimum net retained loss for:

- Wind, Flood, Quake
- Fire etc.
- What is your maximum known line any one Assured 6/or Reassured in respect of:
 - a) Property Damage (P.M.L.) ?
- 13. Do you knowingly expose your General Excess of Loss Contracts on any one risk?
- 14. Have you any comments on your underwriting policy for next year?
- 15. What is your approximate Aggregate Earthquake Liability as regards Japanese companies in respect of Zone 5 from:
 - a) Pro rata and Surplus Treaties?b) Excess of Loss Treaties?

 - c) Facultative?

- 16. Do you write any Oil Rig Business (including War etc., as original) other than as per Questionnaire? If so, please give details.
 - 17. Do you intend to write Incidental Marine Business? If so, please give details.
 - 18. Do you write Direct/Facultative South African Riots Business? If so, please give details of the following:
 - a) G.N.P.I. Estimate for 1985 1986 1987 1988
 - b) Max. Gross Line any one Assured
 - c) Any Inuring Reinsurances (Inc. Reinstatement Provisions)

Do you agree that a catastrophe loss would broadly follow the hours etc. definition (7 Days/15 miles radius any one city etc.) as per L.P.O. 416? - Or state your preferred alternative intent.

19. Do you write Contract Frustration/Confiscation/Political Risks?

If so, please give details of the following:

- a) P.I. (Gross)
- b) P.I. (Nett)
- c) Maximum Line any one risk
- d) Maximum exposure any one country
- e) Any inuring Reinsurances

```
Please give "ground up" losses on the following: (for purposes of current Generals)
 1965
           BETSY
 1969
           CAMILLE
1970
           CELIA
            (HUMBLE OIL (Fire)
(PARSONS ET AL (T.P. Net to General)
1972
           AGNES FLOOD
            EUROPEAN STORMS
           MANAGUA EARTHQUAKE
1974
           AUSTRALIAN FLOODS
           CAT. 74
                              (R/I assumed
                              proportion if applicable:
           NYPRO
           CYCLONE TRACY
1976
           JANUARY STORMS
1977
           FORD (COLOGNE) (20.11.77)
1978
           SEVERE WEATHER CONDITIONS (28.12.78-7.1.79)
1979
           WICHITA FALLS (CAT. 93) (10/13.4.79)
           DAVID
           FREDERIC - Split CAT X/L
                        All other
1980
           BRITISH AEROSPACE
           ALLEN
           CROWN ZELLERSACH (22,10,80)
           M.G.M. GRAND HOTEL (21.11.80)
           CAT. 22 (7/8.5.81)
CALGARY HAILSTORM (28,7.81)
1981
           CAT. 81 J WINTER LOSSES
           CAT. 81 J WINTER LOSSES
IWA (23.11.82)
1982
           WASHINGTON PUBLIC & SUPPLY SYSTEM (22.3.82)
1983
           AUSTRALIAN BUSH FIRES
           SASKATCHEWAN HAIL (24.6.83)
          ALICIA CAT. 15
- Split Direct Cat. XOL
          R/I Ass. Cat. XOL
All other
U.S. WINTER FREEZE CAT. 24
                 - Split Direct Cat. XOL
R/I Ass. Cat. XOL
All other
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1984 U.K./EURO STORMS (12/14.1.84)
GULF RESOURCES (5.5.84)
HAILSTORMS MUNICH (12.7.84)
CRICKLEWOOD FIRE (24.8.84)
LAPORTE INDUSTRIES, FIRE (15.9.84)

UK WINTER WEATHER (10/17.1.85)
BRISBANE STORM (18.1.85)
WIND, BAIL, TORNADOES (29.5 TO 1.6.85) CAT. 71
ARLINGTON PARK RACE TRACK (31.7.85)
"ELENA" (30.8.85 TO 3.9.85)
MEXICAN QUAKE (19.9.85)
"GLORIA" (26/27.9.85)

1986 MONTREAL HAIL (29.5.86) AMAX (7.6.86) SYDNEY FLOODS (4/5/6.8.86)

1987 UK WINTER WEATHER (10/23.1.87) NEW ZEALAND QUAKE (2.3.87) EDMONTON TORNADO (31.7.87)

ANY OTHER LOSS EXCESS OF 75% OF EXCESS POINT

The information contained in the questionnaire is for the guidance of Reinsurers but is not warranted.

APPENDIX

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What are your net lines on the following?

a) Master Drilling Rig Cover (R/I Lloyd's & Companies)

Buffer (T. & D. S100,000,000 xs $45,000,000,000 $250,000,000 xs $45,000,000,000 $250,000,000 xs $450,000,000 $250,000,000 xs $400,000,000 $250,000,000 xs $850,000,000 $250,000,000 xs $850,000,000 $250,000,000 xs $850,000,000 $250,000,000 xs $45,000,000 $250,000,000 xs $45,000,000 $250,000,000 xs $100,000,000 $250,000,000 xs $100,000,000 $250,000,000 xs $250,000,000 $250,000,000 xs $250,000,000 $250,000,000 xs $250,000,000 $20,000,000 xs $250,000,000 $20,000,000 xs $130,000,000 xs $130,000,0
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d) Factory Mutual System

Please detail by layer your risk exposure to the following Companies

- 1) Allendale Mutual Ins. Co.
- Protection Mutual Ins. Co. Risk Excesses
- 3) Arkwright Boston

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e) I.R.I $ 50,000,000 xs $ 40,000,000 $ 50,000,000 xs $ 90,000,000 $ 50,000,000 xs $ 140,000,000 $ 65,000,000 xs $140,000,000 $ 65,000,000 xs $190,000,000 $ 85,000,000 xs $275,000,000 $ 85,000,000 xs $365,000,000 $ 85,000,000 xs $365,000,000
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g) Aetna Casualty & Surety Co. $ 30,000,000 xs $100,000,000 $ 30,000,000 xs $130,000,000 $ 35,000,000 xs $190,000,000 $ 35,000,000 xs $225,000,000 $ 35,000,000 xs $225,000,000 $ 35,000,000 xs $225,000,000 $ 40,000,000 xs $295,000,000
  h) Fire Insurance Exchange
                                                                          $ 30,000,000 xs $ 30,000,000
$ 40,000,000 xs $ 60,000,000
$ 50,000,000 xs $100,000,000
                                                                          $ 62,000,000 xs $150,000,000
  i) United States Fidelity &
                                                                          $ 9,000,000 xs $ 1,000,000
$ 10,000,000 xs $ 10,000,000
$ 30,000,000 xs $ 20,000,000
           Guaranty
           Property Risk Programme

    Employers Ins. Co. of Wausau

                                                                         $ 20,000,000 xs $ 7,000,000
$ 20,000,000 xs $ 27,000,000
           Risk Excesses
          Cat. Prog.
                                                                              8,000,000 xs $ 6,000,000
                                                                         $ 7,000,000 xs $ 6,000,000
$ 7,000,000 xs $ 14,000,000
$ 20,000,000 xs $ 21,000,000
$ 30,000,000 xs $ 41,000,000
$ 30,000,000 xs $ 71,000,000
                                                                        £ 10,000,000 xs £ 10,000,000
£ 25,000,000 xs £ 20,000,000
£ 30,000,000 xs £ 45,000,000
 k) Prudential Assurance Co.
                                                                         £ 35,000,000 xs £ 75,000,000
                                                                        DM42,500,000 xs DM137,500,000
DM45,000,000 xs DM180,000,000
1) Munich Reinsurance Co.
m) New Zealand South British Group
(Second Loss Cover) NZS
                                                                      NZ$ 7,500,000 xs NZ$ 7,500,000
NZ$ 25,000,000 xs NZ$ 15,000,000
                                                                     NZ$ 25,000,000 xs NZ$ 15,000,000 NZ$ 35,000,000 xs NZ$ 40,000,000 NZ$ 50,000,000 xs NZ$ 75,000,000 NZ$ 65,000,000 xs NZ$125,000,000 NZ$ 65,000,000 xs NZ$190,000,000 NZ$ 65,000,000 xs NZ$255,000,000 NZ$100,000,000 xs NZ$320,000,000
                                                                     A$ 10,000,000 xs A$ 10,000,000
A$ 40,000,000 xs A$ 20,000,000
A$ 75,000,000 xs A$ 60,000,000
A$145,000,000 xs A$ 135,000,000
n) N.R.M.A.
o) Royal Ins. Co. Ltd.
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40,000,000
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                                                                     £ 50,000,000 xs £
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\$ 45,000,000 xs \$ 165,000,000	
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\$ 15,000,000 xs \$ 20,000,000	
CIGNA (International) \$ 10,000,000 xs \$ 10,000,000 \$ 15,000,000 xs \$ 20,000,000 \$ 25,000,000 xs \$ 35,000,000	
\$ 40,000,000 xs \$ 60,000,000	

PLEASE INCLUDE ANY OTHER INTERESTS ON THE ABOVE MENTIONED

Appendix B

THE LLOYD'S LITIGATION

The list below is based on the list of cases included at Appendix 1 of *Society of Lloyd's v Jaffray* [2000] EWHC 51 (Comm) (first instance decision) which comprised 102 cases. This was said to be the entirety of the Lloyd's Litigation at the time. In addition, this appendix includes judgments delivered after the *Jaffray* case that are of relevance because they relate to the Lloyd's Litigation, the LMX Spiral, the PA Spiral or R&R.

All cases in bold relate to the LMX Spiral. For completeness' sake, this includes:

- the key cases concerning the LMX Spiral, defined as the Core LMX Cases in Chapter 5 of the thesis;
- the other cases referred to in Chapter 5 of the thesis;
- cases that stem from the above litigation even though the issues in dispute concerned other, procedural issues (e.g. quantum); and
- all cases that contain references to the LMX Spiral even if the LMX Spiral only provided the factual background and is not discussed in any detail.

	Date	Title of Action	Description
			·
1.	29.11.90	Lark v Outhwaite [1991]	Hirst J. Trial of preliminary issues.
		LRLR 1	Wellington Agreement (re. asbestos
			liabilities).
2.	11.03.90	Hiscox v Outhwaite [1991]	HL. "Follow the Settlement" issue
		LRLR 93	concerning the Wellington Agreement.
3.	10.91	Stockwell v Outhwaite	The first Names' action to go to trial. It
			settled in January 1992 without
			judgment being delivered.
4.	03.03.92	Boobyer v David Holman	Mervyn Davies J. Transfer to the
		& Co Ltd and the Society	Commercial Court.
		of Lloyd's [1992] 2	
		Lloyd's Rep 436	

Appendix B - The Lloyd's Litigation

	Date	Title of Action	Description
5.	1.04.92	Ashmore and Others v Corporation of Lloyd's [1992] 2 Lloyd's Rep 1	HL. Appeal from decision of CA (20.9.91) allowed. Order of Gatehouse J that preliminary points of law should be ordered, upheld.
6.	16.04.92	Boobyer v David Holman & Co Limited and The Society of Lloyd's (No. 2) [1993] 1 Lloyd's Rep 96	Saville J. Rejected Names' application to restrain members' agents from giving notices required to use their personal reserves and securities at Lloyd's to meet unpaid cash calls.
7.	14.05.92	Napier & Ettrick and Others v R.F. Kershaw Ltd and Others	Saville J. The Premium Trust Deed did not embrace sums recovered in litigation against agents (Outhwaite) in respect of negligent underwriting.
8.	22.05.92	R v Lloyd's of London ex parte Briggs and Others	Beldam LJ and Laws J. Names' claims for an interlocutory injunction to restrain Managing Agents rejected.
9.	12.06.92	Napier & Ettrick and Others v R.F. Kershaw Ltd and Others [1993] 1 Lloyd's Rep 10.	Saville J. Judgment concerning in subrogated claims to Outhwaite settlement moneys advanced by Stop Loss Underwriters (see 9.7.92 and 10.12.92 below).
10.	02.07.92	Ashmore and Others v Corporation of Lloyd's (No. 2) [1992] 2 Lloyd's Rep 620	Gatehouse J. Judgment on preliminary points of law concerning alleged duties owed by Lloyd's (dispute re. Oakeley Vaughan syndicates).
11.	9.7.92	Napier & Ettrick and Others v R.F. Kershaw Ltd and Others [1993] 1 Lloyd's Rep 10	CA. Dillon LJ, Staughton LJ and Nolan LJ. Partially successful appeal by stop loss insurers against the decision of Saville J on 12.06.92 (see 10.12.92 below).

	Date	Title of Action	Description
12.	17.07.92	R v Lloyd's of London ex parte Briggs and Others [1993] 1 Lloyd's Rep 176	Leggatt LJ and Popplewell J. Successful application by Lloyd's to set aside leave to move for judicial review granted by Potts J on 19.05.92 in relation to cash calls on Names (see 22.05.92 above).
13.	10.12.92	Napier & Ettrick and Another v Hunter and Others [1993] AC 713 [1993] LRLR 305	HL. Names not entitled to be indemnified out of the settlement moneys until the stop loss insurers had been indemnified in full pursuant to their right of subrogation.
14.	16.12.92	R v Corporation of Lloyd's ex parte Lorimer	Pill J. Application to quash decision of Lloyd's Members' Hardship Committee refused.
15.	15.03.93	The Society of Lloyd's v Morris and Others	Tuckey J. Recoveries under Personal Stop Loss Policies taken out by Names at Lloyd's are not subject to their Lloyd's Premium Trust Deed (See 28.05.93 below).
16.	13.05.93	Feltrim and Gooda Walker actions	Saville J. Judgment on "pay now, sue later" clauses. (See 30.07.93 below).
17.	28.05.93	The Society of Lloyd's v Morris and Others [1993] LRLR 217	CA. Bingham MR, Steyn LJ and Sir Christopher Slade. Appeal re. personal stop loss recoveries and Premiums Trust Deed.
18.	05.07.93	The Society of Lloyd's v Canadian Imperial Bank of Commerce and Others. [1993] 2 Lloyd's Rep 579	Saville J. Held that the only substantive defence to a claim by Lloyd's as beneficiary under letters of credit was that there was fraud of a relevant kind.
19.	20.07.93	The Society of Lloyd's v Canadian Imperial Bank of Commerce and Others	Saville J. Summary judgment for Lloyd's. (See 05.07.93 above).

	Date	Title of Action	Description
20.	30.07.93	Feltrim and Gooda Walker actions [1994] LRLR 168 [1996] LRLR 135	CA. Bingham MR, Steyn LJ and Hoffman LJ. Appeal of Saville J decision 13.05.93 dismissed.
21.	12.10.93	The Merrrett, Gooda Walker and Feltrim Cases [1994] 2 Lloyd's Rep 193	Saville J. Judgment on certain questions of law as to the existence, nature and scope of alleged legal obligations of Managing and Members' Agents.
22.	20.10.93	Sheldon and Others v R.H.M. Outhwaite (Underwriting Agencies) Ltd and Others. [1995] 2 Lloyd's Rep 197	Saville J. In a further Outhwaite Names' action, defendants' strike out application refused re. preliminary ruling on limitation issue.
23.	13.12.93	The Merrett, Gooda Walker and Feltrim Cases [1994] 2 Lloyd's Rep 468	CA. Bingham MR, Hoffman LJ and Henry LJ. Unsuccessful appeal of Managing and Members' Agents against Saville J decision of 12.10.93.
24.	16.12.93	The Society of Lloyd's v Clementson The Society of Lloyd's v Mason	Saville J. Preliminary issues concerning compatibility of Lloyd's Central Fund with European competition rules.
25.	12.04.94	Sword-Daniels v Pitel and Others Brown v KMR Services Ltd [1994] LRLR 10	Gatehouse J. Members' Agents held negligent in advising two individual Names as to portfolio selection.
26.	26.05.94	Arbuthnott v Feltrim Underwriting Agencies Ltd and Others	Cresswell J. Plaintiff Names' application successful for the discovery and production by the Members' Agents of seven transcripts of evidence given by them to the Feltrim Loss Review Committee.
27.	26.05.94	Brown v KMR Services Ltd Sword-Daniels v Pitel and Others	Gatehouse J. Response to representations made since judgment of 13.04.94.

	Date	Title of Action	Description
28.	21.06.94	Arbuthnott v Fagan and	CA. Brown LJ, Staughton LJ and Rose LJ.
		Others. [1996] LRLR 143	Appeal from Cresswell J (26.05.94)
			dismissed.
29.	27.06.94	Sword-Daniels v Pitel and	Costs judgment (and assessment of
		Others	damages).
30.	30.06.94	Sheldon and Others v RHM	CA. Bingham MR and Kennedy LJ,
		Outhwaite (Underwriting	Staughton LJ dissenting. Successful
		Agencies) Ltd and Others	appeal by defendants against judgment
		[1995] LRLR 20	of Saville J of 20.10.93 on preliminary
			ruling on the limitation issue.
31.	25.07.94	The Merrett, Feltrim and	HL. Affirmed the decision of the Court
		Gooda Walker Cases	of Appeal (13.12.93) on duties of care
		[1995] 2 AC 145	owed both to Direct and Indirect
			Names.
32.	23.09.94	Yasuda Fire & marine	Colman J. Right to inspect
		Insurance Co of Europe	documents/agency agreement. Orion
		Ltd v Orion Marine	was an underwriting pool that wrote
		Insurance Underwriting	LMX Business.
		Agency Ltd and Orion	
		Insurance Co Plc [1995] 4	
		Re LR 217	
33.	04.10.94	Deeny v Gooda Walker	Phillips J. Landmark judgment
		Limited [1996] LRLR 183	concerning the LMX Spiral in the
			Gooda Walker action.
34.	14.10.94	Hallam-Eames and Others v	Gatehouse J. Certain limitation issues
		Merrett Syndicates Ltd and	decided under RSC Order 14A.
		Others	
35.	10.11.94	The Society of Lloyd's v	CA. Bingham MR, Steyn LJ and
		Clementson; The Society	Hoffman LJ. Appeal from Saville J
		of Lloyd's v Mason [1995]	(16.12.93) as to alleged implied terms
		LRLR 307	dismissed. Appeal as to the
			Community Law issues allowed.
		1	

Appendix B - The Lloyd's Litigation

	Date	Title of Action	Description
36.	25.11.94	R v Chairman of the Regulatory Board of Lloyd's ex parte Macmillan and Another	Macpherson J. Application for judicial review of a decision of the Regulatory Board refusing to suspend the loss review of syndicate 80, dismissed.
37.	07.12.94	Deeny and Others v Littlejohn & Co (a Firm) and Others	Arden J. Transfer to the Commercial Court.
38.	08.12.94	Bates and Others v Robert Barrow Ltd and Others [1995] 1 Lloyd's Rep 680	Gatehouse J. Section 132 Financial Services Act 1986.
39.	11.01.95	Deeny and Others v Gooda Walker [1995] STC 439	Potter J. Taxation issues.
40.	13.01.95	Hallam-Eames and Others v Merrett and Others	CA. Sir Thomas Bingham MR, Hoffman LJ and Saville LJ. Appeal against Gatehouse J decision of 14.10. 94 (section 14A Limitation Act 1986) allowed.
41.	16.01.95	Cox and Others v Bankside Members' Agency Ltd and Others [1995] 2 Lloyd's Rep 437.	Phillips J. Judgment concerning 'First past the post' issues and construction of E&O policies.
42.	10.02.95	Aikens and Others v Stewart Wrightson Members Agency Ltd and Others [1995] 2 Lloyd's Rep 618	Potter J. Judgment on preliminary issues concerning duty of care of Managing and Members' Agents and limitation issues.
43.	10.03.95	Arbuthnott and Others v Feltrim Underwriting Agencies Ltd and Others. [1995] CLC 437	Phillips J. Feltrim (LMX) action. 1594 Names brought similar claims to those in Gooda Walker (04.10.94) and succeeded.
44.	21.03.95	Barrow v Bankside	Phillips J. Application to strike out portfolio selection claim against members' agent refused.

	Date	Title of Action	Description
45.	06.04.95	Deeny and Others v Gooda Walker Limited and Others [1995] LRLR 117, [1996] LRLR 176	Phillips J. Damages awarded in respect of claims that had been paid. That part of claim relating to anticipated claims reserved for future determination.
46.	11.04.95	Caudle and Others v Sharp [1995] LRLR 389	CA. Nourse LJ, Evans LJ and Rose LJ. Appeal from Clarke J allowed: E&O losses under 32 run off contracts could not be aggregated.
47.	04.05.95	Sheldon and Others v RHM Outhwaite (Underwriting Agencies) Ltd and Others [1996] 1 AC 102	HL. Claimant's appeal from CA (30.06.94) on limitation issue allowed.
48.	05.05.95	Hallam-Eames and Others v Merrett Syndicates Ltd and Others.	Cresswell J. Application for orders in relation to privileged/confidential material.
49.	12.05.95	Cox and Others v Bankside Members Agency Limited and Others [1995] 2 Lloyd's Rep 437	CA. Bingham MR, Gibson LJ and Saville LJ. Dismissed the appeal on 'first past the post' ruling (16.01.95).
50.	25.05.95	Deeny v Gooda Walker Ltd (No.3) [1996] LRLR 168	Phillips J. Basis on which interest ought to be awarded.
51.	28.06.95	Arbuthnott and Others v Feltrim Underwriting Agencies Ltd and Others (1993 Folio 1191).	Gatehouse J. Judgment for the claimants against Managing Agents for damages to be assessed with interest.
52.	12.07.95	Brown v KMR Services Limited [1995] 2 Lloyd's Rep 513	CA. Stuart Smith LJ (dissenting in part), Hobhouse LJ and Gibson LJ. Appeal from Gatehouse J (12.04.94) on portfolio selection partially allowed.

Appendix B - The Lloyd's Litigation

	Date	Title of Action	Description
53.	31.07.95	PCW Syndicates v PCW Reinsurers [1995] LRLR 373	CA. Staughton LJ, Rose LJ and Saville LJ. Appeal from Waller J sitting as a judge- arbitrator on Sections 18 and 19 of the Marine Insurance Act 1906 dismissed.
54.	09.08.95	Arbuthnott and Others v Feltrim Underwriting Agencies Ltd and Others	Phillips J. Judgment on issues concerning measure of damages.
55.	21.08.95	Cox v Deeny [1996] LRLR 288	H.H.J. Diamond Q.C. E&O policy proceeds. Determination of issues.
56.	05.10.95	Deeny v Gooda Walker Ltd [1995] LRLR 361, [1996] LRLR 109	CA. Simon Brown LJ, Gibson LJJ and Saville LJ (dissenting). Taxation issues. Dismissed appeal from Potter J (11.01.95).
57.	20.10.95	Rew and Others v Cox and Others.	Cresswell J. Professional indemnity insurances. Application for stay pursuant to section 4 Arbitration Act 1950 refused.
58.	24.10.95	Marchant & Eliott Underwriting Limited v Dr Higgins [1996] 1 Lloyd's Rep 313	Rix J. Summary judgment for Managing Agent re. cash calls based on "pay now sue later" provision in agents' agreement.
59.	31.10.95	Henderson and Others v Merrett Syndicates Ltd and Others [1997] LRLR 265	Cresswell J. Liability judgment in action concerning run-off contracts and RITCs covering Long-tail liabilities.
60.	07.11.95	Barrow v Bankside Members Agency Ltd and Another [1996] 5 Re LR 1	CA. Bingham MR, Peter Gibson LJ and Saville LJ. Appeal from decision of Phillips J (21.03.95) dismissed.
61.	04.12.95	Deeny v Walker and Others Deeny v Littlejohn & Co and Others [1996] LRLR 276	Judgment of Gatehouse J. Whether pleadings against brokers and auditors should be struck out.

	Date	Title of Action	Description
62.	20.12.95	Arbuthnott & Others v Feltrim Underwriting Agencies Ltd & Others.	Gatehouse J. Feltrim claim of negligence against members' agent.
63.	21.12.95	Marchant & Eliott Underwriting Limited v Dr Higgins [1996] 2 Lloyd's Rep 31	CA. Leggatt LJ, Rose LJ and Roch LJ. Appeal by Dr Higgins against judgment of 24.10.95 dismissed.
64.	01.01.96	Arbuthnott & Others v Feltrim Underwriting Agencies Ltd & Others [1996] CLC 714	Judgment of Longmore J. Further issues as to damages, following judgments of Phillips J 10.03.95 and 09.08.95.
65.	21.02.96	Henderson and Others v Merrett Syndicates Ltd and Others [1997] LRLR 247	Cresswell J. Following on from main judgment of 31.10.95. Issues of Limitation, misrepresentation / non-disclosure, general principles as to damages and contribution considered. Interim payment ordered.
66.	07.03.96	Deeny and Others v Gooda Walker Ltd and Others [1996] LRLR 109	HL. Taxation issues. Appeal from CA (05.10.95) dismissed.
67.	19.03.96	Berriman and Others v Rose Thomson Young (Underwriting) Limited [1996] LRLR 426	Morison J. Rose Thomson Young Names action (LMX). Judgment as to liability in favour of Names.
68.	16.04.96	Wynniatt-Hussey and Others v R.J. Bromley (Underwriting Agencies) PLC and Others.	Longley J. Bromley Names action (LMX). Judgment as to liability in favour of Names.
69.	19.04.96	Judd and Others v Merrett and Others [1997] LRLR 21	CA. Leggatt LJ, Waite LJ and Sir Glidewell. Appeal from Gatehouse J. Leave to defend conditional on interim payments.

Appendix B - The Lloyd's Litigation

	Date	Title of Action	Description
70.	07.05.96	The Society of Lloyd's v Clementson [1997] LRLR 175	Cresswell J. European Community Law issues. Central Funds arrangements held valid (not void by reason of art. 85 of the Treaty of Rome).
71.	16.05.96	The Society of Lloyd's v Woodward and Another	Sir Richard Scott VC. Litigation recoveries and the Premium Trust Deed.
72.	22.05.96	Charter Reinsurance Co Ltd v Fagan [1997] AC 313	HL. Meaning of the words "actually paid" in the context of the UNL Clause.
73.	23.05.96	Wilde Sapte and Deeny v The Society of Lloyd's	Sir Richard Scott VC. Application under O.85 rule 2 to authorise the distribution of litigation recoveries to Names rejected.
74.	20.06.96	Axa Reinsurance (UK) Plc v Field [1996] 2 Lloyd's Rep 233	HL. Aggregation issues: construction of "originating cause" and "event".
75.	23.03.96	Cohen v David Holman & Co Ltd [1996] Re LR 387	Morison J. Judgment concerning arbitral award under Lloyd's procedure given by one arbitrator without notice and without a full hearing. Award quashed.
76.	06.07.96	Henderson v Merrett Syndicates Ltd	Cresswell J. Provision of documents to the Council of Lloyd's.
77.	16.07.96	Aiken and Others v Stewart Wrightson Members Agency Ltd and Others	CA. Neill LJ, Otton LJ and Ward LJ dismissing the appeal from Potter J ordering interim payments (10.02.95/31.07.95).
78.	24.07.96	Hill and Another v The Mercantile & General Reinsurance Co Plc [1996] LRLR 341	HL. Seminal judgment on the "double proviso" follow the settlements clause.

	Date	Title of Action	Description
79.	15- 16.08.96	R v The Council of Lloyd's ex parte Susan Rachel Johnson & Others.	Brooke LJ. Application for Judicial Review of R&R dismissed on grounds of delay and merits. Lloyd's were acting within their power in putting forward the R&R proposals.
80.	02.08.96	Nederlandse Reassurantie Groep Holding NV v Bacon & Woodrow Ernst & Young [1997] LRLR 678	Colman J. Case re. disastrous acquisition of Victory Reinsurance by NRG. Victory was grossly underserved for LMX losses.
81.	24.10.96	Napier and Ettrick and Another v Kershaw Ltd Lloyd's v Woodard and Another [1997] LRLR 1	CA. Nourse LJ, Hobhouse LJ and Pill LJ. Appeal in Napier v Kershaw (14.5.92). and Lloyd's v Woodward (16.5.96) allowed.
82.	20.02.97	The Society of Lloyd's v Leighs and Others [1997] CLC 759	Colman J. Claim by Lloyd's (assignee) for recovery of Equitas premium. Summary judgment granted on preliminary issues.
83.	24.03.97	Fawkes - Underwood v (1) Hamiltons and (2) Hereward Phillips	Goudie QC. Defendants in breach of duty in failing to advise Mr Fawkes-Underwood that he should not allow himself to be on certain syndicates.
84.	23.04.97	The Society of Lloyd's v Leighs and Others [1997] CLC 1012	Colman J. Further preliminary issues arising out of Lloyd's claim for the Equitas premium.
85.	08.07.97	Re Yorke v Chataway (1997) TLR 451	Lindsay J. Executors are at liberty to distribute deceased's estate to the beneficiaries.
86.	31.07.97	Manning v Lloyd's, Lloyd's v Colfox and Others, Philips v Lloyd's [1998] LRLR 186	Mance J. Judgment in favour of Lloyd's concerning R&R.
87.	31.07.97	The Society of Lloyd's v Leighs and Others [1997] CLC 1398	CA. Saville LJ, Ward LJ and Phillips LJ. Names' appeal against decisions on 20.02.97 and 23.04.97 dismissed.

	Date	Title of Action	Description
88.	01.08.97	Aneco Reinsurance Underwriting Ltd v Johnson & Higgins Ltd [1998] 1 Lloyd's Rep 565	Cresswell J. Judgment about the Bullen treaty not being defined as 'fac/oblig'.
89.	03.12.97	Lloyd's v Fraser and Others	Tuckey J. An abuse of process for Names to seek to advance allegation of bad faith relating to R&R.
90.	16.01.98	Yasuda Fire & Marine Insurance v Lloyd's Syndicates 229, 356, 462, 571, 661 and 961, [1998] LRIR 285	Cresswell J. Aggregate Extension Clause. Construction.
91.	27.01.98	Lloyd's v Daly.	Tuckey J. Judgment re. Equitas premiums.
92.	06.02.98	Brown and others v Gio Insurance Ltd [1998] Re LR 201	CA. Waller LJ, Chadwick LJ and Sir Brian Neill. Clause giving reinsured sole judge as to what constitutes an event.
93.	05.03.98	Denby v English and Scottish Maritime Insurance Co Ltd and Others, Yasuda Fire & Marine Company of Europe Ltd v Lloyd's Underwriting Syndicates Nos 209, 356 and Others [1998] LRIR 343	CA. Hobhouse LJ, Brooke LJ and Chadwick LJ. Aggregate Extension Clause. Construction. Appeal from Cresswell J (16.01.98) dismissed. Appeal from Waller J [1996] LRIR 301 allowed.
94.	16.03.98	Skandia International Corp & Anor v NRG Victory Reinsurance Ltd [1998] EWCA Civ 467	CA. Wolf MA, Potter LJ and May LJ. Follow the settlement issues arising out of coverage for Exxon Valdez loss.
95.	08.06.98	Norwich Union Life Insurance Society v Qureshi [1999] LRIR 263	Rix J. Summary judgment. Norwich Union did not owe alleged duties to Name.

	Date	Title of Action	Description
96.	31.07.98	Aldrich and Others v Norwich Union Life Insurance Co Ltd [1999] LRIR 276	Rimer J. Case similar to the one above. Names' case struck out on the basis of the Qureshi ruling.
97.	31.07.98	Lloyd's v Fraser and Others [1999] LRIR 156	CA. Hobhouse LJ, Pill LJ and Judge LJ. Leave to appeal against decisions on 03.12.97, 27.01.98 and 04.03.98 (Quantum) refused.
98.	23.11.98	Aldrich and Others v Norwich Union Life Insurance Co Ltd [1999] LRIR 453	CA. Morritt LJ and Tuckey LJ. Leave to appeal from 08.06.98 and 31.07.98 granted.
99.	02.12.98	McAllister v Lloyd's [1999] LRIR 487	Carnwath J. Hardship Agreement. Arguable case that the debts were disputed on substantial grounds.
100.	02.01.99	Lloyd's v Jaffray [1999] LRIR 182	Colman J. Lloyd's application to stay proceedings because of failure by Names to pay sums ordered by the Court, dismissed.
101.	23.03.99	Lloyd's v Robinson [1999] LRIR 329	HL. Appeal from CA (24.10.96) allowed in part.
102.	10.06.99	Garrow v Lloyd's [1999] LRIR 482	Jacob J. Lloyd's statutory demand served on a Name set aside.
103.	30.07.99	Aldrich and Others v Norwich Union Life Insurance Co Ltd [2000] LRIR 1	CA. Evans LJ, Ward LJ and Mummery LJ. Appeals from Qureshi and Aldrich cases dismissed (see 08.06.98, 31.07.98 and 23.11.98).
104.	13.10.99	Garrow v The Society of Lloyd's [2000] LRIR 38	Appeal by Lloyd's dismissed (see 10.06.99).
105.	22.10.99	Price v Lloyd's [2000] LRIR 453	Colman J. Claim. Summary judgment in Lloyd's favour re. Equitas premium.
106.	16.12.99	Jones v Lloyd's	Rattee J. R&R. Penalty argument rejected.

Appendix B - The Lloyd's Litigation

	Date	Title of Action	Description
107.	03.03.00	Lloyd's v White and Others	Cresswell J. Anti-suit injunction granted re. proceedings in Australia.
108.	23.03.00	Lloyd's v Twinn and Another	CA. Sir Richard Scott V-C, Chadwick LJ and Buxton LJ. Appeal from Jacob J (10.06.99) allowed.
109.	20.01.00	Avon Insurance Plc and others v Swire Fraser Ltd and another [2000] Re LR 535	Rix J. Unsuccessful misrepresentation case by stop loss insurers against brokers.
110.	14.06.01	Noel v Poland and Poland [2002] Lloyd's Rep IR 30	Toulson J. Summary judgement awarded against litigant in person seeking to establish personal liability on the chairman and director of Members' Agent.
111.	03.11.00	Society of Lloyd's v Jaffray and ors [2000] EWHC 51 (Comm)	Cresswell J. Threshold fraud issue. Names failed to establish that Lloyd's had been dishonest or reckless.
112.	26.07.02	Jaffray and ors v Society of Lloyd's [2002] EWCA Civ 1101	CA. Waller LJ, Robert Walker LJ and Clarke LJ. Unsuccessful appeal by Names against decision of Creswell J (03.11.00).
113.	08.07.03	Sphere Drake Insurance v Euro International Underwriting [2003] EWHC 1636 (Comm)	Thomas LJ. Findings of dishonest breach of fiduciary duties and fraudulent misrepresentation. PA Spiral.
114.	10.05.04.		Colman J. First instance decision concerning coverage issues relating to Exxon Valdez losses.
115.	10.03.05		CA. Waller LJ, Rix LJ and Sir Martin Nourse. Appeal against decision of Colman J (10.05.04).

Appendix B - The Lloyd's Litigation

	Date	Title of Action	Description	
116.	11.05.05	Society of Lloyd's v	Andrew Smith J. Claim by Names	
		Henderson and others	against Lloyd's for misfeasance in	
		[2005] EWHC 850 (Comm).	public office.	
117.	08.11.06	Frederick Thomas Poole	Langley LJ. Names sued the government	
		and others v Her Majesty's	for failing to regulate Lloyd's and ensure	
		Treasury [2006] EWHC	compliance with EU directives.	
		2731 (Comm)		
118.	27.07.07	Stockwell & ors v Society	Unsuccessful appeal by some of the	
	27.07.07		Names against decision in Henderson.	
		Civ 930	names against accision in Trenaerson.	
		CIV 930		
119.	11.11.09	Equitas v R&Q	Gross J. Equitas could rely on	
		Reinsurance Company	actuarial model to verify losses under	
		(UK) Limited [2009] EWHC	reinsurance contracts that were	
		2787 (Comm)	within the LMX Spiral.	
120.	28.10.13	Equitas Ltd & Anor v	Males J. Equitas seeking recoveries of	
		Walsham Brothers &	unremitted sums owed by Walsham	
		Company Ltd [2013] EWHC	Brothers as brokers of Lloyd's	
		3264 (Comm)	Syndicates.	

Appendix C

TYPICAL LMX WORDING (from LMX Working Party Report)

66.

Appendix 4

Example of Slip

A4.1: Slip Details

REINSURED

(As Appropriate - the Reinsured)

PERIOD

12 months at 1st January 1988, Losses occurring during basis.

TYPE

Excess of Loss Reinsurance.

CLASS

To indemnify the Reinsured for all losses of whatsoever nature in respect of all business allocated to their Casualty Account.

TERRITORIAL

SCOPE

Wheresoever arising.

LIMIT

£125,000 or US or C\$250,000 each and every loss

IN EXCESS OF AN ULTIMATE NETT LOSS OF

£75,000 or US or C\$150,000 each and every loss.

WARRANTY

*No loss shall be payable hereunder, unless the Reinsured sustain loss from more than one Assured or Reassured in the same loss.

REINSTATEMENT

Three full reinstatements each at 100% additional premium.

PREMIUM

Premium hereon shall be calculated at 10.20% of the Reinsured's Nett Premium Income on the business protected "accounted for" during the period of this reinsurance. Subject, however, to a Minimum and Deposit Premium of £10,938 plus US\$70,000 payable in four instalments as follows:

25% at 1.1.88 25% at 31.3.88 25% at 30.6.88 25% at 30.9.88

To be adjusted no later than 90 days after expiry.

DEDUCTIONS

10%, Reinstatements 5%.

GENERAL CONDITIONS

Ultimate Nett Loss Clause.
Losses Discovered or Claims Made Clause.
Definition of each and every loss.
Currency Conversion Clause.
Aggregate Extraction Clause.
Standard Run Off Clause, risks written basis.
E.C.O. Inclusion Clause.
Nuclear Energy Risks Exclusion Clause.
Nuclear Incident Exclusion Clauses.
Non-Marine London Market War Exclusion Clause.

WORDING

As expiring as far as applicable, to be agreed.

A4.2: Clauses (abbreviated).

Insuring Clause.

Repeats the cover given in the slip as "LIMIT".

Warranty.

Same as "WARRANTY" in the slip. *(N.b. this particular warranty is unusual and specific to this contract).

Period.

Expands on the period of cover. Also explains the procedure for obtaining run-off of coverage written prior to the expiry date in the event of non-renewal.

Losses Discovered or Claims Made Clause.

For losses on contracts covering on a losses discovered or claims made basis, i.e. the date of discovery of the loss or the date when the claim is made determines under which contract the policy is collectible, such losses are covered if this date falls within the period of this reinsurance (irrespective of the date on which the loss occurs). The date of the first discovery or when a claim is first made is the date applicable to the entire loss.

Ultimate Nett Loss Clause.

This is defined as the sum actually paid by the Reinsured in settlement of losses or liability after making deductions for all recoveries, all salvages, and all claims upon other reinsurances, whether collected or not, and includes all adjustment expenses arising from the settlement of claims (other than employees' salaries and the Reinsured's office expenses).

Definition of "Each and Every Loss".

Each and every loss and/or occurrence and/or catastophe and/or disaster and/or calamity and/or series of losses and/or occurrences and/or catastrophes and/or disasters and/or calamities arising out of one event.

Premium Clause.

Repeats the "PREMIUM" information given in the slip.

To ascertain if the minimum premium has been exceeded dollars are converted to sterling at rates of exchange applying at the date of inception of the policy. If an additional premium is due the premium is paid pro-rata to the Reinsured's Nett Premium Income in Sterling, US and Canadian Dollars.

Mett Premium Income is gross premium less commission, taxes and similar deductions, brokerage and profit commission, cancellations and return premiums and less premiums given off by way of reinsurance, recoveries under which inure to the benefit of this reinsurance, and after deduction of premiums in respect of business excluded from the protection of this reinsurance.

Currency Conversion Clause.

Losses in currencies other than Sterling, US and Canadian Dollars are converted into Sterling at the rate of exchange ruling in London on the date of settlement of the original loss. For a loss in Sterling and US and/or Canadian Dollars, the excess and deductible are apportioned in the proportion that the amount of each currency bears to the Reinsured's total loss, with the calculations involved being in a common currency using the same ratio as in the Insuring Clause (i.e. £1 = 2\$).

Reinstatement Clause.

In the event of loss or losses the reinsurance will be reinstated but the Reinsurers shall never be liable for more than £125,000 or US or C\$250,000 in respect of each and every loss nor for more than £500,000 or US or C\$1,000,000 in all.

In respect of a loss or losses aggregating to the first £125,000 or US or C\$250,000 reinstated hereunder an additional premium is payable at 100% of the final basic earned premium (with similar wordings for the other two reinstatements). Each reinstatement premium is in respect of a Total Loss, lesser amounts being calculated in proportion. It is paid when the loss is settled, is provisionally adjusted on the basis of the Deposit premium, and is paid in the same currency or currencies in which the loss is paid (using rates of exchange as at the date of inception).

Losses are considered in date order of occurrence but this does not preclude the Reinsured from making provisional collections in respect of claims which may not ultimately be recoverable.

Nuclear Incident Exclusion Clauses.

Various market standard exclusion clauses applying to applicable classes of business and territories are listed, with amendments.

Extra Contractual Obligations Clause.

This section firstly excludes ECO "howsoever arising, such ECO being defined as any award made by a Court of competent jurisdiction against an Insurer or Reinsurer, which award is not within the coverage granted by any Insurance and/or Reinsurance contract made between the parties in dispute". It then extends coverage to cover any loss arising from a claims related ECO awarded against the Reinsured or incurred by the Reinsured where they have paid their share of a claims related ECO awarded against one or more of their co-insurers. Also covered is all loss from ECO incurred by the Reinsured as a result of participation in Insurance or Reinsurance which provides cover for such loss.

A Claims Related ECO is defined as the amount awarded against an Insurer or Reinsurer found liable by a Court of competent jurisdiction to pay damages to an Insurer or Reinsurer in respect of a claim made under an Insurance and/or Reinsurance contract, where such liability has arisen because of:

- a) the failure of the Insurer or Reinsurer to agree or pay a claim within the policy limits or to provide a defence against such claims as required by law or
- b) bad faith or negligence in rejecting an offer of settlement or
- c) negligence or breach of duty in the preparation of the defence or the conduct of a trial or the preparation or prosecution of any appeal and/or subrogation and/or any subsequent action resulting therefrom.

War and Civil War Exclusion Clause.

Excludes loss or damage occasioned by War, Invasion, Acts of Foreign Enemies etc., or confiscation, nationalisation, destruction of or damage to property under the order of a government or public or local authority.

Aggregate Extraction Clause.

For losses on risks covering on an aggregate basis, the amount of a loss from one event is that percentage of the aggregate loss to the Reinsured on the original contract that the total loss from the particular event bears to the total aggregate losses to the original Insured or Reinsured.

Inspection of Records.

Allows inspection of the books of the Reinsured, as far as they concern the contracts falling within the scope of the reinsurance, by an authorised representative of the Reinsurers at any reasonable time during the continuance of the reinsurance or any liability thereunder.

Other clauses for this reinsurance which are not worth expanding here are:

Amendments and Alterations.

Loss Clause.

Errors and Omissions Clause.

Arbitration Clause.

One other clause, which is not included in this reinsurance but is common and of some import as it covers the situation where the underlying business can be on either a losses occurring or claims made basis, is as follows:

Interlocking Clause.

If the Reinsured are liable in respect of any one loss or series of losses arising out of one event under two or more contracts issued to the same Insured and/or Reinsured and such policies incept in different years, the each and every loss any one Assured or Reassured excess and indemnity provided for in the Schedule shall be reduced to the proportion that the Reinsured's loss on the business protected hereunder bears to the total loss sustained by the Reinsured on the portfolio protected irrespective of inception dates of original contracts.

Glossary

APH This abbreviation stands for "Asbestos, Pollution and Health",

the long term liabilities that, together with the demise of the LMX Spiral, caused the Lloyd's crisis at the beginning of the

1990s (see section 3.4.1).

Combined Lloyd's agents who acted as both Managing Agent and

Agent Members Agent for the same Name (see section 3.1.2).

Corporation of An unregistered company that provides and regulates the

Lloyd's Lloyd's insurance market (see also "Society of Lloyd's") as

described in section 3.1.1.

Council The Council was established by the Lloyd's Act 1982 to

govern and regulate Lloyd's (see section 3.1.3).

Direct Name A Name that was the client of a Combined Agent (see section

3.1.2).

Equitas Model The most sophisticated actuarial model of the LMX Spiral

created by the expert Mr R. Bulmer for the purposes of the *Equitas v R&Q* [2009] EWHC 2787 (Comm) case. See section

3.4.4.

Equitas The settlement offer made by Lloyd's to the Names to create

Settlement Equitas and end the Lloyd's crisis. See section 3.4.3 of this

thesis for more information on the settlement.

Excess of Loss A type of insurance or reinsurance that is triggered only once

the loss exceeds a specific level (the "excess point"), usually

up to an agreed cap (the "Sum Insured"), as described in

section 2.2.3.

External The Names who do not work within the Lloyd's insurance

Members market (see section 3.1.2).

Finality Bill Total estimated amount owed by Names to settle all their

outstanding losses and contribute to the costs of setting up

Equitas (see section 3.4.3).

Glossary

Foreign XL Reinsurers based outside the London XL Market that

Reinsurer participated in the LMX Spiral (see section 3.2.2).

Gross Claim Total amount paid by all reinsurers from all layers (see

section 3.2.1).

IBNR Incurred But Not Reported losses i.e. future potential claims

under policies of insurance or reinsurance.

Indirect Names Names who were clients of Members' Agent and who

therefore had no direct contractual relationship with the

Managing Agents (see section 5.3.1)

Litigating The Names that rejected the Equitas Settlement offer and

Names continued to sue Lloyd's (see section 5.1.3).

Lloyd's The Lloyd's insurance market situated in London, as

described in section 3.1 of this thesis.

Lloyd's The large number of court proceedings initiated in the wake

Litigation of the Lloyd's crisis of the early 1990s (see section 5.1)

Lloyd's A Names or, since 1994, a corporation admitted to be a

Members Lloyd's Member (see section 3.1.2).

LMX London Market Excess of Loss. This term is used in case law

and other publications that related to the LMX Spiral. In this thesis, the term "London XL Market" is used instead to clarify that the LMX Spiral was only a part of the London XL Market.

(see section 3.2.2).

LMX Business The XL reinsurance of a London XL underwriter, as explained

in section 3.2.2.

LMX The standard form (but not compulsory) questionnaires used

Questionnaire in the London XL Market by underwriters to assess the risk

(see section 4.3.2 and Appendix A).

LMX Player A reinsurer that took on LMX Business although such

business may or may not be part of the LMX Spiral (see

section 3.2.4).

Market

London XL The reinsurance market within London that traded XL

reinsurance including Lloyd's, the LUC and the wider

companies market. Section 3.2.2 of this thesis explain how a risk entered the London XL market when it was first insured or reinsured on an XL basis, at which point it was not yet part

of the LMX Spiral.

LUC London Underwriting Centre, a competitor to the Lloyd's

market set up by a number of reinsurance companies in

1983 (see section 3.1.3)

Managing Agent The individuals in charge of managing the Syndicates. See

section 3.1.2 for more information on their role within Lloyd's and section 5.3.1 for an explanation of their legal

duties.

Members' Agent The individuals whose role it was to advise the Names and to

look after their interest. See section 3.1.2 for more

information on their role and section 5.3.1 for an explanation

of their legal duties.

Names The individuals who are the Lloyd's members and who use

their own means, with unlimited liability, to fund

underwriting activities at Lloyd's (see section 3.1.2).

OPL Overall Premium Limit: the maximum amount of business a

Lloyd's Member could underwrite (see section 3.4.2 for the

full definition).

PA Spiral The reinsurance spiral that developed in the early 1990s that

comprised XL reinsurance contracts covering Personal

Accident insurance policies from the US (see section 6.1.2)

Glossary

PML Probably Maximum Loss: the maximum amount of loss a

Syndicate may suffer based on the underwriter's analysis of the risk of several policies being impacted by the same event

(see section 2.2.4)

R&R Reconstruction and Renewal, which is the name given to the

plan put together by the Society of Lloyd's to enable the market to overcome the Lloyd's crisis of the early 1990s. See section 3.4 of this thesis which provides a detailed account

of the R&R project and its implementation.

Reasonable LMX The underwriter who follows the reasonable steps set out in

Underwriter case law when writing LMX Business (see section 5.3.3)

RITC Reinsurance to close, which is the term used to describe the

reinsurance of one Syndicate year to enable it to close its

accounts for that year (see section 3.1.2).

Society of An unregistered company created by the Lloyd's Act 1871

Lloyd's that provides and regulates the Lloyd's insurance market (see

also "Corporation of Lloyd's") as described in section 3.1.1.

Spiral Business LMX Business that had become part of the LMX Spiral, as

explained in section 3.2.2.

Spiral Contracts The XL reinsurance contracts that were within the LMX Spiral

(see section 6.1.3).

Spiral Effects The effects any reinsurance spiral has on the XL reinsurance

market it inhabits ones it reaches a specific point. Those effects have been identified in a number of reports and they

are listed in section 4.5.1 of this thesis.

Spiral A reinsurer that participates in the LMX Spiral. Section 3.2.4

Participant explains in some detail the approach taken in this thesis to

identify Spiral Participants.

Spiral Risk The element of risk added by the LMX Spiral. This is

explained in section 6.1.3 of this thesis.

Syndicate A Lloyd's Member or a group of Lloyd's Members

underwriting insurance business at Lloyd's through the

agency of a managing agent (see section 3.1.2).

Syndicate The Names or corporations that are members of a relevant

Members Syndicate (see section 3.1.2).

Working The Names who work within the Lloyd's insurance market

Members (see section 3.1.2).

XL Abbreviation commonly used for "Excess of Loss".

Interviews

As part of the research carried out to write this thesis, the author has conducted a number of interviews with individuals who had an interest in, or who had been involved in the development of the LMX Spiral and related case law. The interviewees are listed below.

Professor Professor Bain is a professor of economics who published the Andrew Bain

paper "Insurance Spirals and the London Market" in 1999

when he was at the university of Glasgow.

Tony Berry Mr Berry has been described as a "doyen" of the LMX Spiral⁵⁰⁸,

> having been involved in the XL market for over 30 years, most notably as the active underwriter and managing director of Syndicate 536 (Cotesworth & Co Limited), a

marine XL syndicate.

Mr Berry has acted as an expert witness in many cases and arbitrations concerning the LMX Spiral and he has also given presentation on the topic of the LMX Spiral or the London XL

Market (see bibliography).

Paul Brockman Mr Brockman worked in-house at Equitas where he was

heavily involved in the Equitas 509 case.

Mr Brown is a Fellow of the Chartered Insurance Institute who Reg Brown

was the underwriter of syndicate 702 from 1984 until 2000

as well as being a director of Managing Agent Octavian

Syndicate Management Limited and its successor company Market Syndicate Management Ltd and Pool Reinsurance Ltd.

⁵⁰⁸ In the case of *Equitas* (n 1) para 24, where he appeared as an expert witness to provide evidence in relation to the LMX Spiral.

⁵⁰⁹ ibid.

Interviews

Julian Burling

Mr Burling is a barrister at Serle Court Chambers who practised in-house at the Corporation of Lloyd's 1985 to 2010 and was Counsel to Lloyd's 1995 to 2010, where, interalia, he dealt with issues of reinsurance, regulation and insolvency. Julian is the author of "Lloyd's: Law and Practice" and joint editor of "Research Handbook on International Insurance Law and Regulation".

Clive O'Connell Mr O'Connell is an English Solicitor who is now a partner at law firm Goldberg Segalla Global LLP. He is a leading insurance and reinsurance legal professional, having focused his practice on reinsurance law since qualifying as a solicitor in 1982.

John Emney

Mr Emney has been described as a "doyen" of the LMX Spiral⁵¹⁰ having been, amongst other things, one of the three founding members of Charter Reinsurance Company in 1986 where he became the Chief Underwriter and then the Chief Executive. Mr Emney worked in the London reinsurance market for almost 40 years initially as a broker and then as an underwriter.

Mr Emney has been called upon to act as an expert witness on the LMX Spiral on several occasions and he has given many talks on the topic (see bibliography). He was also the first Chairman of the Joint Excess of Loss Committee, a body created by the Lloyd's Underwriting Association and the Institute of London Underwriters.

Jim Gregory

Mr Gregory is an underwriter who specialised in XL reinsurance and worked in the London XL Market before being employed by Equitas to assist with R&R.

⁵¹⁰ ibid.

Barbara Merry

Ms Merry is a former member of the Lloyd's Council and she was general manager in the Corporation of Lloyd's regulatory division at the time of the LMX Spiral. She then went on to become Hardy Underwriting's Chief Executive, a post she held from 2002 until February 2014.

Adam Raphael

Mr Raphael is a well known journalist who was, before retiring, executive editor of the Observer and presenter of BBC's Newsnight as well as reporter for The Economist and correspondent for the Guardian. He was a Lloyd's Name at the time of the LMX Spiral, which led him to write the book "Ultimate Risk The Inside Story of the Lloyd's Catastrophe".

Philip Rocher

Mr Rocher is an English solicitor who is now senior partner in the Dispute Resolution Group of law firm Gibson, Dunn & Crutcher. Mr Rocher led the legal team that represented the Names in the landmark *Gooda Walker*⁵¹¹ case.

⁵¹¹ Gooda Walker (n 1).

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