

REINSURANCE TRENDS AND REGULATORY ISSUES¹

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Following the September 11 attacks the reinsurance industry was in a troubled state. While the resilience of the reinsurance industry in dealing with totally unprecedented losses without substantial disruption is remarkable, some reinsurance companies that formerly were viewed as having unquestionable financial strength were repeatedly downgraded by financial rating agencies. It should be noted that the majority of the major reinsurers continue to have very solid ratings. The response of reinsurance companies has been to limit the coverage available, or even to cease operations. The impact of these changes has been felt most acutely in developing markets. In the years following the terrorist attacks the reinsurance industry has recovered with remarkable resiliency as a result of increased rates, new capital, relatively low catastrophe losses, and stabilization of the equity markets.

At the same time that some reinsurance companies have limited the geographic coverage of their marketing efforts, some are extending their products into the area of credit risk. The inclusion of new risks, and the consequent interaction of the reinsurance and banking sectors, are causing concern about effects on the stability of the international financial system. On the other hand the entry of new participants into risk transfer through mechanisms such as catastrophe bonds is expanding capacity.

This paper provides a review of the status of the reinsurance industry, in relation to pricing, capacity, and financial condition, in the aftermath of Sept. 11. It goes on to review the regulatory situation for the industry, and the efforts of international agencies to improve the regulation of reinsurers.

Regulatory frameworks for reinsurance differ greatly in different countries. As the segment of the insurance industry with the most international scope of operations, reinsurance is most affected by differences in regulatory schemes. Differences in regulation increase the cost of compliance, and create opportunities for undesired regulatory arbitrage. They also make it more difficult for regulators to evaluate the financial condition of reinsurance companies based in other countries. Differences are fundamental, ranging from total regulation of reinsurance in some countries, to a virtual *laissez faire* approach in others. Beyond the differences in overall approach, the technical aspects of valuation of assets and liabilities, and the determination of required capital are quite varied in different countries.

A key concern about the reinsurance industry is its perceived lack of transparency. The consensus of regulators is that transparency in the industry needs to be greatly improved. When combined with the differences in regulatory regimes, the lack of transparency can create an insurmountable obstacle to understanding the financial condition of a reinsurance company based in a foreign country.

Insurance companies and regulators in emerging market economies are more vulnerable to the problems of the industry than are their counterparts in developed economies. Insurance companies in many emerging market economies have to place virtually all of their reinsurance with foreign reinsurance companies. This exacerbates the problems of

¹ This paper was prepared for presentation at the 14th Assembly of Latin American Insurance Regulators in Punta Cana, Dominican Republic, and has been subsequently revised.

inconsistent regulatory and financial reporting frameworks. The availability of reinsurance in emerging market economies is less stable, and more subject to important gaps than is the case for reinsurance markets in developed countries. Some well-established but small economies face a similar need to place reinsurance with foreign reinsurers, but have more stable relationships than those of the emerging economies.

Numerous international bodies are working to improve the regulation of reinsurance. Among these, the Organization for Economic Co-operation and Development (OECD) developed Recommendations on the Assessment of Reinsurance Companies (1998), a Decision on the Exchange of Information on Reinsurers (2002) and is regularly monitoring developments in the reinsurance market and regulation. The IAIS is also deeply involved in the promotion of more sound and transparent reinsurance markets with the creation of a specific Task Force aimed at enhancing transparency and disclosure in the Reinsurance Sector, (Task Force Re), the recent establishment of a Steering Group on Transparency in the Reinsurance Sector to resume the work of Task Force Re, the implementation of a reinsurance database and the issuance of principles and standards on reinsurance disclosure and supervision². The efforts of the most important international organizations working to develop reinsurance regulation are reviewed in this paper. The number of organizations working on reinsurance regulation, and the number of projects under way demonstrate the importance of the reinsurance industry, and the high concern about the shortcomings of current regulations and the need for a global approach to reinsurance regulation.

Large catastrophes, most notably the terrorists attack of September 11, 2001, have created stresses and uncertainties for reinsurance companies and their regulators. This paper is intended to highlight the current concerns affecting reinsurance, and to review the issues of concern to regulators faced with the responsibility for overseeing this vital segment of the insurance industry.

² See *inter alia* Supervisory Standard on the evaluation of the reinsurance cover of primary insurers and the security of their reinsurers (January 2002), Principles on minimum requirements for supervision of reinsurers, 5 October 2002) Standard on supervision of reinsurers, (October 2003) and draft standard on disclosure concerning technical performance and risks for non-life insurers and reinsurers (November 2003), as well as IAIS core principles Dealing with reinsurances issues. All Standards and principles are available at IAIS website (www.iaisweb.org)

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Chapter 1. The Reinsurance Market After September 11

On September 11, 2001, terrorists attacked with an act of unprecedented impact. In addition to the human cost of this tragedy, there have been huge economic costs, some of which were insured. The total cost to the insurance industry is not yet precisely known. Many reinsurance agreements cover aggregate losses from individual events, or related events that occur during a short time period, such as 48 hours. As a result, a key issue in determining exactly how much of a group of claims is covered by reinsurance is whether the claims arose from a single event, or separate events. Because the insured loss came from a series of four related acts over a few hours, there has been some controversy about whether these acts should be considered a single event. According to the Associated Press a court decision on April 29, 2004 has ruled, in relation to the majority of the insurance contracts involved, that the collapse of the World Trade Center buildings was a result of a single event as defined in the contracts. The decision was reported as being a partial one, with a decision related to at least one contract, that of Swiss Re, being still under deliberation. Authoritative initial estimates of the insured loss ranged as high as \$80 billion³, however the court decision cited above, as well as higher than expected use of the Victims' Compensation Fund, have reduced the expected cost. According to Robert Hartwig, Chief Economist of the Insurance Information Institute, as quoted on May 10, 2004⁴, the best estimate of the insured loss is now in the range from \$30 to \$35 billion.

Some reinsurance contracts are more specific than others as to the definition of an event. This and other reasons have led to many claims being settled by agreement between the direct insurer and its reinsurer. The courts have now settled the issue for most of the remaining contracts. A major part, perhaps about half, of the cost of September 11 claims will ultimately be borne by reinsurance companies throughout the world. With an estimated \$250 billion of total capital at the time, the global reinsurance industry was severely impacted by this event, and major effects on capacity and pricing could be anticipated.

In the context of insured catastrophes throughout the world the September 11 tragedy was by far the largest, but was not outside the range of events that could have been considered plausible. According to Swiss Re *Sigma*, in the years preceding 1988 insured catastrophe losses averaged around \$6 billion per year, and varied within a range that, with hindsight, is quite narrow. Insured catastrophe losses jumped to \$10 billion in 1988, and to \$18 billion in 1989. The period of the early 1990s saw a series of large insured catastrophes, including hurricane Andrew in 1992 at an estimated \$20 billion loss, and the Northridge earthquake in 1994, with an estimated \$16 billion loss. The Kobe earthquake of 1995 was limited to less than \$3 billion of insured worldwide losses, but only because of the Japanese governmental earthquake fund. This latter event put many reinsurers on notice as to the need to model potential earthquake losses, and added to the perceived future cost of catastrophes without involving an actual major loss. Losses in the \$50 to \$100 billion range were anticipated⁵ by those planning for catastrophe reinsurance levels prior to the events of September 11. Annual insured catastrophe losses ranged between \$10 billion and \$30 billion throughout the '90s, except for 1997, which was lower. Figure 3 shows the total of insured global catastrophe losses by calendar year. Because of the nature of the September 11 losses, the portion reinsured would be expected to be higher than for catastrophe losses in general.

³ All monetary amounts are stated in U.S. dollars.

⁴ <http://www3.ambest.com> BestWire release of May 10, 2004, 10:23 a.m. ET

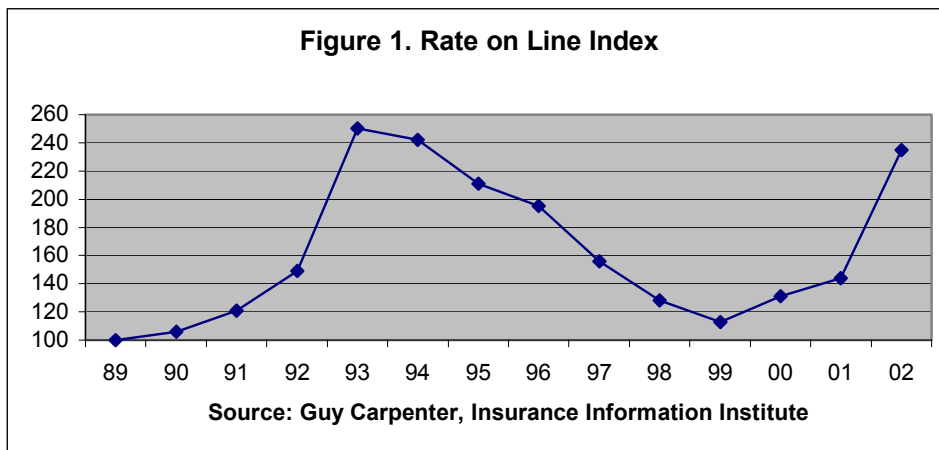
⁵ Froot, Kenneth A., (editor), *The Financing of Catastrophe Risk*, University of Chicago Press, Chicago, IL, 1999.

I. Premium Rate Increases

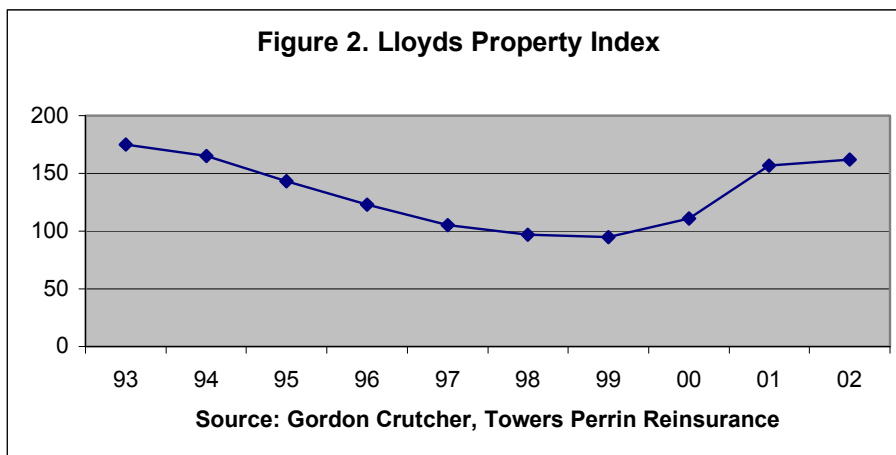
The effects of this event on the insurance industry cannot be correctly analyzed in isolation from conditions in the global reinsurance industry and capital markets at the time. The period of the late 1990s was a time of relatively soft insurance markets, but around the year 2000 the declining trend of reinsurance rates was reversed, albeit rather slightly for that year. Rates continued to increase in early 2001, in part as a result of reserve inadequacies coming from asbestos claims, and poor investment performance for companies with significant equity holdings, such as many of the major European reinsurers. Thus, at the time of the terrorist attack insurance prices were increasing, but had little or no capacity to absorb cost increases without a further premium increase. The attack not only caused insurance companies to increase significantly their estimates of future losses, but also increased the demand for comprehensive coverage, as risk managers for the first time saw the risk of global terrorism as a credible threat.

Prices, as a result, took a further jump. Coverage for terrorism, which had been viewed by many as a feature that could be offered at little or no cost, which was reasonable on the basis of experience up to that point, suddenly became unavailable. Over the intervening three years terrorism coverage has again become selectively available, but at a significantly increased cost. In addition to the increase in prices the firming of the market and the increased concerns of reinsurance managements has led to a harder line on terms and conditions of reinsurance contracts. Thus, it is not possible to fully evaluate the change in premium levels in relation to risk, as the value of the coverage offered has declined.

Figure 1 shows a global reinsurance rate index compiled by a leading reinsurance broker. This shows the softening of the market from 1993 to 1999, but also shows that rates had started to firm well before the September 11 attack. The fact that the attack occurred in the second half of the year pushed the effect of rate changes into 2002.



A similar pattern can be seen in the property rates of Lloyds, shown in Figure 2. While a number of different influences affect these rates, the bottoming of the rates in 1999, and the subsequent significant increase are both apparent.



The pattern of prices after September 11 varied by line and over time. For example, aircraft hull rates immediately increased by a factor of five,⁶ a greater increase than for other lines of business. Rates for all lines generally started to decline from their peaks within one year, although not back to their former levels. The losses from September 11, involved different lines of business previously viewed as independent. For example, a major catastrophe in workers compensation and a multiple loss in aircraft hull insurance arose from the same cause. The common cause of losses in different lines changed the perception of insurance and reinsurance managers about the risk levels of all of the lines involved. While the correlations among losses from different lines had been recognized and incorporated into insurers risk calculations, the results from the September 11 events exceeded the levels of correlation in virtually all models previously in use. As a result, premiums necessary to compensate insurers for their perceived risks have increased, resulting in 30 to 50 percent increases in reinsurance rates over a variety of lines of business. Rates for political and war risk reinsurance, when available, are still four to five times the level of 2001, and rates for aviation, property, and energy coverages remain about two times as high as in 2001.

There is evidence of a softening of rates during 2003, but the effects on rates of the 2004 hurricanes in the U.S. remain to be seen.

II. Capacity Problems

The insured loss from September 11 was estimated to exceed one-fifth of the capital of the reinsurance industry at the time. (Subsequent revisions have reduced the estimated loss.) Events leading to insured losses greater than those of September 11 are conceivable. Possible terrorist acts resulting in much greater damage to life and property have been a subject of speculation in the press. A reinsurance loss exceeding worldwide capacity must be considered possible. In view of these issues, the capacity of the reinsurance industry has been reduced, and certain coverages are no longer available.

The events of September 11 are not the only cause of capacity problems for reinsurers. Adverse reserve development has also contributed to the depletion of reinsurance companies' capital. The number one cause of adverse reserve development is liability for asbestos in the United States. This is not to suggest, however, that there are no other problems with reserves. U.K. casualty reserves have also experienced adverse development during the 1990s. Even continental Europe has experienced adverse reserve development in recent years.

⁶ Swiss Re, "Reinsurance – a Systemic Risk?" sigma No. 5/2003.

Poor performance of equity investments also contributed to the decline in capacity among European reinsurers. These companies generally invested a relatively high proportion of their assets in the equity markets in comparison to U.S. companies, so their available capital was sensitive to overall changes in equity prices. The largest European reinsurers currently have rather low portions of their investments in equities. On the basis of financial reports as of December 31, 2003 the four largest European reinsurance companies had equity investments ranging from a low of 5% of the investment portfolio for SCOR up to 15% for Munich Re.

The real impact of 9/11 on the reinsurance industry worldwide came as much from the nature of the act as from its magnitude. Up to that time virtually all of the major insured catastrophes were caused by natural events. Those classified as man-made events, such as the Piper Alpha oil rig explosion, the Phillips Petroleum explosion of 1989, and the Bhopal incident in 1984 all could be classified as accidents. Not a single one of the 40 largest insured catastrophes up to that point was a result of an intentional act. Up to 9/11 insurance industry executives were able to look at catastrophe risk measurement as an exercise in mathematical modeling applied to various natural systems like weather and earthquake. After that date catastrophe risk measurement involved imagining the degree of evil that could be perpetrated by terrorists. In one moment the problem of risk measurement changed from a problem of science to one of imagination. The confidence of reinsurance managers in the effectiveness of their planning was eroded, if not eliminated. The effects went beyond the direct impact on coverage for terrorism and extended to lines of business totally distinct from this risk. For example, the premium rates for hurricane coverage increased about 30 per cent after September 11. It will take time and more settled world conditions to restore the confidence of reinsurance managers. In the mean time, the cost of reinsurance will include the effect of the perceived increase in risk to capital.

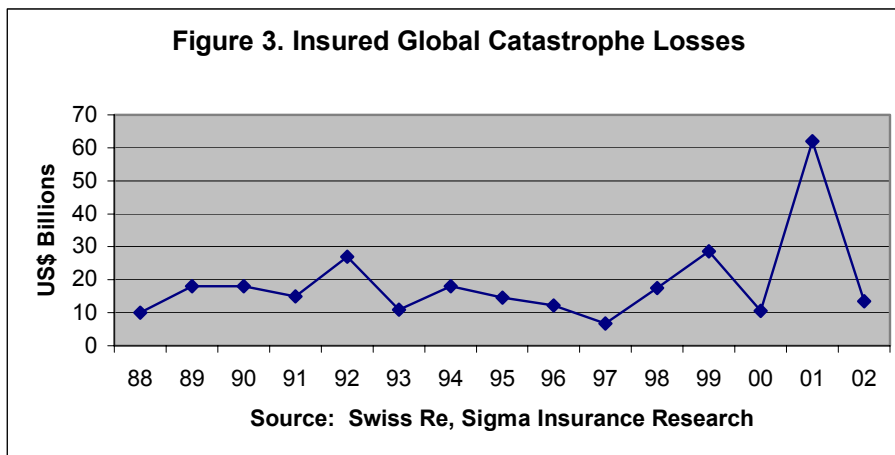
Up to September 11 the losses in many lines of business were viewed as being uncorrelated, or correlated principally by their common dependence on inflation. A reinsurer would assume that an aircraft liability loss would occur at a different random time from a workers' compensation loss. In this way the various lines of business were viewed as complementing each other by having the peaks and valleys of their losses at independent times. The view at the time was that the risks of different lines were not totally additive, because an unusually high loss in one line would not be expected to coincide with an unusually high loss in another line. The September 11 terrorist attack involved many lines of business, including aircraft hull and liability, property, business interruption, workers' compensation, and life insurance, i.e., risks aggregated in ways not previously perceived by the industry. Once events proved that catastrophe losses could be strongly correlated, the risk to capital was perceived as being much higher than it had previously been perceived to be. As noted above, this caused a 30 to 50 percent increase in rates for many lines of business.

III. Planning for Future Catastrophes

For losses approximating available capital various technical issues could affect the financial outcome. For example, varying levels of financial strength among companies, and the fact that risks may be concentrated by geographic area or type of business, imply that failure of individual companies would precede the exhaustion of capital for the entire industry. Timing of cash flows, substantial increases in future premiums, and gradual recognition of needed reserve levels could mitigate the financial effects on reinsurance and insurance companies. Attitudes about the ability of the insurance industry to cope with an extremely large loss could affect the regulatory and business environment faced by companies. All of these uncertain circumstances contribute to the creation of an unclear picture of how the results of a loss approximating available capacity would work out.

A loss far exceeding the capacity of the reinsurance industry must also be considered possible in the current international political environment. Alternative risk transfer through mechanisms such as catastrophe bonds might have the potential to greatly increase the capacity of the world economy to recover from a major catastrophe, but, as discussed later in this paper, private resources may never be sufficient to provide for the worst imaginable events. In such circumstances government action would be needed to avoid a chaotic effect on the real economy. Some governments have started preparations to deal with such a contingency at the level of the individual country. International cooperation would be needed to provide enough resources to handle the largest potential catastrophes, but difficult political obstacles would have to be overcome to develop an advance plan to deal with them at the international level.

Techniques of mathematical modeling may be helpful in the future in planning for such extreme contingencies, but the history of the development of earthquake and windstorm modeling shows that substantial effort would be needed before modeling techniques would have enough credibility to be useful to planners. In addition, a scientific basis for modeling earthquakes and windstorms preceded the development of insurance models. Current issues in the modeling of insurance losses include the unlimited risks imposed in certain countries by legislation or court decisions in relation to automobile liability or workers compensation medical coverage. Of course no scientific foundation currently exists with respect to the modeling of terrorism risks.



As can be seen, an insured loss for the 9/11 tragedy at the lower end of the estimated range, i.e., at \$35 billion, while unprecedented, would not have been outside the range of planning envisioned by reinsurance company managements.

For example, in a book published in 1999⁷ Kenneth Froot remarked, “prospective event losses ... can easily exceed \$50 billion...” He warned that the insurance industry was not ready for such an event. Indeed, the world was not ready for an event of the magnitude and nature of the September 11 terrorist attack, with the result that the economic impact went far beyond the direct economic effects. To some degree the ability to prepare for catastrophes is not just a matter of creating a theoretical model that shows their potential magnitude, but making the projections of such a model of practical concern to the people who are charged with the responsibility of providing for such risks. Some in the industry had taken the prospect of such large losses seriously, but this was certainly not universal.

⁷ Froot, Kenneth A., editor, *The Financing of Catastrophe Risk*, University of Chicago Press, Chicago, 1999.

Negative developments in global capital markets up to September 11 placed capital markets in a vulnerable position in relation to the negative sentiments caused by this event. The overall effect of declines in global capital markets was a multiple of the direct effect of the September 11 tragedy on reinsurers. There is a two-fold connection between capital markets and reinsurance. In Europe, for example, reinsurance companies had held the majority of their assets in equities, so a decline in equities caused a corresponding decline in reinsurers' capital. Perhaps more important, however, is the change in flow of capital into the reinsurance industry that had previously followed adverse events. In this case that flow was restricted because of broader capital market conditions and the perception of increased risk of investments in the reinsurance industry. The European companies have greatly reduced the portion of equities in their investment portfolios, so one of the issues cited is no longer a concern. Also, there has actually been a positive flow of capital to the industry, but not at the level seen in previous hard-market conditions. Significant increases in rates have attracted new capital, with Bermuda being the focus for much activity. This continues a pattern of capital entering the market whenever a large catastrophe has increased rates and demand, often more than offsetting the erosion of capital caused by the catastrophe. A dozen new reinsurance companies have been established in Bermuda since September 11.

In comparison to the difficulty in planning for terrorist events at the level of the reinsurance industry as a whole, the issue for an individual company is even more complex. The losses from such an event would not be spread evenly over the worldwide industry. Disruptions could occur if individual companies were unable to meet their obligations, even when the capital of the industry as a whole exceeds the level of the losses incurred. Companies must continue to monitor their risk portfolios to avoid undue concentrations. While reinsurers have started once again to offer coverage for some terrorist risks, the reinsurers' own retrocession covers generally exclude such risks.

Overall the condition of the global reinsurance industry appeared poor at the end of 2001, but the picture has improved since then. Company failures as a result of the September 11 attack were few, and involved relatively small companies. The cost of natural catastrophes was quite low during 2002 and 2003. Equity values have stabilized, and have started to increase, and many companies have reduced the equity components of their portfolios. In combination with increased premium rates these conditions have restored confidence in the strength of global reinsurers. The effects of concerns about capacity are more severe for developing countries than for developed countries. The reason for this is that reinsurers that face financial difficulties will reduce their expansion efforts before they will cut back on existing programs. As a result, existing markets will feel a less severe effect than markets that have an expanding need for reinsurance. In Latin America the availability of reinsurance varies greatly, with a few countries continuing to experience a virtual shutdown of reinsurance capacity. Capacity is returning to the market, both from the stabilization of existing reinsurance companies and in the form of new entrants. Approximately \$30 billion of new capital has been brought into the market since Sept. 11, 2001, and this has restored much of the lost capacity. A shift of certain catastrophe risks to the capital markets through the development of catastrophe bonds has improved the overall risk management picture. Another contributing element to the restoration of capacity is the low volume of catastrophe losses since Sept. 11, 2001 up to the hurricanes of 2004. The new capacity is not being offered uniformly in all lines. Property capacity is adequate, but casualty capacity is still limited. There are also reports that the reinsurance availability is still restricted in the life insurance market. In addition, consolidation has reduced the number of reinsurers, sometimes making the placement of reinsurance more difficult.

Coverage for terrorism risks is very limited, if available at all. This has caused some governments to step in with programs to provide some protection for terrorism risks. Among the countries with such new programs are the United States, France, Germany, and Austria.⁸

IV. Financial Deterioration of Reinsurance Companies

Some of the most respected and solid companies in the reinsurance industry have had financial problems that can be attributed in large part to the terrorist strike. Several reinsurers, including Scandinavian Re, Fortress Re, and Copenhagen Re ceased operations. The financial ratings of several large European reinsurers, including Swiss Re, Hannover Re, Munich Re, and SCOR have been downgraded by rating agencies since 2001. Munich Re, one of the largest reinsurers, was again downgraded in 2003. The rating of Swiss Re was also downgraded in early 2004. Gerling Re, after a series of downgrades, is no longer rated by Standard & Poors. Because of the previous perception of financial strength of these companies, their downgrades not only increase the cost of capital for these companies, but raise fears about the financial condition of all companies in the industry.

As shown in Table 1, the reinsurance industry is dominated by a small number of large companies, most domiciled in Europe. Total net premiums written by the next 25 companies are just a fraction of those written by the top ten. One part of the story that is not obvious from the list of the top ten companies is that about one third of the top 35 companies are based in Bermuda, but only one makes it into the top ten. Another consideration in relation to the concentration of the industry is that since 1995 there has been a wave of consolidation sweeping through the industry, resulting in the elimination, through merger, of at least five major companies. The global reach of these companies creates systematic risk, the risk that the failure of one company could extend throughout the industry. This risk can be exacerbated to the extent that mutual retrocessions may make the reinsurance companies more interdependent, an issue that is difficult to evaluate from outside the industry. The fact that reinsurance companies provide a foundation for risk management in insurance companies, and that the insurance companies provide risk management for the entire economy, lead to systemic risk, the risk that the failure of one large reinsurance company could cause a breakdown in the economy as a whole. Possibly the level of these systematic and systemic risks may be very low in relation to other risks to the economy. The point here is to note that these risks, which have always existed, increase with increasing concentration, and should continue to be monitored.

There has been an increase in the use of downgrade trigger clauses in reinsurance contracts. These clauses, included at the insistence of cedants, provide the cedant with certain options, such as the right of cancellation, in case the reinsurer's financial rating is downgraded. Individual cedants may feel that such clauses provide them with protection from an adverse contingency, but at the level of the market as a whole the use of such clauses could reduce the stability of individual reinsurance companies and the reinsurance market as a whole.

⁸ The OECD has established a Task Force on Terrorism Insurance which *inter alia* studied national coverage of terrorism, which is due to report in 2004.

Reinsurer Rankings ⁹ , 2002		
Company	Domicile	Net Premiums Written (Million) ¹⁰
Munich Re	Germany	\$22,838
Swiss Re	Switzerland	21,617
Berkshire Hathaway	U.S.	14,393
Hannover	Germany	8,528
Lloyd's	U.K.	6,811
GE Global	U.S.	7,892
Scor Group	France	4,694
Axa Re Group	France	2,572
XL Capital	Bermuda	3,544
Converium Group	Switzerland	3,322

As reported in a recent article in *The Economist*¹¹, relationships between reinsurance companies and insurance companies have become strained. Historically the reinsurance industry has operated on the basis of trust between insurance companies and their reinsurers. People on both sides took a long-term view, and legal technicalities were not usually invoked. The attitude on both sides was that some short-term losses could be accepted, because both sides would benefit in the long run. The reinsurers would make a profit in the long run, and the insurance companies would have their claim fluctuations smoothed out in the short run. Insurance companies would cede profitable business that they knew provided more than the minimum required profit to the reinsurer, and reinsurance companies would pay claims without strict interpretation of their contracts. Now the financial weakness of reinsurers is causing them to question the legal validity of claims more than ever. Even valid claim payments may be delayed, causing some serious cash-flow problems at insurance companies. The amount of litigation between insurance companies and reinsurers is greater than it has ever been.

⁹ Source: A. M. Best, *Global Reinsurance Special Report*, 2003.

¹⁰ Source: *Standard & Poor's Global Reinsurance Highlights*, 2000.

¹¹ "Love on the Rocks," *The Economist*, April 19, 2003 pp. 59-60.

Chapter 2. Regulation of Reinsurance

During the decade of the 1990s financial difficulties were encountered in Latin America and in Asia. The G-7 ministers, concerned about contagion of these problems, looked at the structure of financial systems worldwide, and started to institute steps to improve financial stability. At the same time the world's insurance regulators had started to formally organize their cooperative efforts. The leaders were uncomfortable with the limited amount of information about reinsurance, and the absence of regulation of reinsurance in some jurisdictions. The convergence of financial services caused concern that any weak link in the regulatory framework could spill over into problems throughout the system.

At the time of the September 11 terrorist attack reinsurance was already on the agenda for reform, but these events focused the attention of financial leaders. As a global industry with quite limited capital and inconsistent regulation, the reinsurance industry became a target for urgent action. A number of very high level international bodies have become involved in an effort to improve and develop global reinsurance regulation. The large number of projects under way demonstrates the importance of this issue to the leaders of the global financial community. Appendix I is a review of these international efforts.

I. Regulatory Considerations

There is a wide range of approaches to the regulation of reinsurance in different countries. For example, in Greece there is no regulation of reinsurance, while in the United States there is extensive regulation. The global nature of the reinsurance industry causes differences in national regulatory regimes to be of more consequence than for other industries. Because of the high degree of regulation in the United States, and the significant differences between the approach to regulation in the United States and the approach in most other countries, this paper focuses on regulatory issues in countries other than the United States.

Before reviewing the potential types of regulation and the basis for them, it will be useful to consider the basis for regulation in general. The most important step in designing a regulatory framework is deciding the objectives of regulation. Unclear or conflicting regulatory objectives doom the regulatory framework to inefficiency and ineffectiveness. Since a competitive, free market allocates scarce resources efficiently, enhances the value of products brought to market, and enhances the variety of products, the need for regulations should be balanced against their potential cost, both in implementation and in reductions of efficiency. A recent thesis by Dr. T. Boonyasai at Georgia State University contrasted the insurance markets in Korea and the Philippines, which undertook modest deregulation and liberalization efforts, with those of Taiwan and Thailand, which had virtually no deregulation during the period. Dr. Boonyasai found that liberalization and deregulation in Korea and the Philippines seem to have increased productivity there compared with Taiwan and Thailand. This rigorous research confirms the results of economic theory, that a competitive market increases productivity.

What, then, is the proper role of reinsurance regulation? A perfect market might be able to operate effectively with no regulation, but reinsurance markets tend to have imperfections. The proper role of regulation is to compensate for these imperfections with the minimum interference with the functioning of the market. The most important imperfections in the reinsurance market are information asymmetry and systematic financial risks. Other imperfections can arise from market power and from externalities. Regulation should balance the need to correct market imperfections with the potential for loss of efficiency. This can be achieved by focusing regulation on specific needs that can be effectively addressed. As stated by Skipper [2000]:

“Government’s role in crafting insurance regulation should be limited to rectifying imperfections that can cause significant harm. A pro-competitive approach, therefore, would witness governmental regulation of insurance only with respect to matters that meet three conditions:

- an actual or potential market imperfection exists
- the market imperfection causes or can reasonably be believed to cause meaningful consumer or public harm
- government action can ameliorate the harm.

Conversely, if any one of the three conditions is not met, no government intervention is warranted.”

This dictum supports solvency regulation, where the potential for harm to the public is clear, the information that customers need to protect themselves is difficult for them to obtain, and where government has demonstrated an ability to monitor and promote solvency. It would not, however, support regulation of business relationships in a market where buyers and sellers are sophisticated business managers who meet on equal terms. As the market increases in transparency and sophistication, it is possible to reduce the degree of regulation. In this respect, one of the main differences between the regulation of insurance and the regulation of reinsurance arises from the difference in the sophistication of the buyers. Since the buyers of reinsurance are insurance company executives, their level of sophistication in relation to the relevant issues is high. Concerns about asymmetry of information are greatly reduced in this situation, often limiting, in turn, the need for regulation. This is reflected in the reduced extent of regulation of reinsurance in most jurisdictions.

Another key issue to consider is the degree to which regulation will extend only to reinsurance companies domiciled in the regulator’s country, versus to all reinsurers doing business with the country’s insurance companies. From the standpoint of solvency the effects of regulation can be achieved at either the insurance company or reinsurance company level. At the insurance company level regulatory objectives are achieved by controlling the reserve credits taken by ceding companies. Primary companies will be reluctant to do business with reinsurers if cessions to the reinsurer do not provide corresponding reserve credits. In this way, the flow of reinsurance to companies that do not meet regulatory requirements is essentially cut off. Alternatively, the regulatory framework can operate at the level of the reinsurer, providing a degree of assurance that the reinsurer will be able to meet its obligations. Similar results can be obtained at the level of the insurance company or the reinsurance company. Efficiency and effectiveness of the regulations are the most important criteria in deciding the point of application of regulatory controls. Solvency is most efficiently regulated at the reinsurance company level, but this requires the existence of effective regulatory supervision in the reinsurance companies’ domiciles. It has been observed that many reinsurance insolvencies have occurred in highly regulated countries. Reasons for this observation are not fully understood, and would be a fruitful topic for further research.

Regulation comes at a cost in terms of the process of compliance and possible loss of efficiency. The cost of regulation should be an explicit part of the justification for existing regulation and for proposed regulatory changes.

Even though the reinsurance industry is otherwise quite similar to the insurance industry, so that many regulatory issues are common to both, there still remain some important differences calling for a fresh look when one considers reinsurance regulation. Issues related to financial regulation tend to be similar, but issues related to market conduct are quite different. The reinsurance industry, as compared to the insurance industry, is essentially global, because no single country has a reinsurance industry with enough capacity to handle

the largest potential losses. For this reason the cross-border harmonization of regulation is very important to the efficient operation of the reinsurance industry.

Regulatory issues differ somewhat between life insurance and property/casualty insurance, but for the most part the issues are similar or identical. This paper is intended to cover both life and property/casualty reinsurance unless otherwise stated.

In many developing countries the volume of transactions involving reinsurance ceded by domestic insurance companies to foreign reinsurers will far exceed the activity of domestic reinsurers. The main exception to this is in the countries that have become centers for reinsurance captives. Five of the top ten global domiciles for reinsurance captives are islands in the Caribbean plus Bermuda, but none of the Latin American countries is in the top ten. The development of a captive industry involves a number of issues that go beyond the regulatory issues considered here, and will not be addressed further in this paper.

II. Approaches to Reinsurance Regulation

Two general approaches have been taken to reinsurance regulation in different countries. Some countries, such as the United States, Japan, and the United Kingdom, apply essentially the same rules to reinsurance companies that they apply to primary insurance companies. Other countries regulate reinsurers indirectly, through their regulation of the primary insurers, and rules governing the ability of primary insurers to receive credit for balances receivable from reinsurers. At the primary company level regulators may seek the diversification of reinsurance risk over several reinsurance companies. Countries with indirect regulation of reinsurance may, as a practical matter, apply similar considerations of solvency as applied to primary insurers when they determine whether to allow credit for balances receivable from specific reinsurance companies. In view of the wide range of approaches to the regulation of reinsurance in different countries, any discussion of reinsurance regulation must be considered in relation to the context of a particular country. Any generalized view of reinsurance regulation will be inapplicable in some countries as a result of their particular approach to regulation. Since reinsurance is a global business, regulation should recognize its global nature. The primary areas of supervision for reinsurance regulators can be organized under four headings; financial transparency, capital adequacy, systemic risks, and market conduct.

III. Specific Regulatory Concerns

A. Transparency

In 1982 Alexander and Alexander, one of the world's largest insurance brokers at the time, acquired the firm of Alexander Howden, based in the U.K. In the subsequent review of Howden's financial records a massive fraud, estimated at some £300 million, was discovered by the auditors. An important component of the fraud involved reinsurance ceded to organizations controlled by certain executives of the company. The fraud was discovered by an auditor who was attempting to confirm a reinsurance cession to Southern American Re, based in Panama. When he was unable to obtain information about the company, he checked with the registry of corporations in Panama, and discovered that the company, Southern American Real Estate, was not an insurance company at all, but a front company set up by participants in the fraud.

This story points out a basic problem that existed twenty and more years ago, and has not yet fully been solved, i.e., the need for a clear, universally-recognized identification system for

reinsurance companies. The IAIS put forward in 2000 a proposal¹² to establish such a system, and the framework of the system was completed in 2002¹³. As noted by Hall,¹⁴ rating organizations already provide financial ratings on many large reinsurance organizations, and there are technical difficulties in extending this coverage. While the largest organizations are clearly identified and rated, numerous small reinsurance organizations are missed by these rating systems. Anyone who has attempted to review the reinsurance receivables of a large insurer or reinsurer knows that it is extremely difficult to identify companies unambiguously. Issues as simple as the existence of similar or identical names for different companies based in different countries make such a task extremely difficult. A system of unique identifiers could be established by countries willing to participate. While coverage would not be universal, the market would create pressure to expand such a system to universal coverage. The IAIS framework can serve as such a system, but the framework provides a way for regulators in individual countries to submit information voluntarily. The success of this venture will depend on the diligence of regulators in helping to complete the on-line database.

The OECD has also concentrated its work on improving financial integrity and transparency of reinsurance market. For this purpose it has created and developed since 2002, a special and confidential network hosted on the OECD website that provides for the exchange of information among OECD governments. This secure web site allows for the exchange of sensitive information on a timely basis.

1. Identification of Key Participants

Unfortunately the money involved in reinsurance and the fact that the product consists of a promise to pay later make the reinsurance industry attractive to unethical individuals. Regulatory standards in a number of jurisdictions require the identification of the key owners and executives involved in reinsurance companies, and may require background checks on them. This is a relatively low cost intrusion into the affairs of the company, and is sometimes effective in preventing the use of a reinsurance company to commit fraud.

2. Contractual Clarity

As noted in Principle 11 of the IAIS *Principles on Capital Adequacy and Solvency*, “Any credit for reinsurance should consider the effective transfer of insurance risk under the contract of reinsurance.” A problem that can arise between reinsurance and insurance companies is the creation of contracts that are difficult for regulators to interpret. This can occur in the case of non-proportional reinsurance contracts, such as excess or stop-loss contracts. Reinsurance can improve the financial position of an insurance company by managing the risks that the company retains. Some reinsurance contracts may appear to transfer more risk than is actually transferred. If this occurs, the insurance company’s financial condition appears to be improved, and the cost of the reinsurance is relatively low. At the same time the reinsurance company earns premium revenue while taking on minimal risk. Existing short-term incentives cause the reinsurer to want to reduce its risk, even if the contract may appear to transfer more risk, and cause the ceding company to want to get the maximum amount of credit for reinsurance, even if the risk is limited. The interests of third parties concerned about solvency, such as policyholders of the insurance company, may not be protected in this situation.

¹² IAIS Working Group on Reinsurance and Reinsurers: *Relevant Issues for Establishing General Supervisory Principles, Standards, and Practices* (2000).

¹³ See *inter alia* Principles on Minimum Requirements for Supervision of Reinsurers, (October, 2002).

¹⁴ Hall, Debra J., *Reinsurance Regulation in a Global Marketplace: A View from the United States*, Reinsurance Association of America, 2000.

Reinsurance contracts may be confusing to regulatory reviewers when convoluted contract language transfers risk in one section, but negates the transfer in another section of the contract through experience refunds or other means. Alternatively, there may be unwritten, or written but undisclosed, agreements between the insurer and reinsurer under which the reinsurer's losses are repaid through higher premiums in the years following the loss.

As noted in IAIS Supervisory Standard 7 on the *Evaluation of the Reinsurance Cover*, "In some cases the only intention of the cedant is to obtain a favourable impact for financial reporting ..." The Standard states that the regulator should determine whether there is a true transfer of risk. It further states that the regulator should obtain information from reports describing reinsurance cover, reinsurance programs or treaties, and written contract descriptions or summaries.

It is virtually impossible for regulators to unravel the details of convoluted contract language that has been written to offset risk transfers in part of a contract through adjustment clauses in other parts of the contract. An alternative approach is to require insurers and reinsurers to provide examples of the financial operation of complex contracts, including complete details of cash flows related to hypothetical losses. These analyses should be endorsed by both the ceding and assuming company, as a specific illustration of the effect of the reinsurance agreement that they have entered into. In addition, companies can be required to provide professional opinions as to the probability of losses at a level that would trigger a recovery of reinsurance. Since such calculations are surely considered in the pricing of the contract, compliance should not cause an undue hardship. A requirement to clarify the operation of complex contracts would not be intended to determine or prescribe in any way the agreement between the parties to the contract.

Assuming that contracts are written in clear and forthright language, the complexity of the reinsurance contracts, as well as the relationships between reinsurance coverage and the coverage offered by the insurance company's direct policies create a difficult issue for regulators of reinsurance companies and the companies that they reinsure. It has not been unusual to have differences in definitions of coverage between reinsurance treaties and the underlying policies that they cover, but the extent and importance of such differences has grown since 9/11. It is now common for reinsurance companies to insist on exclusions related to terrorism, which may not agree with the underlying policy language used by the direct insurer. This produces a gap in the risk management program of the insurance company that may expose the insurance company to financial difficulty in case of a terrorist act. Such gaps in coverage may arise from policy language that covers risks that are not insurable without government involvement. In addition to coverage differences, the complexity of the various layers of coverage that an insurance company may need to combine creates a risk of error or oversight that may create gaps in the coverage for large losses.

B. Capital Adequacy

Capital adequacy provides a level of assurance of future solvency. Solvency is the fundamental concern in the regulation of reinsurance, but it cannot be regulated without transparency, at least transparency to the regulatory authority. The key elements of reinsurance solvency regulation are sound estimation of liabilities, management of asset values and liquidity, and provision of capital in relation to risks assumed. Financially strong reinsurers can command higher prices in the market. Therefore, in the short run, insurance companies have a financial incentive to purchase reinsurance from weaker companies. This incentive is, of course, offset for reputable companies by longer-term concerns about security, but may dominate for companies that are focusing solely on short-run profitability. Regulators should compensate for the incentive to reinsure with weaker companies by

limiting the amount of credit taken for balances receivable from companies with low financial strength, or by providing such offsetting incentives as capital weighting based on ratings.

The IAIS has adopted three papers on solvency. They cover a review of methods used to quantify insurance liabilities, the use of actuaries in the regulatory process, and solvency control levels. The IAIS evaluated the use of actuaries in various countries, and discussed how to use the work of actuaries, in conjunction with regulatory supervision, to evaluate insurance liabilities. An International Actuarial Association working party has completed a paper on risk-based capital requirements, in response to the issue of solvency control levels. This paper is expected to be presented to the IAIS in May, 2004 for its consideration. The working party was asked to describe principles and methods to quantify total funds needed for solvency as a foundation for a global risk-based solvency capital system. The working party was also asked to identify ways to measure the exposure to loss from risk, as well as dependencies between risks, and to consider practical risk measures and models. The report of the IAA working party is expected to include nine basic principles¹⁵ for solvency assessment.

1. Three-pillar approach to supervision, as in Basel II
2. All types of risks are included
3. A principles-based approach is preferred, but may be supplemented by a rules-based approach
4. The entire balance sheet is considered on the basis of fair values
5. Use appropriate risk measures
6. Two adequacy tests are proposed with different time horizons and degrees of confidence
7. Internal company models may be permitted, but must be amenable to regulatory review
8. Consistent approaches are proposed, but different jurisdictions may have different risk issues, such as legal system and business practices
9. Advanced or company-specific approaches could reduce capital requirements, but companies would need specific permission to use them

The working party paper will also include standardized models to estimate claim fluctuations. These models are already programmed, and will be available on line.

Parallel development of systems to evaluate capital adequacy has progressed in different geographical areas, resulting in differing approaches such as the solvency margin approach used in Europe, and the risk-based capital approach used in the United States and some other countries. The fact that these systems are already fairly well developed implies that it will require substantial effort to reconcile them. In an era of globalization, varying regulation in different jurisdictions can create opportunities for regulatory arbitrage. Efforts to achieve convergence of the various approaches are currently being undertaken by the IAIS. In addition to the IAIS many individual countries and international groups are currently involved in revising capital requirements, including the EC, the United Kingdom FSA, the Dutch PKV, Malaysian Bank Negara, the U.S. NAIC, and the OSFI. One possibility to bridge the gap between requirements in different jurisdictions is to use capital requirement for banks under Basel II as a starting point for development of regulations for insurance company capital adequacy. The forthcoming paper of the International Association of Actuaries Working Party on Solvency takes this approach.

Risk-based capital concepts have been brought to the insurance industry from banking. As these methods are applied in the insurance and reinsurance industries, complexities arise that

¹⁵ Wason, Stuart, "Insurer Solvency Assessment, Towards a Global Framework," *Proceedings of the 2004 Enterprise Risk Management Symposium*, www.casact.org, 2004.

were not present to a significant extent in banking. For example, the fact that the most important liabilities are estimates implies that simply multiplying a factor by the stated value of liabilities may not provide an appropriate capital allocation.

Typically the risk-based capital provision related to an asset or a liability is determined by multiplying the amount of the asset or liability by a numerical factor. The approach is intended to recognize the risks specific to the type of entity being evaluated. As applied in the United States, different sets of formulas and methods apply to life insurance, general insurance, and managed care health organizations. If the risk-based capital provision related to an estimated liability is based on multiplying a fixed factor by the amount of the liability, and if the liability estimate is understated, the risk-based capital will be accordingly reduced. This is, of course, the opposite of what would be desired of a system to assure solvency.

A further development is the application of dynamic methods to the evaluation of capital adequacy. In this approach simulation is used to project multiple future scenarios for the business. Dynamic financial analysis methods to be applied to insurance companies have been under development for the past 15 years, but the methods are still being refined.

In the European Union a solvency margin approach is taken to capital adequacy of primary insurers (but the U.K. has preempted Solvency II by the release of ICAS/ECR risk-based capital rules in June 2004). This approach builds on rules to assure the adequacy of technical provisions (i.e., insurance reserves) and to limit investment risks. The amount of capital that must be held is intended to provide for the risks of the technical provisions and the assets, as well as other general risks. Member states of the E.U. may require more capital, but the solvency margin requirements determine the minimum permitted capital.

The solvency margin approach for general insurance involves a calculation based on premium volume and claim volume over a three-year period. The approach for life insurance involves a calculation based on the technical provisions and the total net amount at risk. In the E.U. approach asset risks tend to be limited through rules about eligible investments, diversification, and methods of valuation, i.e., the asset admissibility and concentration rules, rather than the addition of capital to the margin for insurance risks.

As with the United States system, the European Union primarily regulates solvency for individual companies that are part of affiliated groups. There are additional rules related to affiliated groups, however, to limit the possibility for groups to leverage intra-group capital and intra-group creation of capital, notably the E.U. Insurance Groups Directive.

The types of capital adequacy regulation practiced in the United States and in the European Union are representative of the approaches in many other countries, but other variations exist around the world, defying any attempt at a complete classification of capital adequacy regulatory schemes.

In addition to differences in the regulation of reinsurance (or insurance) companies across jurisdictions, differences exist in the regulation of different types of financial institutions both across and within jurisdictions. The increasing level of risk transfer between different types of financial institutions heightens concerns about inconsistencies in treatment, and opportunities for regulatory arbitrage. Differences exist currently in a number of important elements of the regulatory process for different types of financial institutions. These include differences in accounting rules, differences in the definition of capital, differences in the types and definitions of recognized risks, differences in the time horizon for evaluating risk, and differences in the average level of capitalization in different sectors.

Current differences in the regulation of capital adequacy among different countries and different types of financial institutions have a number of disadvantages. It increases the difficulty of assessing the financial strength of global companies, and creates opportunities for regulatory arbitrage. For reinsurance companies with an adequate level of solvency regulation in their domicile the imposition of similar requirements in host countries is inefficient and duplicative. The International Association of Insurance Supervisors has a goal of harmonizing capital adequacy regulation. This is an extremely complex task that will take some time to accomplish, but its high priority implies that convergence of regulation might be expected.

1. Role of Catastrophe Risk Modeling in Ensuring Solvency

The events of September 11 have focused increased concern about the ability of the insurance industry to large-scale disasters. Current catastrophe modeling capabilities of the insurance industry cover, among others, the risks of earthquake and of wind storms. An example may help to illustrate the modeling techniques that are currently being used by sophisticated risk managers in the insurance industry. Earthquake risks can be modeled in terms of the probability of an earthquake at a specific location over a given time period, the likely magnitude and type of earthquake, and how the earth movement will be transmitted through the ground. These techniques use extensive data on fault locations, earthquake history, and soil types, down to a geographic location measured in terms of city blocks. The damage caused by an earthquake depends on the amount of earth movement and the nature of the buildings within the area affected. These models also make use of data on the degree of earthquake protection in individual business buildings, and the type of construction (masonry vs. wood frame) for residential buildings. Finally, the value of buildings and the probability distribution of damage costs are included in the model. Such models, when applied to simulate results over many random trials, give managers a clear idea of the range of potential losses arising from earthquake. Models of similar sophistication have been developed for insured windstorm damage.

Modeling capabilities for terrorist attacks are still emerging. They have had very limited public discussion, and are far from being as well-developed as the modeling of natural events.

Since September 11 there has been a greatly increased consideration of catastrophes of a magnitude far beyond the level previously contemplated in reinsurance regulation. Potential insured losses from conceivable catastrophes, especially those related to terrorism, could exceed the combined capital of the worldwide reinsurance industry, although this involves some speculation about losses at a level far higher than any insured loss that has ever actually occurred. The solution to such exposure may not lie in adding capital to the reinsurance industry, because it may not be possible to pre-fund the provision for such large risks. Some of the most damaging potential terrorist attacks that have been contemplated could involve the use of a nuclear explosion, dispersal of radioactive material, or release of a contagious pathogen. Typical property and casualty insurance contracts already exclude losses caused by events of these types, so insurance would not provide a recovery mechanism if such an attack were to be carried out. Competing needs for capital, and even the requirements of current consumption, place practical limits on the amount of capital that can be accumulated for a future contingency. The solution may be to provide an unfunded framework for dealing with such potential losses in the future. The ability to implement such a framework would require survival of the institutional infrastructure, so supervisors of financial institutions should ensure that back-up data facilities and disaster recovery plans are in place to enable financial institutions, including reinsurers, to continue in business after a mega-attack.

2. Government Efforts to Provide for Catastrophe Risk

Funded strategies for recovery from the economic effects of catastrophe rest on the use of investments that may themselves be adversely affected by the very catastrophe that they are intended to provide for. In the case of an extremely large catastrophe a mechanism is needed to avoid chaos and to husband the world's economic resources to provide the basis for recovery. A plan of recovery could be more important than investments that provide a claim on future economic activity that is already disrupted. The largest catastrophes are beyond the magnitude that could be provided for in advance by private action, and would seem to require government involvement. Such risks could be covered by funded programs, but the largest risks cannot be pre-funded. Government is the *de facto* insurer of last resort in these cases anyway, because government will be forced to step in to aid recovery if other recovery resources fail. With its power to borrow and tax government can bring to bear greater resources in an extreme emergency than can be provided by the private sector.

A number of countries already have formal public catastrophic reinsurance programs in place. For example, France, Japan, Norway, Spain, and The Netherlands all have national reinsurance programs for natural disasters. These programs can provide some of their own funding through premium revenue, and give government a means to use market forces to internalize the cost of risk. An advantage of such formal programs is that it is possible to coordinate between government and the insurance industry to exclude both the coverage and the cost of the government program from the private insurance contracts.

During the course of history the world has endured catastrophes far beyond the magnitude of the September 11 attack. These include both natural and man-made disasters. Some of the worst man-made disasters were a result of war, which is not necessarily comparable to the current situation, but other man-made catastrophes were not a result of the action of formal governments. Recovery from extremely large catastrophes depends on the encouragement of economic activity through the restoration of confidence in the worldwide economic system.

3. Mitigating Circumstances

The financial effects of catastrophes, both natural and man-made, are felt most heavily by the reinsurance industry, because of excess and stop-loss coverage, which pass high losses from the insurance industry to the reinsurance industry. Even if the total magnitude of a catastrophe could be predicted, the prediction of its effect on the reinsurance industry would be difficult to determine. Determining the amount of coverage can be complex, as is demonstrated by some of the coverage disputes arising out of September 11. In addition to the difficulty of determining the amount of reinsurance coverage, the timing of payment creates uncertainty in projecting cash flow, and in determining the amount of investment income that might contribute to a reinsurance company's ability to pay a claim. While not normally considered for regulatory purposes, a large catastrophe immediately tends to push insurance and reinsurance premium rates higher. This means that a company that can remain solvent for the period immediately following the event may emerge with greater financial strength than would be projected on the basis of its claims alone, since the profits on new business may be earned before catastrophe claims are settled. This is not to suggest that individual companies should be allowed to base current solvency on future profits, but from a global industry perspective it is realistic to recognize the forces that offset the short-term financial impact of major catastrophes.

The Basel Committee is a proponent of capital requirements based on the specific, quantified risks that a company takes on. We can expect further penetration of these ideas in countries throughout the world.

C. Systematic and Systemic Risks

Systematic financial risks exist when the failure of one financial institution leads to the failure of others in the same sector. This has occurred in the United States when the failure of a reinsurer after a major hurricane caused the failure of several primary insurers.

The IMF has concluded that linkages between banking and insurance, as well as the dependence of the real economy on insurance protection, can create systemic risks in which financial problems in the insurance sector can spread to other parts of the economy. For example, in the last twenty years problems with the insurance industry in Ireland, Australia, Korea, and Jamaica have threatened to spread through the economy of those countries. In three of those cases the insurance industry was involved in selling savings products, and financial pressures threatened a run. The banking sector was also threatened. In those cases direct government intervention was needed to restore stability. In the fourth case, in Australia, the problem threatened to spread to the construction industry, and the insurance company, which had already been under government supervision, was put into liquidation at the request of the company.

The World Bank and IMF have identified specific vulnerabilities in the insurance sector that lead to systemic risk. The vulnerabilities that they have identified include weakness in the supervisory coordination among insurance, banking, and securities supervisors; and a lack of effective cross-sectoral systems for identifying and managing risks within financial groups. A recent edition of the Swiss Re publication *sigma*¹⁶ provides a view of systemic risk from the reinsurance industry. That study found that “there are no examples of systemic problems having been caused by reinsurers in the past.” Much of that publication covers the relatively short duration of past problems with the availability of reinsurance, and the rarity and relatively low impact of insolvency of reinsurers in the past. The *sigma* study also reviews the financial exposure of primary insurance companies to reinsurance insolvency by reviewing the percentage of primary insurance company balance sheets represented by reinsurance technical reserves. This approach is appropriate for evaluating the exposure in terms of currently known claims. It does not, however, provide any basis for evaluating the exposure to catastrophic losses prospectively. The most important concern about reinsurance solvency in relation to the industry as a whole is not the ability of reinsurance companies to meet currently recognized obligations. There appears to be little risk that the industry as a whole will have any difficulty with the level of claim liabilities that is recognized currently. The more important issue is the degree of coverage provided for future losses that might not be in line with current expectations, and thus might exceed unearned premiums by a substantial margin. This depends on the ability of reinsurers to manage their insured risks, and to avoid a concentration that might lead to losses exceeding their capacity to respond. It also depends on the potential for unforeseen events or circumstances that could lead to high levels of claims. The record of the industry up to now seems very good, but information that could be used to evaluate the risk-management skill of the companies is currently difficult or impossible to obtain. The unearned premium reserves are the provision for this type of risk, and there is no current basis to determine the pricing adequacy built into these reserves, other than historical experience.

An important area of cross-sectoral risk transfer is the increasing use of credit derivatives. The market in credit derivatives has been growing at an exponential rate, with annual volume increases of about 50% since the mid-1990s (Andersen, 2003). At the same time the volume of credit guarantees sold by reinsurance companies to banks has greatly increased, with an estimated \$200 Billion of notional outstanding guarantees by reinsurance companies at the

¹⁶ Swiss Re, “Reinsurance – a Systemic Risk?” *sigma* No. 5/2003.

end of 2001. When viewed in relation to the estimated \$250 Billion of capital for the industry at that time, this is clearly a very large volume. Credit derivative volume is measured on the basis of the notional amount of coverage, similar to measuring life insurance risk on the basis of the total face amount of policies outstanding, or fire insurance on the basis of the total insured property value. The high correlation of credit risk with economic conditions makes this comparison more meaningful in relation to credit derivatives than it is in relation to life insurance or fire insurance.

By 2003 the reinsurance industry had become a significant net source of credit guarantees. The banking industry is a net purchaser of these guarantees. Even though information needs to be taken cautiously, owing to the complexity and relative opacity of the reporting of these types of instruments, the most recent data available¹⁷ indicated that insurers (both direct insurers and reinsurers) accepted around \$667 billion of credit derivatives by the end of 2002. In this way the growth of the credit derivative market creates a new, though limited, dependency between banks and reinsurance companies that may lead to increased systemic risks.

Banks have decades of experience in managing credit risk. They also tend to have the most direct sources of financial information about creditors. As newcomers to the credit risk business, reinsurance companies may lack the depth of experience of banks, and may find it difficult to manage credit risks for that reason. Certainly the large reinsurers would be in a position to attract individuals with great skill in assessing the degree of risk presented by credit guarantees, but the supporting infrastructure would be less thoroughly tested than in organizations traditionally involved with such risks. Anecdotal reports indicate that the price of credit protection from reinsurance companies is significantly lower, perhaps half, compared to the price that would be expected for a bank to provide the same protection. One explanation that has been offered for this difference is that the credit risk, being uncorrelated with insurance risks, requires a lower allocation of capital for reinsurance companies as compared to banks offering the same protection. This explanation has some theoretical appeal, but if it does make sense it does so only at the level of the individual reinsurance company. Another explanation is regulatory arbitrage, but this does not seem to be a major factor, and has been shown by the F.S.A. of the U.K. not to be a significant driver of the transfer of credit risk to the insurance industry. Other anecdotal reports indicate substantial losses by reinsurance companies, measured in billions of dollars, on credit risk transfers. This would seem to corroborate concerns about the ability of reinsurers to evaluate such risks, although losses should be expected on any risk from time to time. The effects of credit risks on the economy as a whole do not depend on which industry is providing protection, so a reduction in allocated capital that makes sense at the individual company level reduces the aggregate protection of the economy as a whole, although spreading credit risks over a wider group of guarantors may justify some reduction in required capital. According to the International Monetary Fund¹⁸ the net effect of credit risk transfers between banks and the insurance sector has been to add to financial stability.

Another issue in relation to credit risk guarantees is the potential for correlation between insurance and investment risks. Especially in the smaller economies there needs to be care to recognize the correlated risks of investments in entities whose credit is being guaranteed.

Concerns about the lack of transparency of the reinsurance industry are heightened in relation to credit risk transfer, where banks seem to be more open to scrutiny. The Committee on the Global Financial System has criticized the level of disclosure provided by reinsurance companies in relation to credit risks.

¹⁷ Swiss Re, "Reinsurance – a Systemic Risk?" sigma No. 5/2003.

¹⁸ International Monetary Fund, *Global Financial Stability Report*, Washington, DC, April, 2004.

Typically the regulation of financial solvency has focused on the individual entity, such as an individual insurance company, reinsurance company, or bank. The identification and management of entity risks does not necessarily lead to effective risk management at the level of an industry as a whole, or across an economy. When managing risks at the entity level, one is not greatly concerned with the effect on other entities of the risk considered. For example, a life insurance company might be exposed to adverse financial effects from an increase in overall mortality rates, or by a decrease in prevailing interest rates. If both risks were perceived to have similar probability and financial effect, similar capital provisions might suffice for each of them. When the level of concern rises above the level of the individual entity, the entity-level solution, while perfectly appropriate for each entity, may be inadequate on a larger scale. Considering the example given, an increase in overall mortality rates would tend to affect only the life insurance industry, but a decrease in prevailing interest rates could have adverse effects on life insurance companies, casualty insurance companies, and banks.

From the standpoint of the individual entity it is appropriate to be concerned about the probability of adverse financial results for that entity, without distinguishing between risks to the individual entity and those that might have a broader impact. When the concern is raised to systemic risks the events that might cause problems for an individual entity, such as the risk of a large individual claim, are of no significance, but events that would cut across industry lines could be of great significance. For this reason the regulation of individual entities should not be expected to provide protection for an industry as a whole, or for the economy as a whole.

One cannot expect the owners and managers of an individual entity to have a different level of concern for risks that affect only their entity versus risks that have a broader effect. Their concern can be expected to be driven by their self-interest, which could be equally affected by both types of risks. Even regulators tend to have a focus within an industry or sector, and may have similar motivation to control different risks, even though some might be limited to their particular sector, while others might be of systemic significance that would cause more concern in a broader view of the economy.

These considerations lead to the conclusion that protection against systemic risk cannot rest solely on the regulation of individual entities or sectors. Adequate consideration of systemic risk must take into consideration the effects of risk on the economy as a whole, and may require a level of risk management that is beyond the level needed to manage risks for the individual entity, or perhaps even beyond the level needed to manage risks across a sector of the economy. Regulation of risks at this level would seem to be impeded in jurisdictions, such as the United States, where insurance and banking are subject to separate regulatory regimes. Jurisdictions such as the European Community, where regulatory consolidation has occurred, would seem to be better equipped to regulate such risks.

The potentially widespread effects of systemic risks can be expected to continue to draw attention of international financial regulatory bodies.

D. Market Conduct

A central assumption of the economic model of competition is that both buyers and sellers are well informed. We know that this is generally not the case in the insurance industry. Asymmetric information problems arise when one party to a transaction has relevant information that the other party does not have.

In the case of reinsurance it is usually safe to assume that buyers and sellers are sophisticated business people, who are capable of understanding the complexities of the agreements that they make. This eliminates one of the asymmetries that exist in the insurance industry, that of unsophisticated buyers who are unable to fully understand the nature of the contracts offered to them. There is another important reason for asymmetry, which is the ceding company's inability to evaluate the financial condition of the reinsurer unless the reinsurer provides adequately detailed and reliable information. A major goal of reinsurance regulation is to assure that adequate, reliable financial information is provided to reinsurance buyers. The OECD Recommendations on the Assessment of Reinsurance Companies particularly deal with this aspect of regulation. Natural market forces can be expected to push reinsurers to provide the information needed to establish their financial strength, but this process has operated slowly, at best, in the past.

Overall the issue of market conduct, which is the focus of a major part of the regulatory effort in relation to insurance companies, is generally viewed as self-correcting in the case of reinsurance. Many jurisdictions place little or no emphasis on the regulation of market conduct by reinsurance companies.

One potential problem of market conduct that is not eliminated by the sophistication of buyers and sellers is the potential for misleading risk transfer in reinsurance treaties. This was discussed in detail above.

1. Special Areas of Regulatory Procedures

a- Role of Professionals

Company executives, and professionals such as accountants and actuaries have a role in assuring the proper functioning of companies. Company officers can be required to take responsibility for the system of internal control, and existence and compliance with asset and liability risk management systems. These responsibilities can be enforced by requiring officers to make a formal, legally binding statement that the required systems exist and are being applied.

The use of professionals to facilitate the regulatory process is, of course, common. Independent audits are an example. Professionals can be used much more extensively by regulators to go beyond the basic financial reporting functions. For example, actuaries are relied on in the United Kingdom, Canada, and the United States to monitor the company's asset/liability management system. This is accomplished either by requiring the consideration of a fixed set of investment scenarios, or by requiring a simulation certified by the actuary.

The cultural differences in the implementation of these schemes are interesting when one considers applying this approach in other countries. In the United Kingdom actuaries have a direct responsibility to the regulatory authorities, and have some protection from adverse actions by the companies that employ them. In the United States such protections are absent or very weak. This could be a result of differences in legislation between the two countries, but sorting out cause versus effect is not easy. The lack of full reliance on actuaries in the United States may be the reason for the U.S. legislation, rather than its result. The status of the professions in each country must be considered in determining the amount of reliance that can be placed on them.

b- Use of Complex Financial Instruments

Some companies use complex financial instruments to control risk, as well as to provide profit to the company. The complexity of financial instruments available in the market today can make them difficult to understand. Valuation of such instruments can involve sophisticated stochastic modeling techniques.

Complex financial instruments can be used to control the risk of guarantees that cannot be replicated with direct investments, or that are not available in the market. For example, a fund created by the State of California in the United States was able to provide some protection from massive earthquake risks through the use of financial instruments that combined an interest component with a contingent reduction in interest payable in the event of a large earthquake. By investing the proceeds from the sale of these bonds in risk-free financial instruments, the fund was able to create future net cash flows that would tend to absorb the effects of earthquake losses. These financial instruments were structured so that contractual repayment of principal is not contingent on earthquake claim experience. The rating of these instruments can thus be based on the guarantee that applies to repayment of principal.

A second example is provided by a large insurance company that has special expertise in variable interest rate lending, but liabilities that involve fixed interest rates. The company usually finds that its returns are increased if it lends at a variable rate, and engages in swaps for fixed returns, as compared to its potential returns on fixed-rate debt. Of course this approach also creates a need to manage the counter-party default risk.

Managing risks related to complex financial instruments is different in several ways from managing more traditional investment risks. One important difference is that, because of leverage, values can be much more volatile than the values of corporate bonds. This volatility requires more frequent monitoring to control risk. A company that uses complex financial instruments might be able to demonstrate a “clean” balance sheet at annual or quarterly intervals, but could have high risk at interim dates. Controlling these risks requires a system that monitors risk at least daily, and creates a log that can be used for supervisory review. A second difference is the difficulty of identifying all of the risk elements of complex financial instruments. The description of such instruments must have enough detail to allow all of the risk elements to be identified. This level of detail may not fit into existing asset data systems.

As a number of highly-publicized examples demonstrate, control of the hedging function and elimination of speculation are difficult to achieve at the company level. Clearly the task is even more difficult for regulators who have limited information and time. The fact that speculation problems can arise quickly means that traditional year-end reporting is not adequate to control this risk. A better approach is a systems solution that requires companies to demonstrate the existence of a system to control speculative risk, and to further demonstrate that this control system is being applied effectively. U.S. federal banking regulations follow this approach.

One answer to the problem of regulating the use of complex financial instruments is simply to prohibit the use of instruments that could create a risk of speculation. This solution, however, deprives companies of a powerful and legitimate risk-management tool. Regulators need to exercise care in restricting the use of derivative instruments, as derivatives can be the most effective and least costly solution to managing certain types of risks. A solution that simply limits the use of derivatives, while easy to implement, may actually increase risk in some situations, and will certainly limit the ability of companies to find creative risk-management solutions.

Many of the notable recent examples of problems with financial derivatives involved a failure to adhere to basic principles of internal control. For example, in one case involving a loss of about \$100 million by a subsidiary of a large company, the parent company did not confirm bank statements directly with the bank, but allowed the president of the subsidiary to report on his company's financial status. His reports included as assets some holdings that had actually been sold to cover trading losses. This example demonstrates the need to follow standard auditing procedures, such as confirming transactions with the unrelated counterparty.

c- Risk Transfer to the Capital Markets

The potential for risk transfer to the capital markets in general may be illustrated by comparing the capacity of the reinsurance industry to the general capital markets. For example, the entire capital of the worldwide reinsurance industry amounts to less than 4% of the size of the United States capital market. While only a fraction of this capital might be available to provide for insurance risks, the potential is worth considering. A crucial element that is needed for this capacity to be used is a way for a general investor to be able to share some of this risk without being subject to the vagaries of the underwriting process. Insurance companies would prefer that their recovery be directly related to their own losses, but it is impossible for an outsider to have confidence that the company's is successfully implementing its underwriting process. For example, the magnitude of a transfer of windstorm risk from an individual insurance company would depend on the control of geographical concentration by the insurance company. On the other hand, a transfer that depended only on the total property loss caused by a windstorm would remove the dependency on the insurance company's underwriting skill. Some financial derivatives based on overall catastrophe indices have been offered on financial markets, but up to now the impact on global risk transfer has been small in relation to the impact of the reinsurance industry.

The use of methods of alternative risk transfer (ART) has declined since the scandals, such as Enron, involving corporate reporting on complex and, perhaps, misleading financial deals. The definition of ART is not precisely determined, but as used in the industry it includes such methods as finite risk reinsurance and financial reinsurance that have received adverse attention from regulators and the press, as well as insurance risk securitization and credit derivatives. ART is currently perceived as causing concern about appropriate accounting. For this reason the transfer of risk through openly defined securitization of catastrophe risks seems to be the only area where significant transfer of casualty risk to the capital markets is occurring at present. In this paper I have made a distinction between ART as described in this paragraph and risk securitization. Risk securitization does not have the negative connotations of ART, and there is still hope that it will open substantial new sources of risk financing, although the total of this type of financing has been relatively minor to date.

According to an analysis by Lane Financial¹⁹, the volume of publicly-disclosed risk-securitization transactions during the twelve months ending with March 2004 has totaled about \$2 billion, a small fraction of the potential for risk transfer from the insurance industry to the capital markets. The high degree of information asymmetry and high transaction costs associated with these instruments seem to be retarding the growth of this form of risk transfer, but the current low level of activity is disappointing. The low level of activity may simply be a reflection of the low number of interested investors, as the issue of information asymmetry has been overcome, in part, by the use of index triggers.

¹⁹ Lane, Morton, "Risk Management Through Securitization – Trends and Issues," *Proceedings of the 2004 Enterprise Risk Management Symposium*, www.casact.org, 2004.

Risk securitization that is based on some form of publicly-available index is easiest for providers of capital to evaluate. These types of transactions have been most common, typically using some form of catastrophe index. Insurance companies that transfer risk through this type of transaction are left with the problem of reconciling the actual distribution of risks that they underwrite to the distribution built into the index, and continue to have uncertainty about the portion of their catastrophe losses that they will actually recover. On the other hand, instruments that are defined on the basis of the actual losses of a particular company, such as the instruments offered by USAA, are more difficult for providers of capital to evaluate. It appears that for the present most investors are not comfortable with their level of understanding of the risk securitizations that have been brought to market. The volume of activity is a very small fraction of the total volume in the capital markets, as well as a small fraction of the volume of risks that could be transferred.

Chapter 3. Reinsurance Issues and Recommendations for Emerging Economies

Use of reinsurance by insurance companies in emerging market economies involves specific issues that regulators should be aware of and address. Typically, emerging market economies have low savings rates. This, combined with the relatively small size of the economy implies that capital is very limited. Domestic reinsurers, if any, will tend to have very limited capacity, and the established reinsurers are based in other countries. The restriction of access to such markets by foreign reinsurers, as is practiced in some jurisdictions, is particularly unproductive. In emerging markets local insurance companies may not be as familiar with reinsurance issues as are their counterparts in more developed economies. Insurance companies in emerging market economies tend to be more dependent on reinsurance than are their counterparts in developed economies because of the concentration of risk implied by a small economy.

The problem of the lack of transparency in the reinsurance industry can be compounded by a lack of reinsurance experience on the part of some insurance company executives in emerging markets. These markets represent, almost by definition, new areas of expansion for foreign reinsurance companies, so they tend to be the first to suffer when capacity problems arise. This is not to say that there is any intention on the part of reinsurers to restrict their coverage in emerging markets, but simply to note that areas of expansion are often the first to be limited when financial difficulties arise, as has been the case during the aftermath of the September 11 disaster.

As noted above, regulators in developed economies may appropriately have a *laissez faire* attitude toward the market conduct of reinsurers, in view of the fact that reinsurance transactions typically take place between sophisticated buyers and sellers. Regulators in emerging markets may need to modify this approach to compensate for the lack of information and experience for insurance companies in their particular jurisdiction. In addition, regulators may wish to consider whether the interests of the company's policyholders are adequately protected under a *laissez faire* approach to reinsurance regulation.

Regulation of foreign reinsurers by regulators in emerging market economies would generally not be feasible. Regulators could find their resources inadequate to cover the potentially large number of reinsurers with which their domestic insurance companies do business. Reinsurers would find it difficult to justify the cost of compliance with such regulations when their volume of business in the country is small. The cost involved could discourage participation in the market at a time when broad participation is particularly important. Regulators in emerging market economies typically regulate reinsurance through the domestic direct insurance companies that are the purchasers of reinsurance, or via the use of rating-agency ratings, as is the case with Mexico.

One approach to regulation is to require that, to receive credit for reinsurance balances offsetting liabilities of domestic insurance companies, the companies' reinsurers must establish collateral in the form of marketable securities equal in value to the credit taken, and placed in trust accounts in the local jurisdiction. While this approach is easy for regulators to administer, and does not require elaborate financial analysis, this approach is inefficient for the reinsurer, as it does not allow for the offsetting of risks on a diversified portfolio of reinsurance liabilities. In addition, it may not provide complete security if liability estimates prove to be inadequate.

An alternative that is more efficient, but more difficult to apply, is to consider the general credit-worthiness of the reinsurer in establishing limits for credit for reinsurance ceded. For

domestic companies to receive credit for reinsurance ceded, the reinsurer must demonstrate its financial strength to the satisfaction of local regulators. This is typically done through the reinsurer's submission to the regulator of financial information, including reports of rating agencies and home state regulatory reports.

I.

The limited resources of regulators in emerging market economies, both in terms of limited manpower and the limited possibility of specialization in areas such as reinsurance, make it difficult to develop and apply regulations to reinsurance. International bodies, such as the IAIS or the OECD, provide a valuable resource to regulators in emerging market economies. On the one hand, the IAIS makes available information on global reinsurance markets or develops standards and principles *inter alia* on reinsurance supervision²⁰ and disclosure, and, on the other hand, the OECD analyzes and monitors reinsurance market developments, and compiles and disseminates best practices for reinsurance regulation. The latter activities are most helpful if they include "best in class" practices, i.e., best practices from countries with similar markets and resources, so that the approaches presented would be feasible for the intended audience. The OECD should continue its publication of best practices, and include practices related to reinsurance that can be applied in emerging market economies. The IAIS has a mandate to provide educational seminars to promote their Principles and Standards. These are often conducted in conjunction with the Financial Stability Institute.

Regulators and local insurance companies could also benefit from examples of suitable language for reinsurance treaties. This is not intended to suggest that regulators dictate the specific agreements between reinsurers and insurance companies. Rather, it is suggested that regulators provide a resource of model contract language that has been found to provide a clear statement of the risks transferred. This guidance could also identify contract structures that do not transfer risk, as examples to be avoided.

The OECD by promulgating its Decision on the Exchange of Information on Reinsurers and the IAIS through the report issued by the Task Force Re and the future activities of the Steering Group on Enhancing Transparency in the Reinsurance Sector have provided a needed foundation for overcoming the lack of transparency in the reinsurance industry. The usefulness of available information depends on the consistency of types and definitions of data elements provided by different countries. Differences in reporting systems in different countries can make it difficult for some countries to report under a universal information template.

Successful global corporations manage their operations by carefully defining and standardizing the data elements to be provided by subsidiary operations in different countries. The lesson to be learned from this success is that the effort to clarify and standardize data elements will be more than repaid in improvement in the usefulness of information provided by different companies. The IAIS and the OECD can add value to the work it has already completed by continuing its efforts to make available standardized data definitions.

²⁰ See also Appendix I for a summary of IAIS activities on reinsurance issues.

Conclusion

This paper has presented an overview of the state of the reinsurance market in the wake of recent events, including the September 11 terrorist attack and the decline of global capital markets. The strength of even the most respected companies in the reinsurance business is being tested. Reinsurance is a vital component of the risk-taking capacity of the insurance industry, especially in smaller countries with more concentrated risks. This is clearly a time when effective regulation is needed, but excessive regulation can be damaging.

Regulation of reinsurance companies parallels that of insurance companies in many ways, but there are important differences. In the interest of efficiency regulators need to focus on the aspects of regulation that are truly necessary, and dispense with aspects that are not needed. Substantial resources are being provided for regulators by international bodies, such as the International Association of Insurance Supervisors and the Organization for Economic Cooperation and Development, to allow regulators to develop a regulatory regime that covers the necessary parts of reinsurance regulation consistently around the world. By outlining these areas and identifying sources of information from the international community, this paper is intended to provide regulators with a resource for navigating this important area of their responsibilities.

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Internet Resources

The Basel Accords

<http://www.bis.org/publ/bcbsca.htm>

Financial Stability Forum

www.fsforum.org

International Association of Insurance Supervisors

www.iaisweb.org

Organization for Economic Co-operation and Development

<http://www.oecd.org>

Reinsurance Association of America

<http://www.reinsurance.org>

Appendix I

Review of International Efforts in Reinsurance Regulation

In this Appendix we review the substantial efforts under way on the part of a large number of international bodies to improve and develop global reinsurance regulation. The degree of effort and the high level of these organizations testify to the importance of this issue to the global financial system.

The reinsurance industry operates much more as a global industry than does the insurance industry. A number of international organizations are involved in the process of developing and improving the worldwide regulation of reinsurance. For the most part, these organizations serve in an advisory capacity, with voluntary participation by countries. There can be enormous pressure, however, to come in line with recommendations of these organizations, as these recommendations are often viewed as necessary practices for a stable market. In this section we review the efforts of eight of the most active of these international organizations. The organizations covered are the Organization for Economic Co-operation and Development, the International Association of Insurance Supervisors, the Financial Stability Forum, the Financial Sector Assessment Program, the Basel Committee, the International Accounting Standards Board, the Joint Forum, and the European Commission. The fact that these organizations represent a variety of geographic areas, types of entities supervised, and types of sponsors means that their conclusions are not necessarily uniform. They have, however, generally made an effort to produce consistent or complementary recommendations, and these efforts at consistency have been quite successful.

II. Organization for Economic Co-operation and Development

The Organization for Economic Co-operation and Development (OECD) was established in 1961. Today the Organization groups 30 member countries sharing a commitment to democratic government and the market economy. The OECD plays a prominent role in fostering good governance in the public service and in corporate activity. It helps government to ensure the responsiveness of key economic areas such as insurance activities. By deciphering emerging issues and identifying policies that work, it helps policy makers adopt strategic orientations.

In this context, since its mandate received in 1961, the OECD Insurance Committee, comprising government experts in insurance, and representatives of the private sector (insurance associations, insurers and reinsurers when relevant) as well as international organisations such as the IAIS or the IMF, has *inter alia* provided a forum for consultations among Member countries to enable them to exchange views on insurance related issues (including reinsurance). The Committee has also undertaken a wide range of studies necessary to achieve a better understanding of the policies of Member countries with regard to insurance and of the economic importance of, and developments in, the insurance and reinsurance sectors in Member countries. The Committee has been responsible for pursuing efforts to achieve further liberalisation in the field of insurance including in Non-members countries. In this context, the work of the OECD Insurance Committee has been highly valuable for the developments of analysis and best practices relative to the reinsurance sector. For instance, the 2005-2006 Programme of Work of the Insurance Committee deals with a set of issues, such as the monitoring of insurance and reinsurance markets, market liberalisation or large-scale risks, that is key for the future development and in-depth understanding of reinsurance activities.

Moreover, the OECD is also promoting liberalisation in the reinsurance field through its *OECD Code of liberalisation of current invisible operations*. The OECD Insurance Committee also elaborated and adopted in 1997 along with some emerging economies a set of *Twenty Insurance Guidelines for Economies in Transition* which includes rules concerning reinsurance activities and oversight.

The OECD Council adopted in 1998 a *Recommendation on the Assessment of Reinsurance Companies*. This Recommendation calls on member countries to invite insurance companies under their supervision to assess the soundness of reinsurance companies to which they cede, or propose to cede business. Accordingly the reinsurance companies under their supervision are to be invited to provide information to assist in making these assessments. The Recommendation also invites non-member countries to participate. Soundness, for this purpose, includes not only the financial ability of the reinsurer to pay claims, but also the administrative capability and willingness to pay legitimate claims promptly.

Specific information referred to in the Recommendation as a basis for assessment include gross and net premiums, gross and net incurred losses, operating expenses, and investment income. The scope of regulation of the reinsurer in its home country and in the host country may be considered. The Recommendation also suggests that the reinsurance company's retrocessionaires be identified as a component of assessment.

In mid 2002, The OECD adopted a Decision on the Exchange of Information on Reinsurers. This information exchange agreement is binding on all OECD countries and can be extended by invitation to other participants as well. It establishes a foundation and framework for the exchange of information on reinsurers between the regulatory and supervisory authorities of the parties to the Decision. A specially created network hosted on the OECD website allows for systematic information exchange in cases of:

- fraud related to the conduct of reinsurance business, such as fraudulent activities stated by public prosecutors and competent courts, or relevant states of proceedings;

- insolvency: i.e. cases in which a reinsurer is determined by a relevant supervisor or administrative body to be insolvent under the laws of the jurisdiction concerned, including receivership and administrative supervision;

- limitation of activities, such as run off or limitation of free disposal of assets.

Parties to the Decision are also able to exchange via the network any other information deemed relevant for prudential reasons. Exchange of such sensitive information, provided under conditions of confidentiality, plays the role of an early warning system for governmental authorities.

This network also benefits from key information on reinsurers rating changes and their rationale as well as analysis of reinsurance companies' situation on a timely basis provided by major rating agencies (Standard & Poor's, Fitch Rating and AM Best).

The OECD Insurance Committee also plays a key role in regularly overviewing and monitoring developments in the reinsurance market and its regulatory framework in the context of the Insurance Committee *Tour d'Horizon*.

The OECD regularly organizes conferences in cooperation with non-member countries that include far-reaching discussions and analysis on reinsurance markets and regulation. In June 2002, for instance, an Expert Meeting held in Suzhou China was specifically dedicated to reinsurance issues in China and particularly dealt with reserves and solvency management of reinsurance companies, evaluation of reinsurance companies, direct and indirect supervision

of reinsurance companies, reinsurance risk management of direct insurers and alternative risk transfer.

III. International Association of Insurance Supervisors

The International Association of Insurance Supervisors (IAIS) was established in 1994 (a) to co-operate to contribute to improved supervision of the insurance industry on a domestic as well as an international level in order to maintain efficient, fair, safe and stable insurance markets for the benefit and protection of policyholders; (b) to promote the development of well-regulated and competitive insurance markets and thereby contribute to economic growth; and (c) to contribute to global financial stability. In furtherance of its objectives, the IAIS in particular develops principles, standards and guidance for the supervision of insurance markets, which members should strive to apply taking into account the specific circumstances of their markets. The IAIS also encourages the implementation and practical application of its principles and standards and broader contacts and co-operation amongst insurance supervisors, facilitating mutual assistance, education and training on insurance supervision and the exchange of supervisory information. (Note: extract of IAIS bylaws). Currently the IAIS includes representation from more than 100 jurisdictions worldwide, and includes both insurance supervisors and regulators as members and insurance-professionals as observers.

Reinsurance has recently drawn the attention of various international bodies concerned with global financial stability. The IAIS has promulgated principles and standards on insurance regulation and supervision, including reinsurance. In addition, the IAIS has recently started a voluntary database of information on reinsurance companies.

In 2002 the IAIS published the *Supervisory Standard on the Evaluation of the Reinsurance Cover of Primary Insurers and the Security of Their Reinsurers* as Supervisory Standard No. 7. This Standard, which provides details on regulatory procedures for reinsurance. Its main purpose is to ensure that the reinsurance arrangements that primary insurers conclude are fully assessed, and consequently that a judgment can be made on the level of security provided by the reinsurance programme.

IAIS Principles Paper No. 6, *Principles on Minimum Requirements for Supervision of Reinsurers*, also published in October 2002, is a significant first step towards harmonising supervisory practice for the global reinsurance industry. The underlying premise is that all reinsurers must be supervised. It anticipates a global approach to the supervision of reinsurers that will be anchored in the home jurisdiction. The principles identify elements of a supervisory framework that are common for primary insurers and for reinsurers, such as licensing, fit and proper testing and on-sit inspection, and those elements that need to be adapted to reflect reinsurers' unique risks. The areas that are specified for different treatment are technical provisions, investments and liquidity, economic capital adequacy, corporate governance, and exchange of information.

In October 2003, the IAIS issued a Standard on supervision of reinsurers as a follow-up on IAIS Principle Paper N°6 that is available in Appendix III of this report. This Standard focuses on areas where the supervisory framework can be strengthened or adapted to take into account characteristics unique to reinsurance business: technical provisions, investments and liquidity, economic capital requirements, corporate governance and exchange of information on reinsurers by supervisors. In October 2003, the IAIS also revised and expanded its Insurance Core Principles covering all aspects of a supervisory framework; these Insurance Core Principles are relevant for reinsurers as well as for primary insurers, unless otherwise stated (for instance regarding consumer protection).

In addition in November 2003, a draft *Standard on Disclosure concerning Technical Performance and Risk for Non-Life Insurers and Reinsurers*, describing best practices in public disclosure requirements about technical performance and risks that should apply to non-life insurers and reinsurers, was released for discussion and approval. The standard is expected to be adopted at the IAIS General Meeting in October 2004.

The IAIS reinsurers database is an online central facility that offers insurance supervisors certain core information on reinsurers: contact details for active reinsurers; confirmation of the supervisory status of reinsurers (i.e. whether they are supervised, and by whom); and brief details of the overall financial status of the company.

An IAIS Task Force on Enhancing Transparency and Disclosure in the Reinsurance Sector (Task Force Re) was established to look more specifically at measures to improve both the understanding of aggregate reinsurance risks and risk-oriented disclosures by individual reinsurers. The Task Force was chaired by Henrik Bjerre-Nielsen, Director General of the Danish supervisory authority, and comprised of senior representatives of the regulatory authorities of jurisdictions, in which major reinsurers are incorporated. This Task Force presented its final report: *Enhancing transparency and disclosure in the reinsurance sector*, to the Financial Stability Forum in March, 2004. Among the areas that were addressed by the Task Force in its final document were the following:

Review of existing data and analyses on reinsurers.

Development of a framework to produce global reinsurance market data on a regular basis, including information on the size and structure of the global reinsurance market, structure and profile of reinsurance risks assumed, derivative financial instruments and credit risk transfer activity, counterparty risk and linkages to others sectors and investments, profitability and capital adequacy. This aspect of the work of the Task Force Re will lead to the publication in the fourth quarter of 2004 of a first global reinsurance market report analysing 2003 data.

Review of current public disclosures by reinsurers and of on-going work by the IAIS and other groups with a view to enhancing reinsurers' public disclosures. The report also identifies various factors which could be considered within the context of the future development of risk-oriented disclosures by reinsurers

A Steering Group on Transparency in the Reinsurance Sector was recently established to continue the work of Task Force Re. In particular it will, in the first place, be responsible for the production of global reinsurance market statistics and the preparation of global reinsurance market reports, on an annual basis. It will also address further development of the framework for producing global reinsurance market statistics including, for example, the assessment of resilience.

In addition to the wholly IAIS initiatives noted above, in 2002 the IAIS received the final report of the Multidisciplinary Working Group on Financial Disclosure, which it jointly sponsored with the Basel Committee on Banking Supervision, the Committee on the Global Financial System of the G-10 central banks, and the International Organization of Securities Commissioners. This report has come to be known as "Fisher II" after the chairman of the working group, Peter R. Fisher. The scope of the report is much broader than just the reinsurance industry, but includes reinsurance.

The Fisher II recommendations for insurance include disclosure of reserve adequacy, pricing adequacy, and loss ratios. Further work is recommended on the measurement and disclosure of loss concentrations and loss dependencies, and types of disclosure that would be

meaningful for catastrophe risks. It is recognized that the IAIS would have further work to reconcile related disclosures from different countries subject to different regulatory regimes.

On 24 May 2004, the Joint Forum issued a report entitled *Financial Disclosure in the Banking, Insurance and Securities Sectors: Issues and Analysis*, available on the IAIS website, which examines the progress made by financial firms in adopting the recommendations of the Fisher report, and the efforts of regulators and other standard setters in the area of financial disclosure. The paper shows that despite the progress made by firms, greater levels of disclosure are desirable, and it is encouraging to see notably the IAIS projects under way in that respect.

The IAIS has an action plan through the year 2008, including on reinsurance supervision. That action plan generally calls for continued cooperation notably with the OECD.

IV. Financial Stability Forum

The Financial Stability Forum (FSF) is a high-level group formed by the G-7 countries and several other countries to further international financial stability among developed countries. The FSF has supported the efforts of the IAIS in its efforts to establish more effective regulation of reinsurance, including establishment of the Task Force on Enhancing Transparency and Disclosure in the Reinsurance Sector. The Task Force was created to address FSF's perception that deficiencies in the flow of information on the global reinsurance market may contribute to potential destabilization of the financial sector, and is also operating under the encouragement of the International Monetary Fund. Reinsurance was on the agenda of the FSF meeting in Toronto in September, 2002. At that meeting the FSF reiterated its concern about the need for transparency in the reinsurance industry. The organization considers reinsurance disclosures to be opaque. Although the industry was viewed as having performed well in the face of recent shocks, the opacity of disclosure makes it difficult to evaluate the ability of the industry to absorb further losses.

The FSF called on the reinsurance industry and regulators to produce better and more frequent public disclosures. Improvements are sought in both qualitative and quantitative aspects of disclosure. There is particular concern about the disclosure of technical provisions for claims. The FSF has also cited the influence of offshore financial centers in the reinsurance industry as a basis for concern about the adequacy of regulation.

As recently as its March 26, 2003 meeting, regulation of reinsurance was on the FSF agenda, and the FSF again expressed its strong support for the IAIS efforts on transparency in reinsurance, described above in the section on the IAIS.

The FSF has identified a number of specific concerns about the reinsurance industry, especially in relation to systemic risk. Among the concerns identified by the FSF are the following:

- A lack of availability of reinsurance can be harmful to the real economy.
- There is a lack of information about reinsurance companies in relation to the risk of their bankruptcy. Currently available tools are inadequate or not timely.
- Some reinsurance activities, such as financial reinsurance, are not understood by regulators, and may be incorrectly represented in financial reports of the reinsurance companies.
- Reinsurers may be endangered by retrocession spirals in which the coverage for an insured loss is many steps away from the insurance company that must pay for the loss.

- The involvement of reinsurance companies in providing credit derivatives to banks may create a risk of contagion in which the failure of a reinsurance company can endanger the counterparties, such as banks.
- There is a concern that the lack of transparency of the reinsurance industry may lead to an unwarranted loss of confidence in reaction to adverse events.
- Deposits required of foreign reinsurers by some jurisdictions may impair the ability of reinsurance companies to respond to claims in other countries.

In this perspective the FSF invited the IAIS to produce the aforementioned report (*Enhancing transparency and disclosure in the reinsurance sector*) that was presented by Task force Re's chairman at the FSF meeting on 29-30th March 2004 in Rome. In this respect, in a letter sent to all members of Task Force Re on 21 May 2004, the FSF chairman expressed its appreciation on the work carried out by the IAIS group and welcomed the annual publication on global reinsurance data. He also added that more must still be done to enhance transparency in the reinsurance sector *inter alia* in the framework of the newly created IAIS Steering Group on reinsurance transparency and urged all concerned jurisdictions and their insurance supervisors as well as individual reinsurers to continue to actively co-operate with the IAIS on this key issue.

V. Financial Sector Assessment Program

The World Bank and the International Monetary Fund (IMF) have formed the Financial Sector Assessment Program (FSAP) to assist countries in identifying and correcting vulnerabilities in their financial systems. Responding to G-7 concerns, both the World Bank and the IMF have identified reinsurance as an important element of global financial stability. Accordingly, reinsurance is one of the areas that has come under the purview of the FSAP. The IAIS developed the standards that are used by the FSAP. While the process of developing standards is not open to the public, so far the IAIS standards have met widespread acceptance, and enhance the credibility of the FSAP process for insurance and reinsurance.

The foundation of the FSAP standards is the set of Insurance Core Principles (ICP). The original Insurance Core Principles, which were adopted in 1997, were a set of 17 standards identified by the FSAP as a precondition to effective insurance regulation. The Insurance Core Principles were revised and broadened, and a new set of 28 Principles that were approved by the IAIS in October, 2003. In the previous set of Core Principles a specific Principle applied to reinsurance, but in the new set it is intended that the Principles apply to both insurance and reinsurance. Reinsurance is referred to in Core Principle 19 as a component of risk management for insurance companies²¹. An evaluation of various countries regulatory frameworks in relation to the ICP was begun in 1999, and more than 40 countries have already participated and been evaluated. The World Bank expects more than 100 reviews to be completed by the end of 2003. Previously reviewed regulatory frameworks will need to be reexamined in light of the revised Insurance Core Principles.

Regulators may find it difficult to compete with other interests in establishing an adequate framework of regulation. The FSAP provides an objective, independent standard of good practice that can add to the credibility of regulators in dealing with legislative and executive policy makers. The experience of the United States with national accreditation of regulators is that an external evaluation of the regulatory structure can give convincing support to needed reforms.

²¹ The complete text of the Insurance Core Principles, as well as a comparison of the current principles with those adopted in 1997, can be found on the IAIS web site www.iaisweb.org.

VI. The Basel Committee

The Basel Committee, established by the heads of the central banks of the Group of Ten countries, developed standards for banking supervision that have been influential in many countries beyond the G-10. A consultative paper issued in January, 2001 proposes new Basel Capital Accords, known as Basel II, which include further development of regulatory capital requirements. While there is no direct equivalent of the Basel Accords in insurance, the Committee recommends that insurance regulators develop insurance capital requirements in the spirit of the standards established for banks. The Basel Committee can be expected to continue to influence regulatory practices in financial service companies worldwide.

The new Basel Capital Accords focus on the standards for capital requirements on the basis of risks inherent in the business. Basel II is based on three pillars of regulation:

1. Minimum capital requirements based on a refined measurement framework.
2. Supervisory review of the company's internal assessment procedures.
3. Market discipline through disclosure.

As the reach of the Basel II principles is extended to reinsurers, there will be a need to develop quantitative measures of risk that can be used to establish capital requirements. Some of these measures are still in a state of development.

The largest liability account on the books of insurance and reinsurance companies is the policy reserve. In the case of general insurance this is an estimate that includes claims incurred but not reported. Reinsurance companies can have a lag of years before the first claim report on a treaty may be received. For this and other reasons the estimation of reserves for reinsurance assumed can be difficult and subject to large uncertainties. At this point no completely satisfactory method is available to measure such uncertainties. As a result the process of determining capital requirements does not have a solid base on which to build in the case of the liabilities of reinsurance companies in the general insurance field. Years of work can be expected to develop an approach to this problem.

VII. International Accounting Standards Board

The International Accounting Standards Board (IASB) is an independent body, based in London, with links to the accounting standard-setting bodies in many countries. The IASB is in the process of developing comprehensive accounting standards, and a number of countries have announced plans to adopt these standards. For example, the EU, Canada, and Australia have announced plans to adopt these standards by 2005.

The IASB has several projects related to accounting for insurance and reinsurance. One of the principles that have been pushed by the IASB is the use of fair values in the balance sheet. In the case of insurance company liabilities there are not yet generally accepted procedures for determining fair value, and much work remains to be done. Actuaries and accountants have been working on this issue for at least a decade.

A second principle of developing international accounting standards for insurance is the "unbundling" of savings and risk components in insurance. For example, a typical whole life insurance policy can be viewed as a combination of a savings account and a term insurance policy with a decreasing amount at risk. In many cases the savings and risk elements are linked in a way that their values tend to move together, and there is some concern in the industry that the attempt to unbundle them may lead to erratic and misleading results.

The IASB has already announced that it would not be “realistic” to expect full implementation of accounting standards by 2005. Instead, they expect to complete the following by that time:

- Standards for presentation and disclosure of insurance contracts, including disclosure of underlying assumptions.
- Application of International Accounting Standard 39 (Financial Instruments: Recognition and Measurement) to contracts that are not considered insurance under IASB rules.
- Elimination of some practices that are inconsistent with IASB rules, such as offsetting of reinsurance ceded.
- A review of how non-insurance standards would apply to insurance companies.

The many variations of accounting treatment of insurance in different countries, and the differing viewpoints of companies and regulators make it difficult for the IASB to produce standards that are in any way a consensus of views of these different constituencies. This has caused the process of developing new accounting standards to take more time than a number of other areas of the accounting standards.

VIII. The Joint Forum

The Joint Forum is a group of technical experts established in 1996 under the auspices of the Basel Committee, the International Organization of Securities Commissioners, and the IAIS. According to documents of the Bank for International Settlements, the Joint Forum should “study issues of common interest to the three financial sectors and develop guidance and principles and/or identify best practices, as appropriate. Among the areas within the purview of the Joint Forum, the following are of particular interest in relation to reinsurance:

- Risk assessments and management, internal controls and capital;
- The use of the audit and actuarial functions in the supervision of regulated entities and corporate groups containing regulated entities;
- Corporate governance, including fit and proper tests;
- Different definitions of banking, insurance and securities activities and the potential that they may lead to regulatory arbitrage; and
- Identifying the core principles of the banking, insurance and securities sectors that are common and understanding the differences where they arise.”

In the furtherance of these objectives the Joint Forum has been mandated to focus special attention on risk aggregation, operational risk management, credit risk management and transfer, disclosure of financial risks, and cross-sectoral implications of extreme exogenous shocks. Under the heading of risk aggregation both the approaches used by firms to aggregate risks and the approaches used by regulators in relation to firms with activities in multiple business sectors will be considered. The consideration of extreme exogenous shocks relate to cross-sectoral cooperation in emergency situations, prudential robustness, and contingency planning.

The Joint Forum has found a significant difference among sectors of the financial service industry in the way similar risks are evaluated, and the way capital is allocated to them. As convergence of financial services progresses, supervisors must be more careful to make sure that similar activities have similar liability estimates and require similar capital allocations. This is expected to be an increasingly demanding area for regulators of insurance and other financial service companies.

IX. The European Commission

While the European Commission (EC) directly regulates only one region of the world, the concentration of reinsurance companies in Europe and the leading role of the Commission in developing the foundation for reinsurance regulation cause its impact to be felt worldwide. The EC contracted with KPMG to prepare a paper entitled *Study into the Methodologies for Prudential Supervision of Reinsurance with a View to the Possible Establishment of a European Framework*, which was presented in January, 2002. This study is a comprehensive survey and evaluation of practices with regard to the regulation of reinsurance, both within the European Union and in other countries that are homes to significant portions of the reinsurance industry.

Since 2002 the Commission Services have prepared a number of documents on reinsurance supervision, for example dealing with such issues as the establishment of technical provisions, investment rules, as well as characteristics of different types of supervisory schemes (“passport” or “license” solutions).²² The starting point for the work was to elaborate a reinsurance supervisory system that would be operational in a short to medium-term perspective, rather than wait for the outcomes of the Solvency II project in the European Union. Such a fast-track system was intended to be built on the supervisory rules currently in place for direct insurance in the European Union, with suitable adjustments for the characteristics of reinsurance. The work is also intended to be aligned with ongoing reinsurance work, particularly of the IAIS and the OECD. Numerous consultations with the insurance and the reinsurance industries have taken place during the preparation phase.

A formal proposal for a reinsurance Directive was presented by the Commission in April 2004. The proposed Directive builds on the principle of home country supervision and aims at abolishing existing barriers to reinsurance in the European Union. The working group proposal includes rules concerning the taking-up of reinsurance activities, ongoing reinsurance supervision, the establishment of technical provisions, and solvency requirements. There are, furthermore, rules on the activities of third-country reinsurers in the European Union, and provisions concerning possible mutual recognition agreements with third countries. The proposed directive also proposes consequential changes to the direct insurance supervision directives. The proposal for a directive is currently negotiated through a codecision procedure in the European Council and the European Parliament.

²² All Commission staff documents, as well as the proposal for a reinsurance directive, are available at the Commission web site http://europa.eu.int/comm/internal_market/insurance/reinsurance_en.htm

Unclassified

Appendix II

C(2002)134/FINAL



Organisation de Coopération et de Développement Economiques
Organisation for Economic Co-operation and Development

10-Oct-2002

English/French

COUNCIL

C(2002)134/FINAL
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Council

DECISION OF THE COUNCIL ON THE EXCHANGE OF INFORMATION ON REINSURERS

(adopted by the Council at its 1037th session on 25 July 2002 [C/M(2002)17])

JT00133066

Document complet disponible sur OLIS dans son format d'origine
Complete document available on OLIS in its original format

English/French

THE COUNCIL:

Having regard to Articles 3 and 5 (a) of the Convention on the Organisation for Economic Co-operation and Development;

Having regard to the Recommendation of the Council concerning Institutional Co-operation between Authorities of Member Countries Responsible for Supervision of Private Insurance [C(79)195/FINAL];

Having regard to the Recommendation of the Council on Assessment of Reinsurance Companies [C(98)40/FINAL];

Considering the acknowledgement already expressed in the early 1990s by the Group of Governmental Experts on Insurance Solvency of the importance of implementing a system for exchanging reinsurance information between supervisory authorities;

Considering the recognition that the relative homogeneity of the OECD Member countries, the reliability of their regulatory systems and the degree of co-operation already attained between the Member countries should make it possible to reach an agreement on such a system;

Considering the necessity for insurance supervisory authorities to check that the insurance companies subject to their supervision are able to fulfil their commitments towards their policyholders, and consequently that the claims held by such insurance companies on their reinsurers are recoverable;

Considering that the methods used by insurance supervisory authorities to check this recoverability may vary from one Participant to another, and consequently that the recoverability of claims on reinsurers may be subject to different regulatory and supervisory rules (including accounting rules), either through supervision of both insurers and reinsurers or through supervision of insurers only;

Considering that a great deal of information may already be publicly available;

Considering that it may however be desirable for insurance supervisory authorities to be able to gather information about the reinsurers of the insurance companies they supervise, in particular in cases of fraud, insolvency and limitation of activities, some of which information may not be publicly available;

Considering that the insurance supervisory authorities of some Participants may not be allowed to provide some information to other supervisory authorities, or may be allowed to do so only under restrictive conditions;

Considering that requests for exchange of information should not place excessive burdens on countries providing the information and should be made after unsuccessful search by other means, such as the ceding company;

Considering that this exchange of information may require the Participant providing the information to apply its own confidentiality requirements, as this Participant would do in the case of any other exchange of information;

Considering that in case of any doubt on the nature of the confidentiality requirements of the providing Participant, the country receiving the information should consult the Participant providing the information;

Considering the fact that this Decision does not prevent any additional exchange of information on reinsurance issues;

Considering that this Decision provides a framework for the promotion of exchange of prudential information on reinsurers between the Participants, in particular on issues related to fraud, insolvency and limitation of activity;

Considering that this Decision provides the possibility for the Insurance Committee to transmit any recommendation to the Council in case a recipient would not respect the confidentiality rules which are set as conditions for the provision of information;

Considering the credibility that the international governmental commitments of the Participants to this OECD Decision will provide to this Decision, compared to any informal agreements and thus the expectation that the confidentiality requirements will be fully respected;

Considering the restricted access which will be provided to the OECD reinsurance network;

Considering that in any case a providing Participant has always the right to withdraw the information he provides (and the duty to do it when the information is no longer relevant);

Considering that this Decision will have to be consistent with existing international agreements;

Considering that exchange of information will be completed within the limits of domestic laws and regulations;

Considering that selected non-member economies may be invited to join the Decision, upon approval of the OECD Council on the basis of a recommendation from the Insurance Committee, which would examine any relevant request expressed by such non-member to join the Decision;

Considering that when implementing this Decision, the authorities of the Participants are invited to follow, when relevant, international standards and principles relevant to exchange of information between insurance supervisors;

On the proposal of the Insurance Committee,

I. **DECIDES** that Member countries will exchange information on reinsurers in accordance with the provisions set out hereunder;

Article 1: Scope of the Decision

a) Participation in the Decision is open to all OECD Member countries. Selected non-member economies may also be invited by the OECD Council on the basis of a recommendation from the Insurance Committee to adhere to the Decision.

For the purpose of this Decision a Member country or non-member economy participating to the Decision will be referred to as a Participant.

This Decision applies to the fullest possible extent to sub-national level.

Participation in this Decision shall not prevent the Participants from exchanging any information on a bilateral basis with Participants or non-Participants to the Decision, having regard to the general principles set out in Article 3 of this Decision.

b) Each Participant shall identify an official national co-ordinator responsible for the implementation of the Decision.

Article 2: Definitions

For the purpose of this Decision:

a) Reinsurance entity means a legal entity other than an insurance company, whose main activity consists in accepting risks ceded by insurance or other reinsurance legal entities,

b) Reinsurers means reinsurance entities and insurance companies designated by the Participants, whose main activity includes significant issuance of reinsurance coverage. In that latter case, each Participant will decide what entities in its territory it considers relevant to be covered by the Decision.

c) Establishment means the head office, subsidiary or branch of an entity.

d) The reinsurers covered by the Decision are:

- reinsurers established in the territory of a Participant;
- reinsurers not established in the territory of a Participant but about which a Participant would have relevant information through the supervision of other insurance or reinsurance entities or through other reliable means.

Article 3: General principles

a) Participants agree to exchange information in accordance with the requirements set out in their domestic laws and regulations. In particular, they may apply their own confidentiality requirements to decide upon the appropriateness of the confidentiality requirements followed by the Participant receiving the information.

b) Neither the OECD nor any Participant can be held legally responsible for the accuracy of the information provided. While such information cannot be considered as certified by the providing Participant it shall be exchanged in good faith and, as far as information not publicly available is concerned, on a confidential basis.

c) When the reinsurer has its head office in the territory of a Participant, the other Participants in the territories of which this reinsurer operates should, before providing non-public information to any Participant, endeavour to consult the Participant in the territory in which the head office is located. Any subsequent relevant comment from the Participant in the territory of which the head office is located should be attached to this information. If the reinsurer has its head office in the territory of a non-Participant, the authorities of that non-Participant may also be consulted in a similar procedure.

d) The practical administrative modalities necessary to the implementation of this Decision will be defined separately by the Insurance Committee. This concerns in particular the modalities

related to the disclosure and updating of supporting background information²³ and to the assessment process.

Article 4: Self-limitation

Participants pledge to limit their requests for information and to make use of other available channels, such as requesting information to the ceding insurance entities, prior to contacting the other Participant. Requests for information should be reasonable, be motivated by prudential purposes, and not unnecessarily burden the official national co-ordinator.

Article 5: Provision of information on request

Upon request, each Participant shall provide, without delay, other Participants with the following information:

- a) Publicly available information on reinsurers established in its territory.
- b) Information not publicly available on reinsurers established in its territory, having regard to the general principles set out in Article 3.

Article 6: Provision of information on own initiative basis

Having regard to the general principles set up in Article 3, Participants endeavour to provide, on their own initiative, to concerned other Participants, any information which they find relevant to communicate for prudential reasons.

Article 7: Provision of information systematically transmitted through an OECD internet network

a) Participants agree to transmit systematically and without delay, under conditions set out in Article 7 b) and using an OECD internet reinsurance network to which the official national co-ordinator will have exclusive access, information on reinsurers related to the following categories:

- fraud related to the conduct of the reinsurance business such as fraudulent activities stated by public prosecutors and the competent courts, or relevant states of proceedings;
- insolvency: *i.e.* cases in which a reinsurer is determined by a relevant supervisor or administrative body to be insolvent under the laws of the jurisdiction concerned, including receivership and administrative supervision;
- limitations of activities: such as run off, limitation of free disposal of assets.

b) This transmission will systematically apply for information publicly available in the territory of the concerned Participant (but which would need to be made known to another Participant). For information not publicly available, the transmission should also be done systematically, whenever possible, but the Participant providing the information may decide under which

23. *e.g.*: the list of official national co-ordinators (and other authorised officials designated by the co-ordinators), an illustrative list of types of information not publicly available which may be provided under Articles 5 and 6, and a compilation of information on national and local confidential requirements applied by the Participants

conditions and modalities such information will be circulated -- including the legal authority of the recipient Participant to protect the confidential nature of the information -- having regard to the general principles set up in Article 3.

c) The information will be deleted automatically after six months unless the relevant Participant(s) confirm(s) the need to maintain it, upon justification. Each Participant endeavours to amend any entries as soon as these are no longer applicable.

Article 8: Failure to respect confidentiality requirements

Failure to respect the confidentiality requirements which are set by the providing Participant as conditions for the provision of information may be raised within the Insurance Committee, which shall then transmit any recommendation in this respect to Council for final decision.

Article 9: Use of information provided

The use of the information provided in application of Articles 5, 6 and 7 is limited to prudential purposes.

Article 10: Other international agreements

Implementation of the Decision shall be consistent with existing international agreements or regulations.

II. **INSTRUCTS** the Insurance Committee to define the practical modalities necessary to the implementation of this Decision, in accordance with its Article 3 d);

III. **INSTRUCTS** the Insurance Committee to assess the implementation of this Decision as appropriate and not later than three years after its adoption