

Reinsurance Trends and Regulatory Issues

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This paper has been prepared for presentation at the 14th Assembly of Latin American Insurance Regulators in Punta Cana, Dominican Republic. The paper has been prepared at the request of the Organization for Economic Co-operation and Development, who suggested that it include the current status of the reinsurance market, and a discussion of reinsurance regulation, both of reinsurance companies and of reinsurance ceded by insurance companies operating under the regulator's jurisdiction.

The reinsurance industry is in a troubled state. Reinsurance companies that formerly were viewed as having unquestionable financial strength have been repeatedly downgraded by financial rating agencies. The response of reinsurance companies is to limit the coverage available, or even to cease operations. The impact of these changes are felt most acutely in developing markets.

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 will not be fully known for years to come, but is estimated to be in the range of \$35 to \$80 billion². 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, 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 is some controversy about whether these acts should be considered a single event.

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, but a substantial part of the reinsurance coverage for September 11 claims is still undetermined because of uncertainty about the legal resolution of this issue. While we do not know how courts may rule on this question, 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 \$125 billion of total capital at the time (according to an estimate of the Reinsurance Association of America), the global reinsurance industry was severely impacted by this event, and major effects on capacity and pricing could be anticipated.

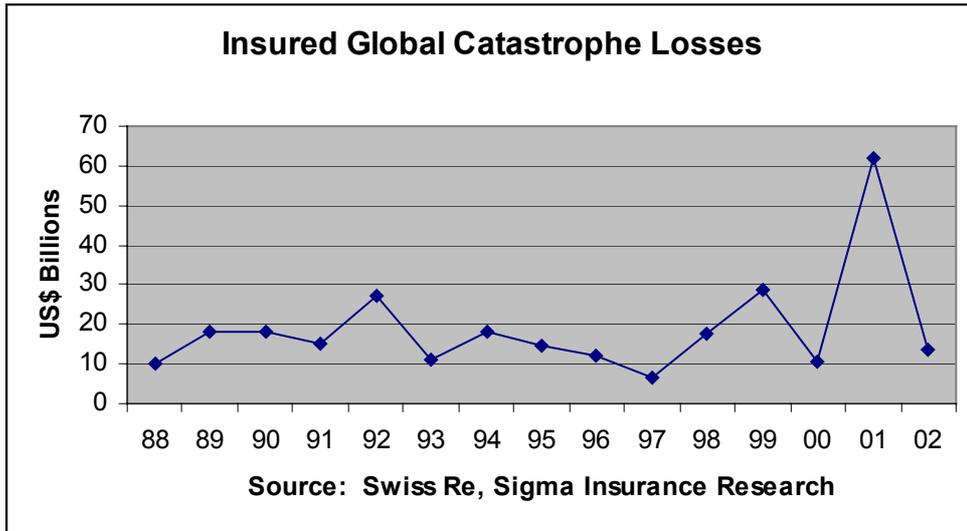
¹ This paper was supported by a grant from the Organization for Economic Cooperation and Development (OECD).

² All monetary amounts are stated in U.S. dollars.

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. Thus, at the time of the terrorist attack insurance prices were increasing and 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.

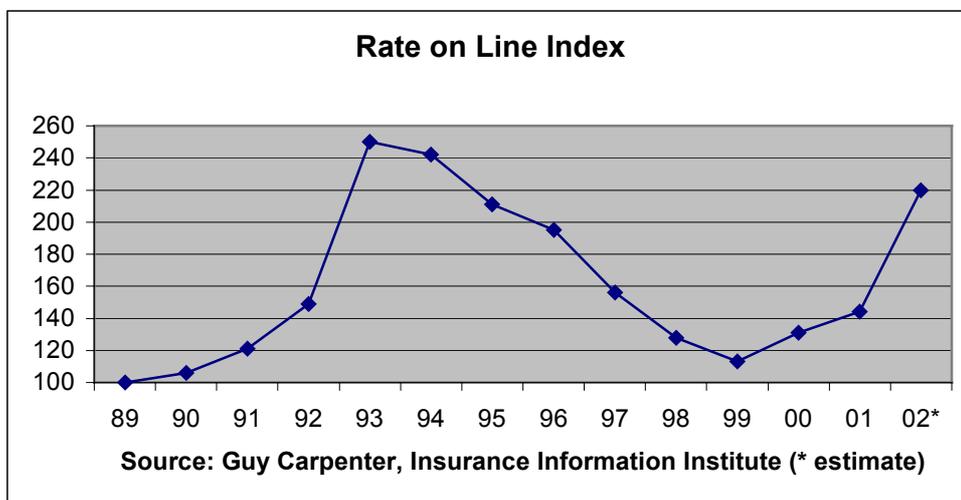
Prices, as a result, took a further jump. Coverage for terrorism, which had been viewed by many as a feature that could be offered at little or no cost, suddenly became unavailable. Over the intervening two years terrorism coverage has again become selectively available, but at a significantly increased cost.

In the context of insured catastrophes throughout the world the September 11 tragedy was by far the largest insured catastrophe, but 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. Annual insured catastrophe losses ranged between \$10 billion and \$30 billion throughout the '90s, except for 1997, which was lower. The chart at the top of the next page shows the total of insured global catastrophe losses by calendar year. The figure for 2001 must still be taken as a rough estimate. Because of the nature of the September 11 losses, the portion reinsured would be expected to be higher than for catastrophe losses in general.

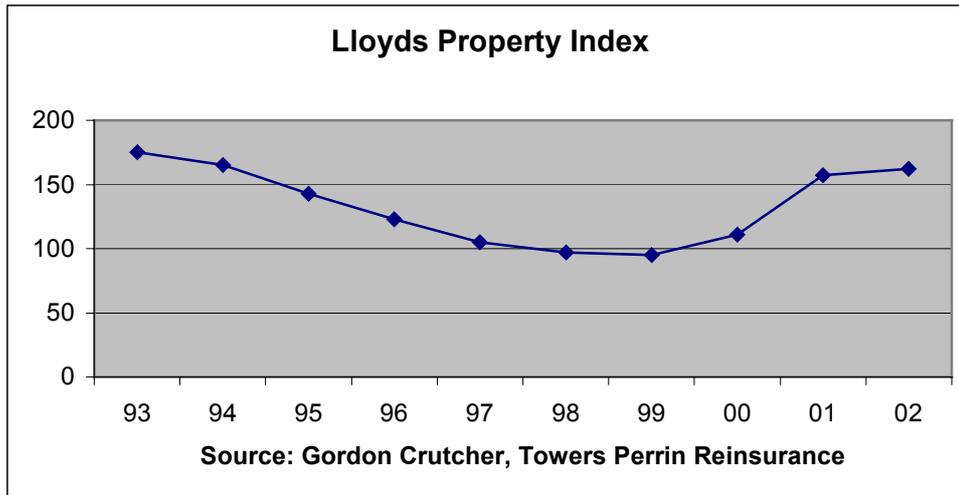


As can be seen, an insured loss for the 9/11 tragedy at the lower end of the estimated range, i.e., at \$35 billion, while unprecedented, would not have been outside the range of planning envisioned by reinsurance company managements.

The chart below 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 the chart at the top of the next page. 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 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. 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. Once events proved that catastrophe losses could be correlated, the risk to capital was perceived as being much higher than it had previously been perceived to be. This caused a 30 to 50 percent increase in rates for many lines of business.

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 typically hold the majority of their assets in equities, so a decline in equities causes 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. 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. 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 are not spread evenly over the worldwide industry, but tend to be concentrated in a few companies as a result of the specific risks they have covered. Disruptions can be expected when individual companies fail to meet their obligations, even when the capital of the industry as a whole exceeds the level of the losses incurred. While reinsurers have started once again to offer coverage for some terrorist risks, the reinsurers' own retrocession covers generally exclude such risks. The OECD has established a Task Force on Terrorism Insurance, which is due to report in 2004.

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 AIG was also downgraded in 2003. 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 the table at the top of the next page, the reinsurance industry is dominated by a small number of large companies, most domiciled in Europe. In addition, 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 in the industry. The global reach of these companies, along with their interlocking web of retrocessions, create systematic risk, the risk that the failure of one company could extend throughout 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.

Company	Domicile	Net Premiums Written (Million) ³
Munich Re	Germany	\$13,566
Swiss Re	Switzerland	12,839
Berkshire Hathaway	U.S.	9,453
ERC	U.S.	6,921
Gerling Group	Germany	3,938
Lloyd's	U.K.	3,799
ASS Generali	Italy	3,533
Allianz Re	Germany	3,299
SCOR Re	France	2,721
Hannover Re	Germany	2,564

Another troublesome sign is the recent activity of the Financial Services Authority of the United Kingdom. This Authority determines financial solvency standards for insurance companies in the U.K. The Authority lowered the solvency standards for life insurance companies in January, 2003 as a result of equity market declines. While such a move postpones the need for corrective action, it also sends a signal of weakness to the financial markets.

As reported in a recent article in *The Economist*⁴, 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.

Overall the condition of the global reinsurance industry is poor, with capacity quite limited. The effects of the issues described above 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.

³ Source: *Standard & Poor's Global Reinsurance Highlights*, 2000.

⁴ "Love on the Rocks," *The Economist*, April 19, 2003 pp. 59-60.

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.

International Efforts in Reinsurance Regulation

A number of international organizations are involved in the process of developing 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 to come in line with recommendations of these organizations, as these recommendations are often viewed as necessary practices for a stable market. In the section below we review the efforts of the most active of these international organizations. The organizations covered are the International Association of Insurance Supervisors, the Organization for Economic Co-operation and Development, the Financial Stability Forum, the Financial Sector Assessment Program, the Basel Committee, the International Accounting Standards Board, the Joint Forum, and the European Commission.

International Association of Insurance Supervisors

The International Association of Insurance Supervisors (IAIS) was established in 1994 to develop international principles and standards for insurance supervision and to improve supervisory systems for the insurance industry through mutual assistance and cooperation. The IAIS also provides training to members, and coordinates efforts with regulators of other segments of the financial service industry. Currently the IAIS includes representation from more than 100 jurisdictions worldwide, and includes both regulators and insurance-professional observers. The IAIS issues insurance Principles, Standards, and Guidance Papers. The IAIS also publishes other documents that it does not officially endorse, but which it believes may be helpful to the regulatory community. Among these is an Issues Paper on reinsurance and reinsurers published in February, 2000.

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, including the regulation of reinsurance. In addition, the IAIS has started a voluntary database of information on insurance companies.

IAIS Principles Paper No. 6, *Principles on Minimum Requirements for Supervision of Reinsurers*, was published in October 2002. Many areas of supervision of reinsurers are identical to those for insurance companies. The areas that are specified for different treatment are technical provisions, investments and liquidity, capital requirements, and corporate governance procedures.

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, is included as Appendix III to this paper.

Another interesting publication is *Issues Paper on Reinsurance and Reinsurers: Relevant Issues for Establishing General Supervisory Principles, Standards, and Practices* produced by the IAIS Working Group on Reinsurance in February, 2000. While this paper does not have the imprimatur of the IAIS, its contents should prove valuable to regulators in identifying the scope of activities involved in the regulation of reinsurance. It is recognized that the primary aim of insurance supervision is protection of the policyholder, so from this point of view the regulation of reinsurance might seem to be unnecessary. Indeed, as noted elsewhere in this paper, the objectives of regulation can be achieved at the insurance company level, but substantial efficiencies can be realized by applying specific aspects of the regulatory effort at the reinsurance company level. The issues paper, besides outlining areas for supervision, provides much helpful background information on the operation of the reinsurance industry, reinsurance terminology, and the external factors affecting the industry.

An IAIS Task Force on transparency in reinsurance is being chaired by the chief insurance regulator of Denmark, Henrik Bjerre-Nielsen. This Task Force is expected to present final recommendations in September, 2003. Among the areas to be addressed by the Task Force are the following:

- Define industry information on the resiliency and soundness of the global reinsurance market.
 - Create a system to produce needed data on a regular schedule.
- Identify forward-looking, risk-oriented information that reinsurers should provide for insurance and financial risk exposures, how they are managing those risks, and the capital and reserves they are holding in relation to those risks.

The IAIS has an action plan through the year 2006 that calls for continued cooperation with the WTO and OECD. Reinsurance supervision is one of the items in this plan, recognizing the great diversity of regulatory regimes for reinsurance in various countries today.

Organization for Economic Co-operation and Development

The Organization for Economic Co-operation and Development (OECD) was established in 1961 on the basis of earlier cooperation in Europe after World War II. The 30 member countries of the OECD share a commitment to representative democracy and the market economy. The OECD has a wide range of activities,

including activities related to insurance and reinsurance as stabilizers of economic society through the management of risk.

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. As noted above, at least one U.S. insurance company was driven into insolvency in the wake of September 11 by the delay of its reinsurer in paying a legitimate claim.

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 will allow 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;
- limitations of activities, such as run off or limitation of free disposal of assets.

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

The efficiency of exchange of information depends on consistency of the types of information and method of presentation between different countries. As noted below, several international organizations currently are working to increase consistency of information among countries.

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 opaqueness 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.

- 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.

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), which is a set of 17 standards identified by the FSAP as a precondition to effective insurance regulation. The text of Core Principle 10: Reinsurance is given as Appendix II to this paper, however this is currently undergoing revision. 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.

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.

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.

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 unbundled 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 Joint Forum

The Joint Forum is a group of technical experts established 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, in particular for:

- 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;
- Outsourcing by regulated firms of functions and activities;
- 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.

Part of the mandate of the Joint Forum is to develop best practices related to these issues, and to share information with supervisors in various countries related to its work. To date the Joint Forum has produced the following documents:

- *Capital Adequacy Principles*
- *Supplement to the Capital Adequacy Principles Paper*
- *Fit and Proper Principles*
- *Framework for Supervisory Information Sharing*
- *Principles of Supervisory Information Sharing*
- *Coordinator*
- *Supervisory Questionnaire*
- *Intra-Group Transactions*
- *Risk Concentrations Principles*

The titles of most of these are self-explanatory, but to clarify a few, *Fit and Proper Principles* covers principles used to evaluate whether individuals managing an entity are fit and proper managers of the entity. The *Coordinator* paper discusses how to coordinate regulatory activities related to an entity that crosses boundaries between regulating organizations, including how this can be handled in an emergency. The *Supervisory Questionnaire* appears to be primarily for the purposes of the Joint Forum in gathering information about supervisory activities in various countries. Finally, *Intra-Group Transactions* deals with ways to handle the effects of transactions between related entities in the same or different segments of financial services.

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.

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.

The EC document builds on the Core Principles of the IASA to put forth a list of specific regulatory parameters for reinsurance. The parameters cover not only prudential regulation of assets, liabilities, and capital, but also such areas as licensing and corporate governance. The document goes on to explain these parameters in detail in the context of reinsurance.

Regulatory Objectives

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. 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. 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.

A 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, and if they do, there is no risk to the balance sheet, since no credit is taken. 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 level 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.

The reinsurance industry is similar to the insurance industry, so that many regulatory issues are common to both. There are some important differences, however, 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.

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.

The primary areas of supervision for reinsurance regulators can be organized under four headings; financial transparency, capital adequacy, systemic risks, and market conduct.

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. Recently the IAIS put forward a proposal⁵ to establish such a system, and the framework of the system was completed last year. As noted by Hall,⁶ 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.

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.

⁵ IAIS Working Group on Reinsurance and Reinsurers: *Relevant Issues for Establishing General Supervisory Principles, Standards, and Practices* (2000).

⁶ Hall, Debra J., *Reinsurance Regulation in a Global Marketplace: A View from the United States*, Reinsurance Association of America, 2000.

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 collusion in creating 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 insurance companies may try to use reinsurance to create an appearance of risk management, while cutting the cost of reinsurance by limiting the actual transfer of risk. In this way an insurance company and a reinsurance company collude to create a reinsurance contract that appears to transfer more risk than is actually transferred. The insurance company improves the appearance of its financial statements at a low cost, and the reinsurance company earns premium revenue while taking on minimal risk. In the absence of transparency and regulatory oversight existing 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 may not be protected in this situation.

When this situation occurs, both the insurance company and the reinsurance company may wish to convince regulators that there is significant risk transfer in the reinsurance contract. This may be done through convoluted contract language that 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 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 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 contract language that has been written with a purpose of deception. 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.

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.

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. The International Actuarial Association is in the process of preparing a paper on risk-based capital, in response to the issue of solvency control levels. This paper is expected to be completed shortly.

Actuaries are trained in the evaluation of insurance liabilities, and can apply systematic methods to these estimates. In recent years actuaries have recognized the need to link the cash flows from liabilities and assets, and have developed techniques to model enterprise cash flows. Proper use of these techniques provides reasonable assurance that the company will be able to maintain liquidity.

Risk-based capital concepts have been brought to the insurance industry from banking. The typical risk-based capital model builds the capital requirement from the bottom up, assigning required capital multiples to various types of assets and liabilities. These elements are then combined in a way that recognizes the presence or absence of correlated risks in the components. Regulators may be provided with specific intervention levels based on the relationship between actual capital and the amounts determined by the risk-based capital formula. As these methods are applied in the insurance and reinsurance industries complexities arise that 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. In addition, the sources of risk in insurance include the sources of asset-related risk in encountered in banking, and add many other types of risk that arise from the various lines of insurance. 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.

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.

Systemic Risks

Systematic financial risks exist when the failure of one financial institution leads to the failure of others. 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 was put under government supervision.

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.

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

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. 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.

Special Areas of Regulatory Procedures

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.

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 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 value in the case of a large earthquake. By investing the proceeds in risk-free financial instruments, the fund was able to create future cash flows that would tend to absorb the effects of earthquake losses.

A second example is 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 speculative 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.

Conclusion

This paper has presented a brief 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 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. Resources are being provided for regulators by international bodies, such as the International Association of Insurance Supervisors, to allow regulators to develop a regulatory regime that covers the necessary parts of reinsurance regulation. 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 responsibility.

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Internet Resources

The Basel Accords

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

Financial Stability Forum
www.fsforum.org

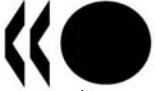
Organization for Economic Co-operation and Development
<http://www.oecd.org>

Reinsurance Association of America
<http://www.reinsurance.org>

Unclassified

Appendix I

C(2002)134/FINAL



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

10-Oct-2002

English/French

COUNCIL

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

C(2002)134/FINAL
Unclassified

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 information⁷ 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 conditions and modalities such information will be circulated -- including the legal authority of

7. *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

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.

Principle 10: Reinsurance

Insurance companies use reinsurance as a means of risk containment. The insurance supervisor must be able to review reinsurance arrangements, to assess the degree of reliance placed on these arrangements and to determine the appropriateness of such reliance. Insurance companies would be expected to assess the financial positions of their reinsurers in determining an appropriate level of exposure to them.

The insurance supervisor should set requirements with respect to reinsurance contracts or reinsurance companies addressing:

- the amount of the credit taken for reinsurance ceded. The amount of credit taken should reflect an assessment of the ultimate collectability of the reinsurance recoverables and may take into account the supervisory control over the reinsurer; and
- the amount of reliance placed on the insurance supervisor of the reinsurance business of a company which is incorporated in another jurisdiction.

Essential criteria

1. The insurance supervisor has the authority to review the reinsurance arrangements to ensure that they are adequate and that the claims held by insurers on their reinsurers are recoverable. This includes ensuring that:
 - the reinsurance programme is appropriate to the level of capital of the insurer and the profile of the risks it underwrites; and
 - the reinsurers' protection is secure, which may be ensured by such measures as obtaining collateral (including trust, letters of credit or funds withheld) or by relying on a system of direct supervision of reinsurers.

Additional criteria

1. A reinsurer which acts also as a primary insurer is subject to insurance supervision.
2. With regard to a reinsurer that does not act as a primary insurer (professional reinsurer):
 - The reinsurance supervisor has:
 - the necessary tools available for collecting, reviewing and analysing prudential reports and other information from reinsurers;
 - regular contact with the management of the reinsurer and a thorough understanding of its operations; and

- the ability to monitor the activities of reinsurers and to intervene when necessary, including issuing cease and desist orders and instituting the winding up of the reinsurer.
- The reinsurance supervisor is entitled to require reinsurance companies:
 - to define clearly the permissible activities they want to engage in;
 - to comply with requirements regarding ownership structure, management, operating plan, internal controls and financial position;
 - to have systems that accurately measure, monitor and adequately control market risks as well as to have a comprehensive risk management process; and
 - to have adequate policies, practices and procedures that safeguard high ethical and professional standards.
- The reinsurance supervisor has the authority to cooperate, where appropriate, with other (re)insurance or financial supervisors to assess the financial position of a reinsurer that is:
 - part of an insurance or financial group;
 - participating in other (re)insurers or financial institutions, or in joint ventures or reinsurance pools; or
 - conducting business in or providing services to other jurisdictions.
- The reinsurance supervisor, in assessing the reinsurer's financial position, takes into consideration:
 - the adequacy of technical provisions (policy liabilities) from both the ceding insurer's and the assuming reinsurer's perspective;
 - the adequacy of capital (solvency margin) to support the reinsurer's business operations;
 - the reinsurance program of the reinsurer itself; and
 - any effects of risk accumulation which result from the aggregation of reinsured insurance branches that are separate at the level of primary insurance.

3. The insurance supervisor:

- has at his disposal the professional skills and tools to ensure independent validation of the received information; and

- has the ability to share confidential information with other insurance supervisors. Information flows between home and host supervisor may be based on agreed model forms for supervisory information.

**INTERNATIONAL ASSOCIATION OF
INSURANCE SUPERVISORS**



**SUPERVISORY STANDARD ON THE
EVALUATION OF THE REINSURANCE COVER
OF PRIMARY INSURERS AND THE SECURITY
OF THEIR REINSURERS**

January 2002

Supervisory Standard on the Evaluation of the Reinsurance Cover of Primary Insurers and the Security of their Reinsurers

This standard provides guidance to supervisors in assessing how insurers manage their reinsurance arrangements. It discusses the policies and procedures that companies should have in place and supervisory approaches for evaluating the adequacy of each company's reinsurance cover.

The IAIS recognises that currently there are significant differences in supervisory approaches taken by member jurisdictions with respect to reinsurance. For example, reinsurers in some jurisdictions are directly supervised; other jurisdictions rely on rating agencies in assessing the security of a reinsurer. Some supervisors maintain a register of those reinsurers authorised to underwrite reinsurance in their jurisdiction, while others evaluate reinsurers actually writing business in their jurisdiction. Some jurisdictions require reinsurers to post collateral, covering the likely liabilities (or liabilities plus a margin) of the reinsurer, with the ceding companies

This standard acknowledges the differing practices but does not purport to favour one regime over another.

In addition, in recent years reinsurance has evolved with the introduction of many new products. These are commonly known as alternative risk transfer (ART) products. The IAIS intends to issue a separate paper on this subject, however, it believes that much of the guidance provided in this standard will also apply in the case of ART products.

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1. Introduction

1. Insurance companies assume risk on behalf of policyholders. They mitigate these risks by acquiring insurance with reinsurers. Through the use of reinsurance, an insurer can reduce risk, stabilise its solvency, use available capital more efficiently and expand underwriting capacity. Reinsurance helps an insurer obtain a desired, prudent risk profile.¹ However,

¹ The risk profile of a financial undertaking reflects the relation between the risks run by the financial undertaking and its financial strength.

irrespective of the reinsurance obtained, the primary insurer normally remains contractually responsible for paying the full claim amounts to policyholders.

2. Reinsurance may be provided by pure (or professional) reinsurers or by primary insurers also authorised to write reinsurance.

2. Types of reinsurance arrangements

Traditional

3. Most risk assumed by reinsurers is based on traditional contracts, which are normally either “treaty” or “facultative”. Under treaty contracts, the reinsurer automatically participates in certain sections or portfolios of the insurer’s business (treaty contracts are also referred to as automatic reinsurance or automatic capacity). Facultative contracts allow the reinsurer to participate on an individual, risk-by-risk basis.

4. Contracts may be proportional or non-proportional. Proportional reinsurance is a form of reinsurance in which the premiums and claims of the insurer are shared proportionally by the insurer and the reinsurer. In non-proportional reinsurance an insurer pays a risk premium to a reinsurer and the reinsurer assumes a share of the insurer’s obligations in excess of a certain amount which could be limited by another, larger, amount. Thus the reinsurance cover can be built up in layers. Typically, for non-life insurance, reinsurance contracts last one year and cover specified lines of business. Life reinsurance contracts are usually indefinite and contain a termination provision for new business only.

ART

5. Insurance risk may be transferred to reinsurers and other counterparties by using ART techniques, such as financial reinsurance and securitisation. Securitisations commonly utilise either a “protected cell” or a “Special Purpose Vehicle” to effectuate the transfer of insurance risk from the ceding company. To date, most securitisations have been fully funded, which means that the proceeds of the securitisation fully cover the risk securitised.

6. Similar cover can also be provided by other types of ART contracts some of which are provided by reinsurers. ART cover may be obtained on a multi-line, multi-year, and holistic basis, and can be retrospective or prospective. Contracts can provide protection against different operational and financial risks. For example, some ART contracts, like traditional reinsurance contracts, protect a primary insurer’s solvency.

7. In some ART contracts the transfer of insurance risk is secondary to the transfer of financial risks, such as credit, liquidity or market risk. While called financial “reinsurance”, most jurisdictions regard that such contracts provide valid reinsurance cover only to the extent they imply a real transfer of insurance risk. However, such contracts do play a part in the company’s risk management; but they should not be considered to mitigate insurance risk unless there is a genuine transfer of this risk. In some cases the only intention of the cedent is to

obtain a favourable impact for financial reporting, but ART contracts should not be used in order to distort true and fair reporting.

3. Reinsurance strategy and management procedures

Board of Directors

8. Every insurer should have a reinsurance strategy, approved by the company's Board of Directors, that is appropriate to the company's overall risk profile. The reinsurance strategy will be part of the company's overall underwriting strategy. The Board should review the reinsurance strategy annually (in the case of life insurers, possibly less frequently). In addition, the reinsurance strategy should be reviewed when there have been changes in the company's circumstances, its underwriting strategy, or the status of its reinsurers.

9. The reinsurance strategy should define and document the insurer's strategy for reinsurance management, identifying the procedures for:

- the reinsurance to be purchased;
- how reinsurers will be selected, including how to assess their security;
- what collateral, if any, is required at any given time; and
- how the reinsurance programme will be monitored (i.e. the reporting and internal control systems).

10. The Board should ensure that all legal and regulatory requirements are met. It should set limits on:

- the net risk to be retained; and
- the maximum foreseeable amount of reinsurance protection to be obtained from the approved reinsurers.

Senior management

11. Senior management should document clear policies and procedures for implementing the reinsurance strategy set by the Board of Directors. This includes:

- setting underwriting guidelines that specify the types of insurance to be underwritten, policy terms and conditions, and aggregate exposure by type of business;
- establishing limits on the amount and type of insurance that will be automatically covered by reinsurance (e.g. treaty reinsurance); and
- establishing criteria for acquiring facultative reinsurance cover.

In order to avoid uncovered risks, the terms and conditions of the reinsurance cover should be compatible with those of the underlying business.

12. Limits on the net risk to be retained should be set either per line of business or for the whole account. The insurer may also set limits per risk or per event (or a combination thereof).

The limits must be based upon an evaluation of its risk profile and the cost of the reinsurance. In particular, the insurer should have adequate capital to support the risk retained. Some insurers may use the results of dynamic financial analysis techniques² (using the reinsurance cover as one of the variables) as input into these operating decisions.

13. The insurer should maintain an up-to-date list of reinsurers³ that it has approved. For each approved reinsurer the appropriate level of exposure should be specified. To do this, the insurer should evaluate the ability and willingness of the reinsurer to fulfil its contractual obligations as they fall due (i.e. its security). Such assessment is required whether collateral is posted or not. The assessment should take into account the effects of any collateral the reinsurer has posted in favour of other insurers. The insurer's credit guidelines should describe the system for controlling exposures to each reinsurer.

14. To improve the security of the overall reinsurance cover, insurers may choose to use a number of different reinsurers. Diversification may also be achieved by using certain ART techniques.

15. Generally speaking, if no requirements are placed on the choice of reinsurer or on the posting of collateral, the fewer the number of reinsurers used, the more an insurer should pay importance to the security of its reinsurers. If a company takes advice on the strength and security of a reinsurer, then it should satisfy itself that the advice given is sound. Similarly, if reinsurance cover is acquired through an intermediary, the company should evaluate the operational risk associated with the transaction.

16. Senior management should ensure that the management information system in place meets all Board requirements with respect to reporting frequency and level of detail. In addition, there should be adequate systems of internal control to ensure that all underwriting is carried out in accordance with company policy and that the planned reinsurance cover is in place. The underwriting control systems should be able to identify and report on a timely basis where underwriters infringe authorised limits, breach company guidelines or otherwise assume risks exceeding the ability of the company's capital base and reinsurance cover to service.

Internal control

17. There should be internal control systems in place to ensure that claims are reported to the appropriate reinsurer and that reinsurance claims payments are being promptly collected. The underwriting control may include an actuarial assessment of the risk and whether it has been transferred as presumed. This assessment may also include a review of the reinsurance

² Dynamic financial analysis evaluates an expanded universe of possible scenarios through computer modelling, as opposed to the traditional approach that involves interpreting historical trends and ratios (i.e. static). With the power of a computer, a user can simulate multiple scenarios based on specified set of constants and probabilistic estimates for key variables, such as reinsurance pricing and coverages, premium volume, pricing adequacy, underwriting profit/loss, investment returns, reserve adequacy, catastrophes and cost of capital. The resulting distribution of these variables can then be used to influence management's operating decisions.

³ Cf. The OECD Recommendation of the Council on Assessment of Reinsurance Companies, C(98)40/FINAL.

contracts. The Board of Directors should receive regular and comprehensive reports on the effectiveness and performance of the claims system and the reinsurance protection. Companies' internal control systems should be subject to regular audit examination.

4. Supervisory regime for insurance business (reinsurance cover and security)

18. The supervisor should verify that the Board of Directors has established an overall strategy framework – addressing, *inter alia*, underwriting and reinsurance. To evaluate reinsurance cover, reinsurer security and collateral that may be posted, the supervisor should have, or have access to, sufficient expertise. Usually the supervisor takes a risk-based approach – ensuring that the company has appropriate policies, systems and procedures in place and focusing more detailed examination work on areas posing specific and significant concern.

19. Before granting a license, the supervisor must be satisfied with the company's planned risk management and reinsurance strategies, and accompanying policies. When examining the business plan of an insurance company, the supervisor must evaluate if the proposed reinsurance covers maximum foreseeable loss. In the business plan the company must describe how, and to what extent, future policies will be reinsured. The supervisor should evaluate whether reinsurers offer sufficient security. In most cases, this evaluation could be enhanced or improved by the exchange of information between supervisors.

20. Companies should maintain adequate reinsurance cover at all times. Supervisors should regularly evaluate the reinsurance cover and risk profile of the insurers. While many reinsurance treaties operate on an annual basis, some treaties especially for life business and some ART contracts can operate for many years. In such cases, supervisors will wish to be assured that the reinsurer offer sufficient security to act as a long-term counterparty

21. Supervisors must receive sufficient and relevant information on the reinsurers used and the reinsurance cover arranged. Relevant information may include:

- reports describing the reinsurance cover, reinsurance programmes or treaties; and
- financial statements, including the result of reinsurance, any amounts outstanding from reinsurers and the effect of ART techniques, including financial reinsurance.

Supervisors should be able to review the quality and validity of information submitted.

22. The information may be submitted in the form of:

- copies of contracts and amendments;
- copies of slips and cover notes;
- supervisory returns; or
- written contract descriptions and summaries.

Information obtained by supervisors in the process of assessing a company's reinsurance cover should be kept confidential.

23. Using this information and other relevant information received during on-site inspection, the supervisor should evaluate:

- the prudence of the company risk profile including an evaluation of any risk concentration, i.e. an aggregate exposure with the potential to produce losses large enough to threaten the insurer's financial health or its ability to maintain core operations;
- compliance with the company's reinsurance strategy;
- the sufficiency of the reinsurance cover and the insurance company's financial strength, in particular under extreme, but plausible loss scenarios;
- the sufficiency of the reinsurance security, taking into consideration a wide range of factors including financial strength, whether reinsurers are properly supervised and whether or not collateral is posted, cf. para. 13 above; and
- the appropriateness of any ART techniques, such as securitisation, used.

24. In making these evaluations the supervisor should consider the overall risk profile of the insurer. The supervisor should be aware of the security and adequacy of the reinsurance or ART coverage for long-tail business (where claims development is slow) and the top layers of catastrophe programmes (where amounts involved can be large).

25. The choice of reinsurance cover is a business decision made by management within the overall reinsurance strategy of the insurer. However, where insufficient or inappropriate reinsurance cover affects the company's ability to pay policyholders' claims, the supervisor must enter into discussions with the management of the company. The supervisor should have the legal and administrative power necessary to take remedial action in *inter alia* cases of insufficient reinsurance cover, insufficient reinsurer security, non-compliance with company reinsurance strategy, insufficient collateral (where applicable) or use of non-admitted (i.e. non-authorised) reinsurers.

26. Remedial action should include the power to disallow credit in whole or in part for reinsurance when calculating solvency requirements or technical provisions on a net basis or when determining the coverage of gross technical provisions by reinsurance recoverables. As well, the supervisor should be able to require the insurer to:

- obtain additional reinsurance cover;
- provide additional capital;
- establish additional technical provisions; and
- have additional collateral posted, if applicable.

Such action should be taken according to transparent principles and be based on objective criteria.

27. The supervisor may choose to provide insurers with comparative risk information, for example in the form of benchmarking data or comparisons. This information allows management to evaluate the quality of the reinsurance cover in comparison with market standards and to decide if its risk profile is acceptable and prudent.