Developing Reinsurance Markets in Emerging Economies: Regulatory Implications and Challenges

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I. **Introduction**

In recent years, various international trends can be discerned as having a significant impact on current worldwide efforts, particularly in an emerging market, to effect viable reinsurance regulatory reform. As efforts have already been made to liberalize the reinsurance business, and harmonize the insurance regulation by international organizations e.g., WTO/GATS, OECD, and IAIS, the development of an appropriate reinsurance...
regulatory regime, is becoming an increasingly essential issue for emerging markets to enhance the stability of the insurance market. In this context, this work will address the main issue of the regulation of reinsurers, and the supervision of reinsurance arrangements of primary insurers, with a view to considering an appropriate model to maintain the solvency of primary insurers. In doing so, this work will attempt to lay out what appears to be the general issue, relating to regulation of reinsurers and primary insurers’ reinsurance arrangements.

As a result of an indirect relationship between reinsurers and the insured party, it appears that the regulation of reinsurance depends, in many aspects, on the regulation of the primary insurers, particularly in market conduct regulation, including tariff and reinsurance contracts. In general, the level of regulation of reinsurance has been reduced, or even exempted, in most countries. While insurance regulation is generally based on the protection of the policyholders, emphasis has been given to protecting the solvency of primary insurers in some countries, such as the United States. In addition, several significant insolvency cases relating to primary insurers resulted from unrecoverable reinsurance. This might lead to a view that the main purpose of the regulation of reinsurers supervisors within their jurisdictions. “Its membership includes insurance regulators and supervisors from more than one hundred jurisdictions, who resolve to: (1) cooperate to ensure improved supervision of the insurance industry on a domestic, as well as on an international, level in order to maintain efficient, fair, safe and stable insurance markets for the benefit and protection of policyholders; and (2) unite their efforts to develop practical standards that members may choose to apply.” See INTERNATIONAL ASSOCIATION OF INSURANCE SUPERVISORS (hereinafter IAIS), INSURANCE PRINCIPLES, STANDARDS AND GUIDANCE PAPERS 1 (1999).


5. Historical evidence, shows that several significant insolvency cases resulted in uncollectable reinsurance for primary insurers during the 1980s. In the insolvent cases of Mission and Integrity in 1984 to 1988, the U.S. House of Representatives, Energy and Commerce Subcommittee on Oversight and Investigations, Staff Memorandum on the Subcommittee’s investigations of the failures, states, “…both insurers used complex arrangements, involving hundreds of reinsurers around the world, to transfer most of the risk on the extremely unprofitable business they were underwriting. When huge losses started to accrue, Mission and Integrity were required to pay the entire amounts, because their reinsurers refused to pay. The reinsurers have alleged fraud and misrepresentation, as justification for not paying, but the ultimate result was to force Mission and Integrity into bankruptcy, because of their inability to collect
is to ensure the security of reinsurance arrangements, and the recoverability of reinsurance. However, in the other countries, the reinsurers are treated the same as the primary insurers, who are subject to relevant solvency and investment regulation. Therefore, the structure of the regulation of reinsurance will depend on the market characteristics and regulatory environments.

In emerging markets, the main concern of primary insurers and regulators is to transfer risk, and extend domestic capacity. As a result of the shortage of capital capacity to cover assumed risk, it is essential to avoid any unnecessary operational obstacles, arising from regulations that may impede the diversification of insurance risk. On the other hand, due to liberalization of reinsurance transactions, cross-border transactions will likely increase dramatically. Consequently, this may cause a supervisory obstacle, if reinsurers are licensed and regulated in another jurisdiction, whose financial information of reinsurers may be difficult to obtain, and where the regulators are unable to ensure the solvency of reinsurers. Under such a scenario, the regulators in emerging markets may face difficulties in compromising the conflicts between the liberalization of reinsurance transactions, and the financial solvency of primary insurers. Furthermore, it is unlikely that many domestic reinsurers would be willing to accept risk from primary insurers, and be licensed in the same market. As a matter of fact, many primary insurers in emerging markets, rely on either state-owned reinsurers or foreign reinsurers to assume their insured risk. Thus, more attention should be given to the reinsurance arrangements of primary insurers, rather than the strict regulation imposed on reinsurers.

In terms of regulation of reinsurers, reinsurers are subject to solvency requirements similar to those imposed on primary insurers, although the standards of solvency requirements for reinsurers may be less stringent in some cases. Due to dynamic reinsurance

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6. Although the reinsurers in the United Kingdom are subject to the similar solvency regulation as the primary insurers, the reinsurers who only carry on the reinsurance business are relatively less regulated. In the UK, according to section 9(3) of the ICA 1982, the requirement of deposit is not applicable in the case of a nonapplicant for an authorization restricted to reinsurance business, only whereas ICA 1982 requires non-EEA companies who carry on direct general, or long-term, business to lodge a deposit of a certain prescribed amount with a nominated person.

7. It has been recognized that "the primary role of reinsurers is to provide adequate coverage of insurance risk. There should be no rules or limitations, or international capital transfers for foreign and domestic reinsurers," during the Annual Conference of the IAIS, in Cancun, Mexico, in Sept. 1998. See IAIS Working Group on Reinsurance, Reinsurance and Reinsurers: Relevant Issues for Establishing General Supervisory Principles, Standards and Practices 11 (Feb. 2000), available at www.iaisweb.org

8. See Jonathan Spencer, Cross-border Services Regulation, GLOBAL REINS., Sept./Nov. 1995, at 76. However, this article points out that, while recognizing the prudential concerns regarding the reliability of cross-border transactions, it is also important to consider the benefit these transactions can provide.

9. For instance, in the United Kingdom, the requirement of deposit is not applicable in the case of an insurer for an authorization restricted to reinsurance business, in accordance
markets and contract parties who are more sophisticated than the general public, the
main difference between regulation of reinsurers, and regulation of insurers are the
market conduct regulations regarding contract terms and tariffs. For emerging markets
however, the regulators often encounter difficulties in obtaining information concerning
foreign reinsurers who transact business with domestic insurers. In addition, it is unlikely
that regulators in those markets have sufficient resources to ensure the financial solvency
of foreign reinsurers through implementing relevant financial requirements. Therefore,
it is essential to enhance the cooperation among regulators in different jurisdictions to
obtain financial information, and to introduce adequate regulatory methods needed to
assess the security and the recoverability of reinsurance.

With regard to regulation of primary insurers' reinsurance arrangements, the issues
often arise from the financial impact caused by reinsurance arrangements on primary
insurers. To what extent reinsurance will affect the solvency of primary insurers, depends
upon the method used to calculate reinsurance on the technical reserve (or loss reserve),
designed to meet the liability arising from the claims of policyholders. While the coun-
tries that adopt the net reserving basis which allows primary insurers to reduce their
technical reserve by the amount of reinsurance arrangements, the recoverability of
reinsurance might have a direct impact on the solvency of primary insurers. It should
be noted that the amount of reduced technical reserve is not only determined by the
amount of reinsurance, but also by the amount of paid reinsurance premiums, and the
loss of investment on the reinsurance claims which should be received in a reasonable
time to meet the claims. As a result of significant financial impacts caused by the col-
lection of reinsurance, some developed countries have developed standards to regulate
the condition under which insurers may be able to reduce their loss reserve. While it
appears that these developed models have been proven successful in ensuring the stabil-
ity of insurance market, similar regulatory methods still have not been implemented in
emerging markets. In addition to the lack of prudent regulations, the market character-
istics and particular legal environments, make it more difficult to decide an appropriate
regulatory model to maintain the stability of insurance market.

To facilitate the main theme of this work, which is to develop an appropriate regu-
latory model for emerging markets, this article will be organized as follows. Sections II
and III consider the general regulatory issues relating to the scope and the implemen-
tation of reinsurance regulation. In terms of the general regulatory issues relating to
regulation of reinsurers and reinsurance arrangements of primary insurers, there are two
which appear to be of the most significant. First, regulators need to address the questions
whether reinsurers who carry on reinsurance business should be subject to direct regula-
tion, and also the relevant solvency regulations. Second, given the trends of liberalization

with Insurance Company Act 1982. T. Henry Ellis & James A. Wiltshire, Regulation of
Insurance in the United Kingdom and Ireland B. 3.4-01 (Feb. 2000).
10. In contrast, the gross reserving basis, is that the amount of reinsurance transferred by the
insurers cannot be used to reduce their loss reserve.
11. See Thomas Warnke, Reinsurance Collections: The Primary Companies' Challenge, in Law and
Practice of International Reinsurance Collections and Insolvency 36, (June 11-12, 1988).
12. In the United States, regulations govern the conditions under which insurers may take credit
for reinsurance in their reserves. NAIC, supra note 4, at 785-1. See also Graydon S. Staring,
of the reinsurance trade, how should regulators supervise the reinsurance arrangements of primary insurers, and maintain their financial solvency? After considering these issues, international supervisory principles also will be discussed in Section IV. Learning from these models and comparing them with practical issues, this work will then propose a series of suggestions for reinsurance regulatory reform in emerging markets.

II. Regulatory Issues Relating to Reinsurers: Direct Regulation versus Indirect Regulation

With respect to regulation of reinsurers, it is difficult to decide upon an appropriate regulatory structure to enable domestic insurers to benefit from the liberalization of reinsurance, without endangering the recoverability of reinsurance. In general, regulation of reinsurers can be categorized into two approaches: the direct supervision of reinsurers, and the indirect supervision of reinsurers by way of supervision of the reinsurance policies of primary insurers. In terms of the direct supervision of reinsurers, all the reinsurers who intend to carry on reinsurance business, should obtain authorization or a license from the insurance regulators. In such an approach, the reinsurers should meet regulatory requirements in relation to corporate structure, capital requirements, financial solvency requirements, and the related obligation to submit their financial statements. On the other hand, the indirect supervision of reinsurance, means that the insurance regulators give emphasis to the reinsurance policies of primary insurers, rather than the reinsurers. Under the indirect regulatory approach, the insurance regulators monitor and supervise reinsurance arrangements of primary insurers. In other words, the insurance regulators lay down the requirements for the approval of reinsurance arrangements of primary insurers. In most cases, this approach often provides less strict regulations for reinsurers.

A. Argument for the Direct Supervision of Reinsurers

In terms of arguments for the direct supervision of reinsurers, several primary points emerge. First, regulators may face a dilemma between liberalization of reinsurance transitions, and financial security of reinsurance. While the trade barriers to reinsurance have been gradually dismantled in recent years, more attention should be paid to avoid any improper sequencing of financial reform, which has been a critical factor in many financial crises. In other words, an alternative regulatory system should be introduced to maintain the financial stability of insurance markets. Consequently, reinsurers should be subject to similar financial requirements, as those imposed on primary insurers and regulators should ensure their ability to supervise these reinsurers' activities. In supervising reinsurers directly, insurance regulators can effectively monitor the financial stability of reinsurers. Furthermore, regulators can obtain the essential information of reinsurers; e.g., investment, capital and management requirements, and reinsurance business.

13. It can also be categorized as domicile-oriented regulation, means that all the reinsurers should be licensed or authorized in the jurisdiction in which they do reinsurance business. See Manuel Aguilera-Verduzco, Reinsurance Regulation and Supervision, OECD, at 2 (Oct. 20, 2001), available at www.oecd.org.
15. IAIS WORKING GROUP ON REINSURANCE, supra note 7, at 49.
Second, due to reinsurance market dynamics and intense competition, reinsurers frequently engage in innovative investment instruments to diversify assumed insurance risk. As a result, regulators may encounter problems in accurately computing the financial security of reinsurers who are exempted from domestic regulation. The direct regulation of reinsurers, can offer the advantage of supervising reinsurance solvency and investment management on a national basis, similar to a primary insurer.

Third, as a result of the necessity of fitness and propriety of management in keeping pace with market dynamics and fierce competition, reinsurers should maintain their expertise, competence and suitability. In terms of governmental supervision concerning the competence and fitness of key personnel, a licensing or authorizing procedure in the regulatory regime can ensure licensed, or authorized reinsurers to carry on reinsurance business with the integrity, prudence and the appropriate degree of professional competence. Therefore, it is essential to implement the direct regulation of reinsurers, to ensure the professionalism of representatives of the reinsurance companies.

B. ARGUMENTS AGAINST THE DIRECT SUPERVISION OF REINSURERS

There are essentially three fundamental arguments against the direct regulation of reinsurers: (i) liberalization of reinsurance business and diversification of insurance risk; (ii) systemic risk and reinsurance business; (iii) an alternative regulatory approach to maintain the stability of insurance market.

1. Liberalization of Insurance Business and Diversification of Insurance Risk

First, as the direct supervision of reinsurers could impose the entry requirements on reinsurers, who intend to carry on reinsurance business in the domestic market, it may impede the liberalization of reinsurance transactions and increase transaction costs. In addition, it is likely that reinsurers who are licensed and supervised by the relevant solvency regulation, would localize their capital and investment in the local market. Consequently, strict investment regulation may have adverse effects on the diversification of insurance risk. Given that funds held relating to catastrophe risk (e.g., earthquake and hurricane), should not be affected by the occurrence of the event, reinsurers may fail to diversify these risks by investing funds abroad, due to restrictive regulations. Furthermore, it is argued “high barrier to entry and restrictive practices in certain countries, prevents free competition between reinsurers, and has the effect of keeping prices in those countries artificially high.” Such a domicile-oriented regulatory approach tends to be used only in countries with high retention levels of premiums, or developed countries such as the United Kingdom.
2. *Systemic Risk and Reinsurance Business*

Second, from the viewpoint of systemic risk and the stability of financial market, it has been observed that "it is unlikely that the reinsurance industry can be linked to systemic problems of financial instability."\(^{19}\) The reasons for this conclusion are as follows:

1. Relative magnitude of reinsurance.
2. Major reinsurers are neither subsidiaries of large bank holding companies, nor owners of large banks.
3. Shift from proportional to nonproportional reinsurance programs.
4. Reduction in cession rates.
5. Industry stability.
6. Creditable rating system.
7. Limited importance of regulatory arbitrage.
8. Time lag between the occurrence of an event, and the payment of claims.
9. Relative insignificance of alternative risk transfer products.\(^{20}\)

Given that systemic risk caused by the reinsurance industry seems low, it has been argued that "over-restrictive investment rules imposed to prevent insolvencies, may not only be inefficient, but also counterproductive."\(^{21}\) Therefore, the strict direct regulation imposed on the reinsurers, "would prevent reinsurers from performing many of their core functions, and threaten the economic benefits associated with reinsurance."\(^{22}\)


The final argument, is that the regulatory purpose of ensuring the stability of insurance markets can still be achieved, even without the prudential regulation of supervising reinsurers directly. This alternative regulatory approach, is based on harmonization of regulatory methods, and the mutual recognition among countries, where reinsurers are already subject to prudential regulation, and are in sound financial condition. In essence, regulators give their emphasis to the reinsurance arrangements of primary insurers, to control the quality of reinsurance with respect to the financial solvency of reinsurers, and the reinsurance contracts. To ensure the quality of reinsurance, regulators can authorize or accredit foreign reinsurers to carry on business, if these reinsurers are licensed and regulated in the jurisdiction where there is a similar solvency regulation. As a result, harmonization of relevant regulations, is the first step in providing a level playing field for reinsurers and avoiding regulatory arbitrage. Consequently, mutual recognition can be used as a tool to promote cooperation between countries, and to reduce unnecessary regulatory costs. In doing so, regulators can not only promote the diversification of domestic risks, but also prevent financial impact arising from insolvent reinsurers and unrecoverable reinsurance. Given the above assumption, it was suggested "a harmonized single licensing system for reinsurance activities, that is similar to the current model of insurance supervision in the European Union, is the ideal to work towards."\(^{23}\) Such a regulatory approach can reduce the uncertainty of the financial stability of reinsurance markets, in the absence of direct regulation of reinsurers.

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\(^{20}\) *Id.* at 9–10.


\(^{22}\) *Id.* at 25.

C. SUMMARY OBSERVATION: SOME PRELIMINARY REQUIREMENTS FOR A VIABLE INDIRECT REGULATORY APPROACH

Liberalization and internationalization of reinsurance transactions provide emerging markets with the opportunity to extend capital capacity, in order to underwrite risks; to enhance the expertise and competence of primary insurers; to diversify risks internationally; and generally, would contribute to a stable growth of the insurance market. Liberalization of the reinsurance business may benefit emerging markets. The regulatory reform necessary to develop an appropriate regulatory system is crucial to maintain the financial solvency of primary insurers. In essence, the financial condition of reinsurers is the main concern for regulators and primary insurers. However, the regulators face a dilemma between the strict direct regulation of reinsurers and the freedom of reinsurance transactions. In supervising reinsurers directly, regulators can efficiently monitor reinsurers, and primary insurers can assess the quality of reinsurance accurately. In contrast, the direct regulation of reinsurers may have an adverse impact on the reinsurance business, and impede the diversification of insurance risks. As a result of the concerns, it appears that the indirect regulation of reinsurers would be more appropriate for emerging markets to adopt. However, the indirect approach to regulating reinsurers may have some flaws, if certain aspects have not been considered.

First, as a fundamental and evident precondition, reinsurers should be licensed and subject to prudential regulation in their domiciled countries. An alternative regulatory approach is based on mutual recognition, a similar regulatory regime should be developed to regulate reinsurers. In addition, regulators should promote cooperation among countries, and gather sufficient information to assess reinsurers.

Second, such a regulatory system should be harmonized and based on the prudential regulatory standard. One of the arguments against the direct supervision of reinsurers suggested that, "there is no justification to increase reinsurance regulation for the purpose of securing the stability of the financial market."24 This observation is generally based on the stability of the current reinsurance market and low systemic risk (or liquidity crisis), caused by an insolvency of reinsurer.25 Note however, that following the trend of concentration of reinsurance markets,26 the financial impact caused by these major reinsurers is becoming significant. As a result, an appropriate governmental supervision of reinsurers is essential to review the capital adequacy, solvency, and professional competence of reinsurers. This will also benefit primary insurers in assessing the reinsurers accurately. An indirect regulation model will be successful, only if it is properly structured, and takes into account the supervision of foreign reinsurers, who are already subject to similar regulatory requirements.

Third, given that the harmonization of reinsurance regulations would contribute to the stability of global insurance markets, and the evaluation of the security of reinsurers, the regulatory standards accepted by countries that intend to enhance the international regulatory cooperation, should not be the lowest common denominator. Although the harmonization of a regulatory approach may reduce regulatory costs, such as a single

24. See Michael Pickel, supra note 17, at 4.
25. Id. at 3-4.
license system in the European Union, a negative effect may occur in countries that already have a more sophisticated system of solvency regulation. It is evitable that regulatory arbitrage would occur when the harmonization of regulatory standards is not based on the highest common denominator. As a result, the acceptable regulatory standards for global reinsurance market should not be established as merely the minimum regulatory requirements, to provide the similar level playing field for reinsurers.

III. Selective Issues Relating to Regulation of Reinsurance Arrangements of Primary Insurers

In terms of solvency regulation for insurance enterprises, regulation generally concerns three aspects: technical reserve, solvency margin, and valuation of assets. To what extent reinsurance may affect the solvency of primary insurers, depends on the reinsurance accounting method. In general, regulators may consider reinsurance either "in the framework of accounting (valuation of receivables, deposit of the reinsurer's part of liabilities), or in the framework of solvency requirements (taking into account only a limited part of ceded business, to reduce the required margin or required free capital, in proportion of reinsurance receivables)." In the European Union, some member states may allow the reinsurance a reduction of required solvency margin, but the reduction must not exceed a specified percent of the required solvency margin. However, the other member states adopt the gross technical reserve basis, and only allow the reduction of required solvency margin, "if a corresponding deposit of premium is made as security for future claims on the reinsurance." In the United States, the amount of technical provisions can be reduced by the amount of reinsurance that meets the relevant requirements, such as evidence of risk transfer, licensed and accredited reinsurers, or

27. It has been observed that many in the United States fear that the mutual recognition approach "may result in regulation at the level of the lowest common denominator." Debra J. Hall, Reinsurance Regulation in a Global Marketplace: A View from the United States, REINSURANCE ASSOCIATION OF AMERICA 11, (Dec. 12, 2001), available at http://www.raanet.org/policyupdate/Marketplace.PDF.
28. Technical reserve is designed to ensure that an insurer has a sufficient fund to meet the liability arising from accepted insurance business. In addition to technical reserve requirements that ensure the ability of an insurer to cover the existing liability, the solvency margin is to ensure that an insurer has adequate funds to cover the future writings. While the funds can be invested and held by several different investment instruments (e.g., securities, bank deposit, and large property holdings), it is also essential to evaluate the actual value of assets held by an insurer. See generally ROBERT KILN & STEPHEN KILN, REINSURANCE IN PRACTICE 385-397 (4th ed. 2001).
30. For example, the reduction must not exceed 50 percent for nonlife insurance, and 15 percent for life insurance. See id. at 26.
31. In France, the ceding insurers cannot reduce their technical reserve if the certain amount of reserve is made as a deposit for future reinsurance claims. See id. at 26.
the amount of the security held. Although regulatory approaches vary in the methods to account reinsurance, evaluating the creditworthiness of reinsurers is the most essential component in these regulatory approaches.

In this section, emphasis will be given to the assessment of the creditworthiness of reinsurers, and the implementation of relevant solvency regulation. As reinsurance should be considered in evaluating a primary insurer’s financial stability, possible preventive measures which may be supported, or even required, by a regulatory framework will be examined.

As the regulation concerning primary insurers’ reinsurance arrangements generally puts emphasis on the security of reinsurance, the relevant issues relating to insolvency of insurers has drawn significant attention in some countries. In the event of an insurer’s insolvency, legal disputes often arise from the reinsurance payment of the reinsurer. As a result of the possible effect on the interests of policyholders, this will also be discussed in the following sections.

In addition to governmental supervision, corporate governance and internal controls can be used as tools to ensure primary insurers arrange reinsurance prudently. The relevant requirements for corporate governance and internal control will also be discussed in this section.

A. CREDITWORTHINESS AND SECURITY OF REINSURANCE—THE IMPLEMENTATION OF RELEVANT SOLVENCY REGULATION

In terms of creditworthiness and security of reinsurance, two fundamental regulatory issues emerge. First, it is difficult for supervisors to establish an appropriate assessment to evaluate the security of reinsurance. Second, it is also problematic to establish a regulatory framework concerning the evaluation of reinsurers.

The assessment of the security of reinsurance and creditworthiness of reinsurers can be analyzed by the following aspects: (1) Fitness and Propriety of Management. (2) Legal Disputes and Payment Issues. (3) Financial Solvency and Capital Adequacy. (4) The Domiciled Regulatory System.

As the creditworthiness of reinsurance can be evaluated and monitored, it is crucial to consider a viable solvency regulation concerning the reinsurance. In the following section, some developed models will be introduced and discussed.

1. Assessment of Security of Reinsurance and Creditworthiness of Reinsurer

The discussion relating to the indirect regulatory model, considers possible regulatory approaches to controlling the creditworthiness of reinsurance, and monitoring the financial condition of reinsurers. As such, an indirect regulatory model not only can reduce the scope of regulation, but can also ensure the security of reinsurance, and


34. Manuel Aguilera-Verduzco, supra note 13, at 3.
maintain the stability of insurance markets. In addition, it can offer an appropriate regulatory regime for emerging markets that have a shortage of capital capacity and expertise. In the following section, several essential components will be identified to establish a viable method to evaluate the creditworthiness of reinsurance.

a. Fitness and Propriety of Management and the Performance of Reinsurers

The quality and integrity of management plays a crucial role in the evaluation of the security of reinsurance. From the viewpoint of ceding insurers, the competence, experience and integrity of key personnel (e.g., board management, legal representatives, and principal shareholders) in the reinsurance company might significantly affect the quality of reinsurance, and relevant expertise to assist ceding insurers. For reinsurers, the competence and experience of key personnel are vital to manage the underwriting risk and operational risk. Furthermore, a sound risk management and prudent investment strategy, are essential to maintaining the financial solvency of a financial institution, and are generally determined by the quality and propriety of management. In addition to the competence and experience of key personnel, special attention should be paid to a person's past record related to criminal or civil sentences or convictions. In addition, the performance of a reinsurance company should be considered in the framework of the assessment. In terms of the performance indicators, it has been suggested that the following aspects be used as the performance indicators for the assessment of reinsurers: (1) Gross and net premiums; (2) incurred losses (gross and net); (3) operation expenses; (4) investment income.

b. Legal Disputes and Payment Issues

While the emphasis concerning the fitness and propriety of management has been on the key personnel in a reinsurance company, the problems arising from the legal disputes between reinsurers, and ceding insurers, need to be addressed. Legal disputes can arise from differences in interpretation of the contract, notice, performance and ultimately, the amount recoverable. While the historical reinsurance practice of developing


36. It has been observed that "the best and safest reinsurer is one whose past record on underwriting is consistently profitable." Robert Kiln & Stephen Kiln, supra note 28, at 396.


38. With regard to premiums and losses, it should obtain the information regarding "the main classes of covered risks; and at least for general liability, transport and catastrophic risks; and the main countries or regional group of countries, in which they operate." Consequently, these data should enable "the calculation of combined ratio (losses plus expenses divided by premiums), loss ratio, expense ratio, operation ratio (losses plus expense minus investment income divided by premiums) and retention ratio." It also should consider the security of retrocession. Id. at 4–5.

39. Thomas Warnke, supra note 11, at 43.
partner relationships between reinsurers and primary insurers, based on utmost good faith, was capable of resolving short-term legal disputes, the results became worse if certain circumstances change, such as an unwillingness to accommodate the other for a long-term partnership, or losses beyond expectation.

Consequently, the reinsurers may delay or avoid payment, and therefore, financially impact the primary insurers. General reinsurance claim disputes have been categorized as follows: (1) "Defenses against the existence of the reinsurance contract, including nondisclosure and misrepresentation issues." (2) Reporting and notice defenses. (3) Defenses arising from the application of the reinsurance contract wording to the indemnity paid. (4) Cooperation and claim-handling defenses. (5) Public policy defenses." As a result of increasing legal disputes between reinsurers and primary insurers, the reinsurance wording should be carefully drafted. From the viewpoint of ceding insurers, a reinsurer's past record, and reputation on reinsurance payment, should also be considered.

In addition to legal disputes, primary insurers should collect their reinsurance efficiently and avoid uncollectable reinsurance. Due to the financial impact arising from delayed reinsurance payments, some developed models have certain statutory accounting treatments designed to reflect the recoverability of reinsurance claims. For instance, the NAIC created the ninety-day rule to require primary insurers to collect their reinsurance recoveries in a timely manner. The rules impose the penalty on a primary insurer to "reduce surplus by an amount equal to 20 percent of all recoverables due, from the slow-paying reinsurer," if reinsurance recoverables are not received by year-end and are

40. For instance, in the early 1980s, long-tail business in liability insurance. See id. at 46.
43. For example, the legal disputes often arose from liability insurance and relevant pollution insurance. Ins. Co. of North America v. Forty-Eight Insulations, Inc. 633 F.2d 121 (6th Cir. 1980), reh'g granted, in part, clarified, 657 F.2d 814 (6th Cir. 1981) (relating to asbestos claims and exposure theory for trigger of coverage). Cited by Robert W. Hammesfahr & Scott W. Wright, supra note 41, at 169.
45. Robert W. Hammesfahr & Scott W. Wright, supra note 41, at 4.
46. Schedule F, Parts 1 to 8, the NAIC annual statement. See generally id. at 248–251.
To avoid such a penalty, the ceding insurer must draw down letters of credit, or other collateral for amount owed by reinsurers, even though collateral is required for ceding insurers in the event of ceding business, to unauthorized and non-U.S. reinsurers. However, as for disputed reinsurance claims, the ninety-day rules permit a primary insurer to avoid such a penalty if a reinsurer, "issues a reservation of its rights, refuse to pay, or initiates litigation or arbitration." Although such a regulatory approach may provide an incentive to increase claims efficiency, the adverse effect may occur, and legal uncertainty may increase in the event of ambiguity of the relevant regulation (e.g., the definition of disputes and when the claims are considered due).

### c. Financial Condition of Reinsurers

The sound financial condition of a reinsurer plays an important role in the recoverability of reinsurance. In addition, reinsurers, like other financial intermediaries (e.g., bank and insurance companies), may cause systemic risks, particularly in the trend of consolidation and convergence of financial markets. As a result, it is crucial to address the essential elements which may affect the financial solvency of reinsurers. In general, financial solvency of reinsurers who assume risk from insurance companies can be evaluated in a similar manner to those applied to primary insurers. As for the solvency rules for insurers and reinsurers, a reinsurer's solvency relies on at least the following three aspects. (1) A prudential evaluation of the technical provisions. (2) The investment of assets corresponding to these technical provisions in accordance with quantitative and qualitative rules. (3) The existence of an adequacy solvency margin.

First, technical provisions are designed to ensure the financial ability of reinsurers, or insurers, to meet any possible liabilities arising from insurance or reinsurance contracts. Technical provisions are generally comprised of two main components: claims provisions and unearned premium provisions. Claims provisions include outstanding liability provisions, future loss expenses, future claims handling expenses, and incurred but not reported, claims (also known as I.B.N.R.). It should be noted that reinsurers might encounter certain loss situations, where there is little or no pattern of past settlements to calculate an appropriate amount of loss provisions (e.g., a major catastrophe or legal liability relating to pollution and asbestos). As a result of the significant impact caused by these risks, it has been suggested that provisions for special cases should

47. Id. at 248–249.
48. This is because the ceding companies may not have drawn down collateral as contemplated. See id. at 250.
49. Id. at 251; see also National Association of Insurance Commissioners, Property and Casualty Annual Statement Instructions 53-1 (revised P/C 1993).
50. For instance, it has been criticized that such a rule cannot consider the difficulties arising from complex claims. ROBERT W. HAMMESEFAHR & SCOTT W. WRIGHT, supra note 41, at 249–251.
51. IAIS Subcommittee, supra note 29, at 7.
52. ROBERT KILN & STEPHEN KILN, supra note 28, at 397–401.
53. Id. at 398.
54. Id. at 400–401.
be considered, and be maintained to meet the claims in the event of a catastrophe or long-tail business.\(^{55}\)

Second, the investment\(^{56}\) of reinsurance companies' assets shall be prudent, and the assets shall be valued properly. The primary insurers should gather the accurate information relating to reinsurers' investment, and evaluate the "security and profitability"\(^{57}\) of these investments. It has been recommended that primary insurers should take all appropriate steps to assess the soundness of the investments of reinsurance companies in the following aspects.\(^{58}\) A primary insurer can evaluate the reinsurers' assets in several categories: real estate, mortgage loans, shares, bonds with fixed revenue, loans other than mortgage loans, and other investments. The use of financial derivatives as a management instrument, may prove useful and effective, if their use is consistent with appropriate and prudent management, such as currency matching.\(^{59}\) The assessment should take into account the relevant investment instruments.

Third, solvency margins of reinsurers should be assessed accurately. In terms of their solvency margin, reinsurers should have sufficient funds (surplus) to support their future writings,\(^{60}\) and allow a margin for possible misrepresentation in the valuation of assets, due to external factors (e.g., fluctuation in currency exchange.\(^{61}\) ) The solvency margin can also be described in a more technical definition as follows:

The solvency margin (surplus capital) of an insurance company, is the surplus of assets over liabilities, both evaluated in accordance with regulations of public accounting or special supervisory rules.\(^{62}\)

As a result of varying evaluations of solvency margins among countries, one should consider the domiciled solvency regulation to determine and analyze the financial solvency of a reinsurer. For instance, the solvency regime used in the European Economic Area (hereinafter EEA)\(^{63}\) consists of two parts: (1) Required solvency margin, and (2) Guarantee fund. Required solvency margin, also called minimum solvency margin, uses fractions of some measure of risk exposure. For a nonlife insurer, the required solvency margin is determined on the basis of either the annual amount of premium, or of the

\(^{55}\) Id. at 401. As for long-tail business, it also has been considered in the EU solvency regulation. "The additional measures of long-tail risks have been on the agenda, as have the question of refined risk classification." IAIS Subcommittee, supra note 29, at 27.

\(^{56}\) The source of an investable fund is comprised of a capital based fund, and a technical provisions based fund, which is generated by the business written.


\(^{58}\) OECD, supra note 35, at 4.

\(^{59}\) As a result of the internationalization of reinsurance business, a reinsurance contract is not handled in one single currency. How to reduce risk in currency matching is one of main issues in reinsurers' investment policy.

\(^{60}\) ROBERT KILN & STEPHEN KILN, supra note 28, at 387.


\(^{62}\) IAIS Subcommittee, supra note 29, at 7.

\(^{63}\) The EEA consists of the 15 European Union (EU) member states, in addition to Iceland, Liechtenstein, and Norway.
average twelve-month claims during the past three financial years.\textsuperscript{64} For a life insurance company, the required solvency margin is determined on the mathematical provisions and sums at risk.\textsuperscript{65} In relation to a guarantee fund, the main purpose is to reinforce the minimum solvency margin in the event of inadequacy. An insurer should maintain its guarantee fund, at a level corresponding to the higher of either one-third of the figure arrived at for the required margin of solvency, or a fixed amount depending on the classes of business written (also called as minimum guarantee fund).\textsuperscript{66}

d. The Domiciled Regulatory System

To determine the creditworthiness of reinsurers, particularly for a foreign reinsurer, a primary insurer and an insurance regulator generally rely on the essential information gathered from their domiciled or licensed countries (e.g., corporate structure, size and the performance). In the U.S. regulatory regime, the Non-Admitted Insurers Information Office was created to compile information on insurers and reinsurers domiciled abroad, and to provide adequate information for state regulators to evaluate the financial condition of foreign reinsurers.\textsuperscript{67} Note however, for emerging markets, it is unlikely that insurance regulators have adequate expertise to establish a similar institution to evaluate the foreign reinsurers. Furthermore, it may severely increase the financial burden on the insurance regulatory system. As a result, the alternative approach would be to rely on the rating agencies and to enhance international supervisory cooperation.

While the rating agencies have been frequently used to assess the security of reinsurers in many countries, international supervisory cooperation relating to reinsurance business has not been emphasized by international organizations until the recent year (e.g., IAIS).\textsuperscript{68} Although efforts have already been taken to facilitate international supervisory cooperation by some international organizations, it seems that the international supervisory cooperation in the insurance sector appears less developed than banking's international supervisory cooperation (e.g., The Basle Committee).\textsuperscript{69}

\begin{itemize}
\item \textsuperscript{64} See First Direct Nonlife Ins. Directive, 73/239/EEC, art. 16, 1973 O.J. (L.228/3). \textit{John McLean et al.}, supra note 61, at 7/14; see also IAIS Subcommittee, supra note 29, at 25.
\item \textsuperscript{65} See First Direct Life Ins. Directive, 79/267/EEC, art. 19, 1979 O.J. (L. 63/1). See also IAIS Subcommittee, supra note 29, at 25.
\item \textsuperscript{67} To facilitate the assessment and the comparison of foreign reinsurers, the financial results of the foreign reinsurers will be converted from its domestic currency to U.S. currency. See \textit{Michael W. Elliott et al.}, \textit{Principles of Reinsurance} Vol. 2, at 214-215 (2d edition, 1995).
\item \textsuperscript{68} With regard to reinsurance business and international supervisory cooperation, Insurance Code Principles established by the International Association of Insurance Supervisors only stated that "The insurance supervisor should set requirements with respect to reinsurance contracts, or reinsurance companies addressing—b. the amount of reliance placed on the insurance supervisor of the reinsurance business of a company which is incorporated in another jurisdiction." See \textit{International Association of Insurance Supervisors, Insurance Core Principles}, at 10 (Oct. 2000), available at \texttt{www.iaisweb.org}.
\item \textsuperscript{69} See Committee on Banking Regulations and Supervisory Practices, \textit{Basle Concordat on Principles For the Supervision of Bank's Foreign} (1975); Committee on Banking Regulations and
In addition, to gather the information used to evaluate the financial condition of reinsurers, the political risk and domestic laws may cause collection problems. It has been observed that some insurers domiciled in the countries which have gone through political and economic turmoil, have been unable to meet the obligations from reinsurance contracts.\footnote{70}

2. Possible Regulatory Approaches Concerning Creditworthiness of Reinsurers

In terms of solvency regulation, solvency margin,\footnote{71} which is surplus of assets over liability, both evaluated in accordance with pertinent domestic solvency regulation, is the main component used to assess the financial condition of an insurer. As the amount of reinsurance may be used to reduce the required technical provisions (or loss reserve), designed to meet the claims from the policyholders, the regulatory approaches concerning creditworthiness of reinsurers generally are considered in the framework of solvency regulation.

Regulatory approaches concerning security of reinsurance can be divided into two aspects. First, the amount of reinsurance can be allowed to reduce the required technical reserve, and consequently, increase the policyholder's surplus. In this regard, insurance supervisors could impose relevant requirements, to give the credit on financial statements of a primary insurer who transacts with an authorized, or accredited reinsurer. Second, insurance supervisors might control the amount of reinsurance by the required solvency margin. In other words, the amount of reinsurance could take into account only a limited part of ceded business, in order to reduce the required margin (or required free capital) in proportion to reinsurance receivables.

a. Technical Provisions and the Credit of Reinsurance

The typical approach to regulating technical provisions and the credit of reinsurance is adopted by the United States.

70. In some countries, the governmental control on currency exchange may impose restriction on reinsurance payments. "In the main, the reinsurers in question emanate from South America, but to a lesser extent, companies will be found in this situation in the Middle and Far East, and even in Europe in countries such as, Greece and Spain." Ivor Kiverstein, Techniques of Reinsurance Collection, in Law and Practice of International Reinsurance Collections and Insolvency (1988).

71. As a result of varying forms of solvency regulation in different jurisdictions, required solvency margin also has been referred to as "available solvency margin, actual solvency margin, statutory solvency margin, available surplus capital, eligible capital, regulatory capital, free capital, total adjusted capital, policyholder surplus, and statutory surplus." IAIS Subcommittee, supra note 29, at 42
(1) U.S. NAIC Model Law  Before describing the regulatory approach in the United States, it is essential to introduce the framework of solvency regulation as a background for further discussion. Although the insurance industry is regulated by the individual states, the National Association of Insurance Commissioners (NAIC), formed by regulators in fifty-five territorial jurisdictions, has issued a series of model laws, regulations and guidelines concerning regulation of insurance.

In terms of solvency requirements, the essential component is a risk-based capital approach specifying a minimum amount of capital based on the company's risk profile. As a result of drawbacks caused by the fixed-ratio approach, risk based capital models have been developed to assess risk elements an insurer may encounter and to determine the solvency of an insurer. In general, risks are divided into the following aspects. "a. Asset risk, b. Interest risk for life insurance, and health credit risk for accident and health insurance, c. Underwriting risk, d. Credit risk (unrecoverable reinsurance of property and casualty insurance), e. Other business risk." To ensure their financial solvency, an insurer is required to prepare and submit to the commissioner an annual report of its RBC Levels. When the insurer's total adjusted capital is below the certain level determined by this model law, it may trigger a governmental intervention to control the operation of the insurer.

As a result of the large increase in insurance insolvency's in the 1980s, a draft of the model addressing reinsurance regulation was published in 1983. After the efforts had been made by many regulators to propose an appropriate model and resolve the relevant issues, the Credit for Reinsurance Model Law was adopted by NAIC in 1996.

The amount of credit given to the reinsurance cover, is regulated by the various requirements. A primary insurer is not allowed to obtain the credit for reinsurance to reduce its technical provisions, unless the reinsurer who transacts with this primary

72. It has been summarized that the fixed-ratio basis may have the following shortcomings: (i) Inadequate response to different risk profiles of individual insurers, such as underwriting risk, and investment risk. (ii) "To the extent exposure is based on historical data, there is no explicit dynamic, forward looking basis for the approach." (iii) "A general model may be vulnerable to the choice of exposure basis and respond illogically, e.g., by increasing requirements in response to stronger premiums, or safer technical provisions, and decreasing requirements with rebates on premiums, or with weaker reserving." Id. at 19.

73. Id. at 29; see also NAIC, RISK-BASED CAPITAL (RBC) FOR INSURERS MODEL ACT, MODEL LAWS, REGULATIONS AND GUIDELINES—COMPANY ORGANIZATION, MANAGEMENT, SECURITIES Vol. II, §2C, at 312-3-4 (July 2001).

74. RBC Levels are divided into four control levels: (i) Company Action Level RBC, (ii) Regulatory Action Level, (iii) Authorized Control Level RBC, (iv) Mandatory Control Level RBC. Id.

75. Total adjusted capital, means the sum of an insurer's statutory capital, and surplus as determined in accordance with the statutory accounting principles. It may be adjusted by the RBC Instructions. Id. §1 L, 312-2.

76. In the event of a regulatory action level event, or lower action level (authorized control action and mandatory control), the commissioner shall take action as are necessary, to cause the insurer to be placed under regulatory control e.g., a corrective order. Id. §§4, 5 and 6, 312-6, 312-9.


insurer meets the relevant requirements provided by the insurance regulation. From the viewpoint of a primary insurer, the credit for reinsurance can reduce its required technical provisions, and extend its capital capacity to underwrite business. If the technical provisions are not allowed to be reduced, a primary insurer's RBC level ratio may fall below the requirements, before the credit for reinsurance is given to the insurer's financial statements. Consequently, it might trigger a governmental intervention or prevent the primary insurer from expanding business, without adequacy of technical provisions.

To meet the requirements provided under the NAIC Credit for Reinsurance Model Law, the regulations generally address the importance of the domiciled and licensed jurisdiction. The main purpose of this approach, is to prevent domestic primary insurers from ceding business to a reinsurer who is located in another jurisdiction and beyond the state regulator's supervision. In this regard, credit for reinsurance is allowed when the reinsurance is ceded to an assuming insurer that is licensed to transact insurance or reinsurance. In addition, when the security of reinsurance focuses on the regulatory purposes, credit for reinsurance is allowed, if a primary insurer transacts with "an accredited reinsurer" who is already subject to a "substantially equivalent" solvency regulation. In order to eliminate the vague "standards of solvency" stated in the previous model law, the Credit for Reinsurance Model Law, provides the precise required amount of policyholder's surplus and the accreditation procedure.

In addition to the reinsurer who is licensed or accredited in the same state, this Model Law provides the alternative requirements to allow the credit given to the ceding insurers. Due to a lack of a single license regulatory system among the states, reinsurers licensed in one state should apply for authorization to carry on reinsurance business in another state. To facilitate reinsurance transactions and avoid the multiple regulatory standards, the Credit for Reinsurance Model Law allows the credit for reinsurance, when the reinsurers are licensed and supervised in a state employing standards

79. It has been observed, "a principal regulatory tool applicable to reinsurance, particularly reinsurance ceded to unauthorized insurers, is the recognition on a ceding company's financial statement of credit for unearned premium, and loss reserves ceded to an assuming insurer." Id. at 785-14.
80. NAIC, supra note 4, at 785-1.
81. To qualify as an accredited reinsurer, the following requirements should be satisfied: "(a) Files with the commissioner evidences of its submission to this state's jurisdiction. (b) Submit to this state's authority to examine its books and records. (c) Is licensed to transact insurance or reinsurance in at least one state, or in the case of a U.S. branch of an alien assuming insurer, is entered through, and licensed to transact, insurance or reinsurance in at least one state. (d) Files annually with the commissioner, a copy of its annual statement filed with the insurance department of its state of domicile, and a copy of its most recent audited financial statement. (i) Maintain a surplus, as regards policyholders in an amount not less than $20,000,000, and whose accreditation has not been denied by the commissioner within ninety days of its submission. (ii) Maintain a surplus, as regards policyholders in an amount less than $20,000,000, and whose accreditation has been approved by the commissioner." Id. at 2B, 785-1, 785-2.
82. Id. at 785-14.
83. Id. at 785-15.
84. Id. at 785-2.
"substantially similar" to those in the model. Second, the credit is given to reduce technical provisions, when a primary insurer can ensure the security of reinsurance by ways of a trust fund established "in a qualified U.S. financial institution for the payment of the valid claims of its U.S. ceding insurers, their assigns and successors in interest." This Model Law specifies the relevant requirements relating to a recognized trust fund. The requirements consist of two main components concerning the commissioner's approval, and qualified assuming insurers or groups. Furthermore, the credit permitted by this arrangement will not be allowed, unless the reinsurer meets certain requirements concerning the role and power of the commissioner in the event of inadequacy of the trust fund. In addition to the respective requirements for the two kinds of reinsurers stated above, credit shall be allowed when the reinsurance is ceded to a reinsurer.

85. To determine the substantially similar standards, the drafting note for this section stated that the term substantially similar, means standards that equal or exceed that the standards of the enacting state, as determined by the commissioner of the enacting state. It is expected that the NAIC will maintain a list of states whose laws establish standards that equal, or exceed, the standards of this model act. It is suggested the NAIC accreditation approach to harmonize the supervisory standards among the states, has been suggested to apply in the program for reinsurance. It should be noted that the commissioner is responsible to determine the standards. In addition, it is argued that "tying the standard to the NAIC accredited status of the reinsurer's state of domicile, could result in denial of credit, even where the lack of NAIC accredited status was unrelated to that state's credit for reinsurance standards." As a result, such an accreditation procedure, determined by the NAIC has not been drafted into this section. Id. at 785-15.

86. Id. at 785-2.

87. Id. at 785-2, 785-3.

88. With respect to approval from the commissioner, the form of the trust and any amendments to the trust have to be approved by: "(i) the commissioner of the state where the trust is domiciled," or "has been approved by the commissioner of another state, who has accepted principal regulatory oversight of the trust." In addition, the form of the trust and amendment, should be filed with the commissioner of every state in which the ceding insurer beneficiaries of the trust are domiciled. The trust shall remain in effect for as long as the reinsurer's outstanding obligation due. Id. at 785-3.

89. In the NAIC Model Law, the requirements apply to the different categories of reinsurer. For the single reinsurer, a trusted surplus of not less than $20,000,000 is required, as well as the funds in trust, in an amount not less than the reinsurer' liabilities, attributable to reinsurance ceded by U.S. ceding insurers. For a group including incorporated and individual unincorporated underwriters, the group is required to establish a trust "in an amount not less than the group's several liabilities, attributable to business ceded by U.S. domiciled ceding insurers to any member of the group" and to maintain the certain amount of surplus. In addition to the requirements relating to a trust fund and surplus, a group should be subject to a similar regulatory control, and should submit its financial statements within 90 days. See id. at 785-3.

90. In this section, this Model Law required the agreements addressing the supervision of the commissioner. In the event of inadequacy of the trust fund (e.g., the grantor of the trust has been declared insolvent), the trustee shall comply with an order of the commissioner. The assets should be distributed by, and claims should be filed with and valued by the commissioner, with regulatory oversight. If the commissioner determined that the assets of the trust fund are not necessary to satisfy the claims of the U.S. ceding insurers of the grantor of the trust, the assets should be returned to the trustee. "The grantor shall waive any rights
only "as to the insurance of risks located in jurisdictions where reinsurance is required by applicable law, or regulation of that jurisdiction." In the event of an unlicensed or unaccredited reinsurer, the credit for reinsurance permitted by Sections c and d will not be allowed, unless the reinsurer meets certain conditions in the reinsurance agreements, with respect to jurisdiction and arbitration.

In a case of ceding business to unauthorized reinsurers not meeting the requirements of Section II, the credit for reinsurance to reduce technical provisions can not be allowed, unless a certain amount of security is held by, or on behalf of, the primary insurer.

(2) The Mexican Regulatory Approach

As the regulators in the United States have developed a comprehensive regulatory regime concerning the creditworthiness of reinsurance, similar regulatory approaches have also been adopted or modified in other countries. Although the concept of the regulations addressing the control on technical provisions adopted by these countries is similar to that of the United States, the content of the regulations might be different from that in the United States, which gives emphasis to the domestic reinsurers and accredited reinsurers. For instance, the regulatory approach in Mexico seems more flexible than that in the United States. Due to market characteristics and lack of domestic capital capacity, foreign reinsurance is crucial to promote the domestic insurance market, and stabilize the growth of the Mexican insurance business. As a result, the emphasis on the quality of reinsurance is given to the security of reinsurance, rather than the domicile-oriented basis in United States. In the past, the regulations in Mexico are similar to other emerging markets where the reinsurance regulations generally focus on risk retention, and compulsory cessions to state-owned

otherwise available to it under U.S. law, that is inconsistent with this provision." See id. at 785-5, 785-6.

91. The main purpose of this section is to allow the insurance risks located in the jurisdictions other than in the United States, to be assumed by the state-owned reinsurers, or reinsurers when the applicable insurance law and regulation in that jurisdiction required the compulsory cession. See id. at 785-5.

92. With respect to jurisdiction, a reinsurer shall agree "to submit to the jurisdiction of any court of competent jurisdiction, in any state of the United States, will comply with all requirements necessary to give the court jurisdiction in any state of the United States, will comply with all requirements necessary to give the court jurisdiction, and will abide by the final decision of the court, or of any appellate court, in the event of an appeal." In addition, a reinsurer agrees to "designate the commissioner, or a designated attorney may be served, any lawful process in any action, suit or proceeding instituted, by or on behalf of, the ceding company." If this obligation is created in the agreement, the obligation of both parties to a reinsurance agreement to arbitrate their disputes, will not be affected by the above section concerning the litigation. See id. at 785-5.

93. The Model Law approved several forms of security: (i) Cash; (ii) Securities listed by the Securities Valuation Office of the National Association of Insurance Commissioners, and qualifying as admitted assets; (iii) "Clean, irrevocable, unconditional letters of credit, issued or confirmed by a qualified U. S. financial institution" and such a letter of credit should, "notwithstanding the issuing (or confirming) institution's subsequent failure to meet applicable standards of issuer acceptability, continue to be acceptable as security until their expiration, extension, renewal, modification, or amendment, whichever first occurs;" (iv) "any other form of security acceptable to the commissioner." Id. at 785-6, 785-7.
reinsurers. To correct the deficiency in supervising the quality of reinsurance, a new regulatory regime concerning reinsurance was enacted by the National Insurance and Surety Commission (CNSF) in 1996.94 This new regulatory regime can be summarized by the following aspects: (i) to establish a specialized reinsurance surveillance scheme within the CNSF, (ii) to support specialized inspection activities, (iii) to establish a legal framework to regulate the maximum retention limits, (iv) to establish a technical reserve for domestic companies considering the reinsurers' quality, and (v) to impact the solvency margin of ceding companies in the case of use of a low quality reinsurer, for foreign reinsurers, to modify the registration basis in order to have an updated situation of their claim pay ability (General Foreign Reinsurers Register); and for reinsurance brokers, (a) to implement the use of domiciled reinsurance brokers, and (b) to strengthen the legal sanctions regime for intermediaries' malpractice.

As one of the main components of the regulation is to ensure the adequacy of technical reserve in relation to reinsurance, the quality of reinsurance should meet the requirements of insurance supervisors in order to reduce the technical provisions of a primary insurer. In terms of quality of reinsurance, a registration system using rating certificates is implemented for those foreign reinsurers who intend to carry on reinsurance business in Mexico. To obtain registration, reinsurers should have a satisfactory evaluation by an international specialized rating agency (e.g., Standard & Poor's, A.M. Best, Moody's, or Duff and Phelps).96 In the event of nonregistered reinsurers, a Special Reinsurers Quality Technical Reserve97 is required to reduce the credit risk arising from reinsurers. In addition to a required special reserve, additional technical provisions may consequently affect the solvency margin of them, and require primary insurers to increase their required capital in order to protect their reinsurance program in the short term.98 Since the implementation of this new regulatory regime addressing the quality of reinsurance, it has been observed that "the quality of the foreign companies now registered, offers a level of security in reinsurance operations that did not exist before, and this helps to reduce the solvency problems that domestic companies might fact due to ceded risks."99

94. See Manuel Aguilera-Verduzco, supra note 13, at 3.
95. See id. at 3.
96. To qualify to obtain the register, the minimum ratings are Standard & Poor's: BBB or higher; A.M. Best: B+ or higher; Moody's: Baa3 or higher; Duff and Phelps: BBB-or higher. See id. at 4.
97. In this approach, this special technical reserve is considered part of the technical reserve investment, basis in a regulated investment regime. The calculation methods for this approach are described as follows:

\[
R_{tcr} = \text{Special Reinsurance Quality Technical Reserve} \\
P_{c} = \text{Premium Ceded to a Non-registered Reinsurer.} \\
P_{rrc} = \text{Retained Premium Ceded to a Non-registered Reinsurer.} \\
C_{np} = \text{Non-proportional Reinsurance Cost Paid to a Non-registered Reinsurer.} \\
= \text{Total Number of Non-registered Reinsurers which the Insurance Company Worked With.}
\]

See Manuel Aguilera-Verduzco, supra note 13, at 5.
98. See id. at 5.
99. See id. at 4.
b. Solvency Margin Approach

In contrast to the regulatory approach on technical provisions, ensuring the quality of reinsurance can be achieved by laying down the relevant requirements on the required solvency margin. In the European Union, the regulatory approach concerning the solvency of reinsurers is the minimum capital requirement, also called required solvency margin.\(^{100}\)

With regard to reinsurance and its effect on solvency requirements, credit for reinsurance may be allowed to calculate the required solvency margin in some member states. In these member states, the reduction is restricted and should not exceed 50 percent for nonlife insurance and 15 percent for life insurance.\(^{101}\) Note however, that regulation of reinsurers may still vary in these countries, which impose limitations on the calculation of required solvency margin. For instance, the UK model imposes the limitation on the amount of cession in the calculation of required solvency margin. Reinsurers who intend to conduct business in UK are required to obtain authorization from the Financial Services Authority.\(^{102}\) As a result, the quality of reinsurance has been considered by means of a framework of direct regulation of reinsurers. In contrast to the direct regulatory approach of the UK model, the current German system of reinsurance regulation focuses on the ceding insurers, rather than the direct regulation of reinsurers. Foreign reinsurers are exempted from direct supervision in Germany, however German reinsurers are subject to strict accounting guidelines, submission of financial statements, regulations concerning the adequacy of technical provisions, on the spot inspection and fines for noncompliance with accounting and financial rules.\(^ {103}\) In addition, a direct insurer in Germany is required to assess the adequacy of reinsurance and the creditworthiness of reinsurers. The inadequacy of reinsurance may trigger governmental intervention by the insurance regulators (the Bundesaufsichtsamt fuer das Versicherungswesen).\(^ {104}\)

In addition to the EU, a similar regulatory framework has been considered or modified in other countries (e.g., Australia.) With regard to solvency requirements in Australia, the solvency margin is related to the level of premium income or the level of outstanding claims.\(^ {105}\) In relation to reinsurance and solvency requirements, the Australia solvency requirements are on a net reserving basis, which means that the amount of reinsurance can be used to reduce the required solvency margin. In the absence of a limitation on the amount of cession to reduce the required solvency margin, credit for reinsurance is allowed only if the reinsurance policies of a primary insurer have been approved by the insurance regulators (the Australia Prudential Regulation Authority, hereinafter APRA). With regard to foreign reinsurers, however, the Australian insurance regulators adopt a spread rule for foreign reinsurance, to ensure the creditability of reinsurance.

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100. IAIS Subcommittee, supra note 29, at 25.
101. It should be noted, however, that other member states do not give any credit for reinsurance, and insisted on the gross reserving basis. Id. at 26.
102. See T. HENRY ELLIS & JAMES A. WILTSHIRE, supra note 9, at B.3.3-02.
103. §1 Abs. 2 VAG: §§55–59 VAG. See Michael Pickel, supra note 17, at 5.
104. §5 Abs. 5 Nr. 2 VAG: §81 Abs. 1 VAG: BAV Rundschreiben R1/97. See id. at 5.
by implementation of the guidelines issued by APRA.¹⁰⁶ A spread rule for foreign reinsurance means that in the event of unauthorized reinsurers, the ceding insurance risk should not be more than 10 percent of the risk, in the case of a lead reinsurer and five percent of the risk, in the case of other participants. By doing so, it may reduce the concentration of ceding risk to unauthorized reinsurers, and the financial impact caused from the credit risk of such reinsurers.¹⁰⁷ On the other hand, as domestic reinsurers are subject to a similar solvency margin requirement, and capital requirements as those applied to insurers,¹⁰⁸ the quality of reinsurance can be maintained and supervised by the APRA.

B. REINSURANCE CONTRACTS AND SOLVENCY OF PRIMARY INSURERS

Although the main focus of this work is discussing the security of reinsurance, a regulatory issue may arise concerning whether a reinsurer can pay an amount, based on the actual amount the insolvent insurer can pay, in order to limit its liability in the event of insolvency of the primary insurer.¹⁰⁹ The significant case addressed by U.S. courts is *Fidelity and Deposit Company v. Pink.*¹¹⁰ In that case, the reinsurer, Fidelity and Deposit Company, argued that the reinsurance contract, as an indemnity contract, required them to reimburse the liquidator—Pink (the Superintendent of Insurance for New York), only with respect to that proportion of losses the liquidator actually paid to claimants. On the other hand, Pink contended that the reinsurer should pay the amount, based on the reinsurance contract regardless of the actual amount the insolvent company was able to pay to the claimants. Based on the reinsurance agreement, “which the Court found made payment of a claim a condition precedent to reinsurance recovery, the United States Supreme Court found for the reinsurer.”¹¹¹ As a result of this case, some states require that reinsurance contracts contain an Insolvency Clause, which obligates the reinsurers to pay the reinsurance proceeds to the domiciliary liquidator, based on the liability of the primary insurer, regardless of the primary insurer’s insolvency.¹¹²

In the event of insolvency of the primary insurer, the policyholders generally have no right to collect from the reinsurers, and the reinsurance proceeds are paid to the liquidator administrating the insolvent primary insurer’s assets.¹¹³ A significant

¹⁰⁶. In addition to relevant insurance law, the regulatory approaches relating to the quality of reinsurance has been based on the guidelines developed in consultation with the industry. See id. at 4.
¹⁰⁷. See id.
¹⁰⁸. See id. at 3.
¹⁰⁹. ROBERT W. HAMMESFAHR & SCOTT W. WRIGHT, supra note 41, at 251–252.
¹¹¹. ROBERT W. HAMMESFAHR & SCOTT W. WRIGHT, supra note 41, at 252.
exception, however, would occur when the reinsurance contract contains a cut-through endorsement, that allows the policyholder to sue the reinsurers directly in certain circumstances. As a result of the advantage of a cut-through clause that entitles the policyholder to proceed directly against the reinsurer for payment, in the event of insolvency of the primary insurer, there have been regulatory and legislative debates concerning the enforcement of cut-through endorsements in the United States. It should also be noted that insolvency laws and contract laws, which vary from country to country, might affect the validity of this endorsement. In the United States, courts have upheld cut-through endorsements in certain circumstances. For instance, the cut-through endorsement must be clearly stated, and contain express language that the insured will be paid by the reinsurer directly, or that the insured can sue the reinsurer directly in certain circumstances. In contrast, it has been criticized that the cut-through clause is contrary to public policy, and effectively illegal under English Law. There are few cases examining the cut-through clause in English Law. In 1975, the House of Lords stated the fundamental principle of pari passu distribution of the insolvent company's assets, and that any preferences not expressly permitted by the insolvency legislation would be contrary to public policy.

As a result of legal disputes arising from the enforcement of cut-through clauses, the reinsurer should consider the potential risk for double exposure to the policyholder and liquidator. From the viewpoint of the policyholder, the cut-through clause, which entitles an insured to collect the payment directly from the reinsurer, provides additional protection for the insured in the event of insolvency of the primary insurer. Nevertheless, it is crucial to consider the interests of other claimants, when the preferences have not been expressly permitted in the relevant insolvency legislation.


114. New York status allows some exceptions for insolvency clause when: “(a) the reinsurance agreement specifies another payee of such reinsurance, in the event of insolvency of the ceding insurer, and (b) the assuming insurer with the consent of the direct insureds, has assumed such policy obligation to the payees, as a replacement for the obligations of the ceding insurer,” §1308 (2)(B(i) and (ii)) of the New York Insurance Code., cited by T. Darrington Semple, Jr. & Robert M. Hall, supra note 112.


119. British Eagle International Airlines Limited v. Compagnie Nationale, 1WLR 758 (1975), (cited by Christopher Braithwaite, supra note 117); see also; Peter Sharp, supra note 118.
C. CORPORATE GOVERNANCE AND INTERNAL CONTROL

It has been observed that "good corporate governance is critical in setting the incentives for a financial institution to act prudently, and for control of the risks which a financial institution takes." Good corporate governance requires not only strengthening shareholders' influence, and control on corporate management, but also enhancing internal control mechanisms and policies to ensure key personnel act in the interest of the enterprise.

In terms of a primary insurer, good corporate governance is essential in limiting, or managing, the amount of risk they assume, or operate such as insurance risk and investment risk. From the viewpoint of insurance regulators, the establishment of relevant requirements for corporate governance can be used as a mechanism to require primary insurers to commit to achieving regulatory objectives, and meeting the regulatory requirements.

1. The Importance of Corporate Governance and Internal Control to Primary Insurers' Reinsurance Arrangements

In the insurance industry, governance problems can be categorized into the two different types of insurance business. In life insurance, governance problems arise because "the poor management decision, such as a rapid expansion in market share, or a deliberate reduction in underwriting standards, often can produce a dramatic decline in profits." In contrast, the governance problems in nonlife insurance focuses on "the continuity of operation and the ethicality of management." Given that the function of reinsurance will extend the capital capacity of primary insurers to underwrite insurance business, the collection problems of the reinsurance arrangements which include: the credit risk of reinsurers; legal disputes arising from reinsurance contracts, and the

120. JOSEPH J. NORTON, supra note 14, at 52.
122. It has been provided by IAIS, that insurance regulators have a responsibility to establish relevant requirements for corporate governance. "Insurance Core Principles 4: It is desirable that standards be established in the jurisdictions which deal with corporate governance. Where the insurance supervisor has responsibility for setting requirements for corporate governance, the insurance supervisor should set requirements with respect to: (a) the roles and responsibilities of the board of directors; (b) reliance on other supervisors for companies licensed in another jurisdiction; and (c) the distinction between the standards to be met by companies incorporated in his jurisdiction, and branch operations of companies incorporated in another jurisdiction. See INTERNATIONAL ASSOCIATION OF INSURANCE SUPERVISORS, supra note 68, at 8.
124. This is because life insurance operations "are long term and fiduciary in nature, and attempt to build contractual relationship between the company and its customers that may last for several years." Id. at 407.
inadequacy of reinsurance coverage, can all be reduced by introducing rules of corporate governance that promote risk management.

In relation to reinsurance arrangements, an institutional framework for sound corporate governance should establish an evaluation procedure to assess creditworthiness of reinsurers, and develop effective means to measure and monitor the reinsurance contracts, as well as adequacy of reinsurance coverage. In addition, the collection of reinsurance should be considered in the framework of internal control. Such a procedure should provide the process of reinsurance claim, identify the collection problems (e.g., legal disputes, financial condition of the reinsurers, jurisdiction), and the approaches used to achieve collection (e.g., negotiation, collateral, arbitration and litigation).\(^\text{125}\)

In developing an evaluation procedure for reinsurance arrangements, private rating agencies can be considered an essential tool to assess the creditworthiness of reinsurers. Due to the inadequacy of information concerning reinsurers, a primary insurer may fail to assess the financial condition of reinsurers accurately and consequently the credit risk of reinsurance may rise. Because of the advantages of assessment of reinsurers provided by these private rating agencies, a primary insurer should develop the relevant procedures to use these rating agencies.

2. *International Supervisory Standards and the IAIS Core Principles for Corporate Governance and Internal Control*

In order to ensure improved supervision of the insurance industry on the domestic as well as the international level, and maintain an efficient, fair, safe and stable insurance market, the International Association of Insurance Supervisors issued in Oct. 2000 the Insurance Code Principles, which is comprised of essential principles that are intended to serve as a basis reference for insurance supervisors in all jurisdictions.\(^\text{126}\)

In relation to corporate governance, it addresses the responsibility of insurance supervisors to establish requirements for corporate governance, concerning the following aspects:

a. The role and responsibilities of the boards of directors.

b. The reliance on other supervisors for companies licensed in other jurisdictions.

c. The distinction between the standards to be met by companies incorporated in their jurisdiction, and branch operation of companies incorporated in other jurisdictions.\(^\text{127}\)

To facilitate the implementation of these principles, the Insurance Code Principles Methodology has been proposed to provide detailed criteria for insurance supervisors to carry on self-assessments or review.\(^\text{128}\) The criteria relating to corporate governance

\(^{125}\) For these elements of the reinsurance collection process, see Thomas Warnke, *supra* note 11, at 37–56.

\(^{126}\) *International Association of Insurance Supervisors, supra* note 68, at 4.


addresses the insurance supervisor's responsibilities toward verifying and enforcing observance of those requirements.129

With respect to reinsurance arrangements, the insurance supervisor should "have authority to require boards or directors, to have in place and to monitor independent risk management functions related to the type of business undertaken."130 In other words, boards or directors are required to monitor the risk management functions including the risk transfer instruments, such as reinsurance.

The Insurance Code Principles recommend that the insurance supervisors should be able to review the internal controls, and require the board of directors to provide suitable prudential oversight.131 The insurance supervisor should require the boards of directors to provide suitable oversight on reinsurance arrangements.132 In other words, the relevant

129. The elements of the criteria can be summarized in the following aspects: The responsibilities of boards of directors, their strategic objectives, the means for attaining those objectives, and the procedure for evaluating their progress toward those objectives. The nomination and appointment procedures, structure, functions, re-elections, and balance between executive and nonexecutive directors of the board in a transparent manner; clarification of responsibilities which will ensure a balance of power and authority; control on risk management functions; protection of customers regarding customer complaints procedures, the enhancement of customer awareness and knowledge, and the assessment of business conduct at regular intervals. The policies regarding conflicts of interest, fair treatment of customers, and information sharing with stakeholders; the policies regarding insider dealing; proper and full disclosure concerning corporate governance principles, and attainment of stated corporate objectives. A proper remuneration policy for directors and senior management, to review that policy, and to disclose it to the insurance supervisors, or to the general public. Id. at 18–20.

130. Id. at 19.

131. According to Principle 5 of IAIS Insurance Supervisory Core Principles, the insurance supervisor should be able to "review the internal controls that the board of directors and management approve and apply, and request strengthening of the controls where necessary; and require the board of directors to provide suitable prudential oversight, such as setting standards for underwriting risks, and setting qualitative and quantitative standards for investment and liquidity management." INTERNATIONAL ASSOCIATION OF INSURANCE SUPERVISORS, supra note 68, at 8.

132. The elements of essential and additional criteria provided by IAIS can be described as follows: The review of internal control that board of directors and management approve and apply; when necessary the supervisory requests a strengthening of the controls. Suitable prudential oversight, such as setting standards and monitoring controls for underwriting risks, valuation of technical provisions (policy liabilities), investment and liquidity management, and reinsurance. Suitable oversight of market conduct activities e.g., setting standards and monitoring controls on fair treatment of customers; proper disclosure to customers of policy benefits, risk and responsibilities; conflicts of interest. Internal control to address issues of an organizational structure, accounting procedure, checks and balances. Control on safeguarding of assets and investments, including physical control. An ongoing audit function, of a nature and scope appropriate to the nature and scale of the business. Formal procedures to recognize potential suspicious transactions. The establishment of lines of communication, both to management, law enforcement authorities and/or the insurance supervisor for the reporting of irregular and suspicious activities. In relation to additional criteria, the insurance supervisor encourages the company to appoint experienced nonexecutive directors to the board, in
assessment should be provided to help the board of directors monitor the efficiency of reinsurance arrangements, and identify the problems arising from reinsurance collection.

D. SUMMARY OBSERVATIONS

An efficient reinsurance market provides the primary insurers with the capital capacity to underwrite and expand their business, the expertise to enhance the relevant experience, the financial stability to smooth the fluctuations in underwriting results, and to protect them against the potential large exposure from catastrophe events. However, the regulations concerning the security of reinsurance varies substantially in countries throughout the world.

To evaluate the security of reinsurance, a primary insurer should not only assess the financial solvency of the reinsurers, but also draft the reinsurance contracts carefully. The quality and integrity of management is essential to ensure the quality of reinsurance, and the good performance of business. As a result of the financial impact from legal disputes between reinsurers and the ceding insurers, the reinsurance language should be properly drafted. Furthermore, the ceding insurers should collect their reinsurance payments efficiently, and any unrecoverable reinsurance should not be considered as assets in the solvency regulation accounting. With regard to financial solvency of the reinsurers, primary insurers and insurance regulators should evaluate reinsurers’ adequacy of technical provisions, the investment of assets, and solvency margin. While the direct regulatory approach addressing the regulation of foreign reinsurers is not common in most countries, to determine the security of reinsurance provided by reinsurers domiciled or licensed abroad, a primary insurer should rely on the information gathered from other countries, and the cooperation with foreign insurance regulators.

Regulatory approaches concerning creditworthiness of reinsurance can be designed either in statutory accounting, or in the required solvency margin. The differences between the two approaches generally depends on the framework of solvency regulation. Furthermore, it appears that the level of regulation concerning the security of reinsurance differs from country to country. However, the foreign reinsurers are supervised either by direct licensing requirements, or indirect regulation concerning the financial condition of reinsurers. Due to problems caused by unauthorized reinsurers, these regulatory approaches address the security of reinsurance.

In the United States, reinsurance can be used to reduce the ceding insurer’s technical provisions, if it meets the requirements established by NAIC and adopted by the states. In comparison with other regulatory approaches, the approach in the United States emphasizing the security of reinsurers licensed and domiciled abroad, may lead to restricting the freedom of international reinsurance transactions, although foreign reinsurers carrying on business are not subject to direct regulation and licensure requirements. In the event of ceding business to unauthorized reinsurers, reinsurers may either establish a multiple beneficiary trust plus a required surplus amount, or provide individual case of a unicameral board structure, and the establishment of an internal audit function that reports to an Audit Committee of the board. The insurance supervisors requires actuarial reporting, where called for by applicable law, or by the nature of the insurer’s operations, and where appropriate encourages the appointment of an actuary reporting directly to the board or directors. Id. at 21–22.
collateral to the ceding insurers. As a result, this may increase the transaction costs caused by the required trusts or collateral arrangements. It has been argued that eliminating regulation that presents obstacles to the marketplace, while introducing and/or maintaining sufficient financial security of the industry, is a critical balance that must be reached. Due to the large number of U.S. insurer insolvency’s in the 1980s, the collateralization of unauthorized reinsurers was established to ensure the recoverability of reinsurance. From the viewpoint of insurance regulators, such a collateral arrangement eliminates the needs to evaluate financial solvency of unauthorized reinsurers.

On the other hand, in Mexico, the evaluation of the security of reinsurance depends on the financial assessments provided by specific rating agencies. Unlike the reinsurance market in the United States, the shortage of reinsurance is the main concern in many emerging markets. It is more difficult for insurance regulators in an emerging market to reach a balance between the security of reinsurance, and the availability of reinsurance. As a result, the regulatory emphasis has been given to the financial solvency of reinsurers rather than the location of reinsurers. In the event of nonregistered reinsurers, the special technical reserve concerning the recoverability of reinsurance will be imposed on the ceding insurers.

With regard to regulatory approaches structured around the solvency margin of the ceding insurers, the approaches adopted by some EU countries restrict the reduction of required solvency margin. In doing so, they may reduce the ceding insurers’ reliance on the reinsurance, and limit the financial impact caused by unrecoverable reinsurance. Among the EU member states, the content of regulation varies from member state to state. In the UK, reinsurers are authorized to carry on reinsurance business while reinsurers domiciled in other member states are required to demonstrate their financial solvency. Under this approach, the financial condition of reinsurers has been monitored and evaluated by the insurance supervisors, and no reinsurer is exempt from the scope of solvency regulation. In contrast, the regulatory regime in Germany imposes the strict regulation on the ceding insurer’s arrangements, and the domestic reinsurers whereas the foreign reinsurers are exempt from the Germany insurance regulation. Although it seems that the regulatory approach in Germany is less restrictive than other countries, it should be noted that governmental intervention might be triggered in the event of inadequacy of reinsurance. Under the Australian regulatory approach concerning the security of reinsurance, authorized reinsurers are subject to a similar solvency requirement as primary insurers whereas, in the event of ceding business to an unauthorized reinsurer, a spread rule will be imposed on the ceding insurers to prevent the concentration of credit risk of reinsurance.

An appropriate regulatory regime generally depends on the market characteristics and relevant regulatory regime. Among the approaches stated above, the collateralization of reinsurance and trust fund requirements in the United States may not be appropriate for emerging markets with the problems of shortage of reinsurance. From the viewpoint of the U.S. approach, the trust fund and collateral arrangements eliminate the uncertainty of financial solvency of unauthorized reinsurers. As a result of the varying accounting principles, it is also problematic to assess the financial condition of the

133. Debra J. Hall, supra note 27, at 7.
134. Id. at 7.
135. Id. at 6.
foreign reinsurers, and therefore may cause enormous costs to establish general acceptable accounting standards. Furthermore, in the event of insolvency of unauthorized reinsurers, the legal disputes from the insolvency law may increase the obstacles for the ceding insurers, when the reinsurer in receivership is subject to foreign insolvency laws. By introducing the collateral requirement and trust fund, it will not only eliminate the difficulties arising from insolvent reinsurers but also ensure the reinsurance collection. From the viewpoint of competition between authorized reinsurers and unauthorized reinsurers, it may provide competitive advantages for unauthorized reinsurers without collateral arrangements, while the authorized reinsurers encounter the regulatory costs.

It should be noted, however, that the significant costs associated with the collateral arrangements and trust funds may not be bearable for the ceding insurers in an emerging market with limited capital capacity. In addition, the main purpose of reinsurance, which is to absorb and diversify risk, should be addressed. It is not feasible to implement such a regulation, while the shortage of reinsurance is the main concern in these markets. As a result, the regulations concerning the security of reinsurance should depend on the evaluation of foreign reinsurers, rather than imposing the restrictive regulation on the ceding insurers, in the event of ceding business to a foreign reinsurer. Although the Mexican regulatory approach, which highly depends on the analysis of rating agencies, seems less developed than the approach in the United States, it has improved the security of reinsurance, without increasing the cost of reinsurance and impeding the diversification of reinsurance risk.

In addition to governmental supervision, good corporate governance and sound internal controls addressing the security of reinsurance should be structured into the framework to ensure the solvency of primary insurers. Insurance undertakings should establish the criteria to review the reinsurance collection and the adequacy of reinsurance arrangements.

IV. International Supervisory Standards and Guidelines

Following the trends of harmonization of reinsurance regulation, the relevant supervisory guidelines and papers concerning the regulation of reinsurance issued and developed by the International Association for Insurance Supervisors are worth introducing.

A. IAIS—The Working Group’s Issues Paper on Reinsurance

The International Association for Insurance Supervisors (IAIS), which has published Insurance Principles, Standards and Guidance Papers to serve as guidelines for the regulation and supervision of insurance markets, is in process of developing guidelines or standards in the areas of licensing, use of derivatives, on-site inspections, solvency, reinsurance, market conduct, and investment policies. With respect to reinsurance and reinsurers, the Working Group on Reinsurance (now the Reinsurance Subcommittee) established by IAIS, has issued a paper titled “Reinsurance and Reinsurers: Relevant Issues for Establishing General Supervisory” for developing guidelines in the area of

136. Id. at 13.
137. See IAIS—Working Group on Reinsurance, supra note 7, at 9.
reinsurance regulation and supervision, in February 2000. Although this paper does not reflect the views of the IAIS, it points out several essential issues and provides a good foundation for developing reinsurance regulations either in developed countries or in emerging markets. In the area of regulation of reinsurance and reinsurers, the Working Group made the following recommendation to the Technical Committee of the IAIS. First, a harmonized single licensing system should be established, and be based on the mutual recognition of supervisory principles and practices among reinsurance supervisors. Second, to facilitate the mutual recognition among countries, the Working Group proposed that such a mutual recognition might be established on a regional basis. Third, in order to obtain the accurate information needed to assess the financial condition, and the corporate structure of reinsurers, a database of all reinsurance companies throughout the world should be created and made accessible. In addition, the rating agencies could be invited to provide the relevant credit rating, and the IAIS should be able to check the quality of the information they provide. Fourth, a licensing or registration system for reinsurance companies should be implemented, and such a system should be able to ensure the fit and proper quality of the key personnel. As a result of the increasing use of new risk transfer products (e.g., insurance-linked securities, and finite risk reinsurance), that may cause regulatory obstacles, the Working Group has given their emphasis on relevant issues, and has recommended the improvement on regulators' expertise, accounting, and solvency requirements to keep pace with market dynamics. In addition to substantial recommendations for the aspects stated above, the paper identifies three issues concerning the systemic risk arising from current market consolidation, the industry's view on a database established by IAIS, and the requirements for licensing reinsurance companies. In terms of the regulation of reinsurance, the paper identifies several essential issues, and proposes several approaches to regulate and supervise reinsurance activities more effectively. These issues and recommendations can be divided into the following aspects.

138. This paper cohered with the existing IAIS principles, standards, and guidance papers. See generally id. at 9.
139. Id. at 1.
140. Id. at 6.
141. Regions could be the following groups. “A. North America, Australia, and New Zealand gradually extended with the countries of Middle and South America; B. Japan and other Asian countries; C. the European Union, countries belonging to the European Economic Area and Switzerland, gradually extended to Middle and East European Countries; D. South Africa and other African countries.” In addition, it provided the alternative approaches, such as a similar market condition, to recognize each other's supervisory approach. Id. at 6.
142. Id. at 7.
143. Id.
144. IAIS—Working Group on Reinsurance, supra note 7, at 7.
145. Id. at 7.
146. In relation to system risk and reinsurance, it has been observed that “it is unlikely that the reinsurance industry can be linked to systemic problems of financial stability.” See Michael Hafeman, supra note 19, at 9. However, this observation reflects only the current situation in the reinsurance industry. As a result of the trends of consolidation of financial markets and increasing catastrophe risks, it is doubtful that reinsurance industry may not have significant impact on the global financial market.
1. Sector Separation for Insurers and Reinsurers

While the separation of primary insurers between life insurance and nonlife insurance is found in many jurisdictions, it is argued that a similar separation should also be applied to reinsurers. This paper categorized two kinds of reinsurers—primary insurers, who also carry on reinsurance business, and professional reinsurers who conduct only reinsurance business. For the primary insurers who also carry on reinsurance business, the sector separation should be applied because of the differences of risk characteristics, and inadequacy of expertise. However, the same separation of regulatory control may not be appropriate to regulate professional reinsurers.

2. Supervision of Reinsurance Arrangements of a Primary Insurer

The paper summarized the following essential aspects concerning supervision of reinsurance arrangements of a primary insurer:

a. Information regarding reinsurers, such as the country of registration, and financial condition.

b. The type of reinsurance treaties and the relevant information (e.g., the terms of the treaties, the cost of reinsurance, the coverage).

c. The amount of risk retention.

d. Plans for spreading risk to avoid the concentration of risk.

However, the paper only emphasized the essential information regarding reinsurance arrangements of a primary insurer, rather than providing a comprehensive approach to efficient regulation of a primary insurer, in arranging their reinsurance contracts.

3. Supervision of Reinsurers

In terms of supervision of reinsurers, the most controversial issue is deciding an appropriate model to regulate reinsurers. Should a reinsurer be supervised directly as a primary insurer, who is subject to licensing requirements and solvency regulation? The paper analyzed the advantages and disadvantages of supervising reinsurers directly, and made the following observations.

147. The main risks arising from life insurance business, can be well identified and slow to change e.g. mortality risk. However, the risks of nonlife insurance are not well predictable, e.g., aviation and catastrophe. Therefore, the life insurers who also carry on nonlife reinsurance, may encounter difficulties from poor indemnity reinsurance result. See IAIS—Working Group on Reinsurance, supra note 7, at 42.

148. The paper made the following observations, to support that the absence of sector separation for professional reinsurers, does not represent a significant impact on the insurance market. First, life reinsurance business, which is readily calculable risk and relative stable, may enhance the diversification of risks accepted by professional reinsurers. Second, the failure of reinsurers may not directly affect the policyholders. Third, the sector separation may impede the diversification of risk, and restrict a sufficient volume of business from another sector. However, it should be noted that the failure of a reinsurers may consequently affect the financial stability of a primary insurers, and hence the interests of the policyholders. See id.

149. See id. at 48.
As a result of market dynamics and the innovations of investment instruments, it becomes increasingly difficult for a supervisor and a primary insurer to ensure the recoverability of reinsurance. In directly overseeing reinsurers, the supervisors will be able to assess the reinsurer's financial condition, and enhance the reinsurer's financial stability by the relevant investment regulations. Due to the importance of the reinsurer's activity in the comprehensive chain of risk spreading, it is necessary to supervise reinsurers directly, to ensure the fitness and competence of key personnel of a reinsurance company.\(^\text{150}\)

Although both the objectives of insurance and reinsurance regulations are to ensure the financial security of insurers and reinsurers, the assessments may differ.\(^\text{151}\) As a result of a lack of definite and uniform procedures for the analysis of annual accounting or further checks, ceding insurers and insurance supervisors may arrive at different results regarding a reinsurer's security, (e.g. capital adequacy requirement or investment regulation).\(^\text{152}\) Consequently, this may cause multiple financial assessments of the reinsurer. To avoid multiple assessments of the same reinsurer's security, a system of home control, including an adequate system of information exchange, was proposed by this report.\(^\text{153}\) Such a system should be uniform, and provide a level playing field for the reinsurers. Furthermore, the paper suggests that a system of single licensing and home region control could be a possible solution, not only to reduce the operational obstacles, but also to maintain the financial stability of reinsurers. In addition to governmental supervision, the paper recognizes the essential nature of private rating agencies, and encourages the supervisors and the ceding insurers to consider using these ratings in conjunction with other solvency regulations, and criteria to select the reinsurers.\(^\text{154}\)

B. ON SOLVENCY, SOLVENCY ASSESSMENTS AND ACTUARIAL ISSUES—AN IAIS ISSUES PAPER (FINAL VERSION)

In addition to the general issues relating to reinsurance, the IAIS Technical Committee, the parent committee of the Solvency Subcommittee, focused on the specific supervisory standards on solvency of primary insurers, and issued a paper to discuss the general principles on capital adequacy and solvency, as laid down by insurance supervisory principles.\(^\text{155}\)

Although the paper focuses on the solvency requirements for primary insurers, it also illustrates several essential issues concerning reinsurance. First, it categorizes the financial impact arising from reinsurance arrangements, as two kinds of risk remain inherent. One is that the reinsurance might prove insufficient to adequately cover the risk. The other is that a reinsurer might prove unable, or unwilling, to pay the claims. To prevent the risk stated above, it proposes that the directors of the insurers should properly assess the needs for reinsurance, and the reinsurer's security or creditworthiness. Furthermore, it describes some solvency practices in several countries.

150. See id. at 49.
151. See id. at 50.
152. See id.
153. See id. at 51.
154. The following commercial rating agencies provided in this paper, have given their emphasis on reinsurers and insurers. A. M. Best Company; Standard & Poor's Corporation; and Duff & Phelps Credit Rating Corp. See id. at 51–52.
155. IAIS Subcommittee, supra note 29, at 4.
C. SUMMARY OBSERVATIONS: WEAKNESSES IN THE REINSURANCE SUBCOMMITTEE'S ISSUES PAPER

While the trends of liberalization of reinsurance, and harmonization of insurance regulation, have made a significant impact on the emerging markets, the essential issues identified by the Reinsurance Subcommittee have provided a good foundation for further discussion, and recommended a possible regulatory structure for those countries where the regulation of reinsurance needs to be enhanced.

As the recommendation made by the Reinsurance Subcommittee establishes a possible model for future reinsurance regulation, it is obviously important for countries to consider the potential difficulties when implementing a new regulatory approach.

First, while mutual recognition in order to harmonize the varying regulatory standards is recommended by the Insurance Subcommittee, regulatory arbitrage should be considered. It has been stated that "mutual recognition may result in the regulation at the level of the lowest denominator."156 For those countries with a highly developed regulatory regime, a single license system may increase the competitive advantage for those reinsurers who are subject to less restrictive regulation. Second, the importance of reliable assessment standards is well recognized in mutual assessment. It has been argued that this paper fails to consider the obstacles of spelling out the standards.157 To establish recognized and harmonized rules is difficult, particularly in the varying solvency regulatory regimes throughout the world. As a result, it has been suggested that "it is not until the International Accounting Standards Committee finalizes its work for insurance, and key financial centers have endorsed the standards and begun implementation of them, that transparency in accounting and reporting standards can be achieved, and discussions concerning mutual recognition made more meaningful."158 Third, the paper emphasizes the assessment of the security of reinsurance, rather than providing possible regulatory approaches to ensure the security of reinsurance. Based on the arguments discussed above,159 a possible regulatory approach should take into account the solvency regulation. The reduction of technical provisions or required solvency margin, will not be allowed unless the creditworthiness of reinsurance has been ensured in reasonable costs. Fourth, while the needs of definite and uniform procedures are addressed in this paper, the importance of an effective insolvency regime should be considered to reduce adverse effects in the event of insolvency of reinsurers. As a result of the increase in international reinsurance transactions, an effective insolvency regime,160 may promote the ceding insurers' confidence to transact with foreign reinsurers, and reduce

156. Debra J. Hall, supra note 27, at 11.
157. Id. at 13.
158. Id. at 14.
159. See Section II, D Summary Observations of this chapter.
160. With regard to the international insolvency process, the following principles can provide the theoretical basis for discussion. Unity means that there are proceedings exclusively in the country of incorporation, or at the place of business of the debtor. Plurality or multiplicity, means that the possibility exists to open more than one insolvency, in order to liquidate or rescue a debtor's estate. Universality, means that the proceedings relating to a company's insolvency will have worldwide extraterritorial effects. In contrast, territoriality means that the proceedings have a purely territorial, national scope. Nichi Kayser, A Study of the European Convention on Insolvency Proceeds, 7 INT'L INSOLVENCY REV. 101 (1998).
unnecessary costs in collecting reinsurance proceeds. Last, while the Reinsurance Subcommittee recommended the mutual recognition for future harmonization of regulation, the cooperation between home countries and host countries, is based merely on information exchange. It is suggested that mutual recognition should clarify the responsibility of home countries and host countries, to improve the access of home supervisors and host supervisors to information, and to ensure cross-border reinsurance operations are subject to effective supervision.161

V. Concluding Remarks: Implications for Reinsurance Regulation and Supervision in Emerging Markets

A coherent and comprehensive system of regulation of reinsurance and its proper implementation, is essential to maintain the stability of insurance markets, as reinsurance provides external capacity for the ceding insurers to expand their business. As the insurance regulators and ceding insurers struggle to ensure the critical balance between

161. In comparison with other financial regulations concerning cross-border operations, the Basle Committee and the Offshore Group of Banking Supervision, have issued twenty-nine recommendations, as a supplement to the Minimum Standards, under the title of "The Supervision of Cross-Border Banking." In relation to cross-border operations, it should ensure that "all cross-border banking operations are subject to effective home and host supervision." For the host countries, it should: "(1) Assist in providing the requisite information to home supervisors, if this is not provided through other supervisory means. (2) Use its best endeavors to have its legislation, which prevents the access of home supervisors to depositor information, reviewed and, if necessary, amended. (3) Respond freely to any questions posed by a home supervisor on qualitative information, and to inform the home supervisor, if any area of concern comes to its notice. (4) Assist the home country to conduct on-site examination, or undertake on-site examination, on behalf of the home supervisor. (5) Ensure there is effective supervision of shell branches. (6) Ensure that operations of parallel-owned banks become subject to consolidated supervision. (7) Be extremely cautious about approving the establishment of cross-border operations by banks incorporated in under-regulated financial centers." For the home country, it should: "(1) Expect parent banks to pass quantitative and qualitative information on to it freely, and verify accuracy of this information, and reassure itself that there are no supervisory gaps. (2) Conduct on-site examination. (3) Pass the information on series criminal violation of home country law immediately, to the appropriate law enforcement authorities in its home country, and inform the host supervisor of the action it intends to take. (4) Inform the host supervisor immediately, if it has reason to suspect the integrity of the local operation, the quality of its management, or the quality of internal controls being exercised by the parent bank. (5) Have on its regular mailing list, for relevant material, all foreign supervisors which act as hosts to its banks. (6) Inform host supervisors of material adverse changes in the global condition of banking groups operating in their jurisdictions. (7) Ultimate responsibility to assure that any gaps in supervising shell branches are closed. (8) Ensure that operations of parallel-owned banks become subject to consolidated supervision. (9) Monitor operations of a banking entity on a worldwide basis, and ensure that no entity should be allowed to use the word "bank" in its name if it is not conducting banking activities, and being supervised by a bank." Basle Committee On Banking Supervision And Offshore Group Of Banking Supervisors, The Supervision Of Cross-Border Banking (Oct. 1996).
efficiency and security of reinsurance, the framework of regulation of reinsurance should be properly structured, and take into account market characteristics and legal systems. While the shortage of reinsurance is the main issue in emerging markets, insurance regulators should consider an appropriate regulatory approach, concerning the security of reinsurance, and reduce the adverse effect caused by the regulation. In this regard, this section intends to address essential aspects for the implication for reinsurance regulation and supervision in emerging markets.

First, all reinsurers should be subject to regulation as primary insurers. Although the direct regulation approach, in which all reinsurers should be authorized to carry on reinsurance, may not be appropriate for emerging markets, foreign reinsurers should be regulated and supervised by a home country regulatory regime. In other words, foreign reinsurers should be subject to the domiciled country's regulation. Such a regulatory regime, should be able to ensure the financial solvency of reinsurers, and the fitness and propriety of management.

Second, in relation to the regulation of the creditworthiness of reinsurance, the relevant solvency regulation should be able to assess the security of reinsurance, and reflect the recoverability of reinsurance. While the collateralization of reinsurance or trust fund requirements can eliminate the regulators' burden, and help to ensure the reinsurance collection, the costs associated with collateral arrangements may impede the diversification of insurance risk, particularly in emerging markets with a shortage of reinsurance. Alternatively, the regulators in an emerging market may choose a less restrictive regulatory approach (e.g., the Mexican model relying on the rating agencies, or the spread rules in Australia) to reduce the financial impact on solvency of primary insurers. It should be noted, that there is no feasible regulatory approach to ensure the security of reinsurance, unless the market characteristics, legal system, and other social factors have been properly considered.

Third, in addition to governmental supervision, good corporate governance, and sound internal controls should be introduced, and implemented in the process of reinsurance arrangements for primary insurers. To remain stable, a financial market cannot merely rely on the regulators. As the failure of reinsurance may result from poor management, good corporate governance is essential to promote the risk management of primary insurers, to reduce financial risk. In relation to reinsurance arrangements of primary insurers, the relevant criteria concerning the adequacy of reinsurance, and the recoverability of reinsurance, should be structured into the framework of internal control.

As efforts have been made to harmonize the regulation of reinsurance by IAIS, it appears that several issues must be addressed, such as regulatory arbitrage, the varying assessment, and effective insolvency regulation. While the mutual recognition approach proposed by IAIS may encounter opposition from countries where there are highly developed regulatory regimes, the supervisory principles and relevant recommendations have contributed significant influence, and an educational regulatory infrastructure for emerging markets for regulatory reform.
