

NEW RISK-BASED SOLVENCY SUPERVISION MODEL FOR THE CHILEAN INSURANCE INDUSTRY

**DECEMBER 2006
INSURANCE AREA
SUPERINTENDENCIA DE VALORES Y SEGUROS OF CHILE**

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EXECUTIVE SUMMARY

With the purpose of better achieving its mission as a regulating entity of the securities and insurance markets in Chile, the Superintendencia de Valores y Seguros (SVS) has been implementing in the last years a revision process of its supervision systems.

Analyzing international experience in insurance supervision, and also considering the recommendations of the World Bank and IMF, made on occasion of the FSAP program¹ held in our country in 2004, the SVS adopted the decision of carrying out a modernization process of its supervision approach, considering therefore the concepts of the risk-based supervision model.

Due to the nature of its business and its economic and social impact, the insurance market is a regulated market. An efficient, competitive and reliable insurance market is very important for the development of the country. Therefore, the existence of a modern and effective regulatory and supervisory framework is essential to favor the healthy development of the market and to protect the rights of the insured.

The main objectives of the regulation are solvency, to ensure that insurers have sufficient financial resources to meet their obligations with respect to their insured, and the market conduct that seeks to protect the rights of the insured and public in general, considering aspects such as fair treatment and transparency when selling insurance, payment of indemnities, and other related benefits.

This document summarizes the new supervision approach in terms of solvency for insurers.

The solvency supervision system of the Chilean insurance market has been based to date mainly on the following concepts:

- Technical Reserves
- Minimum Capital and Risk Capital
- Investments

The solvency supervision approach has focused on establishing reasonable rules that regulate the three aspects already mentioned, concentrating the supervision on the verification of the solvency regulation compliance, and in auditing the financial statements and related information, oriented to guaranteeing that said information properly reflects the situation of the company.

The basic objectives of the new risk-based supervision model are: to strengthen the risk management systems of insurers; to carry out preventive control; to have a more flexible regulation emphasizing on principles; to have a supervision system in

¹ Financial Sector Assessment Program, the objective is to evaluate the strength of the financial systems in a country.

accordance with international recommendations; and to focus the supervision resources adequately.

The new solvency supervision approach of the SVS gathers the approaches of supervision pillars or levels developed by the IAIS for insurance (International Association of Insurance Supervisors) and by the Basel Banking Supervision Committee for banks establishing a basic regulatory level with minimum solvency requirements (level 1) and a complementary supervision level of the same that aims at a risk assessment process of the company, with qualitative emphasis, performed based on management principles or best practices (level 2). A similar approach, based on supervision pillars, is being developed by the European Union for insurance supervision in its member countries (Solvency II).

At the regulatory level, the new minimum solvency requirements to be applied are structured based on: a) new capital requirement, under the concept of risk-based capital and the total balance sheet approach, which considers a “formula” type standard model and the internal model authorization under certain requirements; b) a new investment system, more flexible than the current one, and c) new asset and liability valuation methods, considering international recommendations.

The level of minimum solvency requirements shall be understood as a smallest possible for exercising the activity in a sensible regulation scheme, but there are a series of reasons that make a complementary supervision level absolutely essential, based on the individual assessment of risks and its management in each insurer (level 2).

The risk-based supervision level considers three stages:

- An initial risk analysis, based on ratios and the impact analysis of an eventual insolvency of the company.
- An in-depth risk analysis performed using a “risk matrix” methodology that based on criteria, “benchmarks” and principles or best management practices, evaluates and establishes an added-risk level for the company. The matrix considers a risk analysis for the main activities of the company, evaluating risks that are inherent to them, the quality of the management, the strength of the capital, and the income generation capacity of the insurer.
- Risk Mitigation Activities that correspond to the measures that the SVS will adopt to promote risk mitigation actions by the companies. For this effect, the SVS will issue an “action guide” that will inform about the potential actions that it will adopt, depending on the different levels of risk observed in the insurer.

1. INTRODUCTION

The insurance market allows people, companies and other organizations to transfer their risks; generate savings and pension alternatives for families; favor the development of the economy in an environment of reliability; and promote the development of the capital market through the investment of resources that it manages. Public faith is a key component within the insurance industry and an event of insolvency of an insurer may affect the entire industry as it weakens this reliability. Therefore, having a proper supervision system grants benefits to the insured, to the insurance companies, and in general to all the population.

The SVS has the mission of *“Contributing to the economic development of the country by attaining reliable and efficient securities and insurance markets, through an effective supervision and modern regulation that will allow both to safeguard the rights of the investors and the insured, and to facilitate the role of the other agents of these markets. Our actions shall be based on the principle of good faith and integrity in the civil service”*.

Due to the development and greater complexity of the markets, and the evolution of the supervision models in the world, the SVS has been going in the last years through a revision process of its supervision systems to comply better with its mission.

This revision process has counted with the participation of professionals of the SVS, with the support of foreign consultants, has gathered the recommendations of international entities, the experience of other supervisors and market opinions. As a result of the analysis done, the conclusion reached indicates the need for changing the approach of our supervision model, in order to have more flexibility to adapt to the constant changes of the insurance markets.

International experience shows a clear trend towards supervision systems centered on risk analysis and the management of it by the supervised, which have been called risk-based supervision models (RBS).

In the scope of insurance, several countries like Canada, United Kingdom, and Australia, already apply RBS models, and in Latin American there has been progress in this direction. On the other hand, the basic supervision principles of the IAIS (International Association of Insurance Supervisors) and the new solvency standards that this entity has issued in the last years also aim at this supervision approach.

Consideration was given to a report of the World Bank and of the IMF in relation to the FSAP program executed in 2004 that recommended us to move on towards a risk-based supervision model.

In our country, the Superintendencia de Bancos e Instituciones Financieras (the banking authority) adopted several years ago a supervision system based on risks.

In this context, the SVS adopted the decision of implementing a modernization process of its supervision system, based on the concepts of the above-mentioned model.

For this effect and with the support of a FIRST² project, during the year 2005 and beginning of 2006, takes place a diagnosis work and development of a risk-based supervision model for the Chilean insurance industry. Said work was performed with the technical assistance of the OSFI (Office of the Superintendent of Financial Institutions) of Canada, supervisory authority of the insurance, banking and pension fund market of that northern country. The Canadian supervision model has been the basis for the RBS model of the Chilean insurance industry presented in this document.

During 2005, the SVS also carried out a pilot plan to apply the Canadian RBS model in a life insurance company and in a general insurance company of our industry. Said pilot plan, that counted with the collaboration of the companies Royal Sun Alliance and ING Life Insurance, was of much help to know better how this type of models run, and to analyze its application to our country.

The Chilean insurance supervision system is based on two key concepts: Solvency and Market Behavior. The first aims to the idea that insurers have sufficient financial resources to meet their obligations with their insured. The second aims to establish a regulation and supervision that allows protecting the rights of the insured and public in general.

This document will cover the solvency supervision system for insurers and the new approach that is projected to be implemented. Therefore, issues related to market conduct are not covered, except those aspects that could influence the solvency assessment of the company.

The following sections of the document provide an overview of the relevance of the Chilean insurance industry and of an adequate and efficient supervision system, present the basis on which the current regulatory scheme is established, analyzes international experience, introduces the matrix concepts and ideas of the new supervision model, its main objectives, and expected benefits, and its scope in terms of concrete changes in the current regulatory and supervisory framework.

To date, the SVS has initiated the implementation process of the new RBS model, for which purpose internal working groups were created to address the different aspects that will also count with the support of international consultants (Phase 2 of FIRST project).

Further the SVS will incorporate the insurance market in this process, which participation is considered very important to reach the objectives sought with the introduction of the new model.

² Financial Sector Reform and Strengthening (FIRST) is a program financed by the World Bank, IMF and other countries and international entities, designed to finance strengthening projects of the financial systems.

2. THE INSURANCE MARKET

- 2.1. The insurance market is a key element of the Chilean financial industry. It is not only important in terms of its role in the country's economy, but also from the social point of view. The insurance market allows people, companies and other organizations to transfer their risks, granting protection in case of events that may cause them some capital impairment or harm their physical integrity, by generating savings and pension alternatives for the family, and favoring the development of the economy in an environment of reliability, which finally translates into more wealth and well-being for the country.
- 2.2. Insurance as a risk-coverage product operates based on trust. The insured may pay a premium for years with the promise that in the event of a loss they will be compensated. Similarly, in some savings and pension products, the insured transfer their funds to be managed by the company and obtain profits. Public faith is then a key element in the insurance industry, and an event of insolvency of an insurer may affect all the industry by weakening said trust.
- 2.3. Insurers have accumulated funds greater than 26 billion US dollars (as of September 2006), figure that accounts for almost one fifth of the total GDP of the country. The foregoing turns them into the second largest institutional investors of Chile, as relevant actors of the capital market. These investments have contributed to financing a large variety of development projects, such as public road infrastructure, real estate projects and house financing projects.
- 2.4. The Chilean insurance market is characterized by its openness and high level of competition. There are 53 insurance companies (32 in life and 21 in non-life), some of which correspond to large global insurance groups. There are practically no barriers to enter the industry and insurers have ample freedom to offer their diverse insurance products, and to manage their business.
- 2.5. The local insurance industry shows much development in its product offer, which has a wide variety that covers the main lines of business at an international level. Likewise, the selling mechanisms have become more sophisticated in time and include new actors in the distribution of insurance, such as banks and large department stores, thereby generating even higher levels of competition and more benefits in terms of access to insurance.
- 2.6. In most cases, the insurer-insured relation is asymmetric, as the latter is in a weaker position with respect to the insurer, both in terms of its capacity to evaluate the conditions under which it accedes to an insurance and the financial standing of the insurer, and in the event of dispute or disagreement in relation to the application of the insurance. The non-payment of the insurance may have a strong impact on people.
- 2.7. Life insurance companies are a fundamental part of the Chilean pension system, both in terms of protection and savings of active workers, and in terms of the

pension delivered and the management of the risks associated to their passive stage. In this area, it is also necessary to consider the State warranty on pensions that generates considerable indirect liabilities for the Treasury.

- 2.8. The development of the market entails new risks and greater complexity in the companies' operation. It also causes a rate of growth that demands a modern and flexible management, focused on the risks and their mitigation by the insurer's administration. International openness also implies a challenge for national companies in order to remain competitive in the market.
- 2.9. Considering the above-mentioned aspects, to have an efficient, competitive and reliable insurance market is very important for the economic and social development of the country. Thus, it is essential to have a modern and efficient regulatory and supervisory framework that besides promoting the healthy development of the market will protect the insured's rights. The regulatory system is clearly not neutral to the market operation and its development potential. It should be understood then that a proper supervision system is an asset for the country, and for the insurer; and it is also an essential requirement for projecting the sector to new activities and businesses in the future.

3. THE REGULATORY AND SUPERVISORY SYSTEM

- 3.1 The Chilean insurance supervision system is based on two key concepts: Solvency and Market Conduct. The first aims at generating a reasonable supervision system that will guarantee in general terms that insurers have sufficient financial resources to meet their obligations with their insured. The second aims at establishing a regulation and supervision that allows protecting the rights of the insured and public in general; giving guarantees that insurers properly meet their obligations derived from the insurance policies signed; granting a fair treatment to the insured, beneficiaries and others involved legitimately, and acting with the required transparency in selling insurance, the payment of claims and other benefits related to insurance. This has been called “market conduct”.
- 3.2 This document will address basically the solvency supervision system of insurers and the new approach that will be implemented in this key aspect of the insurance regulatory system. Nevertheless, the issues related to market conduct are relevant in the company’s solvency analysis and assessment, and therefore, from that perspective, are considered in the new solvency model. As a matter of fact, if poorly managed, it could generate important risks for the company (for example, reputation risk). It could also be a symptom that the company is experiencing financial difficulties. For this reason, the insurers’ performance in terms of market conduct, though it is not part of the purpose of this document, is actually considered to be an aspect to be assessed in terms of its potential impact on the company’s solvency.
- 3.3 The solvency supervision approach that has been applied in Chile gives insurers much freedom to market their insurance products and manage their technical risks, as these entities fix the products, subscription and reinsurance policies, and the risk rate fixing. The supervision system focuses on the current financial standing of the company to pay its obligations deriving from insurance sales.
- 3.4 To this date, our solvency supervision system is based mainly on the following concepts:
- Technical Reserves
 - Minimum Capital and Risk Capital
 - Investments
- 3.5 The first refers to a proper setting of Technical Reserves (liabilities that reflect the value of the obligations with the insured), according to the technical criteria and parameters set by the SVS. These criteria are prudent in terms that the amount of technical reserves is sufficient to meet all insurance obligations.
- 3.6 The second aspect refers to the obligation of insurers of maintaining a minimum capital level equivalent to UF 90,000, to exercise the insurance activity, or a higher amount determined according to the level of operations of the companies,

called risk capital. This capital is the contribution of shareholders that guarantee the payment of the obligations to the insured as first priority, and secondly to other creditors. The main purpose of the minimum and risk capital is to serve as security in case the technical reserves of the company are not sufficient to pay its obligations. This is due to the probabilistic nature of the payment of the obligations by means of the sale of insurance, and therefore, the existence of potential deviations between the observed and the expected loss ratio or payment flows.

- 3.7 The third concept points at defining the risk of the assets that support the cash reserves and the minimum or risk capital of the company, in order to limit the losses that the company could face due to investing said reserves and capital. With this purpose, an investment system is established to determine the assets for investment, the diversification limits or margins by type of assets, issuers and securities; the rules for asset valuation; and the constitution of loss provisions, matching rules, and other restrictions to investment operations and risk management deriving from the assets.
- 3.8 The solvency supervision approach is based on the establishment of prudent rules that regulate the three aspects above-mentioned. For application, this approach is based on the financial information of the company, basically financial statements and related information. The supervision has focused on verifying the solvency regulation compliance, and on auditing the financial statements and related information, oriented to guaranteeing that said information properly reflects the situation of the company.

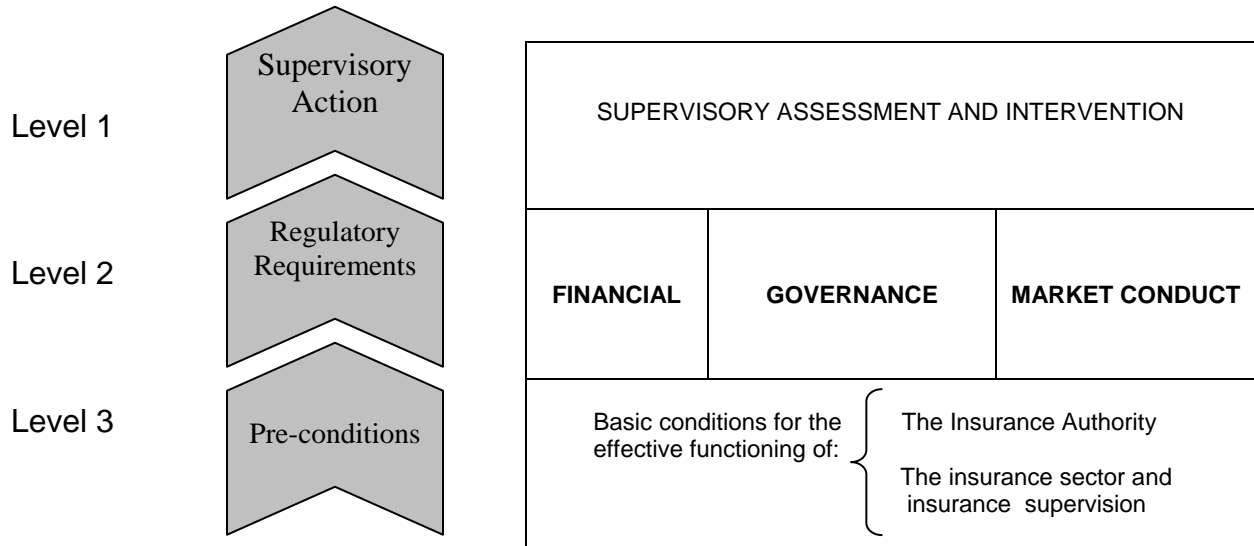
4. THE NEW APPROACH FOR SOLVENCY REGULATION AND SUPERVISION

- 4.1 Though the purpose of the rules is to limit the risk of insurers, due to their general nature, they are not always applicable to the specific situation of each company. Fixed and equal rules applicable to the whole market, though it may be easier to apply and supervise them, are less effective when it comes to properly assessing and defining the risks assumed by each company. The setting of inflexible guidelines and standards may also restrict the company's capacity to manage its financial risks and adopt decisions related to its assets and liabilities.
- 4.2 The development of the insurance market has entailed greater complexity and sophistication in the business of insurers. Due to the development of new types of insurance, new forms of commercialization, the increased competition, and the dynamic nature of risks, companies have had to generate new mechanisms and tools of risk management, so in practice it is very difficult to keep the rules updated and compliant with the risks faced by the insurers. This means that a supervision system based on the compliance of rules is not as effective when monitoring and mitigating the risks that could affect the company's solvency.
- 4.3 Considering this reality, the financial system supervisors of more developed countries have evidenced in the last years a clear trend towards risk-based supervision models rather than rule-based models. One of the approaches that has served as basis for developing models in other financial industries is the banking model, specifically the model proposed by the Basel Committee on Banking Supervision, known as Basel II³. This model is structured based on a three-pillar supervision:
- a) The first pillar aims at the existence of minimum risk-based capital requirements.
 - b) The second supervision pillar of the authorities is based on a revision and analysis process of the risks assumed by the entity and their management.
 - c) The third pillar encourages "market discipline" through the existence of a high degree of "disclosure" and transparency of the information that the entities deliver to the public related to their financial standing.
- 4.4 The IAIS new solvency supervision model for insurers⁴ proposes a solvency supervision structure based on a scheme similar to Basel II, in three levels:

³ See document: "International Convergence of Capital Measurement and Capital Standards: a Revised Framework", Basel Committee on Banking Supervision (June 2004).

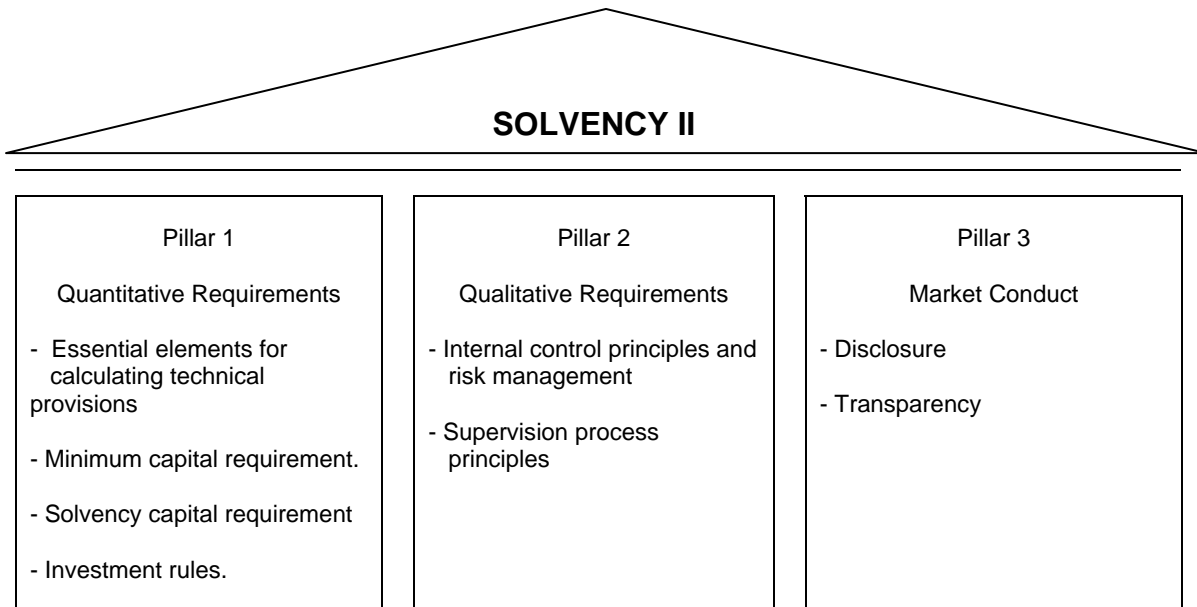
⁴ See IAIS document "A New Framework for Insurance Supervision" (October 2005).

Figure N°1 IAIS Solvency Supervision Model:



4.5 On the other hand, the European Union is developing a new solvency model for insurers called “Solvency II”. This new model is based on a three pillar structure similar to Basel II that can be summarized in the following figure:

Figure N°2: EU Solvency Supervision Model “Solvency II”⁵:



⁵ Source: Swiss Re Economic Research & Consulting (Journal SIGMA N°4/2006)



- 4.6 Levels two and three of the IAIS model are similar to pillars 1, 2 and 3 of the Basel II and Solvency II models, which is to say, a level of minimum quantitative capital adequacy requirements as well as a minimum supervision requirement with qualitative emphasis placed according to risk, management of the same and effective intervention measures. IAIS proposes dividing the level of regulatory requirements into three aspects: financial, corporate governance and market conduct. In the IAIS model, the level of market discipline (level 3 in Basel II and Solvency II) is considered part of the disclosure requirements contained in level 2 and not as an independent pillar.
- 4.7 In addition, considering their Insurance Core Principles, the IAIS⁶ establishes a level one of precondition for effective supervision. This level is fundamentally reflected by the principles one to three, which aim to establish two groups of basic conditions for supervision:
- a) Firstly, a supervision environment which includes:
- A proper legal and institutional framework for insurance activity and the functioning of the supervisory entity.
 - Proper development of the financial and capital market structure.
 - An efficient financial market with relevant available information.
- b) Secondly, it is believed that effective supervision can only be implemented if there is clarity and transparency in the objectives of supervision and if the supervisory authority meets the following requirements:
- Proper entitlement, legal protection and financial resources in order to carry out its mission.
 - Independent action for operations, especially from political authorities and insurers.
 - Transparency in the exercise of its duties and entitlements.
 - The same hires, trains and employs enough professional and competent staff.
 - The same handles confidential information properly.
- 4.8 Based on the models indicated, the Canadian supervision model (OSFI) and the British model (FSA) and also considering the recommendations of other international agencies such as IAA (International Actuarial Association), IASB (International Accounting Standard Board), OECD (Organisation for Economic Cooperation and Development) and the World Bank, the SVS has developed a new solvency supervision model for our country. This model is structured into two levels of supervision, based on the concepts corresponding to supervision levels 2 and 3 of the IAIS model as well as 1 and 2 of the Basel II and Solvency II models.

⁶ IAIS Insurance Core Principles and Methodology, (October 2003)

- 4.9 As for the concepts related to the level 1 preconditions of the IAIS model, although there is a recognized need to some improvement in our legal and institutional framework to get a complete observance of these preconditions, it is believed that our country satisfactorily observes these prerequisites, with evidently good development of the financial and capital market structure, a reasonable legal and institutional framework, a supervisory authority with a marked technical and independent nature as well as human and financial resources which enable the same to fulfill its mission
- 4.10 In keeping with the same, the new risk-based solvency supervision model of the SVS for the insurance industry is structured on two levels:
- a) A regulatory level which establishes the minimum solvency requirements sensitive to the risks of insurers, stemming from both assets and liabilities with quantitative emphasis; new investment regulations which are more flexible than the present regulations; and an valuation system for assets, liabilities and capital in line with new international standards under the concept of economic or market value.
 - b) A supervision level which complements the level of basic solvency requirements with qualitative emphasis and which, in keeping with risk-based supervision approach points observed in countries such as Canada and United Kingdom, enables the authority to assess individual risks for companies and management of these by the same, being able to take preventive measures, anticipating insolvency situations by means of risk mitigation actions. This level takes in aspects of corporate governance, market conduct and disclosure as relevant factors to be considered in a company's risk assessment.

4.11 The following table summarizes the solvency supervision model which the SVS intends to implement:

Figure 2: The New SVS Risk-Based Solvency Supervision Model

 <p>LEVEL 2</p>	<p>SUPERVISORY LEVEL: RISK ASSESSMENT AND MITIGATION ACTIVITY PROCESS</p>	<ul style="list-style-type: none"> • RISK-BASED SUPERVISION FOCUS • CORPORATE GOVERNANCE • MARKET CONDUCT AND DISCLOSURE
 <p>LEVEL 1</p>	<p>REGULATORY LEVEL: MINIMUM SOLVENCY REQUIREMENTS</p>	<ul style="list-style-type: none"> • RISK-BASED CAPITAL • NEW INVESTMENT SYSTEM • VALUATION OF ASSETS AND LIABILITIES CONSIDERING ECONOMIC VALUE

The model, its objectives and concepts are explained in the following numbers of this report.

5. OBJECTIVES AND BENEFITS EXPECTED

The new risk-based supervision model has the following basic objectives:

- 5.1 **The strengthening of risk management systems.** Supervision focused on risk issues is expected to promote further development of tools and modern risk management and control models for insurance companies. The above, in addition to favoring more solvent and well-managed entities, generates a great potential for sustained and stable development of insurers. The fundamental objective of this model is that insurers properly manage their risks, reduce their net exposure and become able to prevent situations which may weaken their solvency. In keeping with this outlook, the model establishes incentives for companies to generate more rugged risk management systems and also generate greater supervision load and requirements for those companies evidencing weaknesses in this area.
- 5.2 **Preventive focus.** The objective of solvency and risk analysis requirements which affect insurers is to avoid situations with excessive risk become real insolvency situations. The adoption of timely preventive measures is essential, and these must be able to reduce risks before the same appear, instead of after measures which aim to manage an insolvency situation instead of avoiding the same.
- 5.3 **More flexible regulation.** The SBR model provides a high level of flexibility for insurers in order to define their risk policies, compared to a traditional standard compliance system. The new model makes regulation more flexible so that companies have greater freedom to adopt their decisions based on their own models and risk analysis and not on specific regulations. This process therefore involves a substantial change in present regulation.
- 5.4 **International recommendations.** The new SBR model will allow the country to more closely follow international insurance supervision principles and recommendations. In addition to the inherent benefits of a more modern and efficient system, the above is a highly desirable objective in itself, among other reasons because it leads to better international assessment of our financial system, favors investment and trade abroad and generates enhanced assessment and recognition of insurance industry development and the work carried out by the SVS.
- 5.5 **Resource targeting.** The SVS has limited resources for supervising the insurance market. Therefore its resources must be efficiently assigned, attempting to focus on the most relevant risk aspects in terms of potential impact on insurer solvency and the system in general, as well as on those entities which evidence the highest vulnerability based on individual risk analysis. In this sense, the SBR model is importantly based on the capacity of professionals in charge of supervising entities. In keeping with the same, implementation of the new model

considers substantial investment in training which aims to provide greater relevance and responsibility to the individual work of supervisors.

6. REGULATORY LEVEL: MINIMUM SOLVENCY REQUIREMENTS

- 6.1 At a regulatory level, the minimum solvency requirements considered are structured based on a new capital requirement in keeping with the concept of risk-based capital and a total balance sheet approach, new investment regulations and the valuation of assets and liabilities, considering the latest international recommendations for insurance companies (economic or market value).

A New Capital Requirement

- 6.2 The new capital requirement will replace the present capital requirements associated to maximum leverage determined by law (which becomes a fixed factor over the company's liabilities) and the solvency margin, determined over premiums and claims according to the European model. As previously indicated, the European Union Solvency Margin model is presently being replaced by a new capital requirement within the "Solvency II" project framework.
- 6.3 There is agreement in Europe as to the need to replace the solvency margin with another which more accurately reflects the risk status of each insurer and which incorporates the concept known as the total balance sheet approach, which implies representing all relevant risks coming from both assets and liabilities as well as the interdependence of the same and the company's capital in the capital requirement.
- 6.4 The total balance sheet approach implies integral analysis of the company's solvency considering an economic valuation of assets and liabilities as well as a consistent capital requirement which properly recognizes the risks stemming from the insurer's total balance sheet, which in short enables proper assessment of a company's financial position and application of required capital based on capital economic value. This concept has been accepted as a key point in the new IAIS solvency model⁷.
- 6.5 The economic valuation of assets and liabilities requires that a market value be assigned to the same or, in the absence of this value, a value consistent with the market, which is to say determined based on a model which brings together market information.
- 6.6 For the purposes of capital requirements the previously mentioned Basel II, IAIS and Solvency II models consider the use of a standard model which has been simplified for the entire market and the possibility of replacing the standard model

⁷ See "Cornerstone IV" IAIS - Cornerstones for the Formulation of Regulatory Financial Requirements, October 2005.

with more sophisticated internal models developed by each company which better reflect the own risk profile for a company.

- 6.7 Standard models usually correspond to formulas which apply capital requirement factors based on asset or liability amounts, seeking to represent the different types of risks which affect a company. In some cases analysis of scenarios determined for this purpose may also be considered. Internal models must be approved by the authority and must meet certain minimum requirements, such as the insurer evidencing sufficient technical capacity and experience in the development of quantitative risk management models, the existence of stringent internal control and corporate government systems and the model suggested must be used for the company's risk management and to determine optimum capital levels.
- 6.8 Both standard and internal capital requirement models are based on estimating the amount of capital needed for a company to be able to absorb losses, in a given timeframe (usually one year) and estimation generated under a certain confidence level.
- 6.9 For insurance, this standard model mechanism and the authorization of internal models for determining risk-based capital requirements is already being incorporated by some countries such as Australia, United Kingdom and Canada. For example, United Kingdom established an internal model system in late 2004 to determine optimum capital known as "ICAS" (Individual Capital Adequacy Standard) which will enable British insurance entities to replace minimum regulatory capital requirements (standard) with an optimum economic capital model developed by the company itself. It is noteworthy to mention that the World Bank recommended that our country consider this type of standard model and internal capital requirement model system as part of its FSAP review in 2004. The same recommendation came out of the project completed in conjunction with OSFI from Canada.
- 6.10 The use of a standard model to determine minimum capital requirements entails a certain factor of conservatism associated to the homogeneous application of these requirements for all companies in the market. The use of internal models, since these are centered on the reality of each insurer, should lead to better risk assessment and therefore an capital requirement with lesser degrees of conservatism, which could eventually lead to lower capital requirements.
- 6.11 Minimum capital requirement models are only able to represent those risks which can be quantified using a quantitative model. In this sense, international recommendations aim to consider four types of risk for capital requirements⁸:

⁸ For a more detailed definition of the risks indicated, see the IAA document "A Global Framework for Insurer Solvency Assessment", IAA, 2004.

- Underwriting risk which incorporates the inherent risks of insurance activity such as underwriting, pricing, insufficiency of technical reserves and mortality.
- Credit risk associated to default regarding assets, risk rating reduction and non-observance of counterparts for reinsurance contracts and derivative products, among others.
- Market risk, which includes lost value of assets, interest rate and reinvestment risk.
- Operational risk, understood according to the Basel II definition, as the *“risk of loss resulting from inadequate or failed internal processes, people and systems or from external events”*.

6.12 Considering the above and the analysis work carried out by the SVS, the new capital requirement model which the SVS plans to implement can be summarized into the following concepts:

- a) The model will replace present risk capital requirements (leverage and solvency margin), maintaining a minimum capital requirement for exercising the activity (an absolute fixed amount).
- b) The model will be structured based on the concept of a "total balance sheet approach" including capital requirements associated to the risks of assets and liabilities and determined according to the estimation of solvency capital required to face eventual losses stemming from the materialization of said risk. Risks which are considered for the purpose of determining solvency capital shall be technical, credit, market and operational risk.
- c) The new capital requirement considers the valuation of assets and liabilities as an economic value and therefore applies to a different concept than the present accounting value. In other words, in order to determine a company's available capital and verify observance of capital requirements, economic capital is considered, determined based on market value of a company's assets and liabilities. In keeping with international recommendations, the criteria of subtracting assets which do not have a clear realization value (as is presently the case for the purposes of net capital) will be maintained.
- d) Although determining capital for purposes of meeting other non-accounting requirements is feasible, it is desirable that both aspects coincide in order for the accounting capital to be consistent with that considered for the purpose of observing capital requirements. In keeping with the same and considering IASB and IAIS recommendations on the matter, in the future the SVS considers moving towards an accounting system for insurers based on the concepts of fair value for assets and economic value or

market consistent value for liabilities, seeking to make the determination of capital equivalent for the purpose of solvency standard observance, with the accounting capital reported in the financial statements.

- e) The model will consider a standard methodology for determining risk-based capital or solvency to be issued by the SVS and the possibility of insurers which meet certain requirements being able to use internal models which have been previously approved by the SVS. The standard model being considered for introduction is a formula-type model with factors that apply for certain balance sheet amounts or risk exposure amounts (for example: amounts insured by some kinds of insurance policies) similar to those used in Canada and the USA. The possibility of incorporating scenario analysis for some kinds of specific risks is also being analyzed, such as for interest rates or reinvestment risk.

New Investment System

- 6.13 As was indicated in foregoing number 3, an important component of the present solvency supervision system is the regulation of insurers investment by means of defining eligible assets to back technical reserves and risk capital as well as the establishment of diversification margins and limits which restrict amounts which can be invested into certain types of securities and issuers.
- 6.14 Formerly established investment regulation models for restrictions and limits do not adequately represent investment portfolio risk exposure as a whole nor the same related to a company's liabilities. This system may be relevant for a supervision model where solvency capital required does not incorporate risks stemming from assets, or in other words, the same is not sensitive to exposure to the risks that every company faces. Under the new supervision focus, asset risks are incorporated into the capital requirement and therefore, companies which have high exposure to these risks, such as credit or market risks, must have a higher level of capital in order to compensate for said exposure.
- 6.15 The capital requirement may also be complemented by financial regulation which precisely measures some relevant risks of assets for certain insurers. Thus, such as the case of reinvestment risk for insurers who sell life annuities, tests which measure matching and incorporate scenario analysis have proven to be more suitable for capturing this kind of risk than the prior establishment of asset investment limitations. In our country, matching regulation and the recently-issued asset sufficiency test (AST), which enforces penalties in terms of additional technical reserves in the case of companies with high exposure to reinvestment risk, have been very effective in terms of capturing and limiting this risk. Another example of the same is value at risk (VaR) regulation which aims to measure an investment portfolio's market risk.

- 6.16 The new risk-based solvency supervision system includes a level 2 supervisory level which also acts as a complement to the capital requirement or to technical reserves associated to investment risk. The new model features individual investment policy analysis and requires that insurers demonstrate that their investment policies, models and risk management tools are proper and coherent with their liability profiles.
- 6.17 In other words, the new model contemplates investment strategy and ALM (asset liabilities management) as a relevant factor for an insurer's risk analysis, which enables limiting of the risks stemming from its investment portfolio, considering its obligation structure for policy holders. In this aspect, the SVS aims to issue general regulations establishing asset portfolio administration principles as guidelines or good practices which will establish the minimum parameters to be considered when it comes to assessing risk stemming from investments which affect insurers.
- 6.18 The new model features asset valuation at economic or market value. To the extent that this asset value is as close as possible to the value at which the company can sell or transfer the same to a third party, which is to say that there is a clear asset realization value, it becomes less necessary to previously discard certain types of assets or investments from the company. In this sense, it is possible to review the concept of investment which is representative of technical reserves and risk capital contemplated by present legislation.
- 6.19 In summary, considering the fact that the system will take on investment risk by means of an increased capital requirement or eventually increased technical reserves, there will be an assets valuation system at market value and that the model will feature a second supervision pillar with intensive risk analysis for investments as well as risk management policies, tools and ALM for insurers. The present system which does not allow investment into certain types of assets will be reviewed along with the regulations which establish numerous investment limits and margins. In keeping with the same, the new investment regulations include:
- a) Streamlining the concept of investment representing technical reserves and risk capital, freeing up investment by insurers.
 - b) Reducing investment limits and margins, maintaining restrictions for investments which may be high risk (for example: derivatives and related investments).
 - c) Incorporation of investment risk into capital requirements.
 - d) Perfecting financial regulation in order to more precisely capture specific risks such as reinvestment and market risk.

- e) The above is complemented by the level of supervision which will have a strong attention focused on investment matters and which will consider the issuance of guidelines or good practices for asset and liabilities management (ALM).

New standards for Valuation of Assets and Liabilities

- 6.20 As previously indicated, there is widespread international consensus that for the purposes of supervision, the accounting valuation of assets and liabilities should be calculated at market value or that in the absence of liquid and deep-reaching secondary markets which enable the calculation of market prices at a value consistent with the market. This way of valuation is contemplated in the previously mentioned total balance sheet approach has been incorporated into the work of IASB and IAA and is accepted as that most recommended by IAIS. In addition, the same is explicitly recognized in the European Union's Solvency II project as the most appropriate mechanism for application.
- 6.21 IAIS has established the valuation of assets and liabilities at a market or market consistent value as an important component of its new solvency supervision approach in insurers. This concept is considered essential for the new model to be able to properly assess a company's real capital and financial status, which specifically enables assessment of insolvency risk present and the level of backup that has to be able to answer to policy holders.
- 6.22 Although in the case of assets there is generally greater information available for valuation at market value, either by taking secondary market transaction prices or using generally accepted models to valorize at an economic value based on market information, the rule is not so clear in the case of liabilities, especially when it comes to non-life insurance liabilities, given greater difficulty for assessing the value of an obligation through the use of models.
- 6.23 Assuming the concept of present value of estimated future cash-flows associated to the policy as a general rule for calculating insurance liabilities, in the case of life insurance there is a greater capacity for their projection. In keeping with the same, some life insurance products which feature savings or investment accounts have an important financial component and can be valorized similar to an asset. The same thing holds true when these feature benefits in the form of options which policy holders or beneficiaries can exercise (for example, minimum profitability or redemption). Notwithstanding, in the case of non-life insurance, the estimation of payment flows is more uncertain, given the greater volatility of estimated cash-flows which makes higher security margins necessary and these are more difficult to associate to a market parameter.
- 6.24 In IFRS 4 and the so-called "Phase II" of the project for insurance contract valuation, IASB has defined some concepts for the valuation of insurance liabilities in a manner consistent with market information. This work is being

carried out in coordination with the IAIS insurance contract sub-committee in conjunction with IAA.⁹

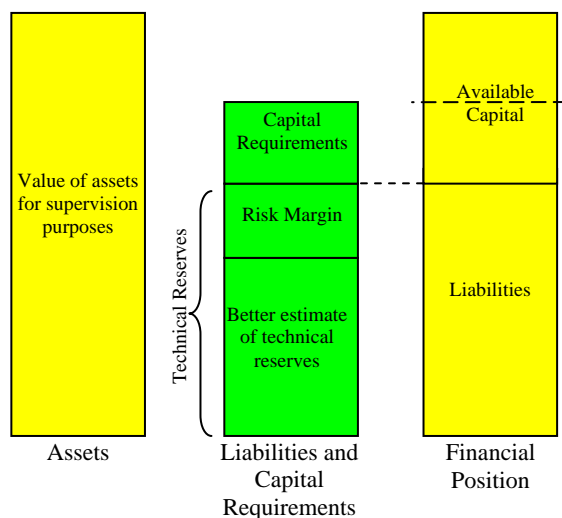
- 6.25 The manner in which liability valuation at market value is proposed is by means of the concept of technical reserves equivalent to the “best estimate” or “current estimate” of future cash-flows plus a risk margin over best or current estimate. This is to say that the concept considers a current estimate of technical reserves under technical criteria and with the available information, plus an associated risk margin considering that said estimate is not enough in that there may be future payments higher than what is statistically expected. The above is subject to a confidence level of statistics.
- 6.26 The current estimate is made based on general principles and criteria of actuarial technique considering a diversified portfolio. This initially means that for a certain type of insurance, the current estimate will depend on the risk characteristics of the portfolio evaluated and not on the particular status of the insurer which maintains the portfolio, the estimated value being the same for any company. The risk margin must be consistent with the market and this implies that the same must be equivalent to the risk margin required by another insurer in the market for the obligation derived from the insurance policy to be accepted. Given the fact that there is not secondary liability market, the value consistent with the market aims to model this risk margin on the information coming from the transfer of risk observed in the market, at the level of portfolio purchase, company buyouts and reinsurance contracts. In addition, the option of considering the "risk price" model implicit in the premiums of new business deals with similar characteristics has been proposed.
- 6.27 The concept of market consistent liability valuation allows the same technical reserve value to be assumed for any insurer. Consequently, transfer of the insurance policy (portfolio) to another insurer should not mean a change in the value of said technical reserve. This does not mean that portfolio particularities should be omitted in terms of business and underwriting policies followed by the original risk issuer, since these will affect the risk inherent in the portfolio. On the other hand, poor portfolio diversification will generate a specific risk for the insurer maintaining the same and this risk must be reflected in increased capital requirements and not in increased technical reserves. This is to say that risks that are diversifiable shall be considered in capital and not in technical reserves.
- 6.28 The risk margin for technical reserves shall therefore be associated to a market value or "risk premium" market concept, and should not be confused with solvency requirements which the authority may require, from a prudent point of view for meeting policy holder protection and market stability objectives. In this sense, the authority should contemplate an underwriting risk, but this requirement considered in the required solvency capital shall be additional to that

⁹ For further information see IAIS document: “Issues Arising as a Result of the IASB’s Insurance Contracts Project – Phase II Second Set of IAIS Observations” IAIS, May 2006.

contemplated by the market and therefore will not affect the calculation of technical reserves nor the company's accounting capital. As previously indicated, financial statements used by the authority for supervision being the same as those delivered to the public is a highly desirable objective and these should provide information which accurately represents a company's real financial status.

6.29 The following table summarizes the conceptual model IAIS is considering for insurer solvency analysis, based on the valuation of company assets and liabilities and the concept of economic or market consistent value:

Figure 3: Insurer financial status assessment¹⁰



6.30 In summary, within a minimum solvency requirement layout, the valuation of assets and liabilities at market value and calculation of the capital economic value is a key component which provides coherency for the model. According to international recommendations, it is widely accepted that for the purpose of solvency assessment of an insurer's effective financial status requires that the system consider realistic or economic values. Likewise, from an accounting standard point of view, there are joint efforts between IASB, IAIS and IAA aiming to generate a new standard for insurance liability accounting at a market consistent value which is to be issued within the coming year. The objective addressed is to match the accounting standard with the supervising authority's requirement in order to avoid the existence of regulatory financial statements in a country different from the financial statements used by companies to inform shareholders and the general public.

¹⁰ Source: IAIS - Cornerstones for the Formulation of Regulatory Financial Requirements, (October 2005)

6.31 In Chile, given the fact that there are only regulatory financial statements, it is the intent of the SVS that these be drawn up from an economic basis which captures market value or value consistent with the asset and liability market and that these be in accordance with international accounting standards. This aspect is an important component of the new model. Notwithstanding the above, this is a matter which shall be assessed in further detail in the future, once a new international accounting standard has been issued and detailed assessment of the impact of this standard in our market has been carried out. The SVS therefore considers making headway in terms of the adoption of international accounting standards for insurance as an important part of its new solvency model, modifying its present regulation in the sense of moving towards market valuation of assets and liabilities.

7. SUPERVISORY LEVEL: RISK ASSESSMENT PROCESS AND MITIGATIONS ACTIVITIES

- 7.1 As previously indicated, the new supervision approach consists of two levels, a regulatory level featuring minimum solvency requirements of a more quantitative nature which we could call more “standard” (except for the authorization of internal models) and a more individual supervisory level based on the analysis of risks taken on by each insurer and assessment of administration carried out by a company with a more qualitative and sound profile drawn up by the authority. The level of minimum solvency requirements must be understood as the platform for carrying out the activity in a prudent regulation layout, but there are a series of reasons which make a complementary supervisory level essential, based on individual risk assessment and administration of the same by each insurer.
- 7.2 Firstly, the minimum solvency requirement model does not consider all risks which may affect an insurer. There are other risks which by nature are difficult to quantify and reflect in an capital or technical reserve requirement model, such as liquidity, moral, reputation or strategic risks. In addition, there is a series of risk-related aspects such as concentration of risks and dependence or covariance which are difficult to include into a basic model.
- 7.3 Capital requirements are based on a simplified standard model which does not always properly reflect the optimum capital associated to the risks of each insurer. The company should have its own model to determine the level of optimum capital for its specific situation, more precisely reflecting the risks of the same. The minimum solvency regulatory model is a simplification of reality which in no case replaces the necessary risk analysis from insurers and regulators. The supervising authority must be able to require an capital level higher than the minimum requirement in situations in which the standard model does not properly cover the specific risk status of a company.
- 7.4 The minimum solvency requirement model provides an approximation to a insurer's present risk status of a company. There is a series of factors which may identify a negative trend for the company or a weakness which has not yet been reflected in its technical or financial information or in the capital requirement. The authority's objective is to act proactively, preparing for insurer financial weakness situations. In keeping with the same, the authority's supervision activities are focused on mitigating risks before these materialize and are reflected, for example, by an important capital loss for the company.
- 7.5 A key aspect for risk assessment at any company is the company management analysis including its internal control and supervision mechanisms. The company must be able to handle proper monitoring, risk assessment and reduction systems proportionate to the size and complexity of its business. This is a fundamental aspect for all international recommendations regarding supervision of the financial industry in general and the insurance industry specifically and this is presently one of the main attention points for regulators around the world.

Assessment of the quality of risk management carried out by the company is eminently qualitative and is therefore not reflected in the capital requirement. Therefore this must be considered separately within the authority's supervision level.

- 7.6 A very relevant factor in assessment of a company's risk management quality is the evaluation of how its corporate governance works. Therefore this aspect is considered to be a relevant part of the model and corporate governance principles and good practices will be developed for analysis of the same, which will act as benchmarks for evaluation.
- 7.7 On the other hand, and considering international recommendations in this area, disclosure and market conduct will be factors to be analyzed as part of the assessment of a company's management quality. For this purpose, the SVS shall promote the provision of in-depth public information by insurers, especially that related with its solvency and risk management and the same will create levels to ensure proper observance of minimum market conduct standards.

Principles of the New Supervision Approach

- 7.8 In keeping with the above, the SVS has developed a new focus for supervising insurers based on the analysis of risks for these entities and administration of the same, representing Level II supervision in the new risk-based supervision model for the insurance market. This new approach has the following principles and basic objectives:
- a) **Emphasis on risk management.** Risks are evaluated with special emphasis on how a company manages the same. In this sense, more than having a tool for the SVS to measure risk, the emphasis is on determining whether the insurer has proper risk management and control mechanisms for these to be properly applied. In this sense the intervention measures adopted by the authority directly focus on the insurer improving or strengthening its risk control and management systems or limiting its exposure to the same.
 - b) **Flexible analysis with qualitative emphasis.** Risk management assessment is flexible, in that the same does not require a specific model or methodology. This implies recognizing that there is no single method for managing risk and that the type, degree of development or complexity of internal risk management systems and tools is going to depend on the type and level of operations and business carried out by a company. The above entails that risk assessment is largely based on evaluator judgment, based on general principles and criteria as well as the development of benchmarks for risk types and entities, as opposed to a specific and quantitative methodology.

- c) **Knowledge of the business and relationship with the company.** Risk assessment is carried out based on supervisors having a wide-ranging knowledge of the insurance business and its risks. In addition, a close relationship must exist with the supervised entity in order for the supervisor to be aware of the company's business and operations, its operational systems, governance and administration structure and in general all relevant aspects to be able to assess the company's solvency. The above means that it is desirable to maintain a relationship featuring greater cooperation with the supervised entity. The SVS shall establish and notify company administration as to assessment results, which shall not be made public and shall make recommendations in order to strengthen risk management systems.
- d) **The role of external auditors and actuaries.** A key aspect of the model is a higher level of reliance on the work of the companies' external auditors, especially when it comes to auditing financial statements, concentrating supervision resources on risk issues relevant for market solvency. As for company actuaries, the model gives the same an essential role in terms of calculating liabilities and management of underwriting or insurance risk. The objective, as in the case of external auditors, is that companies should employ technically and ethically suitable professionals who take on greater responsibility for the company's actuary management, especially regarding the calculation of technical reserves, in order to release SVS supervision resources.
- e) **Roles of the board of directors and corporate governance.** The main parties responsible for proper risk management of insurance companies are their managers, represented by the company's board of directors. The board of directors has an essential role and should actively participate in determining general policies and guidelines which steer the company's actions and exercising true and effective control over the levels managed by the same, adopting all necessary measures to ensure that the company's operations fall under the guidelines determined. The principles of independence, experience and technical capacity followed by the board of directors in order to carry out their work, together with the specific corporate governance mechanisms within the insurance company and the effectiveness of supervision and control performed by the board of directors shall be considered by the authority when it comes to analyzing the quality of this company's risk management.
- f) **Self-regulation.** In keeping with the above, there is an important space for the self-regulation of insurers. The directors and management of the insurance company are responsible for proper general management of the company and for establishing the supervision, evaluation and mitigation mechanisms of the risks they face. Likewise, external auditors shall verify and certify the reasonability of the financial statements of the insurance companies and the actuaries of the companies, the proper establishing of

the technical reserves. As part of this scheme, the authority must be present, while following up closely the operation of the companies and the system as a whole, monitoring their risks and adopting the measures that tend to avoid high risk conditions and potential insolvency while promoting and strengthening and adequate management of risks in insurers.

Structure of the new supervision approach

7.9 While taking these principles into account, the SVS has designed a process for the risk assessment of insurers which includes three stages:

- a) **Initial risks analysis.** This shall take place based on ratios or financial and technical indicators, which shall allow with a simplified methodology, to have an initial basic risk analysis of the company. This ratios and indicators based analysis system which at international levels is usually know as “early warning indicators system” or also as “baseline” supervision, shall be applied periodically to all insurers of the market.

When the result of this analysis is taken into account, as well as an analysis of the impact in the market of an eventual insolvency of the company, measured by function of variables such as the type of insurance it offers, profile and number of policy holders and the amount of investments they administer, the SVS shall establish priority for the application of a more in depth risk analysis methodology which is considered as a second stage of the new supervision process.

- b) **Risk Matrix.** The analysis of risks by insurers will be carried out based on the risk matrix, which is described in the following number, whose objective is to establish a common and structured methodology for the analysis of risks in such companies. The risk matrix takes into account a separate analysis of the three main factors which define the solvency status of a insurer: the inherent risk that it faces as part of its main activities and business, the management and control that it applies to these risks and its capital strength and profits generation, in order to finally obtain a single risk note for the company based on the combination of these factors.
- c) **Risk Mitigation Activities.** Starting from the results of the risk analysis, and after analyzing such results with company’s management, the SVS shall adopt risk mitigation measures based on the “action guide of the SVS” which shall establish the feasible actions to follow according to the different risk levels detected at the insurer. As an example, the Canadian model takes into account 5 action levels, starting off from a “0 level”, which corresponds to a low risk company which does not require special supervision activities that are different than the day to day up to a level 4 which corresponds to a high risk level, and one of insolvency or imminent

insolvency”, which makes an active and timely intervention by the authority and the company’s management necessary.¹¹

The SVS shall analyze more in depth the levels of action and shall publish on a timely fashion its action guide with the structure of levels that it will adopt and the detail of mitigation activities that it will consider for each level.

¹¹ See OSFI document “Guide to Intervention for Federal Financial Institutions”.

8. RISK MATRIX

8.1 The risk analysis process of a insurer is carried out based on the following risk matrix:

Figure 4. Risk Matrix

Significant Activities	Materiality	Inherent Risks	Risk Management Quality		Net Risk	Direction of Risk
Activity 1 Activity 2 Activity 3 etc....		<ul style="list-style-type: none"> ▪ Credit ▪ Market ▪ Liquidity ▪ Insurance (underwriting) ▪ Operational and Technological ▪ Legal and Regulatory ▪ Strategic 	Operational Management	<ul style="list-style-type: none"> ▪ Board Oversight ▪ Senior Management ▪ Risk Management ▪ Internal Audit ▪ Compliance ▪ Financial Analysis 		
General Classification						

Capital		Earnings			
Composite Rating		Direction of Risk		Time Frame	

8.2 The risk analysis process starts with the identification of the relevant activities of an institution. The net risk in such activities is a function of an added inherent risk which is compensated by the added quality of the risk management. The analysis is shown through the following equation:

Inherent Risk Mitigated by Quality of Risk Management = Net Risk
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Significant Activities and Inherent Risk

8.3 Significant activities include any significant unit, process or line of business. The relevant activities are identified from different sources among them the organizational chart, strategic business plans, capital distribution and internal and external financial reports of the institutions. Examples of significant activities are lines of business with a high participation in the company's income such as life

annuity in life insurance companies and great impact companies in terms of risks such as underwriting risks and reinsurance in non-life insurance companies.

- 8.4 The inherent risk is intrinsic in the business activity and it surfaces as a result of exposure and uncertainty of potential future events. The inherent risk is analyzed considering the probability and the potential dimension of an adverse impact on the capital or earnings of an institution. It is essential to have an accurate understanding of the environment within which the institution operates and its business activities in order to identify and analyze effectively the inherent risk of such activities.
- 8.5 The SVS is considering the following categories of inherent risks:
- Credit risk
 - Market risk
 - Liquidity risk
 - Insurance (underwriting)
 - Operational and technological risk
 - Legal and regulatory risk, and
 - Strategic risk
- 8.6 Once the relevant activities are identified, the level of each inherent risk to such activities is analyzed as low, moderate, better than average or high. This analysis is carried out without considering the impact of the risk mitigation through the risk management controls and processes of the company. The quality of these factors is considered separately and combined with the inherent risk assessment to determine the net risk of each activity.

Risk Management Quality

- 8.7 The quality of risk management is evaluated for each relevant activity under two perspectives; on one hand the “Operational Management” which is responsible for the “day to day” management of the company, and on the other hand, the “Control and Supervision Functions” that the company develops.
- 8.8 The Operational Management, in a specific activity, guarantees that the policies, processes, control systems and levels of experience and personnel are plenty and effective in the offset of the inherent risk to the activity. The structure and organizational controls must be effective in the prevention and detection of relevant errors or irregularities in a timely fashion.
- 8.9 In reference to the Control and Supervision Functions of the risk management, there are six identified in the model, they are the following: Financial Analysis, Compliance, Internal Audit, Risk Management, Senior Management and Board Oversight. The presence and nature of these functions vary according to the size

and complexity of the institution. The SVS is analyzing the specific manner that these functions will be applied to the Chilean market. The existence of these functions within the company does not necessarily require a formal structure or a specific unit that actually carries out the function. However, it is also feasible that some of these functions are not present in some entities that are small in size with a simple business structure.

- 8.10 In any event, as it has been previously pointed out, a factor that will be emphasized in the analysis of the company's risk management is the quality of its corporate governance structure and the role and participation of the Board of Directors in the operation of the insurance company.
- 8.11 The quality of the risk management processes for a relevant activity is an evaluation of the current practices in each risk management control function for this activity. The quality of the risk management processes is evaluated as strong, acceptable or weak.

Net Risk and Risk Direction

- 8.12 The net risk for each relevant activity is a function of the aggregate level of inherent risk offset by the aggregate quality of the risk management. The aggregate levels are based on judgments that take into account all the inherent risks ratings and risk management quality for the activity. For example; the investment activity of an institution may be evaluated with a high aggregate level of inherent risk that surfaces from a combination of high credit risk, high market risk and high liquidity risk. However, the net risk for the activity may be rated as moderate due to the mitigation as a result of a strong aggregate quality of risk management, which in turn is the result of a strong operational management, internal audit, risk management and Board Oversight.
- 8.13 The company's aggregate net risk shall depend on the combination of the inherent risk level for the different activities and the quality of the company's risk management while taking into account the relative importance of the activities. The following table shows an example (this matter is still not defined by the SVS) of the application of the aggregate net risk:

Aggregate Quality of Risk Management for Significant Activity	Aggregate Level of Inherent Risk for Significant Activity		
	Low	Moderate	High

	Net Risk Assessment		
Strong	Low	Low	Moderate
Acceptable	Low	Moderate	High
Weak	Moderate	High	High

8.14 The assessments include a determination of the direction of the net risk in process. The direction of the net risk is evaluated as decreasing, stable, or increasing within a time outlook for the institution. For example, the time outlook for a large size and complex insurer may need to be much larger than that for a smaller institution. The time outlook considered shall be indicated in each case.

Final Evaluation: Capital and Profits

8.15 The Risk Matrix includes an evaluation of the capital strength and the generation of earnings combined with the analysis of the net risk, as a result of the final evaluation of the company, called Composite Risk. The final evaluation considers a review of the quality, quantity and availability of the capital generated internally as well as externally.

8.16 The Risk Matrix is a convenient tool in order to summarize the conclusions of the risk analysis. This must be backed by the documentation of the analysis and a justified explanation of the conclusions. For such purpose, a “Summary of the Risk Assessment” (RER) is written, which shall point out the current financial condition of an institution, its prospective risk profile, key subjects and findings of previous supervisions.

8.17 The RER is the point of start for the planning of the actions to follow by the SVS. As of this report, the SVS shall schedule visits and supervision actions in reference to the factors detected as weak, it shall carry out such actions, document the final findings and once the initial findings are ratified, it shall present the conditions before the company’s management as well as the recommendations, in order for it to establish an appropriate risk mitigation

schedule. Finally, a subsequent follow up of the full compliance of the mitigation schedule takes place and the RER is updated.

- 8.18 The process to apply the risk analysis methodology, based on the matrix described in this number, requires an adequate structure which ensures consistency in the analysis applied to the different companies. For this purpose, the development of the criteria or “benchmarks” which provide a common base for the analysis of the supervisors and a “quality control” mechanism within the SVS is primordial, whereby it shall allow validating the analysis carried out as well as its consistency at market level.

9. CONCLUSIONS

- 9.1 The SVS is currently working on the implementation process of the new solvency regulatory and supervision model of the Chilean insurance industry. This new model shall have two levels of action. The first level is the regulatory level, which implies to modify the current basic solvency parameters, while taking into account capital requirements, investment systems and new regulations on accounting and valuation of assets and liabilities. The second level is the supervisory actions that the SVS will carry out, which will be focused on the individual assessment of the insurers' risks, focused on risk management by the company.
- 9.2 The implementation process shall be carried out in part with the support of external advisors. Periodic consultations to the market will take place in order to gather its opinion, as well as diverse coordination and broadcast activities with the companies, in order to carry out the process in a transparent and informed manner.
- 9.3 For the development of the first level of minimum solvency requirements, a proposal will be developed which shall modify the DFL N° 251 (Insurance Law) for such cases related to mainly risk capital and investment systems.
- 9.4 The application of the second level of supervision, without detriment to the legal details that may be required in the future for an integral application of the new model, does not require a legal modification. In order to carry out this process, the SVS has created an "Implementation Group" in the Insurance Area, which is made up of the Deputy Chairman of Insurance and the Directors and Deputy Directors of the Financial, Technical and Regulatory Control divisions of such area. Furthermore, it has created diverse working groups in order to develop the different aspects involved in the implementation process. Some of the subjects that are being covered are:
- Implementation of the Risk Matrix
 - Definition of "Benchmarks" and general criteria for the evaluation
 - Strengthening the work of external auditors and companies' actuaries (reliance)
 - Strengthening companies' corporate governance
 - Documentation and support systems for the evaluation
 - SVS training
 - Analysis of SVS organizational structure
- 9.5 Subsequently, the insurance market will be integrated to this process, whereby their participation is considered to be of great importance in order to reach the objectives set out with the introduction of the new model.
- 9.6 The SVS shall issue a document called "Roadmap", specifying the activities and terms considered for the start up of the new supervision model.