Superintendency of Banks and Financial Institutions
Chile

ROAD MAP GUIDELINES: TRANSITION TO BASEL II

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INTRODUCTION

At the end of June 2004, the Basel Committee on Banking Supervision published the document "International Convergence of Capital Measurement and Capital Standards" which, for the sake of simplicity, will be referred to here as the New Capital Framework or Basel II. This Framework will come into force in 2007, replacing the Basel Committee's 1988 Capital Accord, known as Basel I.

A recent assessment by the International Monetary Fund and the World Bank found that Chile complies with more than 80% of the Basel Committee's Principles for Effective Banking Supervision. A summary of this assessment can be found in the Basel II section of the website of the Superintendency of Banks and Financial Institutions (SBIF). Chile's level of compliance with these principles constitutes a solid foundation for the banking industry's transition to the New Capital Framework.

Basel II should rapidly become an international standard for bank management and supervision. Its implementation in Chile will, therefore, be a positive factor for assessments of bank solvency and soundness by external risk classification agencies, capital markets, domestic and overseas institutional investors, and multilateral financial organisations.

1. Pillars of the New Capital Framework.

The New Capital Framework comprises three "pillars" that are complementary, integrated and mutually reinforcing. They seek to measure, manage and supervise bank risk and to establish adequate capital safeguards. These pillars are:

- Pillar I: Minimum capital requirements
- Pillar II: Supervisory review process
- Pillar III: Market discipline.

Pillar I updates Basel I and extends its scope, devoting considerable attention to credit risk and, for the first time, defining and including operational risk. Pillar II refers mainly to the supervision of capital adequacy and aims to ensure that banks' regulatory capital is in line with their economic capital. Pillar III highlights the role of financial transparency in enabling "market discipline" to complement the role of supervisory institutions in monitoring bank solvency.

2. Scope of the Road Map Guidelines.

The SBIF proposes to divide the implementation of the New Capital Framework in Chile's banking industry into two major stages. These Guidelines refer to the first of these stages, comprising the transition to the standardised approaches to credit and operational risks and, in the case of market risk, to the use of the standardised approach and of internal value-at-risk models. In a subsequent stage, not covered here,

approaches based on internal models will be addressed for the assessment of credit and operational risks.

Following the present introduction, this document is divided into four sections, of which the first three deal individually with each of the three pillars of the New Capital Framework. Chile's General Bank Law (LGB) is important in the supervision of capital adequacy risks and the disclosure of information about the financial situation of banks. It refers principally to banks that are subject to special Basel Ratios of more than 8%, to assessment of the management and solvency of banks, and to the periodic publication of information on provisions, capital and Basel Ratios. These points are discussed under Pillars II and III of this Road Map.

The final section of this document refers to the conditions, sequence and timing of the adoption of risk approaches in the banking industry's transition to Basel II. During this transition, the regulatory authorities' existing powers will be used within a framework of understanding and co-operation with the banking industry.

These Guidelines draw on the working document "The New Capital Framework: Concepts, Definitions and Proposals for a Road Map". This latter document contains additional conceptual and methodological information about risks, provisions and capital, as well as on the use of the Basel Ratio to determine and assess bank capital. Both this document and the present Guidelines are available for comments on the SBIF's website.

A. FIRST PILLAR: MINIMUM CAPITAL REQUIREMENTS

Effective capital as defined by the LGB is comparable to the three tranches - Tiers I, II and III - into which effective capital is divided under the Basel Capital Accord. Basic capital, as defined in the LGB, is equivalent to Tier I capital, while subordinate bonds and other components are equivalent to Tier II. However, Chile's banking regulation does not at present define the components of capital that would be equivalent to Tier III capital.

Pillar I of the New Capital Framework maintains the minimum 8% Basel Ratio and the corresponding capital requirements for covering unexpected losses that may arise in the course of a bank's business. Under this Road Map, Pillar II deals with capital requirements to cover significant unexpected losses caused by unusual or unforeseeable events, such as shocks in the banks' economic and financial operating environment, or serious failures of their operating systems.

1. Provisions.

The loss risks that banks face can be divided into expected and unexpected losses. According to convention, in the case of credit risk, expected losses are covered using provisions, and unexpected losses with capital.

Basel II envisages three types of provisions against the risk of losses on a bank's loan and investment portfolio: general, specific and portfolio-specific general provisions. These are similar, respectively, to provisions for loans to normal-risk borrowers and to borrowers with deteriorated loans, and to additional provisions as defined in the new provisions regime introduced by the SBIF in January 2004.

Portfolio-specific general provisions have the same purpose as additional provisions, although the former include country risk. Both are designed to safeguard against the risks of a bank's loan and investment portfolio in the case of an adverse macroeconomic outlook or conditions. These are sometimes very difficult to foresee and can affect a particular sector, industry, or group of borrowers.

Under the standardised approach to credit risk, the limit on the provisions that can form part of a bank's Tier II capital continues to be 1.25% of credit risk-weighted assets. Additional provisions can be interpreted as quasi-capital since they include a component of capital reserve and could, up to this limit, form part of a bank's effective capital.

Chapter VII of the LGB, referring to the relation between the asset and liability operations of financial institutions, establishes that the assets to be credit risk-weighted are net of required provisions, including both general and specific provisions. This practice is maintained in the present Road Map since both correspond to expected losses.

Subsequent to this document, a proposal on credit-risk mitigants, including physical assets and goods, will be presented in order to adapt Basel II recommendations on guarantees and collateral to the characteristics of the country's credit markets.

2. Standardised approach to credit risk.

The provisions regime based on expected losses, introduced in January 2004, establishes that a period of consolidation is required for the design and validation of models based on probabilities of default and other advanced credit-risk concepts. Advanced models of provisions and capital require reliable data about borrowers and their payment behaviour in different segments of the credit market over a period of at least five years, including the effects of a shock in the banks' economic and financial operating environment, such as that which occurred at the end of the 1990s.

These arguments justify the main guideline of this Road Map as regards minimum capital requirements for credit risk. In order to establish a firm starting point, the banks will, in the first stage of Basel II implementation, have to determine these requirements using the standardised approach to credit risk.

1. Capital for credit risk in the standardised approach.

Under the standardised approach, bank assets are subject to pre-determined asset risk weights, based on external ratings by accredited risk classification agencies. This

applies principally to loans or credits, bonds and other instruments issued by sovereign and corporate borrowers and by banks.

As in the First Capital Accord, this approach also envisages credit-risk weights for loans to borrowers not subject to external risk classification. These weights, determined by the Basel Committee on Banking Supervision, are considered a minimum, and can be tied to certain conditions and set at a higher level at the discretion of national regulatory authorities.

i) Credit-risk weights in Basel I and II.

Figure N° 1 summarises credit-risk weights under both Basel I and Basel II for different banking-book assets. These weights refer to both Basel I and Basel II.

The first column sets out Basel I risk weights as applied to Chile's banking industry. The only differences as regards risk weights occur in the case of residential mortgage loans and residential leasing contracts, for which Basel I established a weight of 50% while Chilean regulation set a figure of 60%.

The second column shows Basel II weights, divided into assets whose weight depends on ratings by risk classification agencies and those whose weight was established by the Basel Committee on Banking Supervision.

The third column sets out credit-risk ratings for banking-book assets as they could apply to Chile's banking industry. Weights in bold letters differ from those established under Basel II and apply mainly to residential mortgage loans and retail loans, including those to small and medium-sized enterprises, which are discussed separately below.

Figure Nº 1

Credit-risk weights under Basel I and the Basel II standardised approach.

Exposure	**Basel I Chile**	**Basel II**	**Basel II Chile**
▪ Cash or deposits at Chilean Central Bank ▪ Sight deposits at banks established in Chile ▪ Sight deposits abroad providing the recipient bank is classified in the highest risk category (A -) ▪ Instruments issued or guaranteed by Chilean Central Bank	0% 0% 0% 0%	0% 0% 20% 0%	0% 0% 20% 0%
▪ Instruments issued or guaranteed by the Chilean government ▪ Instruments in country-of-origin currency, issued or guaranteed by states or central banks, providing these instruments are classified in the highest risk category (A-) ▪ Instruments in country-of-origin currency, issued or guaranteed by states or central banks, in a category below A-	10% 10% 100%	10% rating rating	10% rating rating
▪ Inter-bank operations between banks established in Chile, including certificates of deposit, investments and repos ▪ Certificates of deposit in overseas banks with a maturity of not more than 180 days and a classification of not less than A- ▪ Letters of credit issued by overseas banks classified in the highest risk category (including commitments)	20% 20% 20%	20% rating 20%	20% rating 20%
▪ Residential mortgage loans ▪ Residential leasing contracts ▪ Commitments including performance bonds, avals and stand-by letters of credit ▪ Certificates of deposit in overseas banks with a maturity of more than 180 days and a classification of not less than A-	60% [1] 60% [1] 60% 60%	35% 35% 50% rating	**50%** **50%** 50% rating
▪ Claims on banks - Foreign currency - Domestic currency	 100% 20%	 rating rating	 rating 20%
▪ Claims on corporates - Foreign currency - Domestic currency	 100% 100%	 rating rating	 rating rating
▪ Claims included in retail portfolio - Domestic currency	 100%	 75%	 **90-100%**
▪ Claims secured by commercial real estate	100%	100%	100%
▪ Other assets not listed above	100%	100%	100%

[1] The Basel Committee risk weight is 50%.

ii) Assets subject to external risk classification.

The SBIF will review the conditions of admission to its register of risk classification agencies in order to bring them into line with the process established under Basel II.

The SBIF proposes to adhere to one of the Basel II criteria on the risk classification of issuers of debt obligations and other securities. This establishes that, when an issuer is required to have two ratings and these differ, the higher level of risk will apply. This criterion is already in force under local regulation on risk classification.

For the classification of debt obligations and other securities denominated in different currencies, the general rule under Basel II is that, if ratings are available for assets in domestic currency, these are used to risk weight loans and investments in domestic currency. Similarly, if ratings are available for assets in foreign currency, these are used to risk weight positions in foreign currency.

After the corresponding assessment, the SBIF will take a decision on the application of these principles to the risk classification of debt obligations and other securities that are denominated in foreign currency and are issued and placed on the domestic market.

Figure N° 2 sets out bank borrower risk weights for loans or credits and for bonds or securities held on the banking book that have been rated by accredited risk classification agencies. In this Figure and in the following rating of loan securitisations, the Standards & Poor's notation is used to identify different risk categories.

This Figure shows a substantial reduction in the credit-risk weights of issuers with a good risk rating. Corporate exposures classified in the range of AAA to AA-, for example, have a risk weight of 20%, as compared to 100% under Basel I.

iii) Credit-risk weights for retail loans.

The SBIF will analyse the criteria for classifying firms according to their size within the Chilean economy and the credit-risk weights of loans to small and medium-sized enterprises in order to determine whether this portfolio, if adequately diversified, would merit a weight of 90%, rather than 100%. It will also look at whether the risk weight for residential mortgages could be reduced to 50%, down from the 60% currently established by the LGB.

Figure N° 2

Credit-risk weights of rated assets in the standardised approach

1. Claims on sovereigns

Credit Assessment	AAA to AA-	A+ to A-	BBB+ to BBB-	BB+ to B-	Below B-	Unrated
Risk Weight	0%	20%	50%	100%	150%	100%

2. Claims on banks *

Credit Assessment	AAA to AA-	A+ to A-	BBB+ to BBB-	BB+ to B-	Below B-	Unrated
Risk Weight	20%	50%	50%	100%	150%	50%
Short-term Risk Weight	20%	20%	20%	50%	150%	20%

3. Claims on corporates

Credit Assessment	AAA to AA-	A+ to A-	BBB+ to BB-	Below BB-	Unrated
Risk Weight	20%	50%	100%	150%	100%

* Option 2 in the standardised approach.

iv) Securitisation of loans.

Under Basel II, banks must maintain capital for all their positions in securitised assets. As investors in long or short-term securitisation positions, they must, under the standardised approach, multiply these positions by the weights that correspond to their risk ratings in order to establish the respective credit risk-weighted assets:

Long-term rating category

External Credit Assessment	AAA to AA-	A+ to A-	BBB+ to BBB-	BB+ to BB-	B+ and below or unrated
Risk Weight	20%	50%	100%	350%	Capital deduction

Short-term rating category

External Credit Assessment	A-1/P-1	A-2/P-2	A-3/P-3	All other ratings or unrated
Risk Weight	20%	50%	100%	Capital deduction

Securitisations with the risk ratings set out above and positions in unrated securitised assets result in capital deductions. When a bank has to make such a deduction, it will subtract 50% from each of Tiers I and II of its effective capital.

As securitisers, banks obtaining a risk rating that is below investment grade BBB-, which maintain the securitisations of these operations as part of their assets, must subtract these positions from their effective capital.

The SBIF will review current banking regulation on securitisation in order to bring it into line with Basel II recommendations.

4. Capital for market risk.

The 1996 Market Risk Amendment to Basel I identifies two approaches to the measurement of market risk: a standardised approach and internal value-at-risk models.

i) Standardised approach.

Under the standardised approach, the risks of loss of trading-book assets in the event of adverse movements in the interest rate or exchange rates are estimated separately. These risks are then added together in order to calculate overall market risk, without compensating for positions of an opposing sign. Positions in shares and commodities are not considered under the LGB.

ii) Internal value-at-risk models.

Internal value-at-risk models can play an important role in those banks in which trading-book operations make a considerable contribution to gross margins.

The adoption of these models is conditional on compliance with a number of qualitative and quantitative standards, including backtesting, and requires authorisation by the SBIF.

iii) Norm on market risk.

The Chilean Central Bank and the SBIF have prepared a joint norm on market risk, which, in general terms, reflects the 1996 Amendment. However, in order to submit market risk to banking supervision, it uses the concept of limit on capital, set out in the last section of this document referring to the sequence and timing of the transition to the first stage of Basel II.

5. Capital for operational risk in the alternative standardised approach.

Commercial and retail banking generally account for more than 90% of the gross margins of banks that operate in Chile. This justifies the exercise of the right to national discretion by the supervisory authority, allowing the banks to opt for the alternative standardised approach which is also envisaged in Basel II.

If “Cc” is a bank’s average commercial loan balance over the last three years, “Cd” is its average retail loan balance over the same period and “MBo” is the average contribution of other lines of business to its gross margin over that period, the capital charge, or “RO”, in the simplest formula of the alternative standardised approach is:

$$RO = 0.15*3.5\%*(Cc + Cd) + 0.18*MBo \qquad (A\text{-}1)$$

6. Minimum capital requirements in Pillar I.

In Chile, there is a predominance of banks that are subject to a capital of not less than 800,000 Unidades de Fomento (an index-linked currency unit; as of March 2005, 1 Unidad de Fomento = US$30) and a minimum Basel Ratio of 8%. Once the LGB has been amended to take account of market and operational risks, a bank in this category will be subject to the following minimum capital requirements under Pillar I:

$$Cm = 0.08*APRC + RM + RO \qquad Cm \geq UF\ 800{,}000 \qquad (A\text{-}2)$$

These requirements are a minimum since they do not include capital for Pillar II risks, which may result in significant unexpected losses due to sporadic or unpredictable events.

B. SECOND PILLAR: SUPERVISORY REVIEW PROCESS.

Under the New Capital Framework, a bank's directors and senior management have great responsibility in implementing internal procedures for assessing capital holdings and goals in line with the risk profile of its business and its internal management and control systems.

1. Basic principles of risk-based bank supervision.

Pillar II sets out four basic principles of risk-based supervision:

Principle 1: Banks should have a process for assessing their overall capital adequacy in relation to their risk profile and a strategy for maintaining their capital levels.

Principle 2: Supervisors should review and evaluate banks' internal capital adequacy assessments and strategies, as well as their ability to monitor and ensure their compliance with regulatory capital ratios. Supervisors should take appropriate supervisory action if they are not satisfied with the result of this process.

Principle 3: Supervisors should expect banks to operate above the minimum regulatory capital ratios and should have the ability to require banks to hold capital in excess of the minimum.

Principle 4: Supervisors should seek to intervene at an early stage to prevent capital from falling below the minimum levels required to support the risk characteristics of a particular bank and should require rapid remedial action if capital is not maintained or restored.

2. Incorporation of capital, receipt of deposits and supervisory responsibilities.

Under the LGB, all banks operating in Chile must incorporate capital as part of a uniform set of requirements that is independent of whether they are holding companies, branches or subsidiaries and of the country of residence of the controlling companies or individuals.

This capital enables a bank to receive deposits in the domestic market. Certificates of deposit in all banks are protected by a state guarantee as laid down in Section 6 of Chapter XV of the LGB. Similarly, if a bank is forced into liquidation, the total payment of its current account and sight deposits is covered as laid down in Article 132 of this Law.

All banks that operate in Chile, whatever their controllers' home country, must submit to the inspection and supervision powers with which the SBIF is endowed under Section 2 of Chapter I of the LGB. These powers are designed to protect depositors and other creditors and the public interest, and apply equally to all banks.

As a result, although Chile hosts a number of institutions controlled by foreign banks, the SBIF will continue to exercise full supervision. However, the SBIF is willing to collaborate with the supervisory authorities and headquarters of these banks in their home countries on the basis of a memorandum of understanding or other similar arrangements.

3. Capital requirements in banks subject to minimum Basel Ratio above 8%.

The LGB envisages various cases in which banks must have a Basel Ratio higher than the general norm of 8%. Small banks that start business with a capital of less than the general norm of 800,000 Unidades de Fomento are required to have a minimum Basel Ratio of 10% if their effective capital is above 600,000 Unidades de Fomento, and this rises to 12% if their effective capital is between 600,000 Unidades de Fomento and the minimum of 400,000 Unidades de Fomento. Banks that wish to qualify for an A solvency rating must have a Basel Ratio of at least 10%. In addition, the LGB empowers the SBIF to set a minimum Basel Ratio of between 8% and 14% for those banks that, as a result of a merger, attain a significant market share.

Amendments to the LGB, related to the implementation of Basel II, may result in changes to these Ratios when market and operational risks, and other factors, are incorporated. For a bank that, as a result of these adjustments, is subject to a Basel Ratio of more than 8%, the minimum capital required can be calculated using formula A-2 where “IBm” is the corresponding minimum ratio:

$$Cm = (IBm*APRC + RM + RO) \qquad IBm \geq 8\% \qquad \text{(B-1)}$$

4. Capital adequacy in stress tests.

Pillar II requires banks to design and test stress models, and the supervisory authority must issue an opinion as to their reliability. Stress tests refer to unexpected capital losses that may be significant, caused by sporadic or unforeseeable events, such as those arising from shocks in banks’ economic and financial operating environment, or losses arising from operational risk in the event of serious failures of their systems and processes, or human error.

The unexpected losses assessed in these tests are hypothetical and would arise only if the unusual and unforeseeable events by which they are caused actually occur. Shocks in the economic and financial environment can cause unexpected losses as a result of credit risk if there is an abrupt deterioration in the repayment capacity of large numbers of borrowers. In addition, they can result in unexpected losses due to market risk if there are unforeseen increases in interest rates or sharp fluctuations in the exchange rate.

Unexpected losses caused by unusual and unforeseeable operational events usually affect a single bank and are not related to those that originate in the economic and financial environment. These events can cause important unexpected losses that transcend the operational sphere as, for example, in the case of market risk arising from failures in a bank’s treasury.

Stress tests estimate the effect of unexpected capital losses, “ΔC”, on a bank’s effective capital in order to determine whether its holdings would be above its minimum capital and/or Basel Ratio. One method of determining a bank’s capital adequacy is, therefore, to compare its capital after these losses, “(C-ΔC)”, with Pillar I minimum capital requirements:

$$(C-\Delta C) \geq (0.08*APRC + RM + RO) \qquad (B\text{-}2)$$

If a bank fulfils this condition, it would have adequate capital under Pillar II.

The norms on management and solvency rating, which will form part of the amendments of the LGB, should - in accordance with the first and fourth basic principles of risk-based supervision - be such as to provide incentives for capitalisation, if stress tests show that a bank would have a Basel Ratio below the minimum reference 8% and a capital holding below the corresponding minimum.

5. Classification of bank management and solvency.

Under Basel II, the process of risk-based supervision culminates with the supervisory authority’s integration and assessment of banks’ risks, capital and risk management. The LGB adopts a similar process in Chapter V on the classification of bank management and solvency.

In assessing a bank’s management and solvency in the framework of Basel II, the factors set out in the SBIF’s Manual on Management and Solvency will be considered. These are credit-risk provisions, structure and allocation of capital, stress tests, capital adequacy and maintenance, internal organisation, management and control (including important risks not considered under capital adequacy), corporate governance and leadership, and financial transparency and market discipline.

C. THIRD PILLAR: MARKET DISCIPLINE.

The aim of Pillar III of the New Capital Framework is for bank investors, whether depositors, creditors or shareholders, to exercise market discipline through the analysis and monitoring of banks' risks and their financial situation.

The disclosure of information as envisaged in Pillar III should not conflict with that which arises from the accounting standards required of banks. This Pillar refers mainly to information about banks' risks and capital adequacy in contrast to the broader information contained in their financial statements.

1. Materiality of information.

Under Pillar III, a bank's board of directors is responsible for defining a policy on information disclosure, taking into account the information's materiality. Information is considered material if its omission or misstatement could change or influence the assessment of a user relying on that information for the purpose of making economic and financial decisions.

Basel II recommends that, in order to corroborate the materiality of the information, a bank's disclosure policy should include a process of validation to adjust it to the needs of investors and the market.

2. Scope and frequency of information disclosure.

Figures N° A-1 to A-4 of the Appendix to this document summarise the information that banks should disclose and the frequency of publication in line with Pillar III. The first figure shows the factors that render a bank subject to the application of Basel II: controlling shareholders, capital consolidation and policy definitions, while Figure A-2 deals with provisions for credit risk, and Figure A-3 refers to risks and minimum capital requirements depending on a bank's approach to risk. The last figure looks at capital from the point of view of its structure, allocation and adequacy, including the result of stress tests.

These figures are a general guideline and each bank is responsible for defining its own policy, notwithstanding the instructions that the SBIF may issue and the information that the SBIF publishes on banks' risks and their financial situation.

The banks must also disclose additional information on other risk factors, taking into account its materiality, which may vary from bank to bank. This information is additional to that which must be divulged under current regulation and may refer to factors that include loan portfolio concentration and securitisation of assets.

D. CONDITIONS, SEQUENCE AND TIMETABLE OF THE TRANSITION TO THE FIRST STAGE OF BASEL II.

This document sets out the terms of the first stage of the transition to Basel II in the banking industry. This comprises mainly the implementation of the standardised approach to credit risk and the alternative standardised approach to operational risk, starting in both cases in 2007 in the form of management standards. In addition, market risk will be incorporated in 2005 in compliance with the 1996 Amendment to Basel I. This sequence concludes with references to internal approaches and advanced models of credit and operational risk, which correspond to a subsequent stage of the implementation of the New Capital Framework.

The SBIF considers that the standardised approaches, including that contained in the 1996 Amendment, are attainable by all banks operating in Chile. Moreover, the proposed timetable includes a two-year period of preparation (2005-2006) during which the banks and the SBIF will be able to adjust their risk-measurement and management practices, anticipate the capital effects of these approaches, and undertake the necessary staff training. During this period, it will also be possible to adjust the present proposals, to clarify pending issues related to Basel II and to draw up proposals for amending the LGB and banking regulation.

During the transition to Basel II, market and operational risks will not result in capital charges until the corresponding amendments to the LGB are in place. In the meantime, these risks will be taken into account by banking supervision in the form of management standards using the concept of capital limit.

This Road Map reflects the view that Basel II should be implemented within a framework of understanding and co-operation with the industry, using existing supervisory systems and the authority's existing regulatory powers.

The decision as to which market risk approach a bank adopts will be taken by its board of directors. Similarly, the board will be responsible for determining whether a bank maintains standardised approaches or moves on to advanced internal approaches in the second stage of Basel II implementation, as well as for informing the SBIF and seeking its authorisation in each corresponding case.

The different banks have already appointed a representative to liase with the SBIF on matters related to Basel II. This representative will be responsible for informing the bank's General Manager of the results of the exercises carried out in 2005 and 2006 in preparation for the first stage of Basel II, and for informing the corresponding counterpart in the SBIF as to the results of these exercises, advances and pending issues.

1. Incorporation of market risk in 2005.

The banks and the SBIF will prepare for the implementation of the standardised approach to market risk as from the second half of 2005 in the terms set out in the joint norm on market risk issued by the Central Bank and the SBIF. This norm refers to

adverse variations in interest rates and exchange rates, as well as in the Unidad de Fomento, and incorporates market risk into bank supervision in the form of a capital limit.

As from 2006, the banks will be able to submit internal value-at-risk models for the SBIF's consideration. In deciding whether to authorise a bank to adopt these models, the SBIF will verify compliance with a number of qualitative and quantitative conditions, including the results of running these models in parallel to the standardised approach and of backtesting. However, compliance with the conditions generally required for the implementation of value-at-risk models does not exempt those banks that adopt them from the limitations they may show in the measurement of market risk in certain situations.

2. Capital requirements and limits.

Under the existing LGB, a bank's minimum capital requirement is calculated as its minimum Basel Ratio multiplied by its credit risk-weighted assets. Until such time as capital requirements for market and operational risks have been introduced into the LGB, this formula will continue to apply to all banks during the transition to Basel II, using in each case the corresponding minimum Basel Ratio.

At the same time, a bank's Basel Ratio, calculated on the basis of its credit risk-weighted assets will determine whether it requires a ratio of 10% or higher to qualify for an A solvency rating in accordance with Article 61 of the LGB.

i) Banks subject to the reference minimum 8% Basel Ratio.

During the transition to Basel II, the effective capital of banks subject to the general rule of a minimum Basel Ratio of 8% must meet the following condition in order to comply with Article 66 of the LGB:

$$(C - 0.08*APRC) \geq 0 \qquad \text{(D-1)}$$

Following the introduction of market risk as from the second half of 2005 and the introduction of operational risk at the beginning of 2007, these banks will be subject to the following limits in the form of management standards, respectively:

$$C - (0.08*APRC + RM) \geq 0 \qquad \text{(D-1a)}$$

$$C - (0.08*APRC + RM + RO) \geq 0 \qquad \text{(D-1b)}$$

A bank's non-compliance with these limits will be taken into account by the SBIF in assessing its management and solvency.

ii) Banks subject to a minimum Basel Ratio above 8%.

Under the existing LGB, banks with a significant market share and small and newly established banks are subject to a minimum Basel Ratio of more than 8%. During the transition to Basel II, a bank that is subject to a minimum Basel Ratio of 10% will, for example, be required to have an effective capital that fulfils the following condition:

$$(C - 0.10 * APRC) \geq 0 \qquad \text{(D-2)}$$

In addition, solely for the purpose of assessing the capital limit of those banks considered as among these special cases by the existing LGB, the SBIF will be able to consider a Basel Ratio of less than that used to determine their minimum effective capital requirement under this law. According to the joint norm on market risk issued by the Central Bank and the SBIF, the Basel Ratios used to calculate the capital limits of these banks, taking into account market risk, will be between 8% and 10%. This procedure is justified by the fact that the minimum Basel Ratios of more than 8% that are in force, were set taking into account only Basel I credit risk-weighted assets or, in other words, without explicitly considering market and operational risks.

For example, while the minimum capital requirement of a bank with a minimum ratio of 10% is "0.10*APRC", the SBIF could set a Basel Ratio of 9% for the purpose of assessing its capital limits following the incorporation of market risk as from the second half of 2005 and of operational risk in 2007. In other words:

$$C - (0.09 * APRC + RM) \geq 0 \qquad \text{(D-2a)}$$

$$C - (0.09 * APRC + RM + RO) \geq 0 \qquad \text{(D-2b)}$$

3. Preparatory exercises for the first stage of Basel II.

In order to prepare banks and the SBIF for the implementation of the New Capital Framework in the form of management standards in 2007, the following simulation exercises will take place during 2005 and 2006:

i) Quantitative impact exercises in 2005.

These exercises measure the impact on bank capital of the standardised approaches to credit and market risks and of the alternative standardised approach to operational risk. They will take place in the second half of 2005 for the purpose of updating and refining simulations run by the banks and the SBIF in 2002 and 2003.

These exercises will take into account the credit-risk weights set out in Figures N° 1 and N° 2. For the purpose of illustration, they will include the alternative weight of 90% for loans to small and medium-sized enterprises, and 50% for residential mortgages.

ii) Capital stress tests in 2006.

In 2006, as part of the preparation for compliance with the first and fourth basic principles of risk-based supervision set out in Pillar II, the banks will stress test their capital.

To provide the banks with more information about these tests, the International Monetary Fund's report on stress testing in the banking industry, which formed part of the recent assessment of Chile's compliance with the Basel Committee's Principles for Effective Banking Supervision, and other material, will be posted in the Basel II section of the SBIF's website.

4. Transition to the first stage of Basel II.

The implementation of the standardised approaches to credit and operational risks and financial transparency and market discipline in the framework of Basel II, requires the following conditions and activities:

i) Capital and Basel Ratios.

As part of the evaluation of banks' management and solvency, their compliance with capital limits will be assessed as from 2007 using, in the corresponding cases, formulas (D-1b) y (D-2b). As from that date, and until such time as explicit capital charges for market and operational risks are incorporated into the LGB, banks will determine their minimum capital requirements using the Basel I credit-risk weights for assets that are in force under the existing LGB while, in order to estimate the capital for those assets that form part of their capital limits, they will use Basel II credit-risk weights.

In the transition to Basel II, the SBIF will, with the prior agreement of the Central Bank Council, introduce the adjustments to credit-risk weights required for the implementation of the standardised approach to credit risk.

ii) Information disclosure as from 2007.

As from 2007, in order to increase financial transparency and facilitate the exercise of market discipline under the conditions established by Pillar III, the banks will disclose information about their ownership and management and about their risks, provisions and capital, as set out in Figures N° 1 to N° 4 of the Appendix to this document.

This information will be complementary to, and co-ordinated with, the information contained in the banks' financial statements and the notes to their annual balances required by the project of convergence towards international accounting standards, currently being implemented by the SBIF.

Figure N° 3 summarises chronologically the activities that will be carried out in the banking industry during the transition to the first stage of Basel II until such time as the LGB has been amended.

5. Amendments to the LGB.

The SBIF will draw up a proposal for amendments to the LGB during the transition to the first stage of Basel II, taking into account their scope and timing. For this purpose, it will consider the results of the above exercises on the quantitative impact of the implementation of standardised approaches to risk and of the stress testing of bank capital.

These amendments will refer particularly to explicit capital charges for market and operational risks, to minimum Basel Ratios above the reference 8% for specific banks, and to the Basel Ratio that a bank must have in order to qualify for an A solvency rating.

Once these legal amendments are in force, capital requirements will be determined on the basis of Basel II credit risk-weighted assets, and of market and operational risks in accordance with the changes introduced in Articles 66 and 67 of the LGB, while the Basel Ratio that a bank must have to qualify for an A solvency rating will be determined by a revised version of Article 61 of the LGB. As a result, the following criteria, which form part of the transition to the first stage of Basel II, will simultaneously cease to apply:

i) Calculation of bank capital requirements using the Basel Ratios and asset credit-risk weights corresponding to Basel I that are specified in the existing LGB.
ii) A Basel Ratio of at least 10% in order to qualify for an A solvency rating in terms of these credit-risk weights.
iii) The interpretation of capital limits contained in formulas (D-1b) and (D-2b).

Figure N° 3

Timetable of activities in the transition to the first stage of Basel II.

Year	**Activities**
2005 2nd semester	Exercises simulating the quantitative impact of credit, market and operational risks Incorporation of market risk according to the standardised approach Application of the capital limit with assets weighted for credit and market risks
2006	Capital stress testing Option of presenting internal value-at-risk models for assessment and authorisation by the SBIF.
2007	Application of the capital limit with assets weighted for credit, market and operational risks Disclosure of information by banks on their ownership and management, risk policies, risks and capital

Source: SBIF (Internet Web Site: www.sbif.cl)

6. Towards the second stage of Basel II.

Those banks that decide to move towards internal approaches to credit risk and advanced models of credit and operational risk in a second stage of Basel II implementation must immediately begin to gather information so as to have reliable series of data with which to estimate the parameters of these models.

A bank that wishes to use internal models for calculating capital requirements for credit risk will have to demonstrate that it has a consolidated provisions regime based on probabilities of default and expected losses, taking into account the impact of shocks in the economic and financial banking environment, and that it has run the standardised approach to credit risk in parallel to these models. Where applicable, it will also have to show successful use of internal value-at-risk models to measure market risk.

The SBIF will create a specialised unit to liase with banks on matters related to internal approaches to risk and advanced risk models.

APPENDIX

Figure N° A-1

Ownership, management and consolidation of capital

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1. Bank ownership and management.

i) Significant shareholders or those which directly or indirectly hold more than a 10% stake.
ii) Controlling group and its stake.
iii) Names of the President, Directors and General Manager.

2. Branches and subsidiaries in other countries.

i) Identification of branches and subsidiaries.
ii) Capital allocated.

3. Consolidation of bank assets and capital.

i) Subsidiaries in Chile.
ii) Companies undertaking related activities in accordance with Article 74 of the LGB.
iii) Branches or subsidiaries in countries with the highest risk classification as determined by a risk classification agency registered with the SBIF.

Frequency of publication: at least once a year.

Figure N° A-2

Provisions for credit risk

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1. Credit risk.

i) Credit-risk management policy for different types of portfolio.
ii) Statistical models used to measure credit risk.
iii) Related credit.
iv) Concentration in credit portfolios.

2. Credit-risk mitigants.

i) Policy on the management and valuation of credit-risk mitigants.
ii) Description of principal guarantees and collateral.

3. Expected losses.

i) Expected losses based on classifying credit portfolio into loans that are assessed individually and in groups.
ii) Past due portfolio by loan type.
iii) Overdue portfolio by loan type (overdue by more than 30 days and less than 90 days).

4. Provisions.

i) General provisions for loans to borrowers of normal risk.
ii) Specific provisions for loans to borrowers of above-normal risk.
iii) Portfolio-specific general provisions.
iv) Country risk provisions.

1. Report of the board of directors on the adequacy of provisions divided into the categories set out in point 4 above.

Frequency of publication: at least three times a year, except the report by the board of directors which will be issued at least once a year.

Figure N° A-3

Risks and capital requirements

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1. Credit risk in the standardised approach.

i) Risk classification agencies whose ratings are used to determine asset risk.
ii) Credit risk-weighted assets on the banking book.
iii) Minimum capital for credit risk.

2. Market risk.

i) Exposure to short- and long-term interest-rate risk on the banking book.
ii) Capital according to the standardised approach or, depending on the case, value-at-risk models.

3. Operational risk in the alternative standardised approach.

i) Contribution of commercial and retail banking to gross margin.
ii) Capital according to the alternative standardised approach.

Frequency of publication:
- Credit, operational and interest-rate risk on the banking book: at least three times a year.
- Market risk on the trading book: more than once a month.

Figure N° A-4

Capital structure, allocation and adequacy

1. Structure of effective capital.

i) Tier 1, or basic, capital.
ii) Tier II capital.
Additional (and general) provisions in Tier II.

2. Capital allocation.

i) Holding and allocation of capital to assets weighted for credit risk and to market and operational risks.
ii) Unallocated capital.

3. Capital adequacy.

i) Effect on capital in stress tests.
ii) Capital and Basel Ratio in relation to their respective minimum levels.
iii) Tier I, or basic capital as a percentage of assets as compared to their minimum percentage.

4. Policy on replacing capital in the event of unexpected losses.

Frequency of publication:
- Holding and allocation of capital in Pillar I: at least three times a year.
- Capital adequacy in Pillar II: at least once a year.