



**IADI**

*International Association of Deposit Insurers*

# **GENERAL GUIDANCE FOR DEVELOPING DIFFERENTIAL PREMIUM SYSTEMS**

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## ***Executive Summary***

*The International Association of Deposit Insurers (IADI) was established in 2002 with a mission to “contribute to the enhancement of deposit insurance effectiveness by promoting guidance and international cooperation”. As part of its work, IADI undertakes research to provide guidance on deposit insurance issues. The objective of this paper is to develop general guidance for countries considering the adoption of differential premium systems. This paper is designed for deposit insurance practitioners and other interested parties.*

*Deposit insurers collecting premiums from member financial institutions which accept deposits from the public (hereafter referred to as “banks”) usually choose between adopting a flat-rate premium or a system that seeks to differentiate premiums on the basis of individual-bank risk profiles. Although flat-rate premium systems have the advantage of being relatively easy to understand and administer, they do not take into account the level of risk that a bank poses to the deposit insurance system and can be perceived as unfair in that the same premium rate is charged to all banks regardless of their risk profile. Primarily for these reasons, differential premium systems have become increasingly adopted in recent years.*

*The following points of guidance summarize the main conclusions and recommendations to help policymaker’s design, implement and continually assess differential premium systems. These points are reflective of, and adaptable to, a broad range of circumstances, settings and structures.*

- ***Objectives:*** *The primary objectives of differential premium systems should be to provide incentives for banks to avoid excessive risk taking and introduce more fairness into the premium assessment process. Differential premium systems are effective at achieving these objectives when they provide good incentives for banks to manage their risks and when they are accompanied by effective early warning systems and prompt corrective supervisory action to deal with problem banks.*
- ***Situational analysis:*** *Before establishing a differential premium system it is important to undertake a situational analysis to self-assess the state of the economy, current monetary and fiscal policies, the state and structure of the banking system, public attitudes and expectations, the strength of prudential regulation and supervision, the legal framework, and the soundness of accounting and disclosure regimes. It is important to identify gaps between existing conditions and more-desirable situations and thoroughly evaluate available options.*
- ***Approaches used to differentiate bank risk:*** *The approach used to differentiate risk among banks and assign premiums should be: (1) effective at differentiating banks into appropriate risk categories; (2) utilize a variety of relevant information; (3) be forward looking; and, (4) be well accepted by the banking industry and financial safety-net participants.*

- **Authority, resources and information:** *The adoption of differential premium systems requires policymakers to ensure that the deposit insurance authority has the necessary authority, resources and information (i.e. consistent, accurate and verifiable) in place to administer the system appropriately.*

*A balance needs to be struck between requiring necessary information for the classification of banks into premium categories and concern that the demands for information not be unduly burdensome to banks.*

*In cases where the deposit insurance entity does not directly gather information but relies on the supervisor, formal agreements need to be in place to ensure that information required for administering the differential premium system is collected, verified for accuracy, and transmitted on a timely basis.*

- **Premium categories:** *There should be different premium categories to ensure that there is a meaningful distinction between premium categories to act as an incentive for banks to improve their risk profile.*
- **Assignment of premium rates:** *Premium rates applied to risk categories should be set to ensure that the overall funding requirements of the deposit insurance system are met and to provide effective incentives for the sound risk management of banks.*
- **Transition process and period:** *A well-managed transition process can help contribute to the success and acceptance of a differential premium system. An effective transition plan should set out the transitioning objectives, responsibilities, resource requirements, timetable and deliverables. The plan should be communicated to all interested parties prior to the beginning of the process. The use of a transition period for banks and the deposit insurance entity can help facilitate the transition process.*
- **Transparency, disclosure and confidentiality:** *The bases and criteria used in a differential premium system should be transparent to banks and all other participants. Designers of differential premium systems (as well as all other financial safety-net participants) need to determine the appropriate balance between the desire to promote accountability, discipline and sound management through disclosure and the need to ensure the confidentiality of information.*
- **Review, updating and fine-tuning:** *Given the potential financial impact of differential premium rates for banks, it would be expected that banks might wish to provide amended information or even disagree with or contest their assigned scores. Therefore, a formal process to review potential disagreements should be implemented to resolve any disputes.*

*Differential premium systems need to be regularly re-assessed on their effectiveness and efficiency in meeting their objectives. If necessary, they should be up-dated and/or revised to meet changing conditions or requirements.*

## 1. Introduction and purpose

The **International Association of Deposit Insurers** (IADI) was established in 2002 with a mission to “contribute to the enhancement of deposit insurance effectiveness by promoting guidance and international cooperation”. As part of its work, IADI undertakes research to provide guidance on deposit insurance issues.<sup>1</sup> The objective of this paper is to develop general guidance for countries considering the adoption of differential premium systems.<sup>2</sup>

Deposit insurers collecting premiums from member financial institutions which accept deposits from the public (hereafter referred to as banks) usually choose between adopting a flat-rate premium or a system that seeks to differentiate premiums on the basis of individual-bank risk profiles. Flat-rate premium systems have the advantage of being relatively easy to understand and administer. However, they do not take into account the level of risk that a bank poses to the deposit insurance system and can be perceived as being unfair in that the same premium rate is charged to all banks regardless of the risks posed. Primarily for these reasons, differential premium systems have become increasingly adopted in recent years.

This paper: (1) discusses issues for deposit insurance systems that are associated with developing and implementing differential premium systems; (2) examines the advantages, disadvantages and trade-offs associated with various approaches to these systems; and, (3) provides guidance with respect to these issues.

The paper is designed for deposit insurance practitioners and other interested parties. It is based on the judgment of IADI's members, associates and observers and the experiences of various countries that have developed differential premium systems. It also draws on relevant literature available on the subject.

## 2. Background

Sound funding arrangements are critical for the effectiveness of a deposit insurance system. According to the Financial Stability Forum Working Group on Deposit Insurance (2001), a deposit insurance system should have available all funding mechanisms necessary to ensure the prompt reimbursement of depositors' claims when required to do so. Funding can be assured in many ways, such as through loans, guarantees, levies or premium assessments, market borrowings, or a combination thereof.

Most deposit insurance systems initially adopt an *ex-ante* flat-rate premium system because they are relatively simple to design, implement and administer. However, these systems are open to

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<sup>1</sup> The Research and Guidance Committee of IADI developed a research plan setting out study areas for developing guidance on deposit insurance. A copy of the research plan can be found at: <http://www.iadi.org/html/Fx/Forms/ViewNews.aspx?ID=24>

<sup>2</sup> The Subcommittee on Developing Guidance for Differential Deposit Insurance Premium Systems was composed of individuals from: Argentina, Canada (David Walker, Chair), Brazil, France, Hungary, Japan, Jordan, Korea, Mexico, Nigeria, Philippines, Ukraine and the USA.

criticism in that they do not reflect the levels of forward looking risk that banks pose to the deposit insurance system. Flat-rate premium systems are viewed as being unfair as “low-risk” banks are required to pay the same premiums as “higher- risk” banks.<sup>3</sup>

The first step in designing a differential premium system is to identify the objectives that it is expected to achieve. The primary objective of most differential premium systems is to provide incentives for banks to avoid excessive risk taking and to introduce more fairness into the premium assessment process. Introducing more fairness into the system can help bolster industry support for deposit insurance in general. It is also important to ensure that the goals of a differential premium system are consistent with the stated public policy objectives of the deposit insurance system.

The first recorded differential premium system was introduced by the **Federal Deposit Insurance Corporation** (FDIC) in 1993. Since that time, the number of systems has grown steadily and it is estimated that there are currently fifteen in operation. Examples of other countries in which such systems are operating include: Argentina, Canada, Colombia, Finland, France, Peru, Portugal, Romania, Taiwan and Turkey.<sup>4</sup> As well, many countries considering the adoption of or an enhancement to their existing deposit insurance systems have expressed interest in eventually transitioning to differential premium systems.

Nevertheless, differential premium systems are not be appropriate for all deposit insurance systems at all times. The overall nature of the intermediation process of banking makes risk measurement and pricing a complicated task. In addition, it is difficult to find appropriate and acceptable methods of differentiating risk; obtain reliable, consistent and timely information and ensure that rating criteria are transparent. As well, differential premium systems require resources to administer the system appropriately.

Therefore, before establishing a differential premium system it is important to review the state of the economy, structure of the banking system, public attitudes and expectations, the strength of prudential regulation and supervision, the legal framework, and the soundness of accounting and disclosure regimes. Policymakers have a wider range of options available for designing a differential premium system if these regimes are sound. In some cases, country conditions may not be ideal and, therefore, it is important to identify gaps between existing conditions and more-desirable situations and thoroughly evaluate available options, since the establishment of a differential premium system is not a remedy for dealing with major deficiencies.

For instance, sound accounting and financial reporting regimes are necessary for an effective deposit insurance and differential premium system. Accurate, reliable and timely information reported by these regimes can be used by the deposit insurer and other safety-net participants to make decisions regarding the risk profile of a bank. Attributes of a sound accounting regime

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<sup>3</sup> Prior to making the decision to adopt a flat-rate or differential premium system, policymakers will need to choose between *ex-ante*, *ex-post* or some combination of these types of funding. *Ex-ante* funding is more amenable to differential premium systems as *ex-post* funding tends to be used infrequently and unexpectedly. In an *ex-post* funding environment, differential premiums could only be applied on certain occasions and only if the bank risks profiles are available.

<sup>4</sup> See Appendix II for further details.

include accurate and meaningful assessments of information in areas such as asset valuation, the measurement of credit exposures, loan-loss provisioning, measurement of non-performing loans, the treatment of unrealised losses, off-balance-sheet exposures, capital adequacy, and bank earnings and profitability.

It is important to understand that even when it is decided that conditions are appropriate to introduce differential premiums, such systems are most effective at achieving their objectives when they provide good incentives for banks to manage their risks and when they are accompanied by effective early warning systems and prompt corrective supervisory action to deal with problem banks.

### **3. Approaches used to differentiate bank risk**

One of the most challenging aspects of developing a differential premium system is finding appropriate methods for differentiating among the risk profiles of banks. A number of approaches are available and in general they encompass methodologies, which emphasize mainly objective or quantitative factors and/or those, which rely on more subjective or qualitative information. Although difficult to accomplish, the approach used to differentiate risk and assign premiums should be as forward looking as possible.

The following section describes some of the most commonly used criteria or factors for differentiating the risk profiles of banks for premium assessment purposes and some of the advantages, disadvantages and trade-offs associated with their use.

#### **a) Quantitative Criteria Approaches**

Quantitative criteria approaches generally try to use measures that are factual or data driven to categorize banks for premium assessment purposes. Some quantitative systems rely on only one factor to assess risk while others combine a number of factors. Information is usually gathered through on-site or off-site data collection and supervisory processes. Factors that are commonly considered for such systems usually include:

- A bank's adherence with regulatory capital requirements or other measures of the quantity, quality and sufficiency of a bank's capital;
- the quality and diversification of a bank's asset portfolio both on- and off-balance sheet;
- the sufficiency, volatility and quality of a bank's earnings;
- a bank's cash flows (both on- and off-balance sheet) and ability to generate and obtain sufficient funds in a timely manner and at a reasonable cost;
- the stability and diversification of a bank's funding; and
- a bank's exposure to interest rate risk, and where applicable, foreign exchange and position risk.

Usually, one or a combination of quantitative factors is used to differentiate risk among banks. The most common factor used is capital adequacy. Capital is the primary cushion against adverse changes in a bank's asset quality and earnings. Although capital is extremely important, other quantitative criteria are usually taken into consideration such as earnings, which can contribute to the ability of a bank to sustain its capital.<sup>5</sup> The information is often collected directly from the bank based on industry-accepted accounting principles and banks are rated or categorized based on various criteria or peer group comparison.

Another quantitative approach, which can be used to calculate differential premiums, is expected loss pricing. The expected-loss price for a bank depends on the probability of default for the bank, the exposure of the deposit insurer to that bank, and the size of the loss that the deposit insurer might incur should that bank fail.

In addition to using traditional quantitative measures and expected loss pricing, a number of theoretical models have been proposed for use in differentiating bank risk. Merton (1977) likened deposit insurance to a put option written by regulators on the value of a depository institution's assets where the value of deposit insurance can be calculated using a Black-Scholes (1973) option pricing model. Marcus and Shaked (1984) and Ronn and Verma (1986) applied option pricing to estimate insurance premiums. Although quantitatively based and theoretically appealing to some, difficulties in obtaining suitable data and finding agreement on the methodologies employed among member banks, deposit insurers and other safety-net participants have so far prevented many of these models from being adopted.

The advantage of using primarily quantitative approaches to differentiate bank risk is that they rely on relatively objective factors and data and are viewed as being transparent and less open to argument than more subjective approaches. But, the principal drawback is that their effectiveness is heavily dependent on high quality, consistent, reliable and timely data – which may be difficult to obtain in many financial systems. For example, in the case of using expected loss pricing models, most countries simply do not have enough historical default and loss experience to accurately calculate parameters. Another shortcoming is that most quantitative techniques tend to provide information on the past financial condition of the bank. They are less effective at providing leading indications of the future risk profile of banks.

Finally, even when suitable data is available and the methodology employed is widely accepted, systems which rely mostly on quantitative criteria do not allow for consideration of important qualitative factors about a bank - such as the quality of an institution's governance and risk management practices – which may contain valuable information on the management and mitigation of risk.

## **b) Qualitative Criteria Approaches**

Qualitative criteria approaches generally rely on a number of qualitative factors to categorize banks into different categories for premium assessment purposes. The primary method used is

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<sup>5</sup> As an example, Turkey utilizes a differential premium system where a basic premium is charged to all banks covered by the deposit insurer with additional premium charges based on various measures of capital adequacy, foreign exchange positions asset quality and provisioning.

reliance on some form of regulatory and supervisory judgment or rating system and information such as adherence to guidelines, standards, compliance measures or other supervisory or deposit insurance requirements. The assessments are usually designed to provide an indication of the current financial condition of a bank, its key business practices, and some indication of its future financial and risk profile.<sup>6</sup> Examinations are performed “on-site”, “off-site” or some combination thereof and the information collected is usually treated confidentially by the safety-net participants.

Examination criteria vary across countries but commonly include methods such as the CAMEL approach.<sup>7</sup> Although these approaches may include quantitative elements, a high level of judgment is usually employed in determining weights and qualitative factors such as the quality of management may be heavily emphasized.<sup>8</sup>

A differential premium system can also use additional qualitative information, which can be classified as “other information”. This can include: information received from supervisors about a bank or about other companies to which the bank is related (such as regulatory directives, letters of compliance, etc.); independent agency ratings and information; the views of industry analysts and other experts; parent company ratings, interest rates offered by banks and rates charged on the interbank market, market indicators such as stock price movements, and other information which may be considered relevant.

However, using “other information” to help categorize banks is relatively subjective. The deposit insurer would be required to use its judgment in determining whether or not the evidence might materially affect the operations and safety and soundness of a bank. Another issue is that consistent and comparable information may not be available for all banks.

The advantage of qualitative approaches are that they can provide important information on the current and future risk profiles of banks, which may not be captured by quantitative factors alone.

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<sup>6</sup> Key business practices looked at by examiners usually includes an assessment of a bank’s corporate governance, strategic management, risk management and external environment.

<sup>7</sup> Under CAMEL, each bank is subject to an on-site examination and is typically evaluated on the basis of five common factors. These are Capital, Asset Quality, Management, Earnings and Liquidity. In an effort to make the rating system more risk-focused, a sixth component relating to sensitivity to market risk was added to the CAMEL rating, making it CAMEL(S). Each of the component factors is rated on a scale of 1 (best) to 5 (worst). For more information see Sahajwala and Van den Bergh (2000).

The French Banking Commission’s Organization and Reinforcement of Preventive Action (ORAP) system is a multi-factor analysis system for individual institutions. The system works within a standardized and formalized framework, with specific ratings on 14 components related to prudential ratios, on- and off-balance sheet activity, market risk, earnings, and various qualitative criteria (shareholders, management and internal control). Each component is rated on a scale of 1 (best) to 5 (worst). Component ratings are converted to a composite rating similarly scaled between 1 (best) and 5 (worst).

<sup>8</sup> In recent years, many supervisory authorities have been moving to more “risk-based” supervisory examination systems. These are designed to identify key business areas and risks and be more forward looking than more traditional examination techniques. Although these systems often incorporate both quantitative and qualitative factors they can be even more subjective than traditional ratings as judgment is required to identify key risk areas and determine the appropriate supervisory period. And, in some cases, they rely heavily on self-assessment which requires quality assurance and appropriate incentives to work effectively.



However, such systems have drawbacks in that they are generally less transparent and utilize a higher degree of judgment and discretion compared to quantitative techniques. This may increase the number of requests for appeals of assigned rating categories and may be more difficult to defend should a bank question its categorization. Also, qualitative approaches by themselves do not give sufficient consideration to important quantitative factors (e.g. such as the bank's capital adequacy).

### c) Combined Quantitative and Qualitative Criteria Approaches

Combined approaches use both quantitative and qualitative measures to categorize banks. From the submissions received for this paper, combined quantitative /qualitative systems were the most common differential premium systems seen. For example, Argentina, Canada, France, Taiwan and the United States utilize this approach in their differential premium system methodologies.<sup>9</sup>

In Argentina, all institutions contribute a basic premium to the deposit insurer with additional premiums determined by a combined qualitative/quantitative differential premium system. The differentiated additional premium for each institution takes into account factors such as a CAMEL rating assigned by the supervisor and indicators which measure the excess or deficiency of capital over the required minimum capital levels and the quality of the loan portfolio.

The **Canada Deposit Insurance Corporation**'s differential premium system was introduced in 1999 and incorporates 14 individual quantitative and qualitative measures. Quantitative indicators such as capital adequacy, income volatility, and concentration ratios make up 60 per cent of the score while qualitative measures such as examiner ratings, adherence to CDIC Standards of Sound Business and Financial Practices and other measures make up the remaining 40 per cent. The system has four premium categories with category 1 being the best rated and category 4 the worst rated institutions.

The differential premium system in France, which came into effect in 1999, is based on a combination of prudential and financial risk analysis ratios which are applied to the amount of deposits with each member bank. In addition, a "synthetic risk" indicator is employed which is based on four criterion for solvency, profitability, risk diversification and maturity transformation.<sup>10</sup> The four criteria are then rated from 1 (best) to 3 (worst) and premiums applied according to a specified formula.

The differential premium system adopted by the FDIC in the United States was introduced in 1993. It incorporates a 3 by 3 matrix and ratings are determined by a score for capital adequacy and a supervisory rating. It is the longest running differential premium system in operation. Currently, the FDIC is considering modifying its system to expand on the criteria used to assess bank risks.

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<sup>9</sup> The subcommittee received descriptions of differential premium systems from: Argentina, Canada, France, Taiwan, Turkey and the United States.

<sup>10</sup> The solvency criterion is based on the tier 1 risk-based capital ratio; profitability is based on the level of the net cost-to-operating income ratio; risk diversification is based on the level of the 10 largest credit exposures; and, the maturity transformation criterion is derived from a bank's maturity gap exposure.

The **Central Deposit Insurance Corporation** adopted a differential premium system which also utilizes a 3 by 3 matrix. The rating factor used is capital adequacy and an examination data rating composite score which incorporates the CAMEL(S) framework.

An important consideration in systems which combine both quantitative and qualitative factors is the relative weighting between these factors. In some systems (e.g. the FDIC) quantitative criteria receive an equal weight to more subjective criteria such as examination ratings. In other countries, such as Canada, qualitative criteria are weighted less than quantitative criteria. In fact, the tendency among the systems studied seems to be to weight more heavily quantitative elements than qualitative factors. This may reflect less comfort on the part of many banks with subjective assessments – even in situations where a subjective or qualitative assessment such as the quality of management may be one of the more effective leading indicators of risk.

The advantages of combining both quantitative and qualitative indicators, is that it can be a highly effective and comprehensive way to assess the risk profile of banks. Of all the general approaches discussed, this takes into account the widest range of information to help assess a bank's risk profile. The main drawback is that it may impose a higher level of information requirements on banks and could be more open to challenges compared to approaches using mostly quantitative criteria.

In summary, although there are a wide variety of approaches to differentiate risk among banks and assign premiums, the approach chosen should be effective at: (1) differentiating banks into appropriate risk categories; (2) utilize a variety of relevant information; (3) be forward looking; and (4) be well accepted by the banking industry and financial safety-net participants.

#### **4. Authority, resource and information requirements**

The adoption of differential premium systems requires policymakers to ensure that the deposit insurance authority has the necessary authority, resources and information (i.e. consistent, accurate and verifiable) in place to administer the system appropriately. One of the areas that need to be addressed is whether or not the information to be used is already produced and collected. One view is that the required information should be limited to that already provided to safety-net participants.<sup>11</sup> This, however, may not be sufficient for the needs of an effective differential premium system. Obviously, a balance needs to be struck between requiring necessary information for the classification of banks into premium categories and concern that the demands of the system not be unduly burdensome to banks.

In cases where the deposit insurance entity does not directly gather information but relies on the supervisor, formal agreements need to be in place to ensure that information required for administering the differential premium system is collected, verified for accuracy, and transmitted on a timely basis.

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<sup>11</sup> Although information may not be collected by safety-net participants (i.e. supervisory, regulatory, monetary or deposit insurance authorities) it may already be collected by banks for financial reporting purposes, or risk management purposes.

Another issue to be considered is whether the information used for differential premiums has been validated to ensure that it is accurate and consistent among banks and over time. This may require that reporting standards be established and that information be verified through on-site means. The use of previously audited information can also help contribute to the accuracy of the differential premium system and reduce unnecessary administrative and reporting burdens on member banks.

As for the timing of the information, the period for premium assessment should, as far as possible, reflect the most current bank risk profile determination. Given that the risk profile of a bank is always changing it would be ideal to constantly be assessing the factor measures. However, the resource requirements and administrative and reporting costs of such a system make this an unrealistic option. Therefore, many differential premium systems rely on a single risk profile determination period, such as a bank's fiscal year-end audited financial information, as their cut-off date.

Other issues include whether the deposit insurance system should apply the same assessment methodology to different types of member institutions covered such as banks and other financial institutions. In addition to ensuring that each type of bank receiving deposit insurance is well regulated and supervised, policymakers should take into consideration differences in accounting and information reporting systems for different types of financial institutions included in the deposit insurance system.

## **5. Premium categories and assignment of premium rates**

Deciding on the number of premium categories is an important consideration when designing a differential premium system. Some insurers (e.g. the FDIC and CDIC (Taiwan)) use up to nine premium categories while others (e.g. Canada) use four categories. In Argentina and France, discrete categories are not used. Instead, the premium charged is a continuous function linked to the risk profile of the bank.

Using a large number of categories has the advantage in that it may result in less significant premium distinctions between categories and could provide greater risk differentiation between banks. This can allow the insurer to more easily differentiate banks according to their rating and can be beneficial in situations where there are a large number and variety of banks to categorize. In addition, using more premium categories (with smaller rate differentials between them) could potentially result in fewer requests for category review from banks. On the other hand, a large number of premium categories can increase the complexity of the system. As well, it may reduce the significance of, and therefore the incentive for, banks to move from one premium category to another.

Another issue related to the number of premium categories is the range of results that determine each category. It is acknowledged that any range selected must be arbitrary to some degree. However, banks receiving the best category (low risk) should be placed in the lowest premium categories and those receiving the worst results (high risk) should warrant classification into the highest. The remaining categories should be distributed between the highest and lowest. In summary, the objective should be to have different premium categories -- given the size and

number of banks – to ensure there is a meaningful distinction between premium categories to act as an incentive for banks to improve their risk profile.

In determining premium rates to apply to categories, rates should be set to ensure that the funding requirements of the deposit insurance system are met and to provide effective incentives for the sound risk management of banks. An initial step would be to determine the overall funding requirements of the deposit insurer and the premium revenue required.<sup>12</sup> In most instances, countries implementing a differential premium system have had as the primary objective the introduction of better incentives for banks rather than using the system to increase overall premium revenue. In fact, the total premium revenue required may even be lower in the long run under a differential premium system due to the expected positive incentives provided to banks to improve their risk management practices. As part of this incentive process, all banks should be charged a premium, even if very low, as all banks should pay the cost of deposit insurance since they and their clients directly benefit from having an effective deposit insurance system and every bank, no matter how healthy and strong, poses some risk to the deposit insurer.

In order to help assess the correct premium rate to charge for each category, some differential premium systems have conducted simulations, which apply rates to the different categories to determine the impact on overall premiums collected and the relation this has to the total funding requirements of the insurer. Finally, the spread between the various premium categories should be as wide as possible to provide a meaningful incentive for banks to improve their risk management practices.<sup>13</sup>

A remaining issue is whether each bank should be rated individually or the same category should be assigned to all parent/subsidiary member banks in a group. Under a number of differential premium systems, the bank subsidiaries receive the same category as the parent bank. However, where two or more related banking institutions are controlled by a shareholder that is not a deposit insurance system member, their categories should be determined separately.

## **6. Transition issues**

A well-managed transition process can help contribute to the success and acceptance of a differential premium system. One of the first steps in ensuring a successful transition is to have a clear plan which sets out the transitioning objectives, responsibilities, resource requirements, timetable and deliverables. The transition plan should be communicated to all interested parties. As part of the plan, a number of deposit insurance systems have provided for a consultative process to accompany changes to the policy or legislative framework affecting the scheme. This can be done as a matter of law or as a matter of administrative process. The consultation process and resulting period is most often influenced by the complexity of the proposed differential premium system.

With respect to timing, a transitional period can enable banks to familiarize themselves with the elements of a differential premium system and provide an opportunity to further improve their

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<sup>12</sup> For more information in this area, please refer to work by the Financial Stability Forum (2001).

<sup>13</sup> In cases where a high proportion of insured deposits are with a small number of large banks, the movement of a bank between categories could lead to substantial changes in total premium revenue for the insurer. Thus, in order to reduce this variability the premium spread between categories may have to be limited in such circumstances.

financial results and risk management practices. A transitional period can also provide the deposit insurance entity with time to validate or fine tune the differential premium system. Transition periods generally range from one year to a number of years. The advantage of a longer transition period is that it gives banks more time to adjust to the new system (e.g. develop new reporting systems where necessary and improve performance on the measurement criteria) and the deposit insurer to adjust and fine tune its own resources, skill sets, and information systems. Generally, the more complex the differential premium system and the more demanding are its information requirements, the greater the adjustment period required.

Lastly, the adoption of differential premium systems may raise the issue of the potential destabilizing effects of imposing higher premiums on already troubled banks. One approach to dealing with this issue is to implement the differential premium system in stages with advance warning of when and how the stages will be introduced. To cushion the adjustment for banks in weak categories, a transition period where virtually all banks receive favourable treatment to place themselves in low premium categories, could be considered. This has the advantage of reducing the initial impact of a premium increase for troubled banks but it still provides them with incentives to improve their category ratings over time.<sup>14</sup>

## **7. Transparency, disclosure and confidentiality**

The degree of transparency, the extent of public disclosure and confidentiality of ratings need to be addressed when developing a differential premium system. Practices in these areas vary between countries and can be influenced by the culture, legal system, the size, state and level of development of the financial system and prior experience with troubled banks.

Transparency refers to the process by which information on a system and its actions is made available and understood by participants. Ensuring that the differential premium system is as transparent as possible and disclosing information on a timely, consistent and accurate basis can enhance accountability, sound management and the functioning of the system.

The extent of public disclosure of premium categories or ratings can have a major impact on the system's effectiveness. Disclosing the results of a bank's differential premium category rating publicly can enhance discipline and provide additional incentives for banks to improve their future results. However, disclosure can have negative consequences such as those associated with disclosure of bank-specific information to the public and associated premium categories. In cases where a bank is encountering serious problems (i.e. and this is reflected in its differential premium assessment) such disclosure could exacerbate resolution efforts and erode confidence in the financial system. Although insured depositors may not have strong incentives to use such information, uninsured depositors and other creditors may withdraw funds from an institution suffering a poor rating. It should be recognized that the information used for assigning differential premiums is usually based on a specific point in time. Thus, it would be misleading to depositors and others, as well as unfair to the bank, to imply that a premium classification

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<sup>14</sup> To facilitate the adoption of its differential premium system, CDIC (Canada) introduced a transitional mechanism for the first two years of its scheme. In the first year of the transition period, the total quantitative score of each bank was adjusted upward by 20 percent. In the second year, the total quantitative score of each bank was adjusted upward by 10 percent. In the third year and thereafter, there were no such adjustments.

assigned perhaps months earlier is an accurate reflection on a bank that may have already taken steps to improve its premium classification in the next assessment cycle. Finally, disclosure could also increase the legal liability of the deposit insurance entity, and supervisory and regulatory authorities.

On the opposite end of the spectrum, highly rated banks may use the disclosure of their ratings to attract more deposits and other business to themselves. And, faced with the prospect that their rating (and individual components) may be disclosed; they may be reticent to support the introduction of such a premium scheme.<sup>15</sup>

In addition, many deposit insurance entities do not collect directly the information that is needed for the differential premium system and must rely on supervisors or regulators to provide them with this information. In these cases, decisions on disclosure will have to take into account the policies of the authorities and any confidentiality provisions related to the disclosure of information which has been received from banks.<sup>16</sup>

For these types of reasons, designers of differential premium systems need to determine the appropriate balance between the desire to promote accountability, discipline and sound management through disclosure and the need to ensure confidentiality. Some systems have sought a balance with a policy of partial transparency (e.g. Taiwan, the United States and Canada). That is, at a minimum the basic framework of the system and the factor criteria used are disclosed to the public but the actual ratings or premium categories are only disclosed to the board of directors and management of the bank. In such cases, banks are prohibited from disclosing their premium category and any rating (or rating component) on which that classification is based. At present, no deposit insurance system in existence publishes these ratings.

## **8. Review, updating and fine-tuning of a differential premium system**

Given the potential financial impact of differential premium rates for banks, it would be expected that some banks may wish to provide amended information or even disagree with or contest their assigned categories or ratings. While ensuring that the system is transparent and well accepted by industry may lessen the potential for disagreements, a formal process to review potential disagreements should be implemented to resolve any disputes.

An approach used in some countries is for banks wishing to have their category reviewed to submit their requests for review. An administrative law process can be followed to formally review information and results. If a case can be made based on the evidence, then the category

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<sup>15</sup> The use of coinsurance by a deposit insurance system has implications for disclosure and confidentiality. It can be argued that in situations where only a pre-specified proportion of deposits are insured, extensive information needs to be provided to the public regarding the financial condition of banks.

<sup>16</sup> It should be noted that in some countries securities regulators may require the disclosure of deposit insurance premium payments and any material increases in such payments. Thus, sophisticated individual investors and rating agencies may be able to surmise differential premium categories and changes in ratings from such disclosed information.

could be amended.<sup>17</sup> Other countries may choose to use informal approaches to review categories. The degree to which a formal or informal review process is used, and the nature of the process, will depend on the specific characteristics of the country and its legal system.

It should also be recognized that no differential premium system is ever perfect and experience gained operating the system can provide opportunities for improvement and fine-tuning. A differential premium system can benefit from the continuous and regular review of operational experiences. Some countries even conduct scenario testing.

Lastly, changes in the objectives of a differential premium system, industry structure, reporting requirements, approaches to supervision and examinations and international developments, may require a system to be updated and modified over time. For instance, indicators of risk can and do gain or lose significance over time and thus may be dropped, added or be weighted differently. As an example, changes in international standards in areas such as capital measurement (e.g. Basel II) can also lead to a reassessment and modification of differential premium systems employing such measures. Thus, differential premium systems need to be regularly re-assessed on their effectiveness and efficiency in meeting their objectives. If necessary, differential premium systems need to be up-dated and/or revised to meet changing conditions or requirements.

## **9. Conclusions and key points of guidance**

The following points of guidance summarize the main conclusions and suggestions arrived at by IADI to help policymaker's design, implement and continually assess differential premium systems. These points are reflective of, and adaptable to, a broad range of circumstances, settings and structures.

### **1. Objectives of a differential premium system**

The first step in designing a differential premium system is to identify the objectives that it is expected to achieve. The primary objectives of differential premium systems should be to provide incentives for banks to avoid excessive risk taking and introduce more fairness into the premium assessment process.

Differential premium systems are most effective at achieving these objectives when they provide good incentives for banks to manage their risks and when they are accompanied by effective early warning systems and prompt corrective supervisory action to deal with problem banks.

### **2. Situational analysis against conditions**

Before establishing a differential premium system it is important to undertake a situational analysis to self-assess the state of the economy, current monetary and fiscal policies, the state and structure of the banking system, public attitudes and expectations, the strength of prudential

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<sup>17</sup> This process would typically include the deposit insurance entity and may include the supervisory or regulatory authority depending on the role they play (e.g. the provision of examination ratings or information) in the differential premium system.

regulation and supervision, the legal framework, and the soundness of accounting and disclosure regimes.

Policymakers have a wider range of options available for designing a differential premium system if these regimes are sound. In some cases, conditions may not be ideal and, therefore, it is important to identify gaps between existing conditions and more-desirable situations and thoroughly evaluate available options, since the establishment of a differential premium system is not a remedy for dealing with major deficiencies.

### **3. Approaches used to differentiate bank risk**

The approach used to differentiate risk among banks and assign premiums should be: (1) effective at differentiating banks into appropriate risk categories; (2) utilize a wide variety of relevant information; (3) be forward looking; and, (4) be well accepted by the banking industry and financial safety-net participants.

### **4. Authority, resources and information requirements**

- a) The adoption of differential premium systems requires policymakers to ensure that the deposit insurance authority has the necessary authority, resources and information (i.e. consistent, accurate and verifiable) in place to administer the system appropriately.
- b) A balance needs to be struck between requiring necessary information for the classification of banks into premium categories and concern that the demands of the system not be unduly burdensome to banks.
- c) In cases where the deposit insurance entity does not directly gather information but relies on the supervisor, formal agreements need to be in place to ensure that information required for administering the differential premium system is collected, verified for accuracy, and transmitted on a timely basis.
- d) The information used for differential premiums needs to be validated to ensure that it is accurate and consistent among banks and over time. This may require that reporting standards be established and that information be verified through on-site means. The use of previously audited information can also help contribute to the accuracy of the differential premium system and reduce unnecessary administrative and reporting burdens on member banks.
- e) The period for premium assessment should reflect the most current bank risk profile.

### **5. Premium categories and assignment of premium rates**

- a) With respect to deciding on the number of premium categories, the objective should be to have different premium categories -- given the size and number of banks -- to ensure there is a meaningful distinction between premium categories to act as an incentive for banks to improve their risk profile.



- b) In determining premium rates to apply to categories, rates should be set to ensure that the funding requirements of the deposit insurance system are met and to provide effective incentives for the sound risk management of banks.

## **6. Transition issues**

- a) A well-managed transition process can help contribute to the success and acceptance of a differential premium system. An effective transition plan should set out the transitioning objectives, responsibilities, resource requirements, timetable and deliverables. The plan should be communicated to all interested parties prior to the beginning of the process.
- b) The use of a transition period for banks and the deposit insurance entity can help facilitate the transition process. Generally, the more complex the differential premium system assessment criteria and the more demanding are its information requirements, the greater the adjustment period required.

## **7. Transparency, disclosure and confidentiality**

- a) The bases and criteria used in a differential premium system should be transparent to banks and all other participants.
- b) Designers of differential premium systems (as well as all other financial safety-net participants) need to determine the appropriate balance between the desire to promote accountability, discipline and sound management through disclosure and the need to ensure confidentiality of information.

## **8. Review, updating and fine-tuning of a differential premium system**

- a) Given the potential financial impact of differential premium rates for banks, it would be expected that banks might wish to provide amended information or even disagree with or contest their assigned scores. Therefore, a formal process to review potential disagreements should be implemented to resolve any disputes.
- b) Differential premium systems need to be regularly re-assessed on their effectiveness and efficiency in meeting their objectives. If necessary, they should be up-dated and/or revised to meet changing conditions or requirements.

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## APPENDIX I

### Country Submissions on Differential Premium Systems

*The IADI Subcommittee on Developing Guidance for Differential Premium Systems received the following country system profiles for use in the preparation of this guidance paper.*

#### 1. Argentina

Member banks of the **Seguro de Depósitos Sociedad Anónima** (SEDESA) contribute a normal (basic) premium and an additional risk-adjusted premium. The monthly normal premium equals 0.03 percent of the monthly average of daily deposit balances outstanding. The Central Bank of the Argentine Republic may, in case of need, require banks to anticipate the payment of up to 24 months of premiums, with a minimum 30-day prior notice.

The differentiated additional premium for each institution takes into account the following factors:

- The qualification (CAMEL) assigned by the Superintendency;
- The excess or deficiency of capital over the required minimum capital;
- The quality of the loan portfolio measured by:
  - Minimum required provisioning for loan losses;
  - Minimum capital risk-weighted assets over total assets.

The additional premium cannot exceed the normal premium.

To determine the additional premium, the normal premium is multiplied by an index ( I ) based on the preceding factors and having a value between 1 and 2. The index is estimated as follows:

$$I = \{ (A + B + 2 C) / 4 \} - D$$

Where:

A = Provisioning = 25 times the fraction of the total loan portfolio subject to minimum required provisions, elevated to the power 1.20. Resulting values of A below 1 or above 2.5 are assigned those limits, respectively.

B = Quality of Assets = 1.43 times the fraction of total assets represented by risk assets, elevated to the power 1.3. Values of B below 1 or above 2 are assigned those limits, respectively.

C = CAMEL rating transformed into a 1, 1.33, 1.66, 2.00, and 2.00 sequence of values corresponding to the respective five usual grades in increasing order.

D = Capital adequacy = Index based on the ratio of actual to required minimum capital. Up to a ratio of 0.90 (capital deficiency) the value of D is - 0.50 (negative 0.50); from 0.90 to 0.95 is -

0.25, and from 0.95 to 1.00 is - 0.10. This means that capital deficiencies increase the value of the overall index I. Values of the ratio from 1 to 1.10 make  $D = 0$ . Values of the ratio above 1.10, in steps of 0.10, receive an additional positive 0.05 value of D, which then reduce the value of the overall index I.

Finally, the sum of  $A + B + \text{twice } C$  is divided by 4 and is adjusted for the resulting value of D. Values of I below 1 or above 2 are assigned those limits, respectively, so that the total premium does not exceed twice the normal premium.

## 2. Canada

The **Canada Deposit Insurance Corporation** (“CDIC”) Act allows CDIC to assess premiums at a maximum rate of one-third of one percent of insured deposits (i.e. 33 basis points), or such a smaller rate as may be fixed by the Governor in Council on the recommendation of the Minister of Finance.

Throughout most of its history, CDIC charged all its member institutions the same deposit insurance premiums on their insured deposit base, regardless of the risk of loss posed by a member to the deposit insurance fund.<sup>18</sup> In 1995, CDIC was instructed by the Government of Canada to amend the CDIC Act to replace CDIC's flat rate premium system with a system which would classify member institutions into different risk categories, in large part reflecting the risks posed to CDIC, and charging varying premium rates based on these categories.

The design, development and consultation process associated with CDIC's Differential Premium System occurred from 1996-1999 and the Corporation introduced the system in 1999.

Although not actuarially based, introducing a premium spread between high risk and low risk institutions is intended to provide a meaningful incentive for member institutions to avoid excessive risk taking. The implementation of risk-adjusted premiums was co-ordinated with existing and proposed supervisory stages of intervention and will not preclude prompt intervention and, where circumstances dictate, early closure of institutions known to be in trouble.

CDIC's differential premium system categorizes member institutions into one of four premium categories based on how they score according to a series of quantitative and qualitative criteria. The premium rates for the four categories are based on a percentage of the rate determined by the Governor in Council, and are set by the CDIC Board of Directors, with the approval of the Minister of Finance. When introduced in 1999, the premium rates assigned to the four categories were 4, 8, 16 and 33 basis points. In 2002, the rates were adjusted down to 2, 4, 8 and 16 basis points respectively. The reduction reflected the elimination of CDIC's deficit and a consequent reduced need for funds.

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<sup>18</sup> Prior to the introduction of the differential premium system, the premium rate was 16.6 basis points charged on insured deposits for all members.

## Approach to system design and development

In developing a differential premium system, CDIC reviewed a number of potential approaches during the 1995-97 period that would enable it to classify member institutions into different categories for differential premium rating purposes. These included single quantitative and qualitative factor systems and a range of combined quantitative and qualitative factor systems – including the risk-based premium approach used by the **Federal Deposit Insurance Corporation** (FDIC) in the United States, the Bank of England TRAM model and the methodologies used by rating agencies. CDIC also took into account comments from regulators of CDIC member institutions, other supervisory agencies and a committee of senior executives from representative CDIC member institutions.

## General system description

Based on the results of development work, CDIC concluded that its system should be relatively simple to implement yet rigorous enough to effectively classify members into different categories. Accordingly, CDIC's differential premium system scores members according to a number of criteria or factors grouped into three broad categories: capital adequacy, other quantitative measures and qualitative measures.

| <b>CDIC Differential Premium System Summary</b>   |                      |
|---|----------------------|
| <b>• Criteria or Factors</b><br>- Measures  | <b>Maximum Score</b> |
| <b>Capital Quantitative:</b>  |                      |
| <ul style="list-style-type: none"> <li>• Capital Adequacy               <ul style="list-style-type: none"> <li>- Assets to Capital Multiple</li> <li>- Tier 1 Risk-Based Capital Ratio</li> <li>- Total Risk-Based Capital</li> </ul> </li> </ul>   | 20                   |
| <b>Other Quantitative:</b>  |                      |
| <ul style="list-style-type: none"> <li>• Profitability               <ul style="list-style-type: none"> <li>- Return on Risk-Weighted Assets</li> <li>- Mean Adjusted Net Income Volatility</li> <li>- Volatility Adjusted Net Income</li> </ul> </li> </ul>  | 5<br>5<br>5          |
| <ul style="list-style-type: none"> <li>• Efficiency               <ul style="list-style-type: none"> <li>- Efficiency Ratio</li> </ul> </li> </ul>  | 5                    |
| <ul style="list-style-type: none"> <li>• Asset Quality               <ul style="list-style-type: none"> <li>- Net Impaired Assets (Including Net Unrealized Losses on Securities) To Total Regulatory Capital Ratio</li> </ul> </li> </ul>  | 5                    |
| <ul style="list-style-type: none"> <li>• Asset Concentration               <ul style="list-style-type: none"> <li>- Aggregate Counterparty Asset Concentration Ratio</li> <li>- Real Estate Asset Concentration</li> <li>- Aggregate Industry Sector Asset Concentration Ratio</li> </ul> </li> </ul> | 5<br>5<br>5          |
| Sub-total: Quantitative Score   | 60                   |
| <b>Qualitative:</b>   |                      |

|   |     |
|---|-----|
| • Examiner's Rating                     | 25  |
| • Extent of Adherence to CDIC Standards | 10  |
| • Other Information                     | 5   |
| Sub-total: Qualitative Score            | 40  |
| Total Score                             | 100 |

The score assigned to capital adequacy indicates the importance CDIC attaches to regulatory capital as a cushion against adverse changes in a member's asset quality and earnings. Likewise, the weighting of a regulatory rating reflects the reliance placed by CDIC on the views of regulators or examiners for its assessment of member institutions.

Although capital is important as a cushion, even sizeable capital would not save an institution with significant problem assets or a high risk profile. Accordingly, other quantitative criteria or factors should be taken into consideration. CDIC's system incorporates a number of other quantitative factors and criteria that are intended to assess the ability of a member institution to sustain its capital. Although no single criterion or factor in this category would represent more than a score of 5 out of a possible total quantitative score of 60, a possible cumulative total of 40 for this category of criteria or factors is in the view of CDIC appropriate to supplement the capital adequacy measures.

CDIC Standards adherence is included as a qualitative factor or criterion, since it would be difficult to envision a premium system that does not take into account the management of member institution risks and business activities as determined by the Standards. However, a weight heavier than 10 percent was not considered necessary, given that remedies are available under the CDIC Act for failure to follow Standards.

Finally, 5 percent of the total score is allocated for other information that may be relevant in the scoring of a member institution. This criterion or factor would permit information that comes to the attention of CDIC about a member to be taken into consideration. Such information could include, e.g., rating agency ratings or whether the member is a recipient of CDIC assistance.

### Premium Categories

One of the objectives of the Differential Premium system is to send a message -- with financial consequences -- to the managements and boards of directors of CDIC member institutions. Accordingly the system is not concerned with capturing subtle differences between institutions, but rather with providing an incentive to low-scoring members to make improvements where necessary. CDIC considers that a four-category system is appropriate. The premium categories, related scores and charge on insured deposits are set out in the above table.

| Premium Categories |                  |                            |
|--------------------|------------------|----------------------------|
| Score              | Premium Category | Charge on Insured Deposits |
| >= 80              | 1                | 2 basis points             |

|                |   |                 |
|----------------|---|-----------------|
| >= 65 but < 80 | 2 | 4 basis points  |
| >= 50 but < 65 | 3 | 8 basis points  |
| < 50           | 4 | 16 basis points |

Using more premium categories would result in less significant premium distinctions between categories, but also would reduce the significance of, and therefore the incentive for, moving from one category to another. On the other hand, more premium categories with smaller rate differentials between them potentially would result in less requests for review from member institutions.

With fewer categories and greater premium differentials, member institutions would have more incentive to obtain higher scores. At the same time, members falling just short of achieving the score necessary to move into a better premium category may have a greater incentive to question individual criteria scores.

Another factor to take into consideration is the likely number of CDIC member institutions. For example, the recently enacted CDIC Opt-out provisions (which allow banks not accepting retail deposits to withdraw from CDIC membership), combined with increased concentration of member institutions in parent/subsidiary groups and the potential for foreign bank branching, provide less reason to have a premium system with a large number of categories.

In arriving at four categories, CDIC reviewed the nine-category system used by the FDIC -- a system designed for over 10,000 institutions. CDIC concluded that a system using four categories should be sufficient given the size and number of CDIC members, while at the same time providing a meaningful differentiation between premium categories.

Another issue related to the number of premium categories is the range of scores that determine each category. It is acknowledged that any range selected must be arbitrary. However, it seems reasonable that any institution receiving a score of less than 50 out of 100 should be placed in the highest premium rate category and that those with a score of 80 or better would warrant classification into the lowest. The remaining two categories are proportionally established between the highest and lowest.

With respect to concerns that the proposed system puts too few companies in category 1 and thereby may create the impression that there is something wrong with the Canadian deposit-taking financial system, it is the view of CDIC that the information that feed the factors and criteria are sufficiently transparent to the public so that the placing of a member institution in one category or another should not represent any fundamentally new information about that member institution. Moreover, to reduce the score necessary to achieve Category 1 might create the impression that the quality of the Canadian deposit-taking financial system has been diluted.

As for the size/range of category 4, CDIC recognizes the wide range of riskiness within it, but CDIC (and the regulators) have other intervention tools at their disposal besides the setting of premium rates, and these tools can be used in conjunction with the Premium By-Law.

## **Premium Spreads**

Although not actuarially-based, the spread between the various categories (i.e. between 2 and 33 basis points of insured deposits) is intended to provide a meaningful incentive. This is achieved in two ways:

- through negative financial incentives in the form of higher premium rates charged to lower scoring institutions; and
- perhaps more importantly, through discipline brought to bear on an institution's management by the board of directors from its knowledge of the premium category assigned.

Another important determinant in fixing the premium rate for each category is the revenue needs of CDIC. It was the intention of the government when it directed CDIC to establish such a system that the premium level be based on CDIC's financial planning objectives and loss experiences.

## **Disclosure of Ratings**

Each member is advised by CDIC of its assigned premium category and its scores on the criteria and factor measures. The Board of Directors has concluded, as a matter of policy, that a member institution should be prohibited, for a transitional period of three years (now extended indefinitely) following the introduction of a Premium By-Law in 1999, from disclosing the premium category in which it is classified and from disclosing any rating or rating component on which that classification is based.

## **Consolidated Scoring**

An important issue in implementing a Premium By-Law is whether each CDIC member should be rated individually or the same score should be assigned to all parent/subsidiary CDIC member institutions in a group. Under the system, subsidiary member institutions receive the same score as the CDIC member parent. Parent/subsidiary status would be determined by voting control (50.1 percent or more, and subsidiaries of subsidiaries would be included). Where two or more related member institutions are controlled by a shareholder that is not a CDIC member, their scores are determined separately.

## **Transition and New Member Provisions**

To facilitate the adaptation of member institutions to the new system a transitional scoring mechanism was built into the system, to operate for the first two years.

In the first year of the transition period, the total quantitative score of each member institution has been adjusted upward by 20 percent. In the second year, the total quantitative score of each member institution will be adjusted upward by 10 percent. In the third year and thereafter, there will be no such adjustments.



For example, if a member institution received a pre-adjusted score of 30 for its quantitative factors and criteria, its quantitative score would be increased by 6 in the first year. If a member institution scored 30 for its quantitative factors and criteria in the second year, its quantitative score would be upwardly adjusted by 3. There would be no adjustment after the second year.

Any adjustment, however, cannot result in the member institution's total quantitative score exceeding 60. For example, if a member institution's pre-adjusted quantitative score was 55 in the first year, its adjusted score would be 60, not 66.

In terms of members with a limited history, the differential premium system was designed so that member institutions which do not have sufficient operating history for their volatility measures are given a score based on the average of their other quantitative scores.

### **Review Purpose**

Given the significance of differential premium rates for member institutions, any institution not satisfied with its assigned premium category has the opportunity to request a review of its scoring by CDIC.

Member institutions wishing to have their scores reviewed are required to submit requests in writing to CDIC. As part of the premium-setting process, CDIC will be involved in gathering or receiving information and making determinations and calculations as to each institution's score. There is an annual cut-off date for the determination of relevant information, and if information obtained in advance of that date is revised between then and the cut-off date, the revised information will be used.

### **Filing Requirements**

Members are required to file, by April 30 of each year, the requested quantitative information based on the latest available audited financial statements. If member institutions do not have audited financial statements by April 30, they will have to file the quantitative information based on unaudited financial information with the proviso that the information filed would be subject to revision. If member institutions do not provide the required information, they will be assigned the maximum premium rate pending receipt of the information.

All member institutions are required to provide quantitative information on a standardized basis using as much as possible (and where applicable) the type of information reported under the federal system. Quantitative scoring is based on consolidated financial information.

CDIC uses the latest examiners' ratings, CDIC Standards reporting information and other information as at April 30 of each year in determining the qualitative score for the coming premium year.

### **Review, updating and fine-tuning of CDIC's differential premium system**

CDIC has recently undertaken a review of its differential premium system in order to update and fine tune its operation. The scope of the review includes:

- a quantitative analysis of data collected;
- review of environmental changes, such as Basel II and new accounting standards and their implications for the system;
- matters relating to process;
- analysis of individual criteria and benchmarks; and
- the allocation of scoring among criteria or factors.

Extensive consultation with members, their associations, supervisors, other agencies and interested parties will take place throughout the review. CDIC expects to issue a consultation paper in the spring of 2004 that will outline any changes being contemplated and which will request industry comments.

CDIC is aiming for amendments to be in place for the 2005 premium year notwithstanding that this is an aggressive timeline and may not capture the full impact of Basel II on the system.

For more information on CDIC's differential premium system please refer to: <http://www.cdic.ca/?id=292> and a copy of CDIC's Differential Premium By-Law can be found at: <http://www.cdic.ca/bin/diffpreBIL2.pdf>.

### 3. France

The Commission Bancaire (the French banking supervisor) is responsible for calculating each **Fonds de garantie des depots** (FGD) member's premium contribution. It advises each member institution of the amount it owes and provides the opportunity for these institutions to request a revision. It then (after around 2 weeks) advises the FGD of the amounts owing so that a formal request to members can be submitted.

The determination of the FGD members' contribution (premium) uses the following information items:

The Annex to Regulation 99-06 establishes minimum amounts for the annual contributions and for the certificates of association (CA). These are euro 2000 for each of the semi-annual installments relative to the annual contribution (from 2003, it will be only one installment per year: euro 4000) and euro 4000 for the CA. These apply to institutions that have zero deposits, i.e, institutions licensed as credit institutions that do not actually take deposits within the meaning of Regulation 99-06.

Each member's contribution is based on an assessment of the member's contribution to overall system risk. Overall system risk is the sum all members risk amounts. Each member's risk profile is determined with reference to a number of risk indicators based on a combination of prudential and financial risk analysis ratios and applied to the amount of deposits of each member. This amount is increased by an amount equal to 1/3 of outstanding loans. The synthetic risk indicator is evaluated pursuant to four indicators:

- Solvency
- Risk diversification
- Operating profitability
- Maturity transformation.

Each indicator is noted on a scale of one to three, with one being the best notation. The institution's overall notation is the linear extrapolation of the individual notations. To the extent the notation is better than average (2), its contribution is reduced, while a notation higher than 2 results in an increase in the amount of this institution's contributions, both within a range of 25 percent for example, an institution noted one, would have its basis reduced by 25 percent. These reductions or increases are linear.

Details about the Indicators:

- Solvency: the solvency indicator is a basic prudential ratio
- Operating profitability looks at the institution's margin (it's operating coefficient)
- Maturity transformation: this indicator evaluates the institution's medium term risk with respect to refinancing its uses of funds.
- Risk diversification: a higher level of concentration (ten largest risk exposures) is considered more risky.

## 4. Taiwan

As stipulated by the **Central Deposit Insurance Corporation** (CDIC) of Taiwan *Deposit Insurance Act*, the assessment rate for deposit insurance shall be proposed by the CDIC and approved by the Ministry of Finance (MOF) prior to implementation. The CDIC originally assessed insured banks at the flat rate of 0.05 percent of the covered (insured) deposit liability, but lowered this rate to 0.04 percent effective July 1, 1987 in order to promote deposit insurance and increase financial institutions' willingness to be covered. On January 1, 1988, the assessment rate was further lowered to 0.015 percent. Later, in line with the implementation of a compulsory system of deposit insurance, the CDIC on July 1, 1999 implemented a risk-based premium system based on the *Risk-Based Premium Scheme (RBSP)* ratified by the MOF.

The major objectives of the scheme are to:

1. ensure that the deposit insurance premium system remains equitable; and,
2. to direct that insured institutions conduct safe and sound practices.

This scheme regards the "Capital Adequacy Ratio" of each insured financial institution as well as an "Examination Data Rating Composite Score" based on the Examination Data Rating System under the National Financial Institution's Early-warning System (NFIEWS) as indicators of risk. Each of the indicators is subdivided into three levels, with the result that each insured institution may be assigned to any one of nine different risk groups. These nine groups are then assessed on the basis of three different premium rates, namely 0.05 percent, 0.055 percent, 0.06 percent of covered deposits. The following material explains the procedures used in determining these assignments.

| <b><u>Examination Data Rating Composite Score</u></b> |          |          |          |
|---|----------|----------|----------|
| <b><u>Capital Adequacy</u></b>                        | <u>A</u> | <u>B</u> | <u>C</u> |
| 1. Well Capitalized                                   | 5.0      | 5.0      | 5.5      |
| 2. Adequately Capitalized                             | 5.0      | 5.5      | 6.0      |
| 3. Undercapitalized                                   | 5.5      | 6.0      | 6.0      |

- Rates are in cents per \$100 of insured deposits.
- The assessment rates were 0.015 percent, 0.0175 percent and 0.02 percent of covered deposits since July 1, 1999. The rates were further raised to 0.05 percent, 0.055 percent and 0.06 percent on January 1, 2000 in order to enhance deposit insurance reserves.

### **Determination of Risk Classifications**

Outlined herein are the procedures used to place insured financial institutions into RBPS capital adequacy levels and Examination Data Rating Composite Score levels. Assignment to one of

three capital adequacy levels, coupled with assignment to one of three Examination Data Rating Composite Score levels, will determine which of the nine risk groups is appropriate for an institution. The risk group of the institution determines their premium rate.

## **I. Procedures for assigning institutions to capital adequacy levels**

There are three capital adequacy levels:

- ◆ For banks: if the total risk-based capital ratio is greater than or equal to 12 percent; and
- ◆ For community financial institutions: if the total equity to loan ratio is greater than or equal to 10 percent,

then Well Capitalized. Assignment: Capital Adequacy Level 1.

- ◆ For banks: if the total risk-based capital ratio is greater than or equal to 8 percent; and
- ◆ For community financial institutions: if the total equity to loan ratio is greater than or equal to 6 percent,

then Adequately Capitalized. Assignment: Capital Adequacy Level 2.

- ◆ For banks: if the total risk-based capital ratio is less than 8 percent; and
- ◆ For community financial institutions: if the total equity to loan ratio is less than 6 percent,

then Undercapitalized. Assignment: Capital Adequacy Level 3.

## **II. Procedures for assigning institutions to Examination Data Rating Composite Score levels**

There are three Examination Data Rating Composite Score levels:

- ◆ For each insured financial institution if the Examination Data Rating Composite Score it has received is greater than or equal to 65, which generally corresponds to the primary regulator's examination composite rating of A or B, or financially sound institutions with few minor weaknesses,

then its assignment level is A.

- ◆ For each insured financial institution if the Examination Data Rating Composite Score it has received is greater than or equal to 50, which generally corresponds to the primary regulator's examination composite rating of C or the better part of D, or an institution which demonstrates weaknesses which, if not corrected, could result in significant deterioration of the institution and increased risk to CDIC,

then its assignment level is B.

- ◆ For each insured financial institution if the Examination Data Rating Composite Score it has received is less than 50, which generally corresponds to the primary regulator's examination composite rating of the worse part of D or E, or an institution for which there is substantial possibility of loss to CDIC unless effective corrective action is taken,

then its assignment level is C.

The Examination Data Rating Composite Score Level assignment is based on the following areas:

- ◆ capital adequacy
- ◆ asset quality
- ◆ management capacity
- ◆ earnings
- ◆ liquidity
- ◆ market risk sensitivity

### III. Special Regulations

1. For a reorganized member institution that an on-site financial examination has not yet being conducted after reorganization, its risk group will be assigned based on the latest Examination Data Rating Composite Score before reorganization.
2. For a newly established institution that an on-site financial examination has not yet being conducted, the secondary tiered-rate will be applied.
3. For a government-owned member institution, except for those with the lowest rate, one tiered-rate will be deducted from its original applicable rate.
4. For a member institution not conducting a lending business, a special rate will be authorized by the MOF.
5. For a member institution being placed under assistance, supervision or conservatorship by the MOF subject to the Deposit Insurance Act and the Banking Law, the highest rate will be applied.

## 5. Turkey

The **Savings Deposit Insurance Fund** (SDIF) is the primary deposit insurer in Turkey. It is a legal entity represented and administered by the Banking Regulation and Supervision Agency (BRSA). Membership in the scheme is compulsory for all foreign and domestic deposit-taking institutions.

The SDIF is the only deposit insurance scheme in Turkey which uses a differential premium system to categorize its member institutions. The risk-based premium system involves a flat rate for all banks plus “add ons” on the basis of individual bank risk profiles.

On the basis of a protocol signed between the BRSA and the SDIF, the SDIF uses the database of the supervisory body (the BRSA) for the determination of differential premiums where the database essentially contains the outstanding savings deposit balances, and information such as

ratios related to lending, non-performing loans, capital adequacy ratio etc. Also, the SDIF receives any information it needs from banks for both statistical purposes and for double-checking database accuracy.

Banks deposit insurance premium rates are not publicly available. But, financial statements of banks are disclosed quarterly including some essential banking ratios.

Currently there is no minimum reserve ratio for the SDIF. Since the resolution of 21 problem banks the SDIF has been primarily financed by the Government. However, after the completion of the resolution of intervened banks, the SDIF plans to have a target for an optimum reserve and fair premium levels for its overall funding requirements.

In order to finance overall funding requirements and add to the ordinary revenues, the SDIF may borrow in extraordinary situations upon an authorization from the Treasury or it may borrow government securities from the Treasury, if deemed necessary. The debt of the SDIF to the Treasury may be abolished by a decision of the Council of Ministers. Also, if the assets of the SDIF are insufficient to meet current needs, then advances may be received from banks in the amount up to the total insurance premium paid by banks in the previous year. This is to be deducted from their future premium obligations. Such advances, together with interest thereon at such a rate as shall be determined by the Board, shall be deducted from future premium obligations. Under extraordinary conditions, if the resources of the Fund are insufficient, then upon the demand of the BRSA, the Central Bank shall advance money to the SDIF.

The risk adjusted premium system is used to evaluate banks according to their risk situation and to take more premiums from high-risk banks and less from low-risk banks. But, the information required to successfully implement the risk adjusted differential premium system needs to be available. The SDIF's system is designed to increase incentives for risk aversion in the banking sector.

The major revenue source of the SDIF is from collecting deposit insurance premiums. The basic premium ratio is 12.5 basis points of the total Turkish Lira savings deposits of the institution along with foreign exchange and gold savings deposits in domestic branches of the banks (on a quarterly basis). The total premium assessed is determined by additions to the basic premium assessment as determined by the following methodology:

- a) By taking into account the minimum of the capital adequacy standard ratios (calculated by using consolidated and unconsolidated financial statements) additions to the basic premiums are;
  - 2 basis points for banks with ratios of 8 percent or above 8 percent but below 12 percent,
  - 5 basis points for banks with ratios which are below 8 percent,
- b) 1 basis point for banks which have an absolute value above 20 percent of the arithmetic mean of “unconsolidated F/X Net Position on a weekly basis/ own funds” standard ratio calculated on a quarterly basis,

- c) 3 basis points for banks with total loans extended to related parties above the limits stipulated pursuant to the related legislation,
- d) In accordance with the provisions of the “Regulation on Principles and Procedures related to the Determination of the Loans and Other Receivables for which Provisions shall be Set Aside by Banks and to the Provisions to be Set Aside”, 1 basis point for banks where “total net value of the loans classified as doubtful after the special provisions are deducted / total loans classified pursuant to the said Comminuque” ratio is above 5 percent.
- e) 1 basis point for banks total net value of subsidiaries, affiliates, tangible assets, expenses paid in cash and deferred taxes asset in the related period’s balance sheet corresponds to the equity amount or above the equity amount.

## 6. United States

During the first 60 years of its history, the **Federal Deposit Insurance Corporation** (FDIC) charged flat-rate deposit insurance premiums that were identical for all insured banks. The premium rate was set in statute and could be changed only by action of the U.S. Congress. The premium rate was expressed as a percent of assessable deposits, which currently is defined as deposits in domestic offices of insured banks and savings institutions, after certain adjustments.

During this period, the FDIC was granted discretion to vary premiums paid by banks -- not to differentiate among banks according to risk -- but rather to adjust premium income to the size of the deposit insurance fund.<sup>19</sup> With bank failures at low levels the insurance fund grew substantially during the post-World War II period and as a result of legislation in 1950, a system of credits was adopted whereby a portion of the FDIC's net premium income (after expenses and insurance losses) was credited *pro rata* to insured banks and could be used to pay future premiums.<sup>20</sup>

The intent was to provide a flexible means of reducing premiums paid by banks in normal times, while retaining the ability to utilize premium income fully in bad times. As bank failures and insurance losses increased in the 1970s and 1980s, the premium credit system was tied to the ratio of the insurance fund to insured deposits, so that if the fund ratio decreased the proportion of total net premium income credited to the banks would tend to decline and the proportion retained by the FDIC would tend to rise.<sup>21</sup> Concern about the size of the deposit insurance fund -- whether it

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<sup>19</sup> During most of this period the FDIC operated one deposit insurance fund for the protection of bank depositors. Deposits in savings institutions were insured by a separate agency, which was abolished as a result of the savings and loan debacle of the 1980s. Responsibility for insuring savings institution deposits was transferred to a separate fund administered by the FDIC by legislation adopted in 1989. As a result, the FDIC now administers two deposit insurance funds -- the Bank Insurance Fund (BIF) and the Savings Association Insurance Fund (SAIF) built up through premiums paid by banks and savings institutions respectively.

<sup>20</sup> Historical information on FDIC assessment credits is from Christine E. Blair, “History of the FDIC’s Deposit Insurance Assessment System” and “History of the FDIC’s Rebate Authority,” 1997, unpublished FDIC papers.

<sup>21</sup> Further modification led to the adoption of the current provision for premium refunds whereby the FDIC is required to refund any excess in the fund over the target ratio (1.25 percent of insured deposits) subject to the limitation that refunds can be paid only to well-rated institutions and cannot exceed the amounts they actually paid in



may be too low to meet future insurance losses or whether it may be too high with the result that funds are diverted unnecessarily from the banks -- was evident in this period and continues to shape the structure of deposit insurance premiums.

### **Adoption of Risk-Based Premiums**

The surge in bank and savings institution failures during the 1980s led to a reassessment of many bank regulatory and deposit insurance issues. Legislation was adopted in an effort to avoid a repetition of the experience of the 1980s. One of the measures adopted in the legislation of the early 1990s was a requirement that the FDIC establish a system of risk-based premiums.

In devising the initial risk-based rate schedule the FDIC utilized measures of risk that are widely accepted in the U.S. and combine objective and subjective criteria: (1) capital ratios based on financial reports that insured institutions are required to file quarterly with the regulatory agencies; and (2) supervisory ratings (essentially CAMEL(S) ratings) derived from on-site examinations.<sup>22</sup>

The specific capital ratios used in the calculation of risk-based premiums are described in the Appendix and are essentially the same as the ratios used in the implementation of Prompt Corrective Action, which requires that progressively more severe restrictions be placed on troubled banks as their capital ratios decline. As explained by the FDIC at the time the risk-related schedule was introduced, higher capital provides greater protection for the deposit insurance fund by increasing the institution's cushion against loss and increasing the owners' stake in sound operations. Moreover, the use of capital ratios for the purpose of assessing premiums would provide a potentially prompt financial reward (in the form of reduced premiums) to institutions that improve their condition in an objective and defined manner.<sup>23</sup>

Capital ratios do not, however, measure various aspects of an institution's operations that affect the risk exposure of the insurer—including loan underwriting practices, the adequacy of internal controls, and the quality of management—that are appraised in the course of on-site examinations. Unlike some deposit insurance systems, the FDIC has ready access to examination reports for all insured banks and savings institutions on a timely and relatively frequent basis.

The FDIC itself examines state-chartered banks that are not members of the Federal Reserve System (about 5,000 of the nearly 8,000 banks), and routinely receives reports of examinations as soon as they are completed from the regulators of other insured banks and savings institutions. By law, all insured banks and savings institutions must have an on-site, full-scope examination every 12 months (18 months for high-rated small banks).<sup>24</sup> Relatively frequent examinations reduce the likelihood that the condition of a bank may deteriorate between examinations without this being

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the most recent assessment period. As a result, the refund provision is currently of little significance because well-rated institutions generally paid no premiums in the prior assessment period.

<sup>22</sup> Some have argued that capital ratios and CAMEL(S) ratings are measures of the current condition of insured institutions rather than forward-looking measures of future problems.

<sup>23</sup> *Federal Register*, Vol. 57, No. 99, May 22, 1992, p. 21618.

<sup>24</sup> Problem banks may be examined more frequently and very large banks have resident examiners.

recognized by the supervisory authority or the deposit insurer. CAMEL(S) ratings of individual institutions are confidential.

In addition, the FDIC and other bank regulators utilize off-site monitoring systems, based largely on quarterly financial reports submitted by banks and savings institutions to project the likelihood of future downgrades in CAMEL(S) ratings.

Utilizing capital ratios and supervisory ratings the FDIC has computed risk-based premiums according to a nine-cell matrix:

Percent of Number of Institutions and Assessable Deposits in Risk Groups, Dec. 31, 2002

| Capital category          | Supervisory rating |        |       |      |
|---------------------------|--------------------|--------|-------|------|
|                           | A                  | B      | C     |      |
| 1. Well capitalized       | Number             | 91.7 % | 5.4 % | 1.2% |
|                           | Deposits           | 96.7   | 2.3   | 0.6  |
| 2. Adequately capitalized | Number             | 1.3    | .2    | .1   |
|                           | Deposits           | 0.4    | 0     | 0    |
| 3. Undercapitalized       | Number             | 0      | 0     | .1   |
|                           | Deposits           | 0      | 0     | 0    |

All institutions in column A have the highest supervisory ratings, while those in column C have the lowest, with supervisory ratings based essentially on CAMEL(S) ratings assigned by the primary regulator (see Appendix). Institutions are assigned to capital categories on the basis of a battery of capital ratios, as also detailed in the Appendix. The figures in the cells represent the percentage of the number and deposits of insured banks assigned to the various cells as of the end of 2002. As can be seen, the vast majority of the banks, by number and deposits, were well capitalized and had the highest supervisory ratings, reflecting the strong earnings and capital positions of U.S. banks in the period since the early 1990s. Similarly, savings institutions are also heavily concentrated in the 1A cell.<sup>25</sup>

The first risk-based premium rate schedule, which went into effect on January 1, 1993, was designed to achieve the following objectives:<sup>26</sup>

- Be fair, easily understood, and not unduly burdensome on weak banks;
- Produce sufficient revenue within 15 years to recapitalize deposit insurance funds that had been depleted by the large failure costs of the 1980s;
- Increase incentives for insured institutions to operate safely; and
- Provide a transition from flat-rate premiums to a “permanent” risk-based system.

<sup>25</sup> Other features of the premium system include a review process by which an institution disagreeing with its risk classification may seek a review of that classification.

<sup>26</sup> *Federal Register*, Vol. 57, No. 99, May 21, 1992, p. 21618.

In the transitional schedule implemented at the beginning of 1993, the FDIC charged the following premium rates:

Schedule effective Jan. 1, 1993, in basis points (cents per \$100 of assessable deposits).

| Capital category          | Supervisory rating |    |    |
|---------------------------|--------------------|----|----|
|                           | A                  | B  | C  |
| 1. Well capitalized       | 23                 | 26 | 29 |
| 2. Adequately capitalized | 26                 | 29 | 30 |
| 3. Undercapitalized       | 29                 | 30 | 31 |

Under this transitional schedule, the safest institutions—well capitalized institutions with the highest supervisory ratings (1A)—paid the lowest premiums, 23 basis points or 23 cents per \$100 of assessable deposits. The weakest institutions—undercapitalized institutions with the lowest supervisory ratings (3C)—paid the highest rates, 31 basis points. The minimum premium rate of 23 basis points corresponded to the rate paid by all institutions prior to the adoption of the risk-related premium system.

The narrow 8 basis point spread between the premium rates paid by the strongest and the weakest banks obviously did not fully reflect the relative risks they posed to the FDIC. The narrow spread arose, in part, from the objective of restoring the deposit insurance funds, which as indicated above had been depleted by the losses experienced in the 1980s and were to be built up to the prescribed level (1.25 percent of insured deposits) within 15 years. At the time, the FDIC believed that restoring the deposit insurance funds to the target ratio prescribed in the statute necessitated substantial premium payments by all banks, including the safest.

The law required (and continues to require) that when a deposit insurance fund falls below the target ratio of 1.25 percent of insured deposits, the FDIC must charge premium rates that will restore the fund to the target ratio within one year, or charge an average premium of at least 23 basis points. Lowering the rate paid by the strongest banks would have required substantial increases in premiums paid by the weakest group.<sup>27</sup>

At the time, the FDIC indicated that an actuarially fair premium would amount to a "confiscatory tax" for some institutions and that the FDIC's position as a "public, monopoly insurer" made it difficult to impose such large premiums.<sup>28</sup> Institutions that face high premiums could not effectively seek more favorable premiums at a competing insurer. Furthermore, charging actuarially fair premiums might have caused failures that could have been prevented without assistance from the insurer. In the U.S., during the period since the early 1990s, a significant proportion of problem banks (CAMEL(S) 4 and 5) have actually survived, generally because private investors stepped up and provided needed capital. Higher premiums might have thwarted efforts to attract private capital.

<sup>27</sup> In late 1992, the FDIC indicated that 75 percent of the banks (with 51 percent of the deposit base) and 60 percent of the savings institutions (with 43 percent of the deposit base) would be in the lowest rate-paying group.

<sup>28</sup> *Federal Register*, Vol. 57, No. 99, May 21, 1992, p. 21619.

As the condition of the economy and the banking industry improved, deposit insurance funds increased more rapidly than initially expected and reached the target ratio of 1.25 percent of insured deposits in 1995. Given reduced revenue needs, it became possible to lower premium rates for the stronger banks and thereby widen the premium spread relative to weaker banks. Accordingly, the FDIC lowered premium rates for all but the 3C banks, resulting in a 27 basis point spread between the 1A banks and the 3C banks.<sup>29</sup> Even so, available estimates suggest that the spread between the lowest and highest premium rates still was less than would be required on the basis of relative risk.<sup>30</sup> These estimates suggest that actuarially fair premiums might have required premiums so high for the 3C group of banks as to cause additional failures.

Schedule Adopted in 1995, in Basis Points (Cents per \$100 of Assessable Deposits)

| Capital category          | Supervisory ratings |    |    |
|---------------------------|---------------------|----|----|
|                           | A                   | B  | C  |
| 1. Well capitalized       | 4                   | 7  | 21 |
| 2. Adequately capitalized | 7                   | 14 | 28 |
| 3. Undercapitalized       | 14                  | 28 | 31 |

In 1996, with the deposit insurance funds remaining above the target ratio of 1.25 percent of insured deposits, the FDIC reduced premiums by 4 basis points across the board for all banks, while maintaining the 27 basis point spread between the strongest and the weakest groups. Subsequently, legislation was adopted that prohibited charging any premiums to the 1A banks when the insurance funds are above the 1.25 percent target. These actions created the premium schedule that currently exists.

<sup>29</sup> The Savings Association Insurance Fund remained considerably below the target ratio of 1.25 percent of insured deposits in 1995. Premium rates remained unchanged for the institutions insured by this fund until late 1996, after a large special assessment to capitalize this fund was imposed. A significant proportion of the premiums paid by these institutions had been diverted in earlier years to help pay for the costs of the thrift crisis of the 1980s.

<sup>30</sup> In *Federal Register*, Vol. 60, No. 158, August 16, 1995, p. 42688, the FDIC cited a FDIC study that found that an actuarially fair premium spread between the 1A and 3C banks would be on the order of 100 basis points. Gary S. Fissel, *Risk Measurement, Actuarially Fair Premiums, and the FDIC's Risk-Related Premium System*, *FDIC Banking Review*, (1994) 16-27. A later study found that, based on a 5-year time horizon and failure and insurance loss rates over the 15-year period from 1984 to 1999, an actuarially fair spread between 1A and 3C banks would be an estimated 93 basis points. **Federal Deposit Insurance Corporation**, *Keeping the Promise: Recommendations for Deposit Insurance Reform*, April 2001, 8.

## Current Premium Rate Schedule in Basis Points (cents per \$100 of Assessable Deposits)

| Capital category          | Supervisory rating |    |    |
|---------------------------|--------------------|----|----|
|                           | A                  | B  | C  |
| 1. Well capitalized       | 0                  | 3  | 17 |
| 2. Adequately capitalized | 3                  | 10 | 24 |
| 3. Undercapitalized       | 10                 | 24 | 27 |

**Reform of the FDIC Risk-Related Premium System**

The FDIC's risk-related premium system met many of its stated objectives. The deposit insurance funds were recapitalized faster than originally expected, although this was primarily because of a strong economy and a healthy banking industry. The risk-related system is fairer than the pre-existing flat-rate system because institutions with higher risk profiles pay higher premiums. The spread between premium rates for the strongest and weakest groups provides some incentive for institutions to improve their condition -- for example, strengthening capital ratios will tend to reduce the cost of deposit insurance.

However, some provisions of the risk-related system have had unforeseen consequences that require corrective action. The establishment of a "hard target" for the ratio of 1.25 percent of insured deposits was initially adopted by the U.S. Congress as part of the effort to ensure that the cost of deposit insurance would be borne by the industry and not by taxpayers. As noted above, when the fund ratio falls below the target, the FDIC must restore the fund within one year or charge an average premium of 23 basis points. As a result, a sharp rise in premiums may occur in a weak economy when the industry can least afford it.

On the other hand, when the actual fund ratio equals or exceeds the target ratio, the FDIC cannot by law charge the 1A institutions any premiums even though they pose some risk. As a result, premium levels are potentially subject to wide swings. Moreover, hundreds of recently chartered (licensed) institutions and rapidly growing institutions pay no premiums even though they increase the FDIC's exposure.

The present system also fails to differentiate adequately for risk. More than 90 percent of the insured institutions in recent years have been in the 1A group, and subject to the same premium rate, despite significant differences in risk profile.

During the past three years, the FDIC has worked for enactment of legislation to reform deposit insurance. The FDIC has recommended the following changes to Congress:

- Merge the Bank Insurance Fund (BIF) and the Savings Association Insurance Fund (SAIF).
- Grant the FDIC's Board of Directors greater flexibility to manage the combined deposit insurance funds:
  - Let the FDIC manage the size of the fund within a range of fund ratios. Let the FDIC grant assessment credits and rebates if the fund grows too large, and to levy surcharges if it gets too small.

-- Price deposit insurance according to risk, create a fairer system for safer banks using additional objective criteria, increase the premium burden for riskier banks, and make new entrants pay premiums.

-- Grant a one-time initial assessment credit to banks and thrift institutions that capitalized the FDIC funds in the early 1990s to correct the imbalance with new entrants that have paid nothing into the funds.

- Index deposit insurance coverage to ensure that coverage is not eroded over time by inflation and it provides higher limits for retirement accounts.

### **Background Notes: Criteria Used to Assign Institutions to Cells in Risk-Based Premium Matrix**

#### **Supervisory ratings categories are:**

Category A: Consists of financially sound institutions with only a few minor weaknesses. Generally corresponds to CAMEL(S) ratings of 1 and 2.

Category B: Consists of institutions that demonstrate weaknesses that, if not corrected, could result in significant deterioration of the institution and increased risk of loss to the FDIC. Generally corresponds to CAMEL(S) rating of 3.

Category C: Consists of institutions that pose a substantial probability of loss to the FDIC unless effective corrective action is taken. Generally corresponds to CAMEL(S) ratings of 4 and 5.

#### **Capital categories are:**

##### **Well capitalized banks**

- Total risk-based capital ratio at least 10 percent (total capital as percent of risk-weighted assets) and
- Tier 1 risk-based capital ratio at least 6 percent (Ratio refers to percent of risk-weighted assets.) and
- Tier 1 leverage ratio at least 5 percent (Tier 1 capital as percent of total tangible assets)

##### **Adequately capitalized banks**

- Total risk-based capital ratio at least 8 percent, and
- Tier 1 risk-based capital ratio at least 4 percent, and
- Tier 1 leverage ratio at least 4 percent.

**Undercapitalized banks**

- All other banks

Note: Risk-weighted assets refer to amounts of both on-balance sheet and off-balance sheet assets multiplied by their respective risk weights (from 0 percent to 100 percent). Tier 1 capital equals common equity, plus non-cumulative perpetual preferred stock, plus minority interest in consolidated subsidiaries, minus goodwill and other ineligible intangible assets.

## Annex II

### Deposit insurance systems utilizing differential premium systems

*Based on the results of the **Canada Deposit Insurance Corporation** International Deposit Insurance Survey (2003) and Garcia (1999), the following countries currently have in place differential premium systems.*

Argentina

Sweden

Canada

Colombia

Finland

France

United States

Sweden

Turkey

Taiwan

Peru

Portugal

Marshal Islands

Micronesia

Romania