

**COUNCIL OF FINANCIAL REGULATORS  
MINUTES OF THE TWENTY SEVENTH MEETING, 19 JUNE 2009**

*(c) Exit arrangements*

The second main issue was the establishment of failure compensation arrangements for when the deposit guarantee concludes. Council members agreed that the Financial Claims Scheme (FCS) provided an appropriate model to work from, although some features needed to be revisited. Important considerations included whether the scheme should be pre- or post-funded, the level of the cap, and the speed of transition to new arrangements. RBA noted that the International Association of Deposit Insurers' (IADI) Core Principles offered some guidance on these matters. On the issue of pre- versus post-funded the Core Principles were even handed, though a separate Canadian study had found that almost all deposit insurance schemes around the world were pre-funded. APRA noted that a pre-funded deposit insurance scheme in Australia would not be insurance in the true sense, as failure by one of the four largest institutions would be likely to exceed the scheme's resources. It was agreed that the Working Group should further consider the issues identified in the paper and, pursuant to this, work comparing the FCS with the IADI Core Principles would be circulated among the agencies.

**ATTENDEES AT MEETING**

**APRA**

John Laker  
Charles Littrell  
Geof Mortlock

**ASIC**

Tony D'Aloisio  
Malcolm Rodgers

**RBA**

Glenn Stevens (Chairman)  
Malcolm Edey  
Luci Ellis  
Carl Schwartz (minutes)

**Treasury**

Jim Murphy  
Kerstin Wijeyewardene  
(Ken Henry sent apologies)

*Glenn Stevens*  
18/15/05

# **Assessment of the Financial Claims Scheme against the Core Principles for Effective Deposit Insurance Systems**

**Prepared by the Australian Prudential Regulation Authority and the Reserve Bank of Australia**

**September 2009**

## **Introduction**

In June this year, the International Association of Deposit Insurers (IADI) and the Basel Committee on Banking Supervision (Basel Committee) released the Core Principles for Effective Deposit Insurance Systems (Core Principles). The Core Principles are not binding on countries, although as a Financial Stability Board member, Australia will be expected to largely comply with them. The Core Principles provide high-level guidance on desirable attributes for deposit insurance.

This paper provides an informal assessment by APRA and the RBA of the extent to which the Financial Claims Scheme (the FCS) - as it currently applies to protected accounts in authorised deposit-taking institutions (ADI) - complies with the Core Principles. Given that the assessment criteria are not yet available, this assessment may need to be refined once the criteria become available.

The paper does not assess FCS in respect of its application to policyholders and claimants of a general insurer.

This assessment is an input into the review being undertaken by the Council of Financial Regulators (the Council) on possible changes to the structure of the FCS in the context of exiting from the government guarantee arrangements in 2011.

## **Assessment of the FCS against the Core Principles**

The Core Principles comprise 18 principles divided into 10 groups:

Setting objectives (Principles 1 and 2)

Funding (Principle 11)

Principle 2: Mitigating moral hazard - **Non-Compliant** (while the existing \$1 million FCS cap is in place)

Principle 11: Funding – **Compliant**

## **Principle 2 – Mitigating moral hazard**

This Principle states:

*“Moral hazard should be mitigated by ensuring that the deposit insurance system contains appropriate design features and through other elements of the financial system safety net.”*

some features of the FCS do not assist in reducing moral hazard compared to some other countries' deposit insurance schemes. In particular, the lack of a deposit insurance fee payable by depositors and the fact that the scheme is not pre-funded and there is no risk-based fee payable by ADIs arguably weakens the defences against the moral hazard of depositors .

### *Assessment*



The FCS is assessed as non-compliant. While the FCS limit remains at its current level, and in the absence of a risk-based fee paid by depositors, the FCS creates a relatively high degree of moral hazard. This is mitigated, to some extent, by prudential supervision, which seeks to limit ADI risk-taking.

Other design features could be considered to further reduce moral hazard risks, including:

making the FCS a pre-funded scheme, with fees being set on the basis of risk (probability of default and expected loss given default) – although there are also disadvantages to doing this; and

retaining an ex post funded arrangement, but setting the levy on a risk-based basis, whereby ADIs with higher risks pay a higher proportionate fee – but this also has disadvantages.

## **VI Funding**

### **Principle 11 – Funding**

This Principle states:

*“A deposit insurance system should have available all funding mechanisms necessary to ensure the prompt reimbursement of depositors’ claims including a means of obtaining supplementary back-up funding for liquidity purposes when required. Primary*

*responsibility for paying the cost of deposit insurance should be borne by banks since they and their clients directly benefit from having an effective deposit insurance system. For deposit insurance systems (whether ex-ante, ex-post or hybrid) utilising risk-adjusted differential premium systems, the criteria used in the risk-adjusted differential premium system should be transparent to all participants. As well, all necessary resources should be in place to administer the risk-adjusted differential premium system appropriately.”*

### ***Analysis***

There are three main aspects to the Core Principles’ recommendations on funding a deposit insurance scheme:

The scheme should have all the necessary funding mechanisms to ensure that depositors can be reimbursed promptly.

Responsibility for paying for the cost of deposit insurance should be borne by the banks.

Where risk-based premiums are used, the criteria should be transparent and administered appropriately.

In regard to the source of the funding, the Core Principle merely states that the cost should ultimately be borne by banks (ADIs) and does not advocate either pre or post-funded systems (or hybrids of them). However, an IADI Guidance Paper does favour pre-funding. There are advantages and disadvantages with both approaches.

Australia’s existing FCS is post-funded, initially by the Commonwealth, which is then reimbursed through the liquidation of the assets of the failed institution. In the event that this is insufficient, funding is provided through a levy on surviving ADIs. This is consistent with the principle that the cost should be borne by the banks, although in Australia, given depositor preference laws, it is more likely that the cost will be borne by the failed institution’s unprotected creditors, rather than all ADIs.

The FCS does not use risk-based premiums, as funds are ultimately recouped from the assets of the failed institution or via an ex post levy. The Core Principles do not require the use of risk-based premiums; only that, if they exist, they must be transparent and administered appropriately.

The main reasons why FCS is funded on an ex post basis include the following:

Depositor preference laws make it likely that depositors' funds and the costs of administering the guarantee will be recouped from the liquidation of the failed institution's assets, so that the failed institution ultimately bears the cost of the scheme. The challenges of funding a pre-funded system equitably in a concentrated banking system.

Therefore, in a highly concentrated banking market, a pre-funded scheme may not be an efficient funding mechanism unless the scheme were to be used for open and closed resolutions. If the fund were used for open resolution, it would in effect become a recapitalisation funding scheme. This would suggest a different and more complex fee arrangement than if the fund were solely used for funding the FCS.

Given that there is a low probability of ADI failure (based on the last few decades of experience of the Australian financial system), and that the population of ADIs is relatively small by some international standards, a pre-funded scheme may not be a cost-effective means of funding the FCS. The ongoing costs of charging and collecting ADI fees and of establishing and maintaining a fund could well outweigh the benefits of the fund.

*Other considerations in relation to pre- and post-funding*

Although the Australian approach to funding complies with the Core Principle, the Financial Stability Board and G20 are looking at the issue of convergence of deposit insurance arrangements and have identified funding as an area either in "need of accelerated progress, or where there may be potential for progress".

The merits of pre and post-funding have been analysed by a May 2009 IADI guidance paper.<sup>4</sup> Based on the assumption that banks do not provision to meet contingent liabilities arising under deposit insurance, the IADI guidance paper argues that ex-ante funding has several advantages over ex-post funding. These include:

Ensuring a readily available pool of funds enabling prompt disbursement to insured depositors.

Greater equality, as all institutions, including the failed institution, have helped to cover the costs of the system.

Avoiding the pro-cyclical effect of ex post funding.

Reinforcing public confidence through the existence of the fund.

In addition, the accumulated funds of a pre-funded scheme could be used to assist with open resolutions (eg capital injections or facilitating a purchase by another institution). Having a pool of pre-arranged funding may assist in facilitating a quick recapitalisation of an ADI in a situation where an open resolution is considered appropriate. For more details on this, see Principle 16.

Pre-funding is the most prevalent approach internationally. A 2008 Canadian survey of deposit insurance schemes carried out for the IADI, found that 93 per cent of surveyed deposit insurance schemes were pre-funded, with the majority of ex-post schemes being

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<sup>4</sup> See [http://www.iadi.org/docs/Funding%20Final%20Guidance%20Paper%206\\_May\\_2009.pdf](http://www.iadi.org/docs/Funding%20Final%20Guidance%20Paper%206_May_2009.pdf) - Funding of Deposit Insurance Systems Guidance Paper

based in Europe. That said, the mechanisms for funding vary considerably and there is no international consensus on the best approach. Funding sources include government appropriations, levies, premiums assessed against member banks, government/market borrowing or a combination of these. This means that pre-funding actually covers many unique approaches, limiting any 'international norm'.

The Davis Report 5 in 2004 considered the advantages and disadvantages of pre-funding. It argued that that both pre and post-funding can be pro-cyclical, as under either choice of funding scheme surviving institutions may be levied during times of strain. For example, a pre-funded scheme would still need to be replenished after it is utilised. (A summary of the Davis Report's discussion of this area is in Appendix 1.)

A way around this pro-cyclical may be through limits, or a temporary moratorium, on industry-based funding during a certain time period by using hybrid systems of funding. Hybrid systems incorporate elements of both schemes, such as ex-ante funding with a government supplied line of credit, which can be utilised if the accumulated funds prove to be insufficient. These schemes can allow an initial line of credit from the government to be repaid over an extended period of time, smoothing out the repayment cycle.

The Canadian Deposit Insurance Corporation (CDIC) is an example of a hybrid fund – originally founded with a government line of credit, the fund is now maintained through changeable risk-based premiums and is capable of charging an industry levy, if funding proves insufficient.

Despite favouring pre-funding, the IADI guidance paper acknowledges that a post-funded scheme may be less onerous, as the deposit insurer does not need to manage the funds and the upfront cost to banks is initially lower. In addition, the IADI report acknowledges that policymakers need to take into account the features of their own economy and financial system.

### ***Assessment***

The current funding structure of the FCS is **compliant** with Principle 11. Nonetheless, if there is international pressure for greater consistency between countries, then consideration may need to be given in Australia on how to achieve increased convergence with overseas systems, such as pre-funding, or at least to clearly explain the reasons for any divergence.

Regardless of any international pressure on this matter, the exit from the blanket government guarantee provides a good opportunity for the Council to re-assess the funding arrangements for the FCS, taking into account the IADI Principles and international practice. In that context, the costs and benefits of establishing a fund to make FCS payments as well as to finance open resolutions should be assessed.

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<sup>5</sup> See <http://fsgstudy.treasury.gov.au/content/report.asp?NavID=8>

## APPENDIX 1: DAVIS REPORT VIEWS ON EX-ANTE FUNDING

### For and against pre-funding – Davis Report

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#### **For**

*Stability and credibility.* There is a high degree of certainty about the value of funds that are available for distribution in the event of the crisis, and payments can be made quickly and efficiently.

*Risk-sensitivity.* Risk-adjusted premiums are more likely to gain industry acceptance. In addition, moral hazard may be increased under an ex-post system, as the industry may not accept that risk sensitive fees will actually be levied after a failure.

*Perception of fairness.* Prior to their failure, the failed institution would have made a contribution towards the deposit insurance fund.

#### **Against**

*Uncertainty of failures.* As there is uncertainty over the costs and timing of failures, there is a risk that the size of the fund is set too large, and the size of the premiums too high, adding unwarranted costs to the industry. Conversely, the size of the fund may be too small and the premiums too low, and the fund may still require a levy after a failure.

*Moral hazard.* A large visible pool of funds may encourage complacency toward risk by both regulators and industry peers.

*Equity.* When the fund reaches its targeted size, there are significant questions about how to limit its growth, refund any excess contributions to past contributors and charge new entrants for the insurance provided by the existing pool of funds.

*Provisioning.* Reduces the prospect of the burden of failures being borne by taxpayers if governments do not enforce post-funding levies.

*Cost inefficiency.* In theory, there should not be much difference between the administrative costs of an ex-ante or ex-post fund. In practice though, pre-funded systems with stand-alone administration present some risk of ‘regulatory creep’ – the expansion of another arm of bureaucracy beyond economically efficient limits.

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Source: Davis Report

The Davis Report believes that the main difference between an ex-ante or ex-post fund is where the funds are held prior to an institutions’ failure. The Davis Report assumes that under ex-post funding, banks make provisions to meet their contingent liabilities, whereas the IADI guidance paper assumes that banks will not do this.

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**COUNCIL OF FINANCIAL REGULATORS  
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**6. Preliminary Working Group report on the Financial Claims Scheme (FCS) review: cap and coverage issues**

There was also discussion of some of the costs and benefits of different funding structures. Potential benefits of prefunding included potentially reducing moral hazard, but setting actuarially fair premia would be challenging, and any benefit had to be balanced against the cost of establishing an apparatus to administer the funding collected.

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**ATTENDEES AT MEETING**

**APRA**

John Laker  
Charles Littrell  
Geof Mortlock

**ASIC**

Tony D'Aloisio  
John Price

**RBA**

Glenn Stevens (Chairman)  
Malcolm Edey  
Luci Ellis  
Carl Schwartz (minutes)

**Treasury**

Jim Murphy  
John Lonsdale

*John Lonsdale*

## **CANADA'S PRE-FUNDED DEPOSIT INSURANCE: IS IT WORTH THE COST?**

*The Canadian Deposit Insurance Corporation (CDIC) compulsorily insures deposits up to C\$100 000 at Canadian Deposit Taking Institutions (CDTIs) in return for a risk-based fee. The accumulated fees of C\$1.8 billion are held in an ex-ante fund in readiness to payout depositors. However, in the event of failure, this amount would be insufficient to cover all insured deposits at any of the 14 largest CDTIs, leaving the CDIC reliant on government resources or debt funding. The CDIC has average operating costs of around C\$23 million per year even though it has been 14 years since a CDTI failed.*

*The CDIC provides an interesting case study of a pre-funded scheme that is rarely used and is a useful comparison with Australia's Financial Claims Scheme (FCS). This note evaluates the merits of Canada's pre-funded approach in the context of the review of Australia's FCS.*

### **Background on the CDIC**

Since 1967, CDIC membership has been compulsory for CDTIs (domestic and subsidiaries of foreign), with members paying fees to insure deposits.<sup>1</sup> As at 30 April 2009, there were 81 member CDTIs, holding insured deposits totalling C\$590 billion or around 27 per cent of total Canadian deposits (resident and non-resident). Insured deposits typically include those with balances lower than C\$100 000, which are not exposed to investment risk and mature in less than five years.<sup>2</sup>

Since the CDIC's inception, 43 CDTIs have failed with the last one occurring in 1996. Of these, 23 were resolved through depositor reimbursement and liquidation, and 20 through purchase and assumption – where assistance is given to another CDTI to assume some, or all, of the failing group's assets and liabilities. These failures have typically been small and were concentrated in the 1980s and early 1990s.

The CDIC provides a useful comparison for Australia's FCS, because both schemes are intended to be used only rarely. Currently, the FCS is post-funded, where the Government provides the initial up-front funding, analogous to a bridging loan, and is then reimbursed by the proceeds of the failed ADI. This funding arrangement is not common internationally, with most schemes being pre-funded, such as the CDIC's. Given the review underway of the FCS, including its funding arrangements, it is useful to examine the merits of CDIC's approach to funding.

### **Funding**

The CDIC switched from a flat fee to risk-based premiums in 1999. There are four different fee categories, earning the CDIC an average of C\$100 million each year (Graph 1). The CDIC's board sets the premiums for each fee category every year. The banks are then individually assessed and placed into a fee category, with each bank prohibited from disclosing the premium they are required to pay. Risk-based premiums are intended to lower moral hazard, by rewarding

<sup>1</sup> Before this, some provinces had their own deposit insurer. However, the only remaining provincial insurer is Quebec's Autorité des marchés financiers (Financial Markets Authority of Quebec), which co-operates with the CDIC to protect certain Quebecois deposit products.

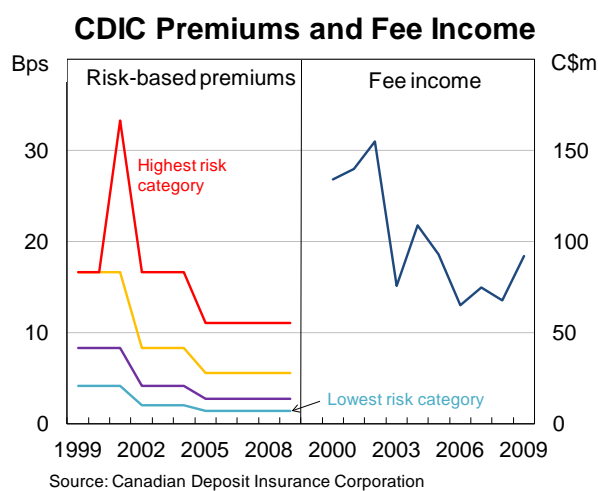
<sup>2</sup> For further details, see CDIC ['What's covered. What's not'](#)

institutions for safer business practices through lower fees. In 1999, moral hazard was thought to be elevated in Canada, because of the CDIC's tendency to reimburse all depositors (even uninsured depositors) during the 1980's and early 1990's crisis.<sup>3</sup>

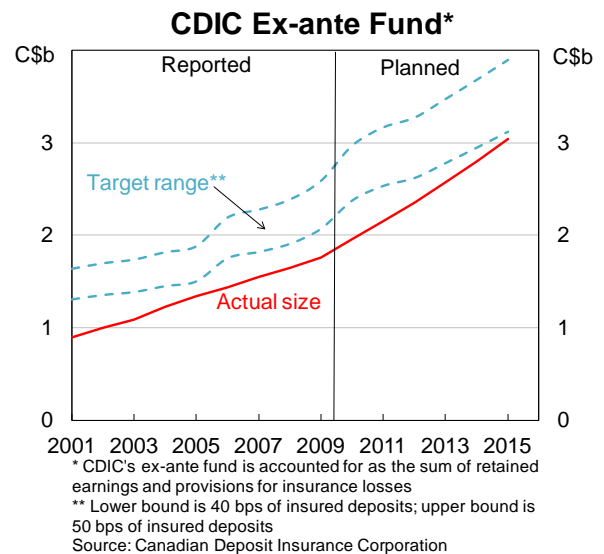
The *ex-ante* fund provides cover for deposit insurance claims in anticipation of a CDTI's failure, and reassures depositors about the safety of their money. The funds can be used for all resolution methods where the CDIC has the powers.

At end 2009, the *ex-ante* fund was valued at C\$1.8 billion, or 34 basis points of total insured deposits (Graph 2). The fund's size was below the target range of 40 to 50 basis points of all insured deposits, although it is forecast to reach the bottom of this target by 2015. This is contingent on there being no claims, insured deposits growing by 5 per cent, and premiums changing in line with the CDIC's plan.

**Graph 1**



**Graph 2**



The *ex-ante* funds target range was devised through simulations. Key variables included in these were: insured deposits at each CDTI; failure probabilities of each CDTI; CDIC's historical loss experience; and the potential that failure situations may be correlated.

### Is the *ex-ante* fund large enough?

Despite the sophistication behind the calculation of the fund's target size, in 2007, the CDIC acknowledged that the *ex-ante* fund was too small to reimburse insured deposits at any of the 14 largest CDTIs.<sup>4</sup> In other words, the institutions that the CDIC could rescue, without resorting to other funding prior to realising the CDTI's assets, amount to under 20 per cent of total banking system deposits.

More specifically, rough calculations show the *ex-ante* fund is probably 50 to 70 times too small to promptly reimburse insured depositors at Canada's largest bank, the Royal Bank of Canada (RBC). At end 2009, deposits at RBC totalled

<sup>3</sup> See Potheir, N. '[CDIC: Deposit Protection In Canada](#)', October 1992

<sup>4</sup> See CDIC, '[2007 Annual Report](#)', p23

C\$400 billion, and if the share of insured deposits is in line with the total Canadian banking system's share, then around C\$110 billion of deposit balances would be covered. This far exceeds the pre-funded amount of C\$1.8 billion.

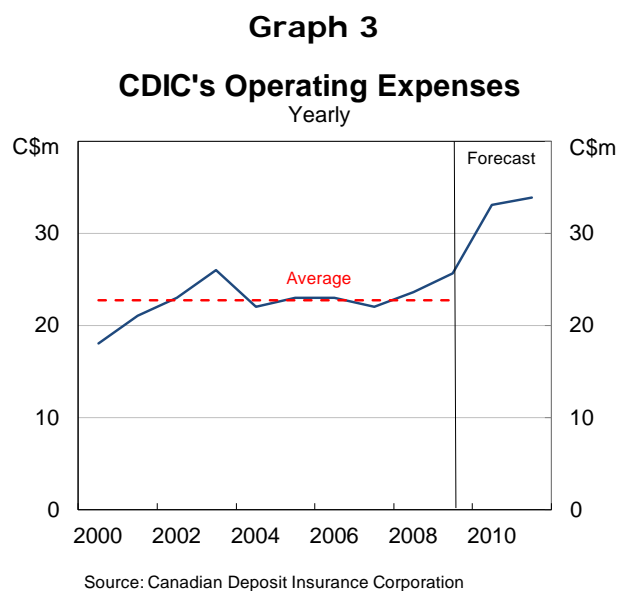
The CDIC can also access a standing C\$15 billion government line of credit.<sup>5</sup> Supplementing this with the *ex-ante* funds, gives the CDIC about one sixth of the required funds needed to promptly payout RBC insured depositors, according to the above estimate of insured deposits. The CDIC can also raise money through the private sector (ie through debt issuance); however, this limits the benefits of accumulating an *ex-ante* fund.

Therefore, although the CDIC is notionally pre-funded, in practice the extent of the pre-funding is limited. The first C\$1.8 billion is pre-funded, and the next C\$15 billion is post-funded (as the government line of credit is analogous to a bridging loan), and the remaining debt funding is also post-funded, as it is ultimately paid for following a failure.

### Costs

Despite no failures, in 2009 CDIC's operating expenses were C\$25.6 million with these forecasted to rise in the coming years (Graph 3). To put this in perspective, in 2009, APRA's annual operating expenses were \$103 million (C\$97 million).<sup>6</sup>

Over this period, around half of the CDIC's expenses were on salaries and personnel costs, employing nearly 100 people, and around 10 per cent on promoting public awareness. Other key activities included preparing for future failures, managing the *ex-ante* fund, and maximising the asset values of previously liquidated CDTIs. The CDIC conducts a yearly practice drill, where they simulate the failure of a CDTI.



Although the operating cost is easily covered by fee income from the fund of C\$100 million a year on average, there is an opportunity cost to this. Given there has been no failure in 14 years, the cost of readiness to deal with a failure is in the order of C\$300 million (and even more in current dollars). Australia has not had a failure-like event since the early 1990s, with Pyramid Building Society and the state banks of Victoria and South Australia.

<sup>5</sup> The \$15 billion limit holds throughout 2010, but will grow proportionally each year along with the growth of insured deposits.

<sup>6</sup> Canada's prudential regulator, The Office of the Superintendent of Financial Institutions, had operating costs of C\$93 million in 2009. Thus, the combined cost of Canada's prudential regulator and deposit insurer was C\$119 million.

The mere existence of a pre-funded scheme incurs costs associated with calculating and collecting premiums, and then investing and managing the accumulated funds. This is the case even though the fund is relatively small and most funding for a failure is likely to be paid by the industry only after the failure. There will also be costs on the banking sector for meeting these criteria and a possible increase in the reporting burden. A key advantage of Australia's post-funded scheme is that these costs can be avoided, although the cost of preparing for future failures still exists. It seems remarkable that around 80-100 people are employed for a depositor protection scheme that has not been used in 14 years.

## **Conclusion**

The CDIC's model does not make a compelling case for pre-funded deposit insurance. There are significant costs associated with running a pre-funded scheme, and much of these do not overlap with the prudential regulator's responsibilities. Despite this, the *ex-ante* fund is too small to support any of Canada's largest institutions, and in these circumstances, post-funded Government assistance will still be required.

**COUNCIL OF FINANCIAL REGULATORS**

**FINAL REPORT ON THE**

**FINANCIAL CLAIMS SCHEME REVIEW: EARLY ACCESS FACILITY**  
**FOR DEPOSITORS**

**Funding**

The FCS should retain the current post-funded approach. In the event of a failure, the cost of invoking the FCS should be initially met through the liquidated assets of the failed ADI, and then in the event of a shortfall, through an industry levy.

*This is discussed at section 5.1.*



## 5 CHAPTER FIVE: FUNDING

In considering funding arrangements for the FCS, a primary question is, ‘Who benefits?’ Market efficiency would dictate that beneficiaries be appropriately charged for the rents they receive. The principal beneficiaries of the FCS are:

- depositors, whom the FCS protects and provides with early access to most of their deposits;
- ADIs, to the extent that the risk of retail runs is reduced and that depositors’ confidence in the safety of their deposits up to the cap is maintained, regardless of the size or credit rating of the institution;
- the Australian people broadly, as the FCS contributes to the stability of the financial system.

Principal costs are the cost of administering the FCS infrastructure while the FCS is inactive, and the cost of paying out in the event that the FCS is invoked. Currently, the administrative costs are intended to be met through the levies on prudentially regulated institutions. Payout costs are met through claims on the assets of an institution in liquidation, and if necessary, a levy on the industry. It is highly likely that the value of the benefit received by ADIs (particularly the smaller ADIs) substantially exceeds the price they currently pay through the levies.

As ADIs are primary beneficiaries of the FCS, it is appropriate that they should bear the cost; this is consistent with the IADI Principles. To determine what this cost should be and how it should be paid, the Working Group has framed the question as a choice between pre- and post-funding. Pre-funding would see ADIs paying some form of up-front fee, while post funding is the model currently in place. A pre-funded model would impact on all the beneficiaries of the Scheme. That is, although the institutions would be levied directly, the cost would be distributed between depositors (through marginally lower rates) and the institutions (through marginally higher rates).

To remain consistent with the previous chapter on the functions of the FCS, the main focus is the section on funding arrangements for closed resolutions. Section 5.1 outlines the pre- and post-funded approaches, provides some international context and discusses the costs and benefits of each. These are illustrated by considering the pre-funded deposit insurance model used in Canada, before conclusions are set out.

The Working Group has concluded that the cost of managing and implementing the FCS should be borne by industry, through the current arrangements, and that no pre-funded fee should be levied. It was of the view that designing an accurate, and therefore market efficient, risk-based pre-funding model is a complex task, and that administering such a system would bring significant costs not justified by the benefits. Under the current post-funded arrangements, the cost is still ultimately borne by the industry. The Working Group considers that no additional charge should be made for the benefits received by ADIs in an environment where the use of the scheme is expected to be low.

### 5.1 PRE-FUNDING VERSUS POST-FUNDING FOR A CLOSED RESOLUTION

#### 5.1.1 Definitions

This discussion considers a closed resolution of an ADI: where the ADI is liquidated. Under a pre-funded approach, the funds would come from a pool accumulated through industry levies. The pool of funds could then be reimbursed through the liquidation process and, in the event of a shortfall,

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replenished through further industry levies. If the initial funds were insufficient, it could be topped up with a government line of credit to be repaid in the future.

The accumulated pool of funds could either be kept as a separate pool requiring administrative and governance arrangements, or incorporated into the consolidated revenue of the government, with records kept of the value of it.

Under a post-funded approach, the FCS would retain its current approach to funding, even if the powers and functions of the FCS were broadened to enable the transfer of all or some deposits to a surviving ADI. That is, the initial funds would come from the Government, and then be recouped through the liquidation process. In the relatively unlikely event that they were insufficient, funds would be obtained through a levy on the industry.

### 5.1.2 International Context

As outlined in Attachment B, the current post-funding arrangements comply with the IADI Principles, and so the IADI Principles provide no impetus for a change in funding model.

In practice, however, the pre-funded model is more common: around 90 per cent of deposit insurance schemes in developed countries are pre-funded. Although this is the predominant approach, the characteristics of these pre-funded systems are very different and there is no consensus or international norm on the best approach. Most schemes have a flat fee, although there has been a tendency to move to risk-based premiums.<sup>23</sup>

In June 2009, the FSB raised the issue of convergence in depositor protection systems and identified funding as an area either in 'need of accelerated progress, or where there may be potential for progress'. At least one high profile country – the UK – is reviewing the funding arrangements of its deposit insurance scheme and appears likely to move from a post-funded to a pre-funded system. The EU appears likely to adopt a directive requiring pre-funding.

If there is international pressure for consistency between countries, then consideration should be given to how to increase convergence with overseas systems and whether this would be appropriate for Australia. If not, reasons for any divergence should be able to be clearly explained.

### 5.1.3 Merits of the Two Approaches

A pre-funded scheme would produce a more market efficient outcome. That is, the post-funding model fails to capture the pricing benefit that eligible financial institutions are likely to receive from the guarantee of deposit liabilities. By imposing a risk-based cost on those institutions benefiting from Scheme coverage, pre-funding provides for:

- competitive neutrality of the policy. That is, a risk based fee would help limit the potential distortion of capital allocation decisions; and
- limit moral hazard, by reducing the incentive institutions may have to engage in excessive risk-taking in the absence of a risk based fee.

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<sup>23</sup> CDIC Survey 2008 Summary p.5 (see <http://www.cdic.ca/e/summary2008IDIS.pdf>). See also Note by the Secretariat for the FSB meeting on 26-27 June 2009 on *Deposit Insurance Arrangements*.

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However, leading up to the introduction of the FCS, administrative efficiency arguments outweighed such considerations. The Council concluded that a post-funded approach would be preferable because of the following:

- the ranking of the FCS in the winding up of an ADI makes it unlikely that there would be a shortfall in assets to reimburse the FCS;
- the costs of administering a deposit insurance fund would outweigh the benefits, given the low probability of the FCS being used.

A key focus here is how the financial crisis may have changed the advantages and disadvantages since the last time the Council considered this issue.

Key changes in Australia in recent years relating to FCS funding are that:

- the FCS cap is higher than originally intended, reflecting that the motivation for the FCS has broadened from an early access facility to more broadly supporting financial stability; and
- actions are likely to have increased public perceptions of government support for the financial sector, with the attendant risk of moral hazard.

International developments have also shaped attitudes to depositor protection in some countries toward:

- a greater focus on alleviating pressure on public finances of financial sector support; and
- greater focus on avoiding procyclicality (which can arise in both pre- and post-funded schemes, depending on the scope to defer pool replenishment or levies ).

Other considerations, that are arguably relatively unchanged since they were last considered by Council, are the cost and complexity of a pre-funded versus a post-funded scheme.

### **5.1.3.1 Higher Cap**

A higher cap increases the likelihood that assets may be insufficient to meet deposits covered under the FCS. However, even at higher levels of the cap, the risk that a significant post-funded levy will be required is not large.

Analysis using data on one large institution has shown that the assets of the institution would easily be sufficient to meet the costs of paying depositors, even with a substantial haircut on assets. Available data from a sample of three smaller ADIs suggest that at an FCS cap between \$100,000 and \$250,000, deposits also appear well covered by assets. This result may be less likely for some smaller institutions where covered deposits account for a larger share of liabilities, though the smaller the institution the less likely it is that any levy arising would be a material burden on the financial system.

### **5.1.3.2 Perceptions of Government Support**

Now that governments in Australia and globally have shown their willingness to step in and support banking systems, there may be value in distancing them from paying out depositors.

## IN CONFIDENCE

For a post-funded scheme, the Government provides the initial funding and therefore is a central part of the operation of the scheme. Where funding comes from an industry-funded pool, the role of the Government is potentially reduced in comparison. However, there are a number of aspects of pre-funded schemes that do not provide this separation:

- under some countries' schemes, funding from the industry is included in consolidated government revenue rather than kept separately in a dedicated fund; and
- pre-funded schemes are often heavily reliant on government lines of credit for funding of all but small institution failures (more below).

In practice, the funding of the scheme can probably only go so far in shaping perceptions. In either model, depositors of the failed ADI will experience some disruption to their banking services, so both creditors and depositors will have an incentive to manage and assess their risks.

### **5.1.3.3 Public Finances**

Ultimately, under either approach, the cost is borne by the failed ADI's creditors and shareholders, and in the unlikely event that its assets are insufficient to cover the FCS costs, by the broader industry through an industry levy. However, the incidence of the initial cost varies between the two approaches. Under a post-funded approach, the initial cost is borne by the Government. In contrast, an advantage of the pre-funded approach is that the industry bears the initial cost, rather than the Government and taxpayers.

While in theory, an available pool of pre-funding may lower the involvement of the public purse in depositor payouts, the benefit should not be overstated. In practice, there is likely to be pressure against building a pool of funds large enough to remove a role for government, given that in many countries the likelihood of the funds being required is remote.

### **5.1.3.4 Procyclicality**

The funding structure for the FCS should avoid procyclical patterns of charging levies. To the extent that a pre-funded scheme has a pool of funds accumulated during stronger economic times to utilise in a downturn, it may be less procyclical than a post-funded scheme. This benefit, however, may be overstated.

Aside from idiosyncratic events, such as an operational risk failure in a single ADI, demands on depositor protection schemes are most likely during a downturn, when bank credit losses are typically at their worst. Both pre- and post-funded schemes may face pressure to raise levies or obtain government funding at an inopportune time. For example, the US Federal Deposit Insurance Corporation's accumulated fund was being depleted by numerous failures, and in the middle of the crisis, levies were raised and insured institutions had to prepay five years' worth of levies. The procyclicality of a pre-funded scheme can be ameliorated by replenishing the fund over an extended period or delaying replenishment, though this would undermine the advantages of pre-funding.

The procyclicality risks of a post-funded scheme can be effectively managed by deferring industry levies until the financial system has been restored to a sound financial condition.

### **5.1.3.5 Complexity**

A pre-funded scheme, whether paid into consolidated revenue or kept as a separate pool, is considerably more complex than an ex post scheme. It requires determining, among other things:

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- the appropriate size of the fund – should it be large enough to cover the failure of large institutions, or multiple institutions in a short period of time? How should any surplus funds be returned to the industry?
- how the levies should be set – for example, by value of deposits? Should a risk-based premium be incorporated? If so, how would this be determined – credit ratings, credit default swap premia or an assessment by the prudential regulator? Difficulties include that the majority of small ADIs do not have credit ratings or credit default swap premia. Should financial authorities increase their reliance on credit ratings given that the rating’s credibility has been undermined by the financial crisis? Assessments by APRA are highly confidential and have not been developed for use in determining depositor protection levies;
- risk-based fees could create an adverse signalling problem, such that ADIs charged a higher fee may be seen by the market to be high risk, with the potential for this to destabilise the ADIs in question, particularly in a period of financial system stress. This could be overcome by keeping the fees confidential; and
- how effects on competition should be balanced – if the levies incorporate some component for total deposits covered, then larger institutions will pay the vast majority of even risk-based levies,
  - . How should new entrants be included in contributing towards the levies?

While overseas schemes with pre-funded arrangements have made judgements about the appropriate way of overcoming these issues, there are shortcomings and trade-offs with each approach. The complexity of these issues is one reason why there are myriad ways of setting up a pre-funded scheme and no international consensus on the best approach.

A pre-funded scheme also requires ongoing administrative and governance arrangements for calculating and collecting the levies, and for managing the fund (where the fund is stand-alone). The levies can be kept in a separate fund, or paid into the Government’s consolidated revenue. If the funds are paid into consolidated revenue, the additional governance and administrative requirements are lower, because the need to decide how the funds are to be invested, and to control and conduct the investments are avoided. As discussed above, however, this reduces the separation of the fund from Government.

### 5.1.3.6 Cost

Reflecting the additional complexity of a pre-funded scheme, and its ongoing nature, administrative costs are likely to be higher than for a post-funded scheme. For a post-funded scheme, administration costs are predominantly incurred after an ADI fails (although there are ongoing costs associated with maintaining preparedness). Therefore, where failures are rare, the costs are likely to be significantly lower.

A useful international comparison is the Canadian Deposit Insurance Corporation.

#### 5.1.4 Example of a Pre-Funded Scheme: Canadian Deposit Insurance Corporation

The Canadian banking system is often compared to Australia, with similarities in key areas such as industry concentration and high credit ratings of the major banks. The Canadian pre-funded Canadian Deposit Insurance Corporation (CDIC) is therefore a relevant indicator of how a standalone pre-funded model could look in Australia.

The CDIC compulsorily insures deposits up to C\$100,000 at Canadian Deposit Taking Institutions (CDTIs) in return for a risk-based fee, holding the accumulated fees of C\$1.8 billion in an ex-ante fund as at end 2009. There has not been a failure of a CDTI for 14 years.

However, the Canadian model and experience do not make a compelling case for pre-funding.

*Although the CDIC is notionally pre-funded, in practice the extent of the pre-funding is limited.* The CDIC has acknowledged that, as at 2007, the ex-ante fund was too small to reimburse insured deposits at any of the 14 largest CDTIs.<sup>24</sup> In other words, the institutions that the CDIC could rescue, without resorting to other funding prior to realising the CDTI's assets, amount to under 20 per cent of total banking system deposits. The CDIC can also access a standing C\$15 billion government line of credit<sup>25</sup> and also raise money through the private sector (that is, through debt issuance) – effectively post-funding options.

*The CDIC is costly.* Despite no failures in many years, in 2009 the CDIC's operating expenses were C\$25.6 million – it employs around 80 to 100 staff – with costs forecast to rise in coming years. To put this in perspective, in 2009, APRA's annual operating expenses were \$103 million (C\$97 million) – to perform the full range of licensing and supervision functions of a prudential supervisor responsible for supervising ADIs, general insurance companies, life insurance companies and superannuation schemes.<sup>26</sup> It is arguable that dedicating resources of this nature to a potential failure would be better deployed to lowering the probability of failure (while also maintaining the capacity to manage failures if they arise).

*The benefit of separation from government is unclear.* When put to the test during the 1980's and early 1990's crisis, the CDIC tended to reimburse all depositors (even uninsured depositors).<sup>27</sup>

#### 5.1.5 Conclusion

In short, there are strong arguments to retain the post-funded approach. These include:

- In Australia, depositor preference reduces the risk of assets being insufficient to meet insured deposits, requiring funds from industry. This is an important difference to other countries. This is reinforced by FCS payments ranking ahead of all other claims (including those of account-holders with funds above the FCS limit) in the winding up of an ADI.

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<sup>24</sup> See CDIC, '[2007 Annual Report](#)', p23

<sup>25</sup> The \$15 billion limit holds throughout 2010, but will grow proportionally each year along with the growth of insured deposits.

<sup>26</sup> Canada's prudential regulator, The Office of the Superintendent of Financial Institutions, had operating costs of C\$93 million in 2009. Thus, the combined cost of Canada's prudential regulator and deposit insurer was C\$119 million.

<sup>27</sup> See Potheir, N. '[CDIC: Deposit Protection In Canada](#)', October 1992

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- Some seemingly attractive features of pre-funding appear not to be that robust in practice. For example, the benefits of perceived separation from government and avoiding procyclicality can be hard to achieve; building pre-funding up to sufficient levels where government support or industry levies are not required creates other costs.
- The costs of a pre-funded scheme could be considerable. This is hard to justify given that a number of factors, including strong regulation, mean that failures have been rare in Australia, to date at least.

**5.4 CONCLUSION**

- For a closed resolution FCS, the current post-funded approach should be maintained, where the cost is initially met through the liquidated assets of the failed ADI, and then in the event of a shortfall, through an industry levy.



# **ATTACHMENT A: INTERNATIONAL DEVELOPMENTS IN DEPOSIT INSURANCE AND RELATED ISSUES**

## **INTRODUCTION**

The review of the Financial Claims Scheme (FCS) needs to be informed by international developments, particularly as regards deposit insurance and associated financial crisis management arrangements. This chapter provides a summary of relevant international developments in deposit insurance. It also summarises international developments in other relevant aspects of financial crisis management.

The chapter draws some conclusions in terms of the implications of these international developments for Australia.

## **DEPOSIT INSURANCE DEVELOPMENTS**

As a key element in effective crisis management is a mechanism to protect those depositors least well placed to protect themselves, there has been a considerable degree of work undertaken at international and national levels to enhance deposit insurance and guarantee schemes. An important element in this work has been the development of international principles on deposit insurance.

### **IADI Principles**

In June 2009, the International Association of Deposit Insurers (IADI) and the Basel Committee on Banking Supervision (BCBS) released the *Core Principles for Effective Deposit Insurance Systems* ('IADI Principles'). A draft assessment methodology was subsequently released to assist in assessing compliance with the IADI Principles. However, the assessment methodology is still in draft form and may be amended as a result of consultation.

The Core Principles comprise 18 principles divided into 10 groups:

- Setting objectives (Principles 1 and 2)
- Mandates and powers (Principles 3 and 4)
- Governance (Principle 5)
- Relationships with other safety-net providers and cross-border issues (Principles 6 and 7)
- Membership and coverage (Principles 8 to 10)
- Funding (Principle 11)
- Public awareness (Principle 12)
- Selected legal issues (Principles 13 and 14)
- Failure resolution (Principles 15 and 16)
- Reimbursing depositors and recoveries (Principles 17 and 18).

The FSB has indicated that the IADI Principles will become part of the compendium of standards and will form part of the Financial Sector Assessment Program (FSAP) as conducted by the IMF. On that basis, although the IADI Principles are not binding on countries, countries will be expected to align their deposit insurance arrangements to the principles, in much the same way as with the other core international standards.

The Working Group has undertaken an assessment against the IADI Principles, taking into account the draft assessment methodology, and factoring in the legislative amendments effected by the *Financial Sector Legislation Amendment (Prudential Refinements and Other Measures) Act 2010 (Cth)*, enacted in June 2010. A summary of the assessment is attached to this report, both in respect of the FCS as it currently stands and on the basis of what the FCS would be like if the Working Group's recommendations were implemented. If the recommendations of the Working Group are adopted, compliance with the IADI Principles will be very high.

### **Deposit Insurance Developments**

A number of countries are in the process of reviewing and upgrading their deposit insurance systems, having regard to the IADI Principles and experience following the global financial crisis.

Some countries are also considering introducing pre-funding, again, in light of the emerging thinking in the EU and the experience in the global financial crisis (particularly Iceland's inability to meet its deposit insurance obligations).

### **EU Proposals**

The European Commission has been reviewing the EU directive on deposit insurance and has recently released a proposal for a revised directive. The key proposals are as follows:

- **Long-term and responsible financing.** Concerns have been expressed that existing Deposit Guarantee Schemes are not well funded. The proposals are designed to ensure that the Deposit Guarantee Schemes are more soundly financed following a four-step approach. First, ex-ante financing is proposed that is intended to provide for a reserve sufficient to cover expected claims. Second, if necessary, this can be supplemented by additional ex-post contributions. Third, if this is still insufficient, schemes can borrow a limited amount from other schemes ('mutual borrowing') within the EU. Fourth, as the last resort, other funding arrangements would have to be made as a contingency. It is proposed that contributions will, as is currently the case, be borne by banks. However, it is proposed that the fees would be risk-based, thereby seeking to reduce moral hazard risks and cross-subsidisation across banks.

## **CONCLUSION**

In the context of this report, the key points to draw from the international reforms under way are:

- The IADI Principles provide a useful framework for assessing the FCS proposals in this report. Although the Principles are not mandatory, it would be desirable for the FCS to be compliant with the Principles to the extent that this is consistent with the needs of the Australian financial system. With this in mind, the Working Group has assessed the FCS as it is now, and as it would be if the recommendations in this report were implemented, against the Principles. The result of that assessment is attached to this report.
- The reforms of deposit insurance schemes in other countries, particularly in Europe and the UK, provide helpful reference points for the FCS review. In particular, it is noteworthy that the proposed EU directive, if accepted by the EU Ministers and Parliament, will require all EU member states to have pre-funded schemes. This is the norm for most schemes around the world, although the specific characteristics of pre-funded schemes vary considerably. This is not necessarily a reason for the FCS to be pre-funded, but it does suggest that there should be sound reasons for taking a differing approach. The chapter on funding addresses this issue.

## **ATTACHMENT B: ASSESSMENT OF THE FINANCIAL CLAIMS SCHEME AGAINST THE IADI PRINCIPLES**

The table attached sets out a summarised assessment by the Working Group of the Financial Claims Scheme as it applies to ADIs by reference to the IADI Principles. Under each principle, an assessment is made of the FCS as it currently stands (in the left column of the table). An assessment is also made of the FCS on the assumption that the recommendations of the Working Group are implemented (in the right column of the table).

Principle	Current Assessment	Revised Assessment if WG recommendation is accepted
<p><b>Principle 2 – Mitigating moral hazard</b></p> <p>‘Moral hazard should be mitigated by ensuring that the deposit insurance system contains appropriate design features and through other elements of the financial system safety net.’</p>	<p>The FCS is assessed as <b>Materially Non-compliant</b> with Principle 2.</p> <p>While the FCS limit remains at its emergency level, and in the absence of a risk-based fee paid by depositors, the FCS creates a relatively high degree of moral hazard. This is mitigated, to some extent, by prudential supervision, which is effective in limiting the extent of risk-taking by ADIs.</p> <p>The moral hazard risks would be significantly reduced if the FCS limit was lowered from its current setting.</p> <p>The post-funded nature of the scheme, with the absence of a risk-based charge, arguably also contributes to moral hazard.</p>	<p>The FCS would be assessed as <b>Compliant</b> with Principle 2 if a lower limit (such as \$100,000 to \$250,000) were adopted.</p> <p>The absence of risk-based pricing and retention of a post-funded arrangement arguably create a higher level of moral hazard than would otherwise apply. However, these moral hazard risks are countered to some degree by the prudential supervision arrangements.</p>

Principle	Current Assessment	Revised Assessment if WG recommendation is accepted
<p><b>Principle 11 – Funding</b></p> <p>‘A deposit insurance system should have available all funding mechanisms necessary to ensure the prompt reimbursement of depositors’ claims including a means of obtaining supplementary back-up funding for liquidity purposes when required. Primary responsibility for paying the cost of deposit insurance should be borne by banks since they and their clients directly benefit from having an effective deposit insurance system. For deposit insurance systems (whether ex-ante, ex-post or hybrid) utilising risk-adjusted differential premium systems, the criteria used in the risk-adjusted differential premium system should be transparent to all participants. As well, all necessary resources should be in place to administer the risk-adjusted differential premium system appropriately.’</p>	<p>The FCS is assessed as <b>Largely Compliant</b> with Principle 11.</p> <p>The current funding arrangement is assessed as <b>Largely Compliant</b> given that the funding mechanism:</p> <ul style="list-style-type: none"> <li>• enables prompt payouts to depositors;</li> <li>• is sufficient to cover most payout situations ; and</li> <li>• ultimately results in depositors (above the FCS limit) and other creditors of the failed ADI bearing the cost of the FCS, with any shortfall being covered by a levy on the ADI sector.</li> </ul>	<p>A <b>Compliant</b> rating would be assigned if the funding amount was sufficient to cover potential payouts for any ADI</p>

# Pricing Arrangements of Pre-funded Deposit Insurance Schemes

19 January 2011





# Outline

- Pre-funding versus post-funding
- Pricing of fees
- Target capital base
- Operating expenses
- Fund investment
- Back-up post-funding sources



# Pre-funding vs post-funding

- Advantages of pre-funding:
  - Faster reimbursement
  - Greater public confidence
  - All participants contribute
- Advantages of post-funding:
  - Lower costs
  - Less complex



# Assessment base

- Usually insured deposits
- Can be broader:
  - ‘eligible’ deposits
  - total deposits
  - total consolidated assets minus tangible equity



# Frequency

- Assessment: generally annual
- Collection: can be more frequent than assessment
- Risk management vs higher administration costs



# Determining fees across institutions

- Risk-based
- Fixed
- Hybrid



# Risk-based vs fixed fees

- Risk-based fees:
  - More equitable
  - Discourage risky behaviour
- Fixed fees:
  - Simpler
  - Fewer resources required



# Risk-based fees

- New Zealand: 15 to 150 bps insured deposits
- US: 7 to 78 bps total deposits
- Canada : 2 to 19 bps insured deposits
- France: €80 million aggregate p.a.



# Fixed fees

- Iceland 15 bps of insured deposits
- Japan 10.7 bps and 8.2 bps of 'insurable' deposits
- UK fixed amount based on requirements





# Hybrid fees

- Finland
  - Fixed: 5 bps of insured deposits
  - Risk-based: solvency
- Norway
  - Fixed: 10 bps of insured deposits
  - Risk-based: Tier 1 capital adequacy



# Fees for new participants

- Fixed payment on entry
- Additional fees over a period of time



# Fund capital base

Capital base = fee income  
+ investment earnings  
– operating expenses  
– payouts



# Target capital base

- Targets:
  - 1 to 2 per cent of insured deposits
  - Fixed level
- Most currently below target



# Fund operating expenses

- Pre-funded schemes generate ongoing expenses irrespective of failures
- Reported operating expenses vary considerably
  - Compare with caution



# Annual operating expenses

- US >US\$1 billion
- UK £32 million
- Canada C\$30 million
- Norway €10 million
- Spain €3 million
- France €2 million
- Finland €1 million



# Asset investment

- Liquidity versus return
- Conservative portfolios
  - cash, government securities
- Broader portfolios



# Back-up post-funding sources

- From participants
  - Additional fees or prepayments
  - Pre-agreed guarantee/declaration of liability
  - Borrowing
  - Other divisions
- From non-participants
  - Government/central bank
  - Debt issuance





# Summary

- Most schemes are pre-funded
- Fees usually a proportion of insured deposits
- Risk-based, fixed, hybrid fees
- Target capital base usually 1 to 2 per cent of insured deposits
- Can also access post-funding





# Spares



**Table 1: Current Pricing of Fees in Selected Countries' Deposit Insurance Schemes**

Country	Assessment base	Frequency of assessment & collection	Determination of fees across institutions	
			Fixed	Risk-based
Canada	insured deposits	assessed annually collected semi-annually	-	1.3 to 18.5 bps 4 categories, factors include: • capital adequacy • profitability • asset quality • asset concentration • qualitative factors
Denmark	insured deposits	annually	Fund at target level. Fees charged to redistribute contributions based on share of total assessment base. Maximum 20 bps.	-
Finland	insured deposits	annually	-	• fixed component 5 bps • variable component based on solvency
France	total 'eligible' deposits (total outstanding loans also form part of the calculation)	assessed annually collected semi-annually	-	Participants' shares of pre-determined aggregate fee determined via scoring system. Factors include: • solvency • risk diversification • profitability • maturity transformation
Iceland	insured deposits	annually	15 bps	-
Japan	'insurable' deposits	annually, although semi-annual instalments are accepted	• 10.7 bps of 'deposits for payment & settlement purposes' • 8.2 bps of 'general deposits'	-
New Zealand	insured deposits	monthly	-	15 to 150 bps Factors: • credit rating • type of institution
Norway	insured deposits	annually	-	• fixed component 10 bps • variable component based on capital adequacy
Spain	total cash deposits plus 5 per cent of the value of transferable securities and financial instruments	annually	• 0.06 bps banking establishments • 0.1 bps savings banks • 0.04 bps credit cooperatives	-
UK	insured deposits (for deposit takers)	annually, collection annual or quarterly	Participants' shares of pre-determined aggregate fee based on share of total assessment base.	-
US	average consolidated total assets minus tangible equity*	quarterly	-	7 to 77.5 bps 4 categories, factors include: • capital ratios • supervisory ratings • debt ratings • financial data 10th category: large & highly complex institutions**

\* This will replace total domestic deposits as the assessment base from the June quarter 2011.

\*\* This category would potentially include around 40 institutions. An institution would be deemed 'highly complex' if it held more than US\$50 billion in assets and was controlled by a parent or intermediate parent company with more than US\$500 billion in total assets, or a processing bank or trust company with at least US\$10 billion in total assets. The FDIC expects to finalise new rules in first quarter of 2011.

Sources: 2008 IADI survey responses; central banks; country legislation; government websites; scheme annual reports and websites



**Table 2: Current Target Capital Bases of Pre-funded Deposit Insurance Schemes**

	Per cent of insured deposits	Fixed level	Point at which may suspend contributions
Canada	0.4 to 0.5 per cent	-	-
Denmark	-	DKK 3.2 billion	-
Finland	-	-	reduced at 2 per cent suspended at 10 per cent
Iceland	1 per cent	-	-
Norway	minimum 1.5 per cent of insured deposits + 0.5 per cent of the sum of the measurement base for the capital adequacy requirements	-	-
Spain	-	-	1 per cent**
US	minimum 2 per cent***	-	-

\* Spain uses a calculation base of total cash deposits, plus 5 per cent of transferable securities and financial instruments.

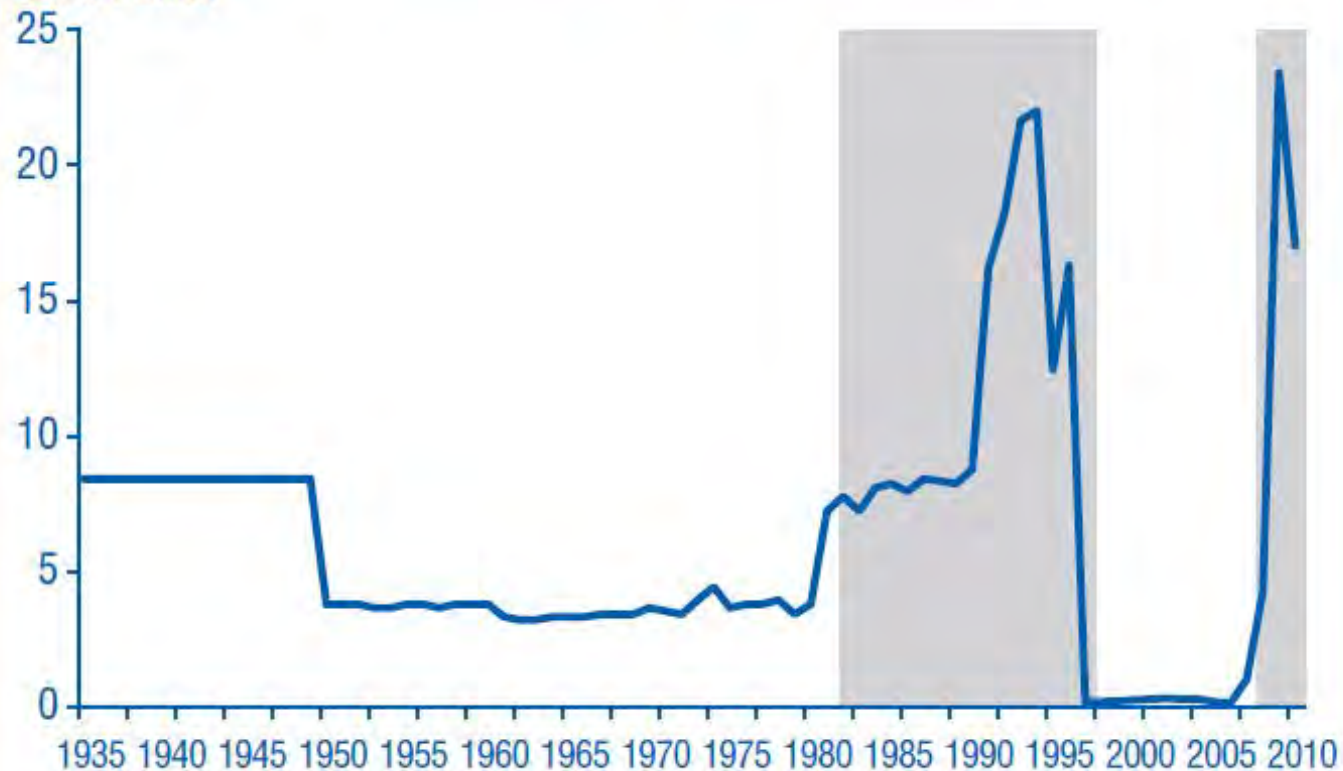
\*\* On 14 December 2010 the FDIC voted on a final rule to set the insurance fund's long-term target minimum designated reserve ratio at 2 per cent of estimated insured deposits (up from 1.15 per cent).

Sources: 2008 IADI survey responses; central banks; country legislation; government websites; scheme annual reports and websites



## Effective Assessment Rates Have Been Volatile and Pro-Cyclical

Assessment Rates  
Basis Points



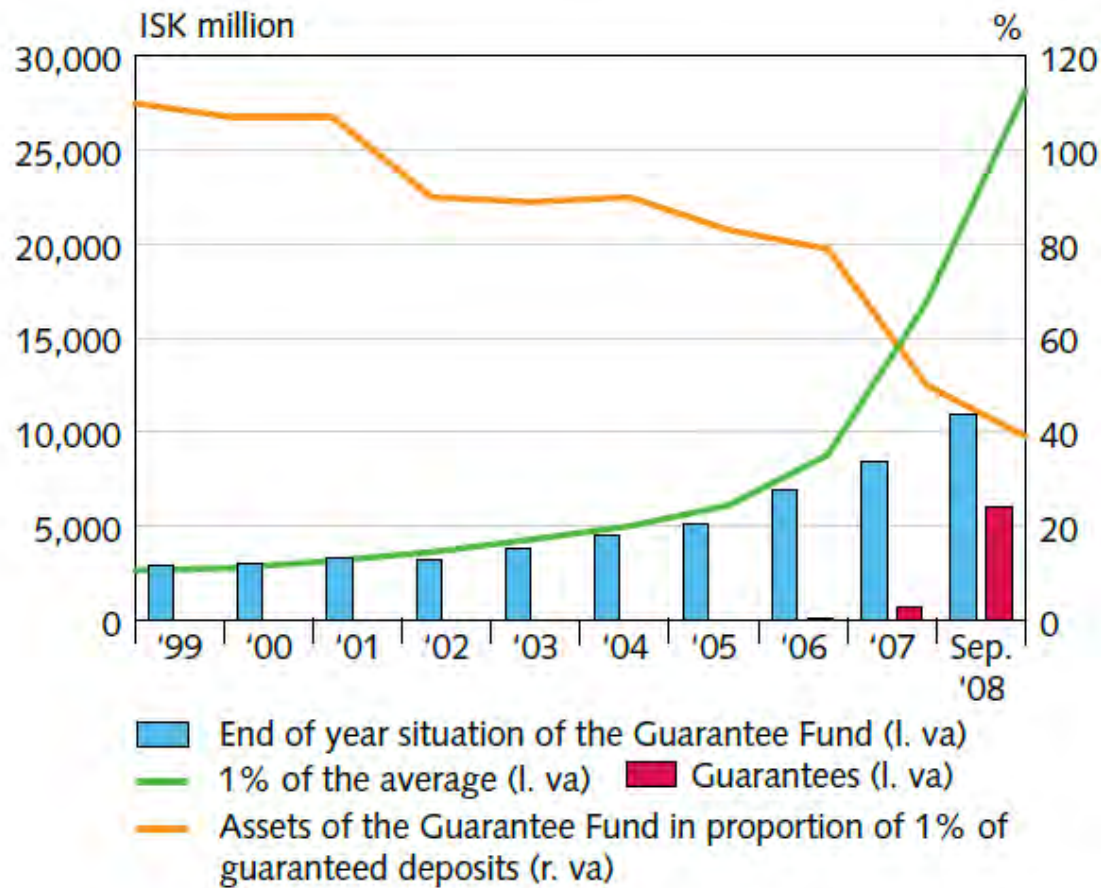
Source: FDIC, data through June 30, 2010.

Note: Shaded areas denote periods of crisis and associated high assessment rates.



# Assets of the Depositors' and Investors' Guarantee Fund

Income years of the Guarantee Fund

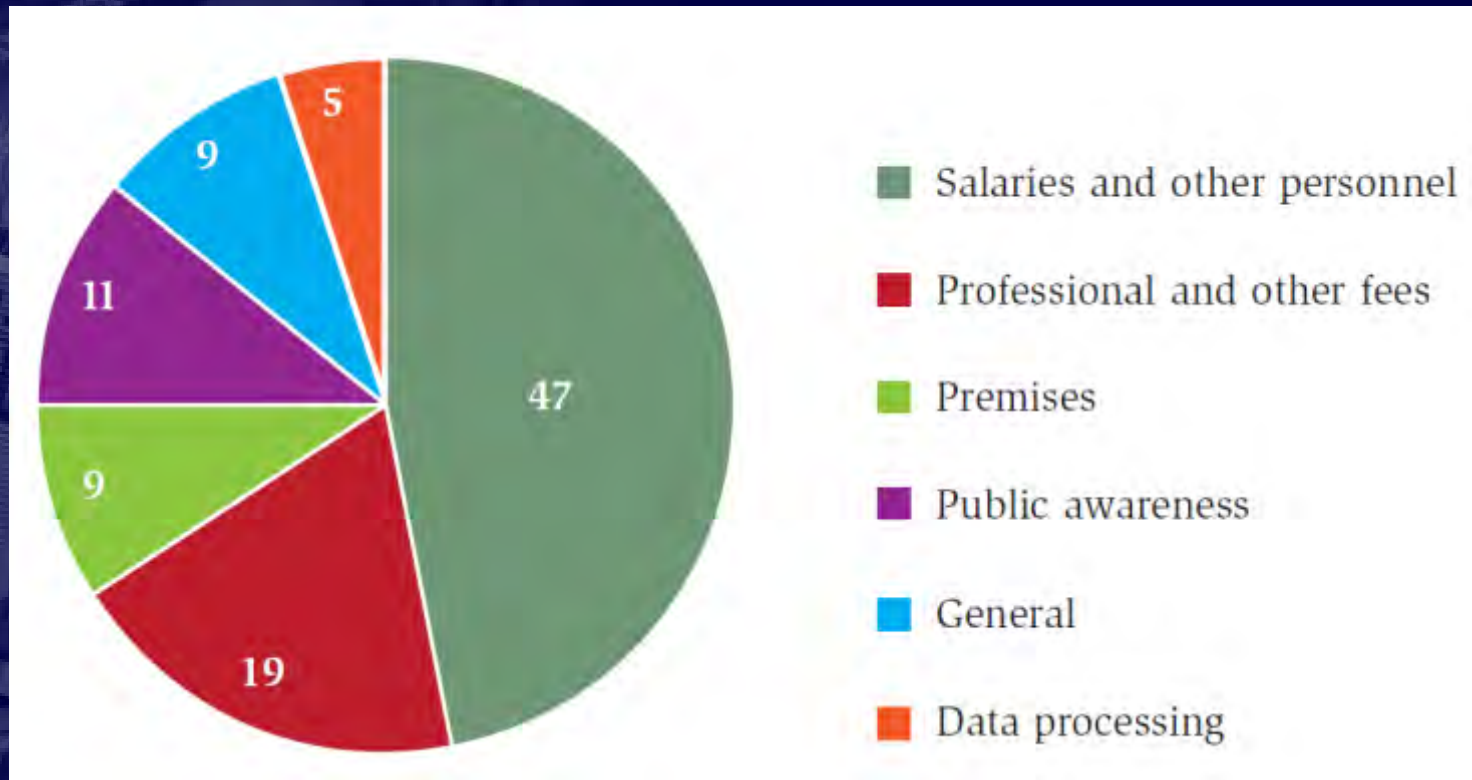


Source: The Central Bank of Iceland, The Depositors' and Investors' Guarantee Fund.



# CDIC Profile of Operating Expenses

Per cent, year to 31 March 2010



Source: CDIC





## New Zealand Retail Deposit Guarantee Scheme Pricing

Fee charged on guaranteed deposits\*

Credit rating	Finance companies	Banks, credit unions, building societies, PSIS**
	bps	bps
AAA+/-	15	15
AA+	15	15
AA	15	15
AA-	20	15
A+	25	20
A	30	20
A-	40	20
BBB+	60	25
BBB	80	30
BBB-	100	40
BB+	120	50
BB	150	60
below BB or unrated	ineligible	ineligible

\*This fee structure applies from 12 October 2010 until 31 December 2011. Fees charged monthly on all deposits guaranteed. Rebate available if the credit rating of an institution improves from the credit rating it held on 31 October 2010. Institutions must be rated at least BB to be eligible, but if the credit rating of an existing member institution falls below BB the fees that will apply are those for BB rated institutions.

\*\*PSIS Limited is a cooperative.

Source: New Zealand Treasury



## CDIC Fees

Score	Fee category	Rate, basis points of insured deposits*					Proportion of institutions 2009
		2002-04	2005-08	2009	2010	2011-14**	
=80	1	2.1	1.4	1.9	2.3	2.8	68
=65 but < 80	2	4.2	2.8	3.7	4.6	5.6	21
=50 but < 65	3	8.3	5.6	7.4	9.3	11.1	10
< 50	4	16.7	11.1	14.8	18.5	22.2	1

\* The CDIC fee year runs from 1 May to 30 April. For example, the 2011 year begins 1 May 2011. The CDIC aims to reach its *ex-ante* target capital base of 40 to 50 basis points by around 2015/2016. In line with this and given the deteriorating economy and faster than expected growth in insured deposits, the CDIC decided to modestly increase fees beginning in 2009. Fees are planned to double from 2008 levels by 2011.

\*\* Planned

Source: CDIC



## FDIC Distribution of Institutions and Domestic Deposits Among Risk Categories\*

Quarter ending 30 June 2010

	Annual rate	Institutions		Domestic deposits	
	basis points	number	per cent of total	US\$ billion	per cent of total
Risk category I	7-24	5583	71.21	4673	60.82
Risk category II	17-43	1408	17.96	2685	34.95
Risk category III	27-58	654	8.34	249	3.24
Risk category IV	40-77.5	195	2.49	76	0.99

\* Institutions are categorised based on supervisory ratings, debt ratings and financial data as at 30 June 2010.

Source: FDIC



## Changes in FDIC Assessment Rates

Total base assessment rates\*

	Current base	Proposed base**
	domestic deposits	total consolidated assets minus tangible equity
Risk category I	7-24	2.5-9
Risk category II	17-43	9-24
Risk category III	27-58	18-33
Risk category IV	40-77.5	30-45
Large and 'highly complex'***	N/A	2.5-45

\* Rate after adjustments.

\*\* The proposed assessment rates aim to collect approximately the same level of revenue as previously from a broader assessment base, and to eliminate risk categories for large institutions.

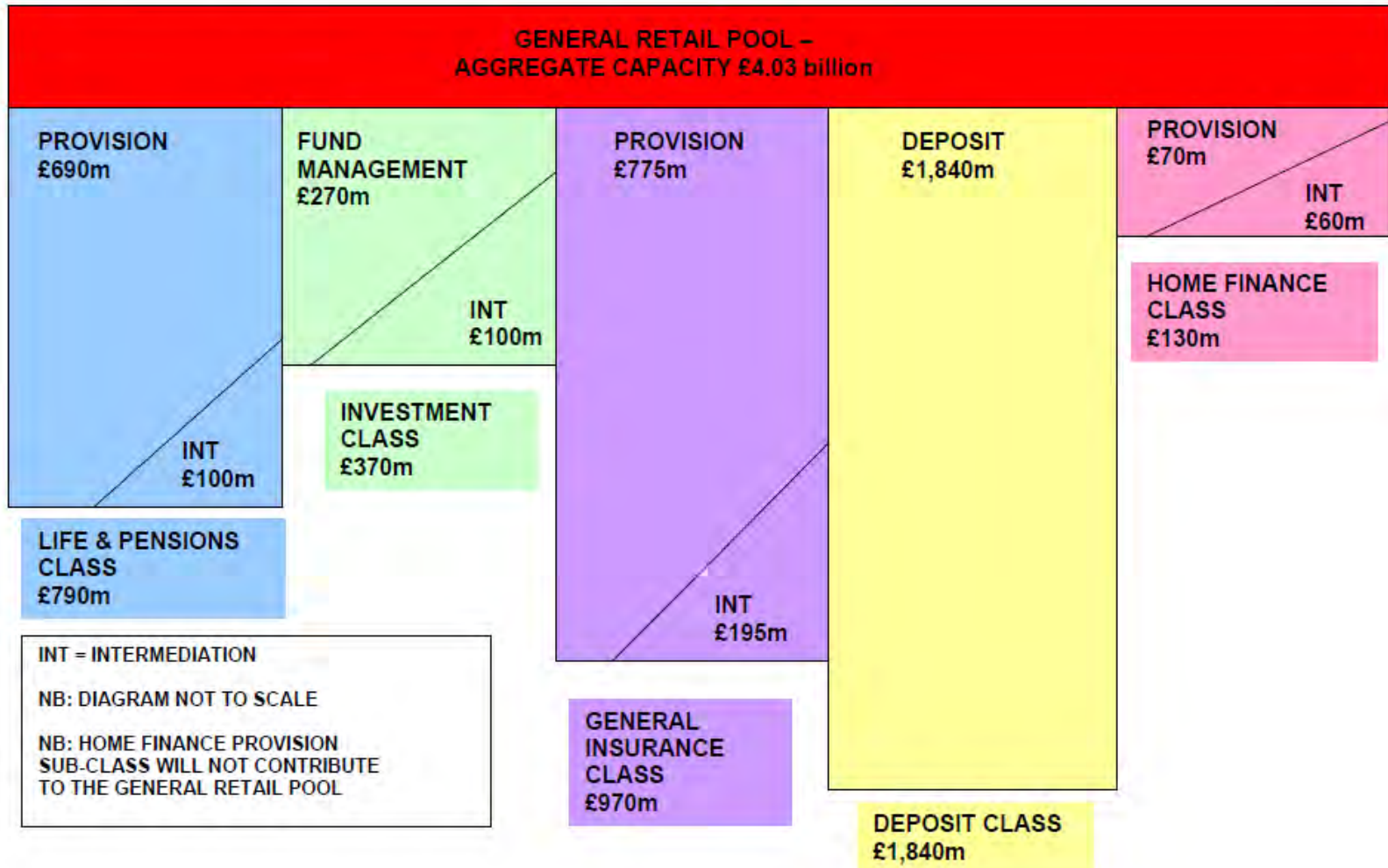
\*\*\* An institution would be deemed 'highly complex' if it held more than US\$50 billion in assets and was controlled by a parent or intermediate parent company with more than US\$500 billion in total assets, or a processing bank or trust company with at least US\$10 billion in total assets. This category would potentially include around 40 institutions.

Source: FDIC



## FSCS FUNDING MODEL

The total annual capacity of the scheme will be £4.03bn unless defaults arise in the home finance intermediation sub-class, in which case the total capacity is £4.10bn. This is due to the £70m contribution from home finance providers, which arises only when defaults are from the home finance intermediaries' sub-class.



## PRICING ARRANGEMENTS OF PRE-FUNDED DEPOSIT INSURANCE SCHEMES

*Internationally, most deposit insurance schemes are pre-funded via fees charged to participating institutions. The current post-funded Australian Financial Claims Scheme is unusual in this respect, in part due to pre-existing depositor preference provisions.<sup>1</sup> This note examines the key pricing aspects of several pre-funded deposit insurance schemes. While approaches vary considerably, some broad observations can be made:*

- *Fees tend to be charged as a proportion of insured deposits.*
- *Schemes either charge fixed fees or differential risk-based fees, and some use a combination of both approaches. Risk-based fees are generally based on varying quantitative and/or qualitative supervisory criteria, and can differ considerably. For example, the Canadian scheme (which has a relatively low target capital base) charges from 2 to 19 basis points of insured deposits, and the US scheme currently charges 7 to 78 basis points of total domestic deposits. The majority of institutions in these countries – around 70 per cent – are currently allocated to the lowest risk category. Fixed fees charged in a few European countries and Japan are within a range of 5 to 20 basis points of insured deposits.*
- *Many schemes target a capital base in the range of 1 to 2 per cent of insured deposits. A number of schemes are currently well below their target capital bases, most notably the US.*
- *Even when they are pre-funded, most schemes can also access additional ex-post funding sources in the event that fund assets are insufficient to repay all of a failed institution's insured deposits. Options include levying additional fees on participants, borrowing from governments or central banks, or issuing debt in the scheme's name.*

### PRICING OF FEES FOR INSTITUTIONS

Table 1 (following page) summarises fee arrangements across a sample of pre-funded deposit insurance schemes.<sup>2</sup>

#### Assessment base

Deposit insurance schemes generally charge fees (premiums) as a proportion of a pre-defined assessment base. For most of the schemes studied, this base is insured deposits.<sup>3</sup> This is seen as more equitable, as institutions with higher levels of protected deposits typically pay higher fees. Canada, Denmark, Finland, Iceland, New Zealand, Norway and UK all take this approach.

Some schemes use a broader assessment base, for example total deposits, either because the scheme covers more than depositors (for example the Spanish scheme insures a portion of banks' debt securities) or because this is easier to calculate. An assessment base of total deposits may also prevent speculative shifts by participants between insured and uninsured deposits.<sup>4</sup> The US FDIC recently proposed several reforms to commence from the June quarter 2011, including broadening

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<sup>1</sup> Around 90 per cent of deposit insurance schemes in developed countries are pre-funded. Apart from Australia, notable ex-post funded schemes include Austria, Italy (although Italian banks pay annual contributions for scheme operating expenses), Luxembourg, The Netherlands, Slovenia and Switzerland.

<sup>2</sup> Deposit protection in Germany is pre-funded, but complicated by the co-existence of statutory deposit insurance and several voluntary schemes. Germany's scheme is excluded from this note as limited funding information is available, but a brief overview is provided in the [Appendix](#).

<sup>3</sup> The terminology used in different schemes is not always perfectly comparable. We interpret 'insured', 'protected' and 'guaranteed' deposits as interchangeable terms for pre-funded schemes. However, it appears that terms such as 'insurable' or 'eligible' refer to insured deposit products more generally, and include balances beyond any cap. For more information, see International Association of Deposit Insurers (IADI) guidance paper '[Funding of Deposit Insurance Systems](#)' (2009).

<sup>4</sup> See IADI (2009).

**Table 1: Current Pricing of Fees in Selected Countries' Deposit Insurance Schemes**

Country	Assessment base	Frequency of assessment & collection	Determination of fees across institutions	
			Fixed	Risk-based
Canada	insured deposits	assessed annually, collected semi-annually	-	Four fee categories, 2.3 to 18.5 bps range. Fees based on risk factors including: <ul style="list-style-type: none"> <li>• capital adequacy</li> <li>• profitability</li> <li>• asset quality</li> <li>• asset concentration</li> <li>• qualitative factors</li> </ul>
Denmark	insured deposits	annually	Capital base currently at target level. Fees charged among institutions based on changes in shares of total assessment base. Maximum 20 bps.	-
Finland	insured deposits	annually		<ul style="list-style-type: none"> <li>• fixed component 5 bps</li> <li>• variable component based on solvency</li> </ul>
France	total 'eligible' deposits (total outstanding loans also form part of the calculation)	assessed annually, collected semi-annually	-	Participants' shares of pre-determined aggregate fee determined via scoring system. Factors include: <ul style="list-style-type: none"> <li>• solvency</li> <li>• risk diversification</li> <li>• profitability</li> <li>• maturity transformation</li> </ul>
Iceland	insured deposits	annually	15 bps	-
Japan	'insurable' deposits	assessed annually, collected annually or semi-annually	<ul style="list-style-type: none"> <li>• 10.7 bps of 'deposits for payment &amp; settlement purposes'</li> <li>• 8.2 bps of 'general deposits'</li> </ul>	-
New Zealand	insured deposits	monthly	-	15 to 150 bps Fees based on two factors: <ul style="list-style-type: none"> <li>• credit rating</li> <li>• type of institution</li> </ul>
Norway	insured deposits	annually		<ul style="list-style-type: none"> <li>• fixed component 10 bps</li> <li>• variable component based on Tier 1 capital adequacy</li> </ul>
Spain	total cash deposits plus 5 per cent of the value of transferable securities and financial instruments	annually	<ul style="list-style-type: none"> <li>• 6 bps banking establishments</li> <li>• 10 bps savings banks</li> <li>• 8 bps credit cooperatives</li> </ul>	-
UK	insured deposits (for deposit takers)	assessed annually, collected annually or quarterly	Participants' shares of pre-determined aggregate fee based on share of total assessment base.	-
US (current)	total domestic deposits	quarterly	-	Four fee categories, 7 to 77.5 bps range. Fees based on risk factors including: <ul style="list-style-type: none"> <li>• capital ratios</li> <li>• supervisory ratings</li> <li>• debt ratings</li> <li>• financial data</li> </ul>
US (proposed)*	average consolidated total assets minus tangible equity	quarterly	-	Four fee categories changed to 2.5 to 45 bps range. 5th category: large & highly complex institutions***

\* Proposed to take effect from June quarter 2011. Rules expected to be finalised in the first quarter of 2011. The proposed assessment rates aim to collect approximately the same level of revenue as previously from a broader assessment base, and to eliminate risk categories for large institutions.

\*\*\* This category would potentially include around 40 institutions. An institution would be deemed 'highly complex' if it held more than US\$50 billion in assets and was controlled by a parent or intermediate parent company with more than US\$500 billion in total assets, or a processing bank or trust company with at least US\$10 billion in total assets.

Sources: 2008 IADI survey responses; central banks; country legislation; government websites; scheme annual reports and websites

the assessment base from domestic deposits to consolidated assets minus tangible equity.<sup>5</sup>

### **Frequency of fee assessment and collection**

Deposit insurance fees tend to be assessed on an annual basis, although the collection period varies. For instance, the Canadian and French schemes collect annually assessed fees in two semi-annual instalments. The New Zealand scheme collects (and presumably assesses) fees monthly. Collecting fees more frequently increases administrative costs, but may be preferred from a risk management perspective if regular payouts from the fund are envisaged.

### **Determination of fees across institutions**

Deposit insurance schemes can be divided based on how fees are charged. Some schemes charge risk-based fees, some charge a fixed fee, and others use a combined approach.

#### *Risk-based fees*

Under risk-based systems, participating institutions considered most at risk of failure pay higher fees for deposit insurance, as they are more likely to result in claims on the fund. These arrangements can help to reduce moral hazard, and are more equitable since cross-subsidisation among members is reduced. However, risk-based fees can be difficult and expensive to put into practice, requiring a rigorous accounting and prudential framework as well as highly developed information systems. For these reasons, the Core Principles for Effective Deposit Insurance Systems stipulate that risk-based criteria should be transparent to all participants, and necessary resources should be in place to appropriately administer the system.<sup>6</sup> While information about the calculation process is made publically available, authorities are careful to not disclose the allocation of individual institutions into risk categories.

The New Zealand, Canadian and US schemes charge differential fees using a series of risk categories. In New Zealand, fees depend on the type of institution and its credit rating. The Canadian and US schemes assign participating institutions to one of four risk categories based on a number of criteria including supervisory ratings, capital ratios, profitability, asset quality and asset concentration. In the US an additional risk category has been recently proposed to cover large and highly complex institutions from mid 2011.

Risk-based fees appear to vary considerably among schemes (see [Appendix Tables 1 to 4](#) for details). Canada's current fees of 2.3 to 18.5 basis points of insured deposits are at the lower end of the spectrum, in line with the scheme's comparatively small target capital base (discussed below). In contrast, the New Zealand scheme currently charges from 15 to 150 basis points. These higher fees are designed to discourage use of the scheme, which is due to expire at the end of 2011.<sup>8</sup> The US scheme lies somewhere between the two, with fees currently ranging from 7 to 77.5 basis points

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<sup>5</sup> These reforms form part of the US regulatory response to the recent crisis.

<sup>6</sup> Basel Committee on Banking Supervision and International Association of Deposit Insurers '[Core Principles for Effective Deposit Insurance Systems](#)', June 2009.

<sup>8</sup> Only 7 non-bank deposit takers are currently approved for the extended New Zealand scheme. Banks and finance companies that are subsidiaries of banks have decided not to take up the extended scheme due to the cost involved.



across its four risk categories.<sup>9</sup> The majority of institutions are currently allocated to the lowest risk category in Canada (68 per cent) and the US (71 per cent).

The French scheme collects a pre-determined aggregate amount in fee income each year. Each participating institution pays a portion of this amount based on its net share of risk. This risk weighting is determined via a complex scoring system relating to solvency, diversification, profitability and maturity transformation.

### *Fixed fees*

Deposit insurance schemes that charge fixed (non-risk-based) fees are generally simpler and require fewer resources to implement. These schemes may also find it easier to change fees in order to achieve a target capital base. Critics argue that, relative to risk-based fees, fixed fees are inequitable, increase moral hazard, and do not discourage riskier behaviour. However, adequate prudential supervision can help to mitigate these concerns.

Fixed fees are charged in Japan and several of the European countries studied:

- The Japanese scheme charges 10.7 basis points on deposits for so-called ‘payment and settlement purposes’, and 8.2 basis points for ‘general deposits’ (including term deposits).<sup>10</sup>
- In Iceland the fee is currently 15 basis points on insured deposits, until the target minimum fund size is reached.
- In Spain, fees are a fixed proportion of the (relatively broad) assessment base for each of the three separate Deposit Guarantee Funds: banking establishments (6 basis points), savings banks (10 basis points) and credit cooperatives (8 basis points).
- Danish participating institutions contribute to the target fixed level of the fund based on each participant’s share of aggregate insured deposits. Total annual contributions shall not exceed 20 basis points of total deposits.
- The UK scheme has a unique and complex funding arrangement for the five sectors it covers.<sup>11</sup> The aggregate amount charged to deposit takers is based on unrecovered compensation costs plus an estimate of management expenses and compensation costs expected in the coming year, up to a prescribed limit (see [Appendix Diagram 1](#)). Fees are distributed among deposit takers according to the proportion of insured deposits held.

### *Hybrid schemes*

Some schemes’ fees comprise both a fixed component and a differential risk-adjusted component, such as those in Finland and Norway. These schemes charge fixed components of 5 and 10 basis points on insured deposits respectively, and variable components based on solvency measures. In Finland the variable component is an additional contribution of up to 25 basis points, and in Norway fees are adjusted up or down based on Tier 1 capital adequacy.<sup>12</sup>

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<sup>9</sup> New lower assessment rates (ranging from 2.5 to 45 basis points) have been proposed in the US, to commence in June 2011 (see Appendix Table 4 for further details). This would result in collecting approximately the same amount of revenue once the larger assessment base comes into effect (see above).

<sup>10</sup> Deposits for payment and settlement purposes are defined as bearing no interest, payable on demand, and capable of providing payment and settlement services.

<sup>11</sup> The five sectors are deposits, life and pensions, general insurance, investments, and home finance. With the exception of deposits, each broad class is divided into two sub-classes based on provider or intermediation activities.

<sup>12</sup> The fee in Norway is calculated as 10 basis points of insured deposits plus 5 basis points of ‘the measurement base for the capital adequacy requirement’, adjusted based on Tier 1 capital adequacy. For a participating institution with a Tier 1 capital ratio of more (less) than 8 per cent, the total fee is lowered (raised) by a percentage deduction of 4 times the

## Fees for new participating institutions

Some schemes require new participants to pay an additional entry fee in order to have access to the safety net.

In some cases the entry fee is a fixed payment upon entry. New entrants in Norway, for example, are charged an amount determined by the Ministry of Finance; this has been set at more or less zero in some cases, while in other instances new participants were charged an entry fee of a similar magnitude to (but on top of) the annual fee paid by existing participants. In Iceland new members are charged an additional fee of 15 basis points of insured deposits.

Other schemes require new participants to pay additional fees over a period of time. For example, in the French scheme new participants pay a supplementary fee (on top of the regular fee) for ten semi-annual payments after joining the scheme.<sup>13</sup>

## TARGET CAPITAL BASES AND THE ADEQUACY OF FUND ASSETS

The capital base (fund size) of a pre-funded deposit insurance scheme consists of accumulated fee income and investment earnings, less operating expenses and payouts. When determining an appropriate target capital base, the requirement to cover potential losses needs to be balanced with the fees that the industry can afford. The appropriate target is also affected by the level of regulatory oversight, and the chosen assessment base.<sup>14</sup>

There are two main approaches to choosing a target capital base. Some schemes aim to accumulate a capital base equivalent in size to a given proportion of the stock of insured deposits, while others target a capital base of a given level. Schemes also differ in their treatment of their targets. While some view the target as a minimum, others indicate that they will not charge fees once the target is reached. A number of schemes, including the UK and US, indicate that they may redistribute surplus funds to participants if they have excess capital.

- Currently, most targets for the minimum size of the capital base are in the range of 1 to 2 per cent of insured deposits. The US, Iceland and Norway all take this approach.
- The Canadian fund's target capital base is lower, at 0.4 to 0.5 per cent of all insured deposits. It is forecast to reach the bottom of this target in 2015/2016.
- Denmark sets a minimum capital base of DKK 3.2 billion, equivalent to below 1 per cent of insured deposits.<sup>16</sup>
- In Spain fees shall be suspended once the capital base reaches 1 per cent of the (broader) assessment base.
- Finland will reduce fees by two thirds when the capital base reaches 2 per cent of insured deposits, and may suspend fees once 10 per cent is reached.
- France collects a pre-announced amount in aggregate fees each year, rather than targeting a particular capital base. For 2007 to 2010 this was €80 million, the scheme's lowest annual contribution level to date.<sup>17</sup> Unused fee income appears to be retained and invested.

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number of percentage points by which 8 per cent is exceeded. The maximum discount is 35 per cent, which applies for a Tier 1 capital ratio of 16.75 per cent or higher.

<sup>13</sup> The idea is for new institutions to have 'caught up' with their payments after five years, by means of ten semi-annual payments each equal to 10 per cent of total contributions already paid by other members multiplied by the new member's net share of risk.

<sup>14</sup> For further information, see IADI (2009).

<sup>16</sup> The capital base covered around 0.9 per cent of total insured deposits in 2001 and around 0.8 per cent in 2007.

- The UK also collects a fixed annual contribution from each industry group.<sup>18</sup> Total contributions are determined with the aim of meeting ongoing operating expenses as well as expected compensation costs for the year, rather than accumulating a capital base.

The information on target capital bases is summarised in Table 2.

**Table 2: Current Target Capital Bases of Pre-funded Deposit Insurance Schemes**

	Per cent of insured deposits	Fixed level	Point at which may suspend contributions
Canada	0.4 to 0.5 per cent	-	-
Denmark	-	DKK 3.2 billion	-
Finland	-	-	reduced at 2 per cent suspended at 10 per cent
Iceland	1 per cent	-	-
Norway	minimum 1.5 per cent of insured deposits + 0.5 per cent of the measurement base for Tier 1 capital adequacy	-	-
Spain	-	-	1 per cent*
US	minimum 2 per cent**	-	-

\* Spain uses a calculation base of total cash deposits, plus 5 per cent of transferable securities and financial instruments.

\*\* On 14 December 2010 the FDIC voted on a final rule to set the insurance fund's long-term target minimum designated reserve ratio at 2 per cent of estimated insured deposits (up from 1.15 per cent).

Sources: 2008 IADI survey responses; central banks; country legislation; government websites; scheme annual reports and websites

The European Commission has suggested a harmonised target of 2 per cent of eligible deposits for EU member states, to be accumulated over 10 years. According to the Commission, this would require participant contributions of four to five times higher than at present, but would only moderately affect bank profits at the EU level, and lead to very limited costs for depositors.<sup>19</sup>

In Denmark, maintaining a fixed DKK 3.2 billion capital base requires participating institutions' level of fees to be adjusted for changes in market share. New participants or existing ones that have increased their share of insured deposits pay a fee to the fund, which is then redistributed to those participants which have decreased their proportion of total insured deposits.

Few funds currently appear to have adequate pre-funded capital bases to satisfy their requirements.<sup>20</sup> This is most notable in the US, where the fund balance was negative US\$15.3 billion in mid 2010 (an improvement from the record low of negative US\$20.9 billion at the end of 2009).<sup>21</sup> The US FDIC aims to provide deposit insurance to the vast majority of US banks and savings associations, and is frequently used. However, the US FDIC has recognised that historically its fees have been pro-cyclical, so that participants have paid lower fees during times of prosperity and higher fees during times of industry distress, when they were least able to afford them (Graph 1). The FDIC is now working to correct this imbalance, part of which includes the recent decision to raise its long-term target 'designated reserve ratio' to 2 per cent of insured deposits. This would be higher

<sup>17</sup> The total amount of the annual contribution was 1999: €400m, 2000: €200m, 2001: €250m, 2002: €100m, 2003-2006: €150m, 2007-2010: €80m.

<sup>18</sup> Some sources, including IADI (2009) do not consider the UK scheme to be pre-funded, as it does not aim to accumulate a capital base over time. However, because regular fees are charged in anticipation of funding requirements over the coming year, we include it in this analysis.

<sup>19</sup> European Commission working documents for the Review of Directive on Deposit Guarantee Schemes, '[Report](#)' p58, and '[Summary of Impact Assessment](#)' p5, 2010.

<sup>20</sup> An exception is Denmark, where the capital base has been at its target level for several years and is considered 'sufficient' by Danish authorities.

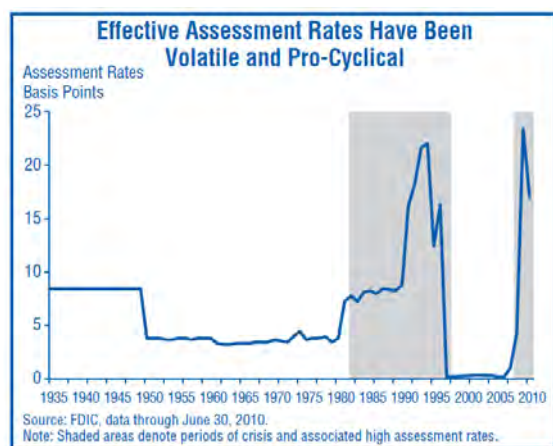
<sup>21</sup> For further information, see '[Toward a Long-Term Strategy for Deposit Insurance Fund Management](#)', FDIC Quarterly Volume 4, No. 4, 2010.

than the capital base has been at any time in the scheme’s history, but would have been sufficient for the fund to withstand past crisis periods while maintaining a positive balance.

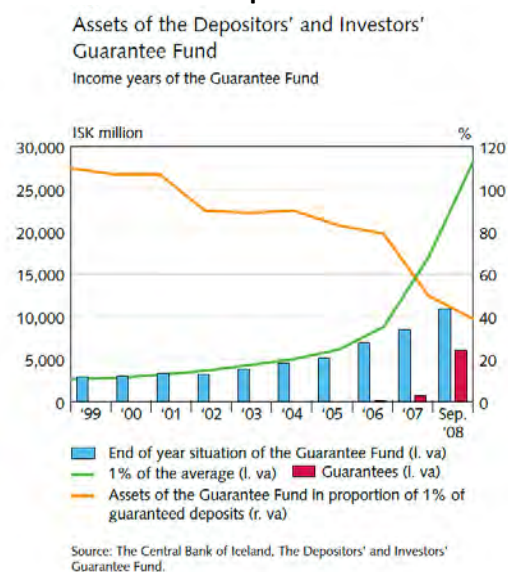
The New Zealand scheme’s funds have also been insufficient to cover the costs of recent failures (including the government’s additional promise to repay all affected depositors irrespective of previous eligibility criteria), and government support has been needed.

From 2002 Iceland’s scheme struggled to maintain its target capital base amid strong deposit growth, including from international depositors (Graph 2). When Icesave was put into receivership in October 2008, the scheme’s capital base was far from enough to cover the losses incurred by depositors.<sup>22</sup>

**Graph 1**



**Graph 2**



The Canadian deposit insurance system is designed to be used rarely, to cover isolated failures. The Canadian fund is too small to reimburse all insured deposits in any of the 14 largest deposit-taking institutions (CDTIs), leaving the scheme reliant on government or debt funding to cover the *ex-post* shortfall. It is estimated that Canadian institutions that could fail in isolation and have their insured deposits fully paid out of the fund’s capital base without resorting to other funding (prior to realising the failed CDTI’s assets), amount to no more than 20 per cent of total banking system deposits.

**FUND OPERATING EXPENSES**

One criticism of pre-funded schemes is that they generate higher ongoing operating expenses regardless of whether any failures occur. Operating expenses are the everyday expenses of running the scheme (for example employee salaries and benefits, costs of premises, and IT system maintenance), as distinct from the costs of paying out insured deposits of failed institutions. Reported operating expenses vary considerably between schemes, due to factors including the differing size and complexity of financial systems and relative complexity of fee determination. Also,

<sup>22</sup> In December 2010 Iceland agreed (subject to parliamentary approval) to fully reimburse the nearly €4 billion the UK and Dutch governments paid to meet insured deposits following the failure of the online bank Icesave in 2008. Interest payments will start in 2011, with principal repayments to begin in 2016 and be spread over no more than 37 years. For further details, see [‘Iceland Strikes New Deal Over Failed Bank’](#), Financial Times, 10 December 2010. Also Ministry for Foreign Affairs of Iceland factsheet [‘The Icesave Issue’](#), April 2010.

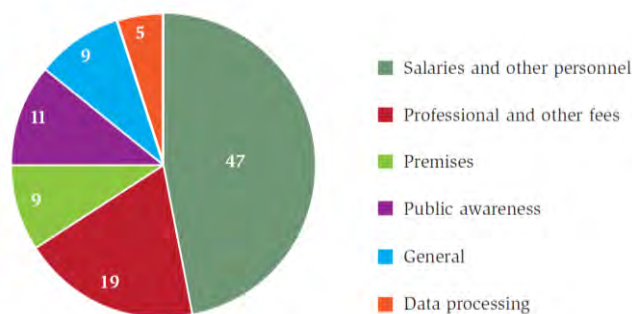
definitions of operating expenses can differ across schemes (for example, it is not always clear whether or not asset management expenses are included). As such, caution should be exercised in comparing schemes' expenses below.

The US and UK schemes both cover large and complex financial systems, and use complex fee structures.

- The US scheme covers a large and complex financial sector, is regularly invoked, and uses a risk-based fee structure. These factors, along with the FDIC's prudential supervision activities, help to explain why operating expenses for the US deposit insurance fund were US\$1.3 billion for 2009 and US\$1.1 billion for the first three quarters of 2010.<sup>24</sup>
- In 2009/10 the UK scheme's management expenses amounted to around £32 million. Around one third of this cost was attributable to employment and other staff costs for its 181 employees. Although only around £1 million was paid out through the depositor scheme in the year, other parts of the scheme (e.g. investor protection) amounted to payouts of £200 million. Costs related to earlier failures of deposit-takers reached £900 million; although of this, the £400 million provision related to Dunfermline Building Society might not all be paid out.

Canadian operating expenses were C\$30.5 million (around US\$30 million) for the year to March 2010, of which almost half is attributable to salaries and personnel costs for its 96 full-time employees (Graph 3). The Canadian scheme is also risk-based, but has not been used in 14 years.

**Graph 3**  
**CDIC Profile of Operating Expenses**  
 Per cent, year to 31 March 2010



Source: CDIC

Several European schemes report much lower operating expenses. Contributing factors include fewer dedicated staff, outsourcing, and sharing of fixed costs with other associations.

- The three fixed-fee Spanish funds incurred total operating expenses of around €2.9 million in 2009. A management company of 16 employees carries out administration of the scheme, which is governed by an 8-person management committee.
- The French scheme reported €2.26 million in general operating expenses in 2008. Some administration work is outsourced, including bookkeeping and computer systems management.
- The Finnish hybrid fee scheme incurred expenses of less than €1 million in 2009, of which €0.8 million represented asset management fees. This scheme is administered by the Finnish Banker's Association, and has no dedicated staff of its own.

<sup>24</sup> The deposit insurance fund is one division of the US FDIC, which also has other responsibilities including failure resolutions and the Temporary Liquidity Guarantee Program.

- The other hybrid scheme studied, Norway, was not invoked in 2009, yet operating expenses amounted to NOK 82.8 million (approximately €10 million). This was up from NOK 47.1 million in 2008, largely due to performance fees and bonuses for (external and internal) managers of around NOK 30 million.

## ASSET INVESTMENT

Pre-funded schemes are able to generate returns by investing accumulated fee income, thus increasing the aggregate fund size. A scheme's investment mandate must consider the trade-off between return and risk, especially liquidity risk. Funds must have adequate liquid assets available to compensate insured depositors if required, as well as to cover ongoing operating expenses. Accordingly, schemes in the US, Canada and Spain invest fee income conservatively (in cash and government securities).<sup>26</sup>

Others have a somewhat broader portfolio.

- The French scheme invests mainly in debt, either in debt instruments directly or via shares in UCITS (whose assets comprise top-rated French issuers' debt).
- The Icelandic scheme's investment policy states that funds should be invested in domestic government bonds (30 to 75 per cent), foreign government bonds (15 to 55 per cent) and foreign equity (0 to 15 per cent).
- The Norwegian fund splits its investments into four asset categories: money market, bonds, equities and 'absolute management' (presumably active management).

While the UK fund does not explicitly aim to accumulate an asset base, fee income collected at the beginning of the year is mainly placed with the Bank of England. The scheme maintains a balance between readily available funds to meet cash flow requirements, and money-market deposits with a maximum six-month term.

## ADDITIONAL SOURCES OF EX-POST FUNDING

While the schemes studied are all pre-funded, they all also have access to backup sources of ex-post funding (usually subject to limitations) if required to meet minimum compensation requirements.

The Core Principles for Effective Deposit Insurance Systems stipulate that primary responsibility for paying the cost of deposit insurance should be borne by banks, since they and their clients are the direct beneficiaries. In keeping with this, schemes tend to call on participants for additional funds before tapping other sources. The various forms of additional funding are:

### *Additional fees or prepayments on participants*

- The US FDIC approved a one-off fee of 5 basis points (of total assets less Tier 1 capital) on all insured institutions in May 2009, and in November 2009 required insured institutions to prepay just over three years worth of fees.
- In 2010/11, UK deposit takers are to pay an additional fee of £376.9 million to cover loan interest amounts on borrowings used to cover the cost of recent failures.
- The French and Spanish schemes can also demand additional fees if required.

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<sup>26</sup>

The Canadian portfolio at 31 March 2010 included 4.5 per cent of central Canadian government or provincial Treasury bills and 94.5 per cent government issued or guaranteed bonds.

### *Pre-agreed guarantee or declaration of liability*

If the total assets of the Icelandic scheme are less than the required minimum, all commercial and savings banks are required to submit a 'declaration of liability'. Unlike an *ex-post* additional fee, this means that participating institutions promise to provide *ex-ante* an additional contribution if certain circumstances in the future are met. Similarly, as occurred in 2010, if the Norwegian scheme's assets fall below the minimum required, the shortfall is covered by participants' guarantees. In both countries, demands for payment based on these declarations may not exceed one tenth of fund assets.

### *Borrowing from participating institutions*

Schemes in Finland and France are able to take out loans from participants to meet obligations, subject to certain limits. In Finland's case at least, fees will be increased in order to repay the loan.

### *Funding from other divisions*

Schemes split into divisions with separate asset pools may draw funds or charge fees from other sectors once their own funds are exceeded. In the UK, annual fees for deposit takers are capped at £1.8 billion. If payout costs exceed this cap, funds will be sourced from the other industries covered by the scheme. Similarly, the Danish and Icelandic schemes are divided into departments, which can borrow a restricted amount from one another if required.

### *Government/central bank lines of credit*

- The US and Canadian schemes are able to access government lines of credit, currently up to around US\$500 billion and C\$17 billion respectively.<sup>27</sup>
- The Spanish Fund can access funds from the Banco de España.

### *Debt issuance*

Several schemes can also access private debt markets if required, including Canada, Denmark, Spain, and Japan. Danish departments are only permitted to issue debt once interdepartmental borrowing has been exhausted.

The rules surrounding the repayment of fund debt are not always clear. However, repayment is likely to be from the proceeds of liquidating the failed institution, or higher future fee income from participants.

Financial Stability Department  
27 January 2011

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<sup>27</sup> The Canadian limit grows proportionally each year along with the growth of insured deposits.

## APPENDIX – ADDITIONAL INFORMATION BY COUNTRY

### New Zealand Retail Deposit Guarantee Scheme

**Table 1: New Zealand Retail Deposit Guarantee Scheme Pricing**  
Fee charged on guaranteed deposits\*

Credit rating	Finance companies	Banks, credit unions, building societies, PSIS**
	bps	bps
AAA+/-	15	15
AA+	15	15
AA	15	15
AA-	20	15
A+	25	20
A	30	20
A-	40	20
BBB+	60	25
BBB	80	30
BBB-	100	40
BB+	120	50
BB	150	60
below BB or unrated	ineligible	ineligible

\*This fee structure applies from 12 October 2010 until 31 December 2011. Fees charged monthly on all deposits guaranteed. Rebate available if the credit rating of an institution improves from the credit rating it held on 31 October 2010. Institutions must be rated at least BB to be eligible, but if the credit rating of an existing member institution falls below BB the fees that will apply are those for BB rated institutions.

\*\*PSIS Limited is a cooperative.

Source: New Zealand Treasury

### Canadian Deposit Insurance Corporation (CDIC)

**Table 2: CDIC Fees**

Score	Fee category	Rate, basis points of insured deposits*					Proportion of institutions 2009
		2002-04	2005-08	2009	2010	2011-14**	
≥80	1	2.1	1.4	1.9	2.3	2.8	68
≥65 but < 80	2	4.2	2.8	3.7	4.6	5.6	21
≥50 but <65	3	8.3	5.6	7.4	9.3	11.1	10
< 50	4	16.7	11.1	14.8	18.5	22.2	1

\* The CDIC fee year runs from 1 May to 30 April. For example, the 2011 year begins 1 May 2011. The CDIC aims to reach its *ex-ante* target capital base of 40 to 50 basis points by around 2015/2016. In line with this and given the deteriorating economy and faster than expected growth in insured deposits, the CDIC decided to modestly increase fees beginning in 2009. Fees are planned to double from 2008 levels by 2011.

\*\* Planned

Source: CDIC



## US Federal Deposit Insurance Corporation (FDIC)

**Table 3: FDIC Distribution of Institutions and Domestic Deposits Among Risk Categories\***  
Quarter ending 30 June 2010

	<b>Annual rate</b>	<b>Institutions</b>	<b>Domestic deposits</b>		
	basis points	number	per cent of total	US\$ billion	per cent of total
Risk category I	7-24	5583	71.21	4673	60.82
Risk category II	17-43	1408	17.96	2685	34.95
Risk category III	27-58	654	8.34	249	3.24
Risk category IV	40-77.5	195	2.49	76	0.99

\* Institutions are categorised based on supervisory ratings, debt ratings and financial data as at 30 June 2010.

Source: FDIC

**Table 4: Changes in FDIC Assessment Rates**

Total base assessment rates\*

	<b>Current base</b>	<b>Proposed base**</b>
	domestic deposits	total consolidated assets minus tangible equity
Risk category I	7-24	2.5-9
Risk category II	17-43	9-24
Risk category III	27-58	18-33
Risk category IV	40-77.5	30-45
Large and 'highly complex'***	N/A	2.5-45

\* Rate after adjustments.

\*\* The proposed assessment rates aim to collect approximately the same level of revenue as previously from a broader assessment base, and to eliminate risk categories for large institutions.

\*\*\* An institution would be deemed 'highly complex' if it held more than US\$50 billion in assets and was controlled by a parent or intermediate parent company with more than US\$500 billion in total assets, or a processing bank or trust company with at least US\$10 billion in total assets. This category would potentially include around 40 institutions.

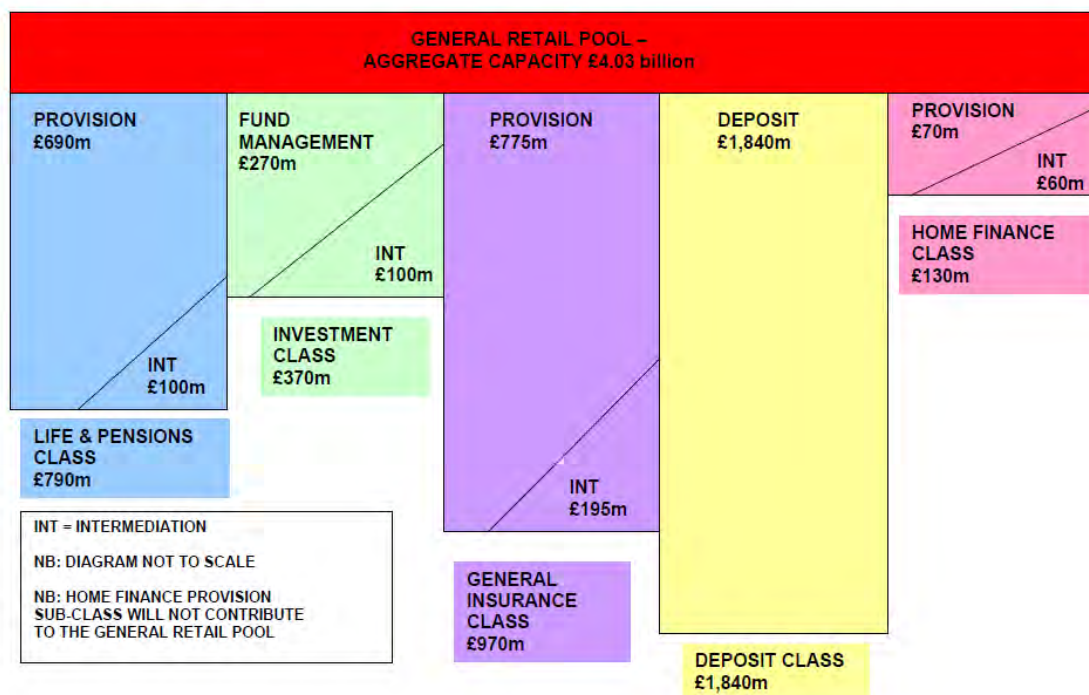
Source: FDIC

## UK Financial Services Compensation Scheme (FSCS)

**Diagram 1: FSCS Funding Model**

### FSCS FUNDING MODEL

The total annual capacity of the scheme will be £4.03bn unless defaults arise in the home finance intermediation sub-class, in which case the total capacity is £4.10bn. This is due to the £70m contribution from home finance providers, which arises only when defaults are from the home finance intermediaries' sub-class.



## German Deposit Guarantee Schemes

Germany has a complex deposit insurance system, with several voluntary deposit guarantee schemes and cross-institution protection schemes supplementing the statutory scheme, which provides depositor protection in accordance with EU regulatory requirements. The voluntary schemes provide additional deposit protection beyond the insurance available under the statutory scheme. All of the German guarantee schemes are currently pre-funded via fees from participants, supplemented by ad hoc additional payments.

Details of funding arrangements are difficult to obtain, but legislation states that the statutory scheme must collect fees to cover claims on the scheme, administrative and other costs. The accumulated funds must be invested with a view to diversifying risk in a way that ensures the maximum security and adequate liquidity of the assets, while earning a reasonable return. Annual fees are paid on 30 September each year. New participants are required to pay an additional one-off fee. If required, the scheme can also collect additional contributions.

At least one of the voluntary schemes (run by the Association of German Cooperative Banks) charges a risk-based fee, sorting participants into five risk categories via several ratios relating to risk structure, capital structure and income.

## PRE-FUNDING CALCULATIONS FOR THE FINANCIAL CLAIMS SCHEME

*The Australian Financial Claims Scheme (FCS) is currently post-funded, unlike schemes in most other developed countries.<sup>1</sup> This note provides some projections of the accumulated fund size under a pre-funded approach to the FCS. Based on several assumptions – including a 5 basis point fee on covered deposits, annual deposit growth of 8 per cent and an annual return on invested FCS funds of 5.5 per cent – the accumulated fund balance would be equivalent to \$37.8 billion after 25 years, which would cover around 43 per cent of covered deposits at*

*, and all covered deposits at Alternative scenarios are also considered, and details of the key parameters and assumptions are provided in the [Appendix](#).*

### Projected fund size and coverage

The base scenario assumes annual covered deposit growth of 8 per cent at all ADIs and an annual return on FCS invested funds of 5.5 per cent. Under this scenario, a 5 basis point fee on covered deposits (up to a cap of \$250,000) would generate around \$284 million in gross fee income in the first year (Graph 1).<sup>2</sup> The fund would reach a size of around \$5.9 billion after 10 years, and \$37.8 billion after 25 years (Graph 2).

Under this scenario, the fund balance would be equivalent to approximately 0.97 per cent of total covered deposits after 25 years.<sup>3</sup>

While covered deposits data are not available for individual CUBS, available information suggests that approximately 82 per cent of this sector's total deposits would be covered by a \$250,000 cap.

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<sup>3</sup> Targets fund sizes within the range of 1 to 2 per cent are common internationally. For further information see Watson (2011).

A 10 basis point fee would roughly double the size of the fund at each point in time. Under this scenario, the fund balance after 10 years would be equivalent to 43 per cent of covered deposits at \_\_\_\_\_, or 0.97 per cent of total covered deposits. After 25 years the fund would be equivalent to 87 per cent of covered deposits at \_\_\_\_\_, or 1.96 per cent of total covered deposits.

**Varying deposit growth and investment returns**

Future rates of deposit growth are uncertain, and have a considerable impact on fund size and coverage estimates. We therefore also consider annual deposit growth rates of 2 percentage points above and below the 8 per cent base growth scenario; our rationale for these rates are explained in the [Appendix](#).

A deposit growth assumption of 10 per cent would reduce the fund’s estimated coverage levels (triangular lines in Graph 4). A little over half of estimated covered deposits at \_\_\_\_\_ could be met after 10 years under this scenario, assuming a 5 basis point fee. After 25 years, the fund would be equivalent to around 0.80 per cent of total covered deposits and could pay out around 36 per cent of covered deposits at \_\_\_\_\_, 28 per cent at \_\_\_\_\_, or 20 per cent at \_\_\_\_\_.

Conversely, a lower deposit growth assumption of 6 per cent would enable the fund to cover a given level of deposits sooner (dashed lines in Graph 4). This scenario can be made more optimistic by also assuming a higher annual return on invested FCS funds (6 per cent). Under this scenario, approximately two thirds of covered deposits at \_\_\_\_\_ could be paid out of the fund after 10 years, assuming a 5 basis point fee (Graph 5). After 25 years the fund could pay out 57 per cent of \_\_\_\_\_ covered deposits, or 1.28 per cent of total system covered deposits. If institutions were charged a 10 basis point fee, after 25 years the fund would be large enough to pay out all covered deposits at \_\_\_\_\_, 90 per cent at \_\_\_\_\_ and 64 per cent at \_\_\_\_\_.

## Appendix: Parameters and Assumptions

There are five key variables used for this analysis:

- **Fee** – All institutions are charged a flat fee of 5 or 10 basis points of average covered deposits over the previous year. This is within the range of fixed (non-risk based) fees charged by deposit insurance schemes in other developed countries, and taking the average mitigates incentives for institutions to switch deposits out of covered products prior to the assessment day. Fees are assessed and collected annually.<sup>5</sup>
- **Deposit growth** – Total deposits have grown at an average annual rate of 10 per cent since 1980. Our baseline assumption for the calculations is that total and covered deposits at all institutions to grow at a slower annual rate of 8 per cent, on the grounds that the 1980-2010 period included significant financial deepening in the economy which is unlikely to continue in the future. However, growth rates of 10 per cent and 6 per cent (trend nominal GDP growth) are included as alternative scenarios.
- **Return on investment** – The fund asset portfolio will need to be highly liquid and have low exposure to credit risk. Another constraint on investment is that the FCS fund could not hold a material amount of government securities – which are in short supply – without making it more difficult for the banks to meet the tougher Basel III liquidity standards. The fund is therefore assumed to earn a (gross) annual return of 5.5 per cent, which is roughly equivalent to the average cash rate since inflation targeting began in the early 1990s. We also include a more optimistic scenario of a 6 per cent return, which is roughly the return on 5-year government bonds since mid-1993.
- **Expenses** – Total expenses (including administration costs and asset management fees) commence at \$8.2 million in 2011, and grow by 2 per cent annually thereafter. This is based on an arbitrary assumption that expenses amount to one quarter of the Canadian Deposit Insurance Corporation's annual operating expenses during 2010.<sup>6</sup> As expenses quickly become very small relative to the fund size, the results are not highly sensitive to this parameter.
- **Coverage limit** – A cap of \$250,000 is assumed (per depositor, per institution), which is at the upper end of the cap envisaged from 12 October 2011 onwards. As fees are a percentage of covered deposits, this higher cap raises the fund size in dollar terms, but only has a small impact on the proportion of covered deposits the fund can cover (via compounding returns).

There are several other assumptions which remain constant throughout the analysis:

- No institutions enter or exit. There are no mergers among the institutions we referred to above (which would increase the value of the institution's covered deposits, and require more FCS funds to reach a given pay out level).
- The scheme is not invoked (i.e. no institutions fail).
- Fee collection and deduction of expenses commence in October 2011.
- The fee remains unchanged regardless of fund size.
- The fund receives no seed capital from the Government. In other words, the fund balance starts at zero. We have excluded the \$20 billion appropriation limit per failure from the initial balance of the fund in the analysis above. (Under current FCS arrangements, this is essentially a bridging

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<sup>5</sup> Quarterly and monthly fees were also considered, and had very little impact on the results. Although more frequent collection may be preferred from a risk management perspective, this is of little benefit in a financial system where failures are very rare. More frequent collection would also increase administration costs.

<sup>6</sup> It is expected that a pre-funded Australian FCS would generate much lower operating expenses than the Canadian scheme, as the latter is risk-based, and attributes half of its operating expenses to salaries and personnel costs for almost 100 employees. In contrast, the pre-funded FCS considered here would charge a fixed fee, and would likely share a lot of APRA's existing infrastructure and resources.

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loan, to provide liquidity in the event of a failure, and be fully repaid out of a failed institution's liquidated assets.)

- The institutions for which covered deposits data are available represent around 94 per cent of total deposits. Accordingly, estimates are grossed up to approximate total system covered deposits and fee income.
- Covered deposits data are taken as at June 2010 from ARF 324 for the major banks, and one-off data supplied by the three regional banks and a sample of CUBS. All institutions except provided data on a per account basis (rather than per depositor), and as it is common for depositors to have multiple accounts at a single institution, it is likely that coverage is overestimated. Also, the distribution of account balances at the major banks is not known with certainty, although account sizes are likely to be skewed towards the lower threshold within each bucket. As such, we assume that all accounts are \$1 above the lower threshold of each value bucket; our estimates of fund size and coverage may therefore be slightly overstated.<sup>8</sup>

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<sup>8</sup>This is the 'upper bound' estimate of major banks' covered deposits; see Donovan and Bilston (2010).

## COUNCIL OF FINANCIAL REGULATORS

### FINANCIAL CLAIMS SCHEME - POSSIBLE INSURANCE FEE

#### OBJECTIVE

This paper is to assist the Council to consider whether to modify the Financial Claims Scheme (FCS) to incorporate a compulsory annual insurance fee paid by all authorised deposit-taking institutions (ADIs), other than foreign ADIs (which are not covered by the FCS). The main purpose of the fee would be to ensure that ADIs and their depositors pay up-front for the benefits they derive from the FCS (rather than just through an ex post levy). This could help in publicly styling the scheme as a deposit 'insurance' or 'guarantee' scheme.

The Council has requested advice to help it consider the merits of moving to a partially pre-funded model. Under this approach, the FCS would retain access to the existing standing appropriation as well as its current ex-post levy powers. These post-funding mechanisms would remain necessary if depositors' claims under the FCS could not be satisfied by the special purpose fund built up from the investment of the annual insurance fees (and there is a shortfall in ADI assets).

This paper looks at the arguments for and against introducing an insurance fee. It discusses various options (especially differences in the size of the fee and the target fund size) and considers some of the merits of different approaches. However it does not reach a conclusion on whether the Council should recommend an insurance fee to the Government. Nor does it reach a conclusion on how such a fee might best be structured.

#### BACKGROUND

In September 2010, the Council considered the Working Group's review of the FCS and supported the Working Group's recommendation that the scheme continue to be post-funded. However, the Council has subsequently asked the Working Group to consider whether the arrangements should be supplemented through the addition of an insurance fee that would make the scheme partially pre-funded.

#### HOW COULD THE FCS BE REDESIGNED TO INCLUDE AN INSURANCE FEE?

To facilitate discussion of the merits of introducing an insurance fee, the Working Group has developed a model showing how a compulsory annual insurance fee invested in a special purpose fund could be incorporated into the existing FCS arrangements. The key parameters of this model were discussed on 3 February by the RBA, APRA and Treasury. The kind of model informally considered in that meeting had the following main features:

- The annual fee could be between 2 and 5 basis points (bps) of covered deposits (the amount of deposits up to the level of the FCS cap).
- It could be set at the same rate for all ADIs. It would not be based on an ADI's individual probability of default and would not be intended to discourage risky behaviour by ADIs.
- The funds collected would be ring-fenced in a special purpose fund that would be used solely to fund payments to FCS claimants.

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we base our initial calculations on a target fund size of 0.5 per cent of covered deposits. Based on the current level of protected deposits in the system, this would amount to somewhere between \$2.2 billion and \$2.9 billion.

- This corresponds to the target fund size of the Canadian deposit insurance scheme. As noted below, some other pre-funded schemes have larger fund targets.
- The current FCS deposit cap is \$1 million. CFR members have agreed that it should be lowered to between \$250,000 and \$100,000 from October 2011. However the Government is yet to make a decision on this issue. Based on estimates of the current level of covered deposits in the system, a fund of 0.5 per cent of covered deposits would equate to between \$2.9 billion and \$2.2 billion (depending on whether the cap is set at \$250,000 or \$100,000). However this figure will grow as the deposit base increases over time.

The amount of funds raised under this model depends on two factors: the insurance fee, and the size of the FCS deposit cap (which determines the size of the pool of covered deposits held by ADIs). As discussed above, the Government is yet to determine the new size of the cap that will apply to the FCS from October 2011 (it is currently set at \$1 million). CFR members have suggested a cap between \$100,000 and \$250,000.

Based on current deposit levels, a 2 bps fee combined with a cap of \$100,000 would yield around \$90 million in the first year. A fee of 5 bps and a cap of \$250,000 would yield around \$287 million. These amounts would increase as the base of covered deposits grows.

Based on assumptions about fund returns, deposit growth, etc, the time taken to reach the fund target under this model would range between 12 and 33 years, depending on the level of the fee (see Table 1 below).

**Table 1: Impact of fees on time taken to reach fund target of 0.5 per cent of covered deposits**

Annual fee	5 bps	3 bps	2 bps
Time to reach 0.5 per cent of covered deposits	12 years	21 years	33 years

Assumes average fund returns of 5 per cent; management costs of 0.5 per cent; average annual system deposit growth of 6 per cent and no pay-outs from the fund. These timelines apply regardless of whether the cap is set at \$250,000 or \$100,000. However the size of the fund in dollar terms would be higher if the cap is set at \$250,000.

Once reached, this fund target is estimated to be sufficient to meet the costs of claims from any one of 103 of Australia's 105 credit unions, at least 7 of Australia's 11 building societies (9 if the cap is set at \$250,000), 6 of Australia's 9 foreign subsidiary banks and 3 of Australia's domestically-owned non-major banks. These calculations assume there is no change in industry composition.

### **Possible alternative approaches to implementing an 'insurance fee'**

The model described above represents only one approach to modifying the FCS to incorporate an insurance fee. Each of its four components could be varied to create a different approach.

Firstly, the insurance fee that applies to each ADI could be varied in line with its estimated individual probability of default or more generally based on qualitative or quantitative indicators of the riskiness of the institution (although this raises the difficult question of how risk can best be measured). The main motivation for differential risk-based fees, which are used in many pre-funded deposit insurance schemes around the world, is to encourage ADIs to reduce their risk profile.



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We have not undertaken detailed work on how a risk-based fee might operate in Australia. However experience overseas suggests it would be possible to apply different fees to different categories of ADI, based on their assessed probability of default. This may have benefits (eg better matching of benefits and costs and reducing moral hazard), but also disadvantages (eg adverse signalling).

Secondly, the special purpose fund created from the insurance fee could be used for broader resolution purposes (rather than solely to meet FCS claims). This could include transferring deposit books (including non-FCS deposits) from one ADI to another. This would have the potential merit of making the fund more useful as a resolution tool. However, broadening the purpose of the fund would have implications for the fee's assessment base and the size of the fund. It would be necessary to extend the fee base to ensure that protected deposit holders do not subsidise other creditors who would benefit from a successful resolution.

- This paper does not consider this question further. Further consideration of this issue could be the subject of a separate work stream, possibly covering Australia's response to FSB recommendations on resolution frameworks for systemically-important financial institutions (SIFIs).

Thirdly, the insurance fee could be set at a rate lower or higher than the 2 to 5 bps of covered deposits discussed on 3 February.

Fourthly, the target size of the special purpose fund could be increased beyond 0.5 per cent of covered deposits. While Canada's target is 0.4 to 0.5 per cent of insured deposits, some other countries have targets of 1.0 to 2.0 per cent of insured deposits. The European Commission (EC) has recently proposed a target of 2.0 per cent of insured deposits (although there have been discussions that these funds could also be available for wider resolution purposes). These higher targets may reflect differences in the frequency and size of bank defaults in each country, differences in the availability of ex-post funding for the schemes and differences in the extent to which scheme funds are available for broader resolution purposes.

### *Implications of higher fees/fund targets*

#### *More rapid fund accumulation*

Higher insurance fees would facilitate a more rapid accumulation of funds. This would make it possible to reach a target of 0.5 per cent of covered deposits more quickly.

Table 2 shows that it would take 6 years to reach a target of 0.5 per cent of covered deposits through an annual fee of 10 bps. A fee of 20 bps would allow this target to be reached in 3 years.

**Table 2: Impact of fees on time taken to reach fund target of 0.5 per cent of covered deposits**

Annual Fee	20 bps	10 bps
Time to reach 0.5 per cent of covered deposits	3 years	6 years

Assumes average fund returns of 5 per cent; management costs of 0.5 per cent; average annual deposit growth of 6 per cent and no pay-outs from the fund. These timelines apply regardless of whether the cap is set at \$250,000 or \$100,000.

Applying an insurance fee of 10 bps to current ADI deposits using a \$100,000 cap would yield an estimated \$450 million in the first year. It would yield \$574 million if the cap was \$250,000. Depending on the size of the cap, a 20 bps insurance fee would initially raise \$899 million or \$1.150 billion.

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*Higher fund targets*

Higher insurance fees would also enable a higher target fund size to be reached over a given period of time. Table 3 shows that a fee of 12 bps would generate a fund equivalent to 1.0 per cent of covered deposits in 10 years. A fee of 23 bps would generate a fund equivalent to 2.0 per cent of covered deposits in the same 10 year period.

**Table 3: Impact of fees on size of fund after 10 years**

Annual Fee	23 bps	12 bps
Percentage of covered deposits after 10 years	2.0 per cent	1.0 per cent
\$ amount for \$250 000 cap	\$11.5 billion	\$5.7 billion
\$ amount for \$100 000 cap	\$9 billion	\$4.5 billion

Assumes average fund returns of 5 per cent; management costs of 0.5 per cent; average annual deposit growth of 6 per cent and no pay-outs from the fund. Percentage of deposits covered is not affected by the size of the the cap.

The main advantage of a higher fund target is that it could be used to meet potential claims from a wider range of ADIs without the need to draw on the standing appropriation.

Table 4 sets out estimates of the likely capacity of a special purpose fund to meet future depositor claims resulting from the failure of a single ADI. It distinguishes between different types of ADIs as well as different categories of banks based on existing deposit data.

**Table 4: Impact of fund target size on capacity to meet claims from different ADIs without using standing appropriation**

Fund size, per cent of covered deposits	0.5 per cent		1.0 per cent		2.0 per cent		
	FCS Cap	\$100,000	\$250,000	\$100,000	\$250,000	\$100,000	\$250,000
Major banks*		0/5	0/5	0/5	0/5	0/5	0/5
Other Australian-owned banks		3/7	3/7	3/7	3/7	3/7	3/7
Foreign subsidiary banks		6/9	6/9	7/9	7/9	8/9	8/9
Building societies		7/11	9/11	10/11	10/11	ALL	ALL
Credit unions		103/105	103/105	ALL	ALL	ALL	ALL

\*Includes BankWest. Calculation and analysis based on data from APRA *Monthly Banking Statistics January 2011* and KPMG *CUBS Survey 2010*.

The key difference between a fund containing 0.5 per cent of covered deposits and a fund containing 1.0 per cent of covered deposits is that the latter would have sufficient reserves to cover potential claims that could result from the failure of one of the following: two additional credit unions  
up to three additional building societies  
and one additional foreign subsidiary bank

A fund of 2.0 per cent of covered deposits would also cover potential claims from  
and another foreign subsidiary bank

However it would not be sufficient to meet depositor claims from the failure of any of Australia's major banks or the failure of the four largest other Australia-owned banks.

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### **IMPLEMENTATION ISSUES**

Implementation of an insurance fee would require significant changes to the provisions of the Banking Act relating to the operation of the FCS. Treasury considers it unlikely that these amendments could be made by October 2011. It is more likely that relevant legislation would not be passed until the end of 2011 at the earliest and most likely not until 2012.

This would complicate the levying of a charge for FCS coverage in the interim. However an alternative could be to impose a fixed fee, or an estimated charge, until after 2015.

### **POTENTIAL BENEFITS OF AN INSURANCE FEE**

Introduction of an insurance fee would have a number of potential benefits.

First, it would help to ensure that ADIs and their customers pay up front for the benefits they receive through the FCS. This is consistent with the user-pays principle. An explicit ex-ante fee would help in publicly re-styling the FCS as a deposit 'insurance' or 'guarantee' scheme.

- Under the FCS, ADIs gain the ability to offer explicitly-Australian Government guaranteed deposit products. In the event of an ADI's insolvency, the FCS will usually give depositors early access to their funds without having to wait until the ADI is wound-up. If the ADI has insufficient assets, the scheme may also allow depositors access to funds they would not have been able to recover through the wind-up process.

It is difficult to estimate the size of the benefit to ADIs and their clients. Also, the costs of APRA's work on the FCS are currently low and are already included in APRA's share of the financial sector levy. The Australian Government only incurs additional costs when the scheme is invoked. The only costs that cannot already be recovered are interest costs that derive from borrowing to meet claims.

A second potential advantage of an insurance fee is that the capacity to make FCS payments from a special purpose fund rather than relying exclusively on the standing appropriation may reduce the Government's borrowing costs by reducing the need to borrow to meet FCS payment obligations. Having a special purpose fund may also help in meeting FCS payments at a time when public finances may not be as strong as they currently are, which could provide additional comfort to depositors.

The extent to which this benefit is realised may depend to a greater extent on the size of the fund. The larger the fund, the larger the probability the FCS would be able to meet depositor claims from

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an ADI failure without the need for borrowing (although interest costs will also depend on the length of time taken to wind-up an ADI and the rate at which funds can be disbursed to its creditors).

Pre-funding using risk-based fees could also help reduce moral hazard, although, as noted earlier, this also raises complexities.

Finally, the capacity to pay FCS claims from a special purpose fund would also help to overcome the 'survivor bias' inherent in the post-funded model by increasing the likelihood that a failed ADI had already contributed to the scheme.

- Under the current model, only surviving ADIs will be subject to an ex post levy (where this is required) meaning they end up effectively subsidising institutions that fail.

## POTENTIAL COSTS OF AN INSURANCE FEE

These potential benefits must be weighed against the following costs.

Firstly, there is an opportunity cost in terms of how the resources accumulated in the special purpose fund might otherwise have been employed. It could be argued that money accumulated in the fund could be better used on the balance sheets of ADIs to support lending and/or bolster their capital position. The fund would have to be invested in liquid assets characterised by relatively low returns (we have assumed 5 per cent for the purpose of calculations in this paper). Design of the FCS is predicated on the assumption that it will only be used infrequently

. The Australian Government currently has a strong budget position and low borrowing costs. This suggests that, currently at least, we have less need than other countries to leave money sitting in a special purpose fund.

Australia's low ADI failure rate, to the extent it continues in the future, may also reduce the case for keeping funds on hand to meet depositor claims. This provides some justification for Australia's outlier status as having a post-funded scheme when most other countries have pre-funded schemes.

IADI data indicate that around 90 per cent of global deposit insurance schemes are pre-funded, including those in the US, Canada and several EU member states. Notable post-funded schemes include those in Austria, Italy, Luxembourg, The Netherlands, Slovenia and Switzerland. The UK currently operates a somewhat different model in which it levies an annual fee on institutions based on claims expected in the subsequent period rather than accumulating a fund; there are indications, however, that it will move to a more traditional pre-funding model in line with EU proposals. The EC has proposed that all EU states establish pre-funded schemes.

One possible reason for the adoption of pre-funding by other countries may be their higher rates of failures. Table 5 shows that failures have been more common in some other countries than in Australia, although it is important to note that the structure of some of these countries' banking systems are quite different to that of Australia. In the last twenty-one years, there have been 1,283 failures in the US, 18 in Canada and 33 in the UK. The last Australian failure was of a state-supervised building society, the Pyramid Building Society in 1990.

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*Table 5: Frequency of deposit-taking institution failures in selected countries 1990-2011*

	1990-95	1996-2000	2001-05	2006-10	2011	Total
Canada	17	1	0	0	0	18
United States	891	25	22	322	23	1283
United Kingdom	15	0	0	18	0	33
Iceland	0	0	0	4	0	4
Singapore	0	0	0	0	0	0
Australia	1*	0	0	0	0	1*

\* Pyramid Building Society, a state-regulated institution.

Sources: CDIC, FDIC, Bank of England, Singapore Central Bank (MAS).

Secondly, creation of a special purpose fund would involve additional management and administration costs.

It is difficult to estimate the potential size of these investment management expenses; although they are likely to be relatively small given the limited investment mandate any FCS fund would likely have. It might be possible to minimise the cost of managing the fund by entrusting this function to an existing Government agency. The Future Fund has been suggested as a possible option. The Working Group has not yet explored options for managing the fund (although the fees of 0.5 per cent assumed in this paper reflect the costs of the Future Fund).

Thirdly, while the fund could reduce ‘survivor bias’ by increasing the extent to which a failed ADI has contributed to FCS costs, it could also create intergenerational inequity in that the beneficiaries of the fund would not necessarily be those that contributed to the fund, given the multi-year period over which it would be generated.

- It may be unnecessary to impose an insurance fee after the fund has reached its target (other than to maintain the ceiling at a constant level relative to a growing deposit base) as payouts could usually be replenished from the assets of failed institutions.

### ISSUES FOR GOVERNMENT RELATING TO AN INSURANCE FEE

There are some other issues that may impact on the Government’s consideration of any CFR recommendations relating to the introduction of an insurance fee.

Firstly, there is a risk that proceeds of the insurance fee could be classified as a tax rather than as a fee for service (even if the FCS is publicly styled as an insurance scheme). This is particularly likely if the fee is not risk-based. This would be a significant consideration if the fee were set at a relatively high level (a 20 bps fee and a cap of \$250,000 would initially raise \$1.15 billion).

Secondly, the fee may be criticised by credit unions and building societies. They may argue that it is anti-competitive. By virtue of their size, major institutions are likely to account for over 75 per cent of total fees paid. However, as shown in Table 6, even a flat fee that is the same for all ADIs would account for a higher proportion of credit unions and building societies’ funding costs because they are more reliant on deposits for their funding. The counter-argument is that credit unions and building societies are more likely to be beneficiaries of the FCS than the larger banks.

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**Table 6: Fee burden of a 3 basis point annual charge (\$250,000 cap)**

Type of ADI	Estimated share of annual fee (percentage of total fees raised)	Amount (\$m) (first year)	Fee as a percentage of total resident assets
Majors	76.6%	132	0.007
Other Australian-owned	9.1%	16	0.007
Foreign Subsidiary Banks	4.8%	8	0.007
Credit Unions	6.5%	11	0.022
Building Societies	3.0%	5	0.021
Total	100%	172	

Calculation is based on data from APRA *Monthly Banking Statistics January 2011*

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**CONCLUSION AND NEXT STEPS**

Council members must decide whether they wish to recommend to the Government that it should introduce an FCS insurance fee.

Members of the Working Group have different views on the merits of introducing an annual insurance fee. The benefits and costs appear to be evenly balanced (although this depends to some extent on how any fee is set and the way in which funds are used as well as the weight that is attached to different benefits and costs).

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**COUNCIL OF FINANCIAL REGULATORS  
MINUTES OF THE THIRTY FOURTH MEETING, 16 MARCH 2011**

**3. Financial Claims Scheme**

*(a) Further considerations on funding arrangements*

The Council discussed a Working Group paper on the pros and cons of augmenting the current ex-post funding arrangements for the Financial Claims Scheme (FCS) with a compulsory annual insurance fee (which would make the scheme partially pre-funded). The model canvassed in the paper was an annual insurance fee of 2–5 basis points levied on protected deposits at the same rate for all ADIs, and with the funds ring-fenced in a special purpose fund that would be used as a first recourse to meet any claims resulting from the failure of an ADI. The proposal did not involve establishing a stand-alone fund. Rather, the intention was to incorporate the FCS fund into an existing fund, such as the Future Fund. Under this model, the FCS would also retain access to the existing standing appropriation as well as its current ex-post levy powers, in the event of a shortfall in the pool. Members held differing views on the overall merits of supplementing the existing FCS funding arrangements with a compulsory annual insurance fee. However, they agreed the Council should recommend to the Government that it undertake public consultation on the merits of introducing an insurance fee.



**ATTENDEES AT MEETING**

**APRA**

John Laker  
Charles Littrell  
Geof Mortlock

**ASIC**


Tony D'Aloisio  
John Price

**RBA**

Glenn Stevens (Chairman)  
Malcolm Edey  
Luci Ellis  
Chris Thompson (minutes)

**Treasury**

Martin Parkinson  
Jim Murphy  
John Lonsdale

  
20/6/2011