

# Financial Crisis: Deposit Insurance and Related Financial Safety Net Aspects

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*Government provision of a financial safety net for banks and other financial institutions has been a key element of the policy response to the current financial crisis. In the process, the design of many safety net elements, such as deposit insurance, has been redrawn in many jurisdictions. In particular, governments extended existing guarantees and introduced new ones. While these measures did not address the root causes of the lack of confidence, they were nevertheless helpful in avoiding a further accelerated loss of confidence, thus buying valuable time. But they are not costless. First, like any guarantee, deposit insurance coverage gives rise to moral hazard, especially if the coverage is unlimited. Clearly, in the midst of a crisis, one should not be overly concerned with moral hazard, as the immediate task is to restore confidence, and guarantees can be helpful in that respect. Nonetheless, to keep market discipline operational, it is important to specify when the extra deposit insurance will end, and this timeline needs to be credible. Second, the co-existence of different levels of protection could give rise to unfair competitive advantages, vis-à-vis other forms of savings or vis-à-vis other deposit-taking institutions that do not enjoy the guarantee. Third, to make a guarantee credible it is important to specify the manner in which it will be provided. There is the possibility that the capacity of some governments to provide for the guarantee that they have announced or implied in announcements may be questioned. Looking ahead, a sharper policy focus will have to be placed on “exit strategies”, especially where unlimited guarantees have been extended. In this context, the fundamental question remains whether government guarantees can be a one-off proposition. There may be a general perception that, once extended in one crisis, a government guarantee will always be available during crisis situations.*

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## I. Introduction

*Whenever a crisis hits, interest in guarantee arrangements rises*

Whenever a crisis hits, interest in guarantee arrangements rises. The current financial crisis is no exception in that respect. It puts the spotlight on the operation of the financial safety net and provides policy makers with a timely opportunity to monitor its performance, with a view to identifying its strengths and weaknesses. The present note focuses on the way parts of the financial safety net are combined, putting special emphasis on deposit insurance and its interaction with other safety net elements. While it also includes a discussion of recent policy actions in that context, the note centres on *structural* rather than practical crisis resolution issues.

*Deposit insurance systems with low levels of coverage and/or partial insurance may not be effective in preventing bank runs*

At its meeting in March 2008, the OECD Committee on Financial Markets (CMF) discussed selected financial safety net issues within the *Tour d'Horizon on Financial Markets* based on a background note prepared by the Secretariat. The note highlighted the importance of various aspects of the design of financial safety nets and in particular of explicit deposit insurance systems. It argued that it was too early to draw any strong policy lessons from recent developments regarding the effects of the turbulence and the adequacy of the financial safety net, but that some preliminary lessons were emerging concerning selected aspects of the design of deposit insurance systems. These included that, as regards coverage, deposit insurance systems with low levels of coverage and/or partial insurance may not be effective in preventing bank runs.

*The present note further explores financial safety net interrelationships...*

The Committee endorsed this and other preliminary proposals and decided to conduct further work in this area. In particular, it was suggested that future work could further explore some of the issues related to financial safety net interrelationships, focusing among other things in particular on the area of overlap between the deposit insurance and the lender-of-last-resort functions. Pursuant to this suggestion, the present article includes an initial discussion of the interaction between these two safety net elements (in its **third section**).

*...and provides a discussion of policy measures related to deposit insurance taken in the fall 2008*

Against the background of recent developments, the present article also provides a discussion of policy measures implemented in the fall 2008 (in its **fourth section**). In the context of recent events, and these measures, the relevance of the suggestion by the Committee to continue work in the area of deposit insurance is undeniable. Indeed, while aspects of the design of deposit insurance schemes undergo rather infrequent but more or less gradual changes, the accelerated loss

of confidence in financial markets - as evidenced by several financial market indicators following the Lehman Brothers Holdings failure - triggered a number of financial safety net emergency policy actions. Deposit insurance is one of several elements of the financial safety net and, as regards the strengths of these nets, there appears to be a growing consensus that they are determined by their weakest elements. Thus, to avoid having the deposit insurance function turn out to be *that* weakest element in the response to the financial turbulence, a number of policy actions were related either directly or indirectly to deposit insurance.

These measures were consistent with the basic thrust of the arguments developed by the CMF at its meeting in March 2008 (see Schich, 2008), although at least some of the changes may have gone beyond levels that, at that time, might have been considered adequate. The measures included the following ones:

- In those jurisdictions of CMF members where explicit deposit insurance arrangements had not existed, such schemes were introduced.
- In many of the jurisdictions where such arrangements had already existed, some design aspects were changed. Perhaps most notably among such changes, the levels of maximum deposit insurance coverage have been increased, at least on a temporary basis, and co-insurance arrangements were abolished in at least some instances where they had existed.
- Policy makers in some countries made statements that suggested (either explicitly or implicitly) that deposit insurance coverage would be unlimited. Coverage of guarantee arrangements was also extended in some cases to wholesale bank liabilities that were not traditionally covered by such arrangements.

These and other related actions were aimed at restoring confidence among both financial intermediaries and the wider public. They tend to reduce the threat of bank failures by raising the likelihood that depositors and creditors continue to provide a stable source of refinancing for banks. Thus, they buy time.

There are nonetheless potential costs associated with these measures, which are discussed in the **fifth section**. Before that, the **second section** develops a framework of the financial safety net that places deposit insurance issues within the wider financial safety net context. Subsequently, the **third section** addresses selected aspects of the interactions between the lender of last resort and the deposit insurance functions. The **sixth section** concludes.

## II. Financial safety net issues

### *An expanded definition of financial safety nets*

*A proper financial safety net is necessary to reduce the risk of severe financial crises*

A proper financial safety net is necessary to reduce the risk of severe financial crises. Without an appropriate financial safety net, even simple rumours of problems regarding solvency or liquidity of a financial institution have the potential to become self-fulfilling and turn into a full-blown financial crisis. With an appropriate financial safety net in place, confidence tends to be greater and the onset of financial crises less likely than otherwise.

There is no generally accepted definition of the key elements of the financial safety net. A narrow definition is limited to deposit insurance and a lender-of-last-resort function, while a more widely accepted one includes (at least) three elements, adding the prudential regulatory and supervisory framework to the previous components (*e.g.* FSF, 2001). This definition has been used in the background documentation prepared for the previous discussion of the CMF.

*A financial safety net consists of several interactive elements*

For the purpose of the present discussion a slightly expanded definition of financial safety nets is proposed. In particular, it is suggested that financial safety nets consist of four key elements, which are the three (minimum) elements already mentioned above as well as failure resolution mechanisms for financial institutions. The advantage of this broader definition is that it allows one to put the issues discussed in the present note into a broader context. Indeed, there exist numerous interactions between the different elements of financial safety nets, which is illustrated schematically by the intersections of the four circles shown in Figure 1. The focus of the current note is on the dark-shaded circle.

*Each of the safety net elements is facing a similar trade-off between avoiding disruptions and reducing moral hazard*

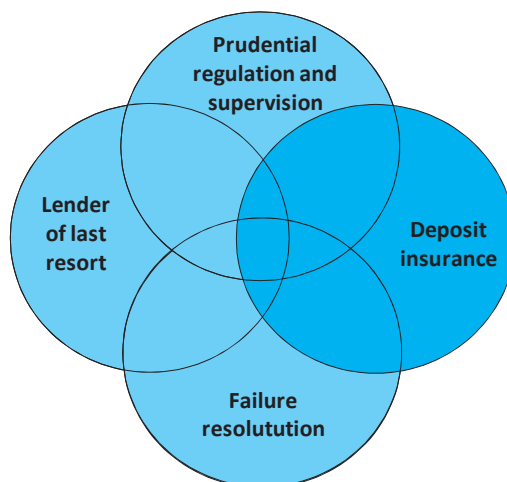
Each of the different elements highlighted in the figure faces a similar trade-off. On the one hand, these elements are designed to reduce the disruptions in the financial system stemming from bank failures. On the other hand, they have to be designed in a way that they reduce *ex ante* moral hazard risk that otherwise can result in the same fragility that the financial safety net is supposed to minimise.

While each of the different elements faces a similar tradeoff, they are designed to achieve different, not entirely consistent, objectives, which has implications for the institutional sharing of responsibilities.

A wide set of different institutions are involved in the provision of the various elements of the financial safety net. Besides the prudential authorities – regulators and supervisors – monetary and fiscal authorities play an important role and there are often specialized agencies providing deposit insurance and these agencies may have additional special responsibilities in a crisis situation, including in relation to bank failure resolution. The monetary authority, whatever

its involvement in prudential responsibilities (and there is an ongoing discussion about the extent of that involvement), plays a crucial role within the financial safety net because of its role as “lender of last resort”. The fiscal authority is involved in the financial safety net either directly or indirectly because of its role as “solvent provider of last resort” but also because of its political responsibility for the use of taxpayer money.

Figure 1. **Interrelations between elements of financial safety nets**



### *Determining the tolerated risk level*

*The financial system is not totally failure-free nor is it designed to be*

The financial system is not totally failure-free and is not designed to be. For one, as a general rule, there is a natural limit to how safe any type of system can be. The financial system is no exception in that respect. Perhaps more importantly, some measure of risk-taking in financial markets is necessary for innovation and growth to occur. That process necessarily means that some bets will turn out to be poor ones, but that is how the system is meant to work in channeling resources to more highly valued uses.

*Attempts to increase safety of the system typically entail costs*

Attempts to increase the safety of the system typically entail costs and these costs could interfere with the system’s efficacy as the resources used (including but not limited to the costs associated with activity of supervisory authorities, administrative costs for supervised entities) would not be available for other uses.

Moreover, raising the level of safety could generate incentive distortions and thus reinforce some of the fundamental challenges characterizing financial intermediation such as those related to moral hazard and adverse selection. That being said, the link between safety and efficiency is not inverse under all circumstances (and almost certainly is not linear); under some circumstances increases in the level of safety could also enhance efficacy of the system in the long run.

*One needs to balance out financial system efficiency with the likelihood and severity of “accidents”...*

One needs to make a conscious decision as to how to balance financial system efficiency against the likelihood and severity of “accidents”. Incidence of bank failures differs across OECD countries and this observation may reflect differences in the tolerated risk level. For example, in the United States, banks do actually fail, even if the failure of large entities is rare. There have only been two years since 1934 when no banks failed in that country (that is, in 2005 and 2006). At the peak of the Savings & Loans crisis in 1988 and 1989, more than 1,000 banks failed. Since the beginning of this year, and unlike in previous years, several banks have failed. In most European countries, by contrast, policy authorities appear to have been reluctant or unwilling to close even small (insolvent) banks.

*...but the complexity of the financial system makes it difficult to choose the tolerated risk level*

What makes it difficult to determine the tolerated risk level is the complexity of the financial system. This complexity appears to have important implications for the “accident” rate. In particular, one hypothesis in this context is that the financial system may be very efficient and stable most of the time, but that it exhibits excessive instability once thrown out of balance. Due to the non-linear feedback mechanisms in complex interconnected financial system segments, even the materialization of small risks can throw the system out of balance: Several amplifiers exist, the joint effect of which can lead to large effects from initially small triggering events.

The experience with the recent financial turbulence seems to testify to the relevance of the assessment. The US sub-prime mortgage debt market was small compared to the US mortgage market let alone as a share of the US or even global financial market. Developments in the subprime market seemed to have had outsized effects on the broader financial markets, a development that can however be explained ex post by the existence of a large number of mutually reinforcing sources of downward dynamics (e.g. including erosion of confidence, market value accounting, need for deleveraging, etc.).

### ***Recent changes in the scope of the financial safety net***

*Traditionally, safety net elements such as deposit insurance and lender-of-last-resort functions have evolved with a focus on deposit-taking institutions*

Recent developments during the financial turbulence have put the spotlight on the type of institutions covered by the financial safety net. Traditionally, financial safety net elements such as the deposit insurance and lender-of-last-resort functions have evolved with a focus on deposit-taking institutions such as (commercial) banks. These entities are an inherently unstable part of the financial system and have the potential to cause significant economic disruption in the case of failure. Failures of these entities generate negative externalities on their customers, especially small depositors, and on financial system stability, as a banking crisis can develop rapidly into a full-blown financial crisis. Banks can be systemically important as their balance sheets are highly leveraged and strongly interconnected.

As a result of innovation, traditional distinctions between different financial activities, including banking, securities dealing, and asset management, have become more blurred. As well, closer and more complex inter-linkages in the financial system have facilitated spillover effects and implied that the systemic risk factors that (commercial) banks are exposed to are more universal. Also, other financial institutions have become systemically important as well.

For example, in the United States, investment banks have grown in size and become increasingly important parts of the financial system as a whole, including as direct counterparties to commercial banks. In part reflecting this latter development, the Fed set up a special liquidity facility for investment banks in March 2008. Moreover, the Fed has provided liquidity support to finance a takeover of a systemically important investment bank by another financial institution. This situation implied that *de facto* investment banks enjoyed the provisions of one element of the financial safety net.

*More recently, some elements of the financial safety net have also become available to other financial institutions*

Thus, the question arose to what extent this situation needs to be reflected in changes in the scope of the other financial safety net elements. In this context, note that investment banks have been subject to less tight prudential regulation and supervision than commercial banks, and they have not been covered by any special failure resolution mechanism nor a guaranty mechanism that is as significant as existing deposit insurance arrangements.<sup>1</sup> In the meantime, while one major independent investment bank has failed, others have been either absorbed by deposit-taking banks, or opted to change their status to bank holding companies.

These developments notwithstanding, the question as to how other elements of the safety net, including prudential regulation and supervision, need to be changed once some elements of the financial safety net are made available to other types of financial institutions (other than deposit-taking banks that have traditionally been the focal point for safety nets) remains valid. For example, the liquidity support by the Federal Reserve for the insurance company American International Group and other recent measures suggests that now some elements of the financial safety net are also becoming more generally available to non-bank financial institutions, as a result of the systemic relevance of these entities.

*If financial institutions sense that there exists an implicit guarantee, moral hazard is likely to arise, increasing the need for regulation and supervision*

If financial institutions enjoy elements of the financial safety net and sense that there exists an implicit guarantee from the government in such situations, moral hazard is likely to arise. Under such circumstances, the need for prudential regulation and supervision increases (top circle in Figure 1). But to what extent this need increases and the public sector should intervene in the financial sector is difficult to establish. Regulation imposes cost on financial institutions and unnecessary regulation may impede the functioning of financial

markets. Thus, a balance needs to be struck between safety and soundness on the one hand and risk taking on the other.

### III. Interactions between the lender of last resort and deposit insurance function

#### *Adapting the lender-of-last-resort function to different circumstances*

*The turbulence highlighted the importance of liquidity in modern financial markets and how rapidly it can dry up*

Liquidity risks are endemic to banks given that these entities undertake maturity transformation, taking short-term deposits and investing them in assets that typically have longer terms to maturity. This nature of the banking business implies that banks may at times be subject to runs resulting in their illiquidity, even if they are solvent. Through the close credit risk linkages among banks, the problems at one institution may then spill over to its peers, perhaps leading to a banking crisis.

The recent financial turbulence has highlighted anew the importance of liquidity in modern financial markets and how rapidly it can dry up even in core segments of the market. It has put the spotlight on the actions taken by and instruments available to policy authorities to deal with changing liquidity conditions, including as a lender of last resort.

By providing temporary lending to the market in general at such a time of financial distress, the central bank can relieve tensions and limit the potential fears that might prompt bank runs. Such actions are part of the lender-of-last-resort function of central banks. Actually, the existence alone of the capacity of the central bank to act as a lender of last resort (LOLR) could already have this effect, as it may stabilize expectations without necessitating any particular course of action.

The classical interpretation of the concept of LOLR was defined by the 19th century British economist Walter Bagehot. According to the interpretation, the LOLR should prevent temporarily illiquid but solvent banks from failing, lending as much as necessary, but at a penalty rate (so that banks cannot use the loans to fund their current lending operations) and against acceptable collateral (valued at pre-crisis prices). The support should be vis-à-vis the entire market and not to specific institutions and it must be credible. The LOLR must make clear in advance its readiness to lend any amount to any institution that fulfills the conditions on solvency and collateral.

The central bank actions taken during the financial turbulence may be similar in some respects to that classical interpretation of the concept of LOLR, but they also differ from the latter in some important aspects. This difference reflects the specificity of liquidity problems in the recent sub-prime financial market turbulence, which differed from those present in earlier episodes of financial turmoil. Indeed, the



market turbulence was triggered by deteriorating conditions in U.S. subprime mortgages, suggesting a heightened credit risk. But the turbulence quickly spread to other markets, as concerns increased over the extent of bank on- and off-balance-sheet exposures to structured credit instruments and their funding. Contagion among banks has occurred not only via credit risk but also via broader market risks.

*As private banks withdrew from core interbank funding markets, central banks themselves became key counterparties in those markets*

The challenges facing the central banks were related to both “market liquidity” and “funding liquidity”, and the lender-of-last-resort function had to be adapted to these changing circumstances (Davis, 2008). In particular, as private banks withdrew from core interbank funding markets and institutional investors from term financing markets, major central banks took over the space left by the retreat of these counterparties and themselves became key counterparties in funding markets.

### ***Changing practices regarding collateral and counterparties***

When injecting liquidity, whether as part of regular refinancing or as LOLR, central banks follow the standard practice of taking collateral. By appropriate selection of eligible collateral (and counterparties), central banks can mitigate credit risk.

*Central banks reduced collateral standards*

But during the recent financial turbulence, central banks responded to the materialisation of market liquidity risk by reducing collateral standards and accepting a wider range of collateral than they had previously. In addition to exceptional fine-tuning measures and exceptional long-term open market operations, as well as, in some cases, front-loading of reserves in maintenance periods, changes in reserve requirements or targets and changes in the standing lending facility, some central banks introduced or expanded securities lending activities, broadened the list of counterparties in some cases and, starting in the fall 2008, offered to provide unlimited liquidity. An example of the broadening of the list of counterparties was the Fed’s special liquidity facility for investment banks set up in March 2008.

While the ECB already had an extensive list of eligible collateral, many other central banks extended their lists during the first months of the financial turbulence. They include the Reserve Bank of Australia, the Bank of Canada, the Federal Reserve System, the Bank of England, and the Swiss National Bank, although the extension of the list by the latter was not expressly linked to the turbulence (BIS, 2008). The ECB also temporarily extended the list of eligible collateral in 2008.

### *Division of labor between lender of last resort and deposit insurance function is less clear in practice than in theory*

By providing temporary lending to the market in general at a time of financial distress, the central bank can relieve tensions in core funding markets and limit the potential fears that might prompt bank runs. Actually, the existence alone of a LOLR could already have this effect, as it may stabilise expectations without necessitating any particular course of action.

*Conceptually, the allocation of responsibilities between the LOLR and deposit insurance is straightforward*

Conceptually, the allocation of responsibilities between the LOLR and deposit insurance is straightforward. In particular, there is a division of responsibilities depending on whether the issue is one of illiquidity, i.e. a lack of liquid funds, and insolvency, i.e. when the value of liabilities exceeds that of assets so that the financial institutions' net worth is negative. The LOLR is relevant in the former situation; it applies to cases of temporary illiquidity (when solvency continues to be intact), while deposit insurance is applicable to the latter type of situations, that is in cases of insolvency. As regards the timing, the LOLR function is relevant as long as the bank is operating, while payouts under deposit insurance occur only once an insolvent bank has been closed (provided the latter is not entrusted with any special failure resolution responsibilities).

*In practice however, this assessment is often not relevant, as illiquidity and insolvency are closely interlinked*

In practice however, this assessment is often not relevant. Indeed, it should be noted that bank illiquidity can either be an indication of insolvency (whereby the value of the banks' liabilities exceeds that of its assets), or it can rapidly turn into insolvency as the need on the part of the bank to meet its obligations immediately may require it to sell its assets at "fire-sale" prices. This situation, in turn, could imply losses on the assets that are high enough to result in net negative worth of that entity. Distinguishing between these two situations may not be meaningful; actually, Goodhart (1988) suggests that it is a "myth" to suggest that it is possible to distinguish between illiquidity and insolvency. Indeed, the current financial turmoil is a reminder how liquidity issues can turn into solvency issues.

### *Competing demands for collateral*

*There may be competing demand for collateral...*

In situations where it is difficult to distinguish between illiquidity and insolvency, there exists another link between deposit insurance and the function of lender of last resort to the extent that the latter focuses on an individual institution rather than on the market at large (thus differing from the classic interpretation of that function as outlined above). In particular, if the LOLR intervened to lend against good collateral to an institution that might eventually become insolvent, the central bank would effectively reduce the collateral available for depositors and other creditors. Also, when the lending of

last resort merely delays the insolvency of the concerned institution, it may allow (well informed) creditor banks and other financial investors to withdraw money from the troubled bank before it collapses.

*...as lending against collateral tends to reduce the funds available to depositors*

Lending of last resort against collateral tends to reduce the funds available to depositors and other creditors,<sup>2</sup> which include (in some countries) the deposit insurer. To control the risk that a broad list of eligible collateral exposes central banks' balance sheets to credit risk, central banks specify haircuts for the collateral against which they lend. As a result, central bank lending increases the banks' liability side by a value that is greater than the value of the asset used as collateral by the bank. The broader the list of eligible collateral, the more likely it is that banks can 'collateralize' a large part of their balance sheet, with the result that the amount of assets remaining for other creditors and depositors will be reduced.

Another risk of a broad list of eligible collateral is that it could encourage banks to continue risky lending practices to the extent that such loans can be used as collateral, thus perhaps further exposing depositors (and other creditors) to greater risks. Recent developments seem to testify to the relevance of this suggestion. Financial institutions reportedly created financial instruments specifically for the purpose of using them as collateral for central bank funding.

Central bankers and policy makers are aware of this potential issue, although so far the evidence suggesting significant tensions has not been strong. For one, in Europe, policy authorities tend to be reluctant to let (even small) banks fail. Also, there are also mechanisms in place that address these potential tensions. For example, in the United States, the deposit insurer is protected by statute from suffering excess loss should the LOLR (the Federal Reserve) lend to a critically undercapitalized insured depository institution.<sup>3</sup>

### ***Potential negative signaling effects associated with the use of emergency liquidity support***

*To the extent that emergency lending is at the discretion of the central bank, there may be unwanted signaling effects*

The injection of liquidity in times of crisis is not mandatory, but it is subject to the discretion of the central bank authority,<sup>4</sup> and this situation implies that the exercise of the LOLR function could give rise to unwanted signaling effects. In this context, a basic dilemma associated with liquidity support facilities is that, to the extent that they are indeed only used under exceptional circumstances, their use may carry a stigma (Mayes and Wood, 2007). Indeed, as emergency liquidity functions are intended to be used when an institution with eligible collateral cannot obtain funding from the market, the actual use of such facilities may have signalling effects that are undesired.

On the one hand, the fact that the central bank provides liquidity to the institution against what it considers good collateral should be taken to imply that it considers the bank illiquid but solvent. Thus, the central

bank liquidity support could be seen as a co-ordination device in a situation of market failure.

On the other hand, the observation that an institution uses an emergency liquidity facility could also be interpreted as signaling that the situation at that specific institution is much more dramatic than at its peers, perhaps even reinforcing reservations against lending to that particular entity.

The episode involving Northern Rock seems to testify to the relevance of this issue. The access by Northern Rock to “special” central bank liquidity facilities was interpreted, rather than as success for the operation of the financial safety net, as a sign of near-failure of that institution. In the meantime, the design of central bank liquidity facilities in the United Kingdom has been changed so as to permit greater anonymity of the bank counterparty, so as to reduce the risk of negative signaling effects. Other public authorities with crisis management responsibilities concur that anonymity, even for a short period, can help alleviate the associated negative effects.

*Anonymity, even for short periods, in situations of emergency lending can be helpful*

Looking ahead, while the stigma associated with borrowing from the central bank’s liquidity facility may have been limited at the peak of the crisis, as the crisis subsides however, the negative signaling effects of continued significant borrowing may become more significant. Some authorities with responsibilities for financial safety net elements share the view that, to avoid the potential negative signaling effect associated with emergency lending, anonymity, even for short periods, can be helpful.

#### ***IV. Emergency measures adopted in the fall of 2008 and related challenges***

##### ***Changes to deposit insurance as part of comprehensive emergency policy measures***

*Nervousness and distrust spread from the banking sectors to the wider public in fall 2008*

In the fall 2008, following the bankruptcy of Lehman Brothers Holdings, confidence among banks fell further. At the same time, it became increasingly clear that the policy interventions to date were not successful in restoring confidence in markets and among the wider public. There was a growing sense that the financial turbulence could develop into the worst financial crisis since the Great Depression. The nervousness and distrust spread from the banking sector to the wider public. Among other things, bank customers in several jurisdictions were reportedly shifting from deposits to the perceived safety of other institutions or instruments.

*Emergency policy measures were taken, several of which related*

Against this background, a great number of emergency policy measures were implemented, several of which related to deposit insurance arrangements. Government responses to the crisis changed

### *to deposit insurance arrangements*

from a case by case approach to a more systematic approach, whereby the lack of confidence and frozen credit markets were tackled by two sets of measures. One set of measures aimed at ensuring continued bank funding through the provision of guarantees (either retail or wholesale) and the other set of measures aimed at addressing bank undercapitalization by injecting capital or purchasing specific assets. Figure 2 places the measures that expand retail deposit insurance in the context of these other bank rescue measures that were announced in fall 2008, using the example of G-7 countries.

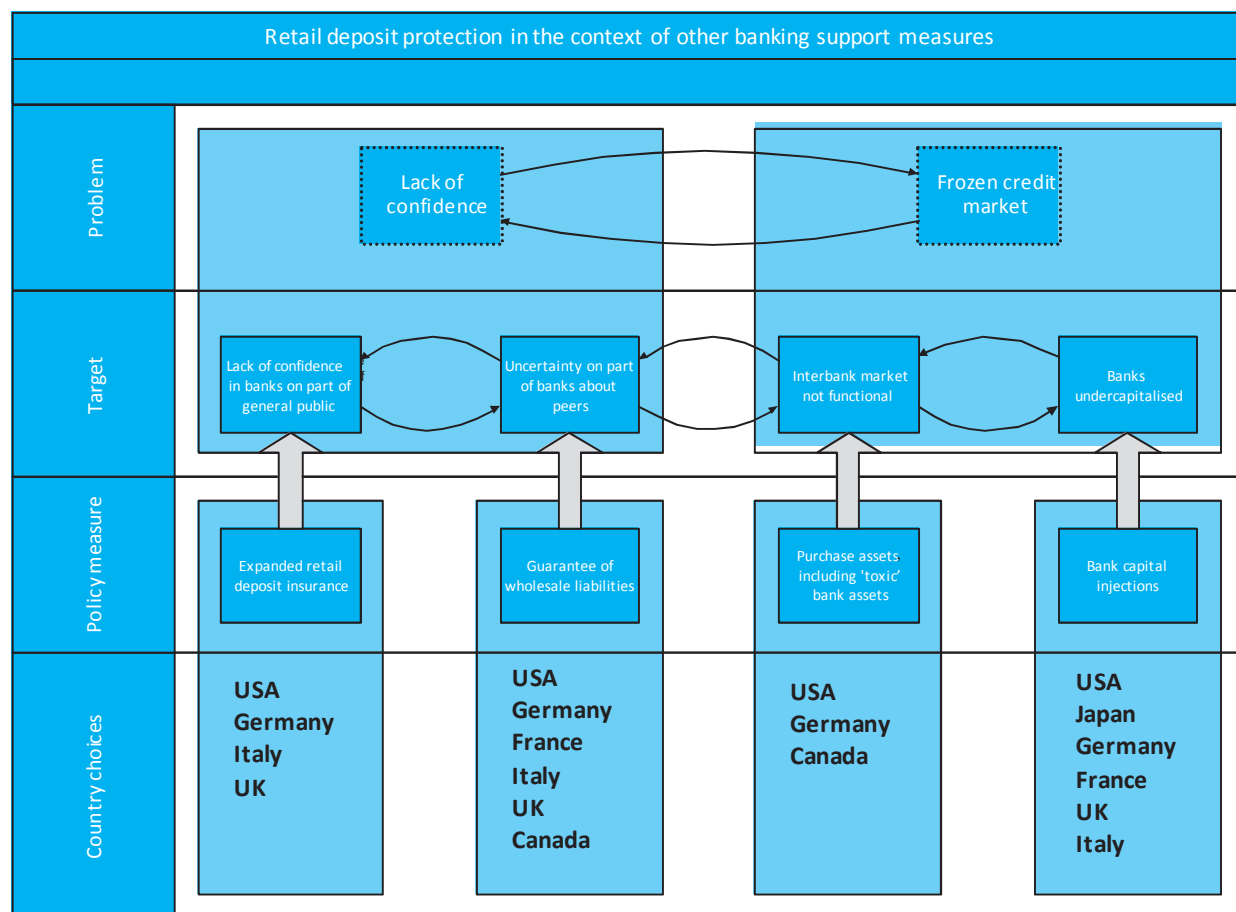
In this context, it is helpful to remember that a report by the FSF Working Group on Deposit Insurance (FSF, September 2001) concluded that, at the level of each country, a well-established mechanism needs to exist in all key areas constituting the financial safety net. The report stressed that if a country has established a well-developed mechanism in only some but not all of these areas, it is still likely to face difficulties in finding effective solutions for preventing or resolving serious problems in its banking system.

According to many observers, the episode involving Northern Rock in the United Kingdom testifies to the importance of that advice. The deposit insurance mechanism turned out to be a weak element in the country's financial safety net. In particular, because of the inadequacy of the deposit insurance system, the situation at Northern Rock triggered fear of contagion with systemic implications.<sup>5</sup> Be that as it may, many of the issues related to deposit insurance that were highlighted by this episode were not specific to the United Kingdom. They were relevant for the systems in place or (under study) in other countries as well. This suggestion has been underscored by the large number of policy measures taken in the fall 2008, which included the following:

- Raising the maximum levels of coverage,
- Reducing the role of co-insurance arrangements,
- Taking steps to ensure timely access to insured deposits, and
- Extending coverage to a wider range of deposits.

A list of selected policy measures related to deposit insurance taken between end of September and early December 2008 is provided in Box 1.

Figure 2. **Expansion of retail deposit insurance in the context of other bank rescue measures announced and/or implemented in G-7 countries in Fall 2008**



*Notes:* The Figure shows measures implemented or *announced* (or those for which capacity for implementation has been created). For example, the Japanese government has not yet had to inject capital into banks during the current financial crisis, although related facilities exist and/or are being reintroduced.<sup>6</sup> In Canada, the Canadian Lenders Assurance Facility (CLAF), announced October 23, will make available government insurance of up to three years, on commercial terms, for borrowings by banks and other qualifying deposit-taking institutions. The government will also purchase pools of insured residential mortgages.<sup>7</sup> In Italy, legislation created the capacity for the Ministry of the Economy to expand the (already high) level of deposit protection, to guarantee wholesale bank liabilities and to inject capital into banks, but it has not had to implement any of these measures.<sup>8</sup> For the remaining countries shown here, the information relies on the OECD Economic Outlook 84 (published on 25 November).

*Source:* Secretariat estimates (updated from a room document presented at the CMF meeting on 13 November 2008, and building on information provided by delegates and contained in the OECD Economic Outlook No. 84).

**Box 1. Selected policy measures related to guarantees of bank deposits**

(between September and early December 2008)

**United States**

United States Treasury establishes two-year guarantee program for money market fund investors, effective as of 29 September 2008, to cover fund levels as of 19 September 2008.

- The new legislation also temporarily allows the United States deposit insurance agency (FDIC) to borrow unlimited funds from the Treasury.
- On 3 October, the House of Representatives voted for the Emergency Economic Stabilization Act of 2008, which included the raising of the ceiling on the FDIC deposit insurance USD 100,000 to USD 250,000 per depositor per bank on a temporary basis until end 2009.
- In mid-October, the FDIC temporarily guaranteed senior unsecured debt of all FDIC-insured institutions and their holding companies (as long as issued on or before 30 June 2009; the guarantee being valid through 30 June 2012), as well as deposits in non-interest bearing deposit transaction accounts.
- On 23 November, the US government injects USD 20 billion of cash into Citigroup in exchange for a USD 27 billion preferred equity stake, and agrees to guarantee loans and securities on that company's books worth USD 306 billion.

**Europe**

- On 30 September, the Irish government temporarily guarantees all deposits, covered bonds, senior and dated subordinated debt held in the six biggest banks, with guarantee scheduled to terminate in September 2010.
- Several countries, including Belgium, Greece, Luxembourg, Netherlands, Portugal and Spain each raise deposit insurance to EUR 100,000.
- On 3 October, the Financial Stability Authority announced that (with effect from Tuesday 7 October) the deposit protection limit changes to GBP 50,000 from GBP 35,000 per person per authorised bank. The chancellor of the exchequer is reported by newspapers to have made statements suggesting that the government might be offering an implicit 100 per cent guarantee on all deposits in a failing bank, although he has not made a legally binding pledge.
- On 5 October 2008, the German government issued a guarantee on every private deposit account; "the state guarantees private deposits in Germany" according to its spokesman.
- On 6 October, the Government of Iceland stated that a blanket guarantee has been extended covering all deposits in domestic commercial and savings banks and their branches in Iceland.
- On 20 October 2008, the Austrian National Council put forward a 100-billion-euro bank rescue package, which included temporarily providing unlimited deposit insurance to savers and undertaking legal guarantees on loans between banks. From 2010, insurance on deposit would have a limit of EUR 100,000.
- On 5 November, the Swiss government announced it was raising its bank deposit guarantee to 100,000 from 30,000 Swiss francs.

**Box 1 (continued). Selected policy measures related to guarantees of bank deposits**

(between September and early December 2008)

- On 8 December, the European Parliament's Economic and Monetary Affairs Committee endorsed a proposal for raising the deposit guarantee level to EUR 50 000, rather than the present EUR 20 000, from 30 June 2009 and harmonising the level at EUR 100 000 from 31 December 2011.

**Asia**

- On 12 October, the Australian government announced that it guarantees all deposits in the country's banks for the next three years, as well as term wholesale funding to local banks until further notice.
- On 12 October, the New Zealand government announces that it introduces an opt-in deposit guarantee scheme, covering deposits for banks and eligible non-bank deposit-takers.
- On 14 October, the Hong Kong Monetary Authority announced that all bank deposits would be fully guaranteed.
- On 16 October, the Singapore Government announced a guarantee of all Singapore Dollar and foreign currency deposits of individual and non-bank customers in banks, finance companies and merchant banks licensed by the Monetary Authority of Singapore, valid until 31 December 2010.

***Raising the maximum levels of coverage***

At its last meeting, CMF delegates agreed with the view that “a consensus seems to be emerging that one of the lessons from the run on mortgage lender Northern Rock in the United Kingdom is that deposit insurance systems with low levels of coverage and partial insurance, together with likely delays in repayment, may not be effective in preventing bank runs.”<sup>9</sup> The policy actions taken in the fall 2008 reflected this understanding (although at least some of the changes may have gone beyond levels that, at that time, might have been considered adequate).

***The maximum amount of insurance coverage provided per depositor per bank was raised in several places***

For example, in the United States, the maximum amount of insurance coverage provided per depositor per bank was raised (temporarily) from USD 100,000 to USD 250,000 in early October. In Europe, finance ministers agreed on raising the level of deposit guarantee protection to € 50,000 at the beginning of October, while some European governments went beyond that limit and raised coverage levels in their jurisdictions to € 100,000. In mid-October, the European Commission announced its plans to require EU member countries to increase their deposit guarantee within a year to at least the latter amount. On 8 December, the European Parliament's Economic and Monetary Affairs Committee agreed on raising the deposit guarantee level to EUR 50 000, rather than the present EUR 20 000, from 30 June 2009 and harmonising the level at EUR 100 000 from 31 December 2011.

***Unlimited retail deposit coverage was also introduced***

A remarkable feature of the changes announced in the fall 2008 was the introduction of unlimited retail deposit coverage in some jurisdictions. Announcements to that effect were either made explicitly



or implicitly, in the form of statements by policymakers suggesting that all retail deposits were covered by a government guarantee. In the case of at least one CMF member jurisdiction, political declarations were made suggesting that a blanket guarantee would be provided if necessary.

The implications of the changes in the deposit insurance ceilings announced or suggested by policy statements are shown in Figure 3. It shows the USD equivalent of the maximum deposit insurance coverage in CMF member jurisdictions as of early December, compared to the situation in mid-September 2008 (using bilateral exchange rates for early December in the case of both dates to eliminate changes induced by exchange rate movements). Where policy statements suggested or were interpreted as suggesting unlimited deposit insurance coverage, the figure contains a value of USD 1 million (which is being chosen for presentational purposes only). One important observation is that many, but not all members changed their deposit insurance ceilings and all changes are upwards adjustments of coverage ceilings.

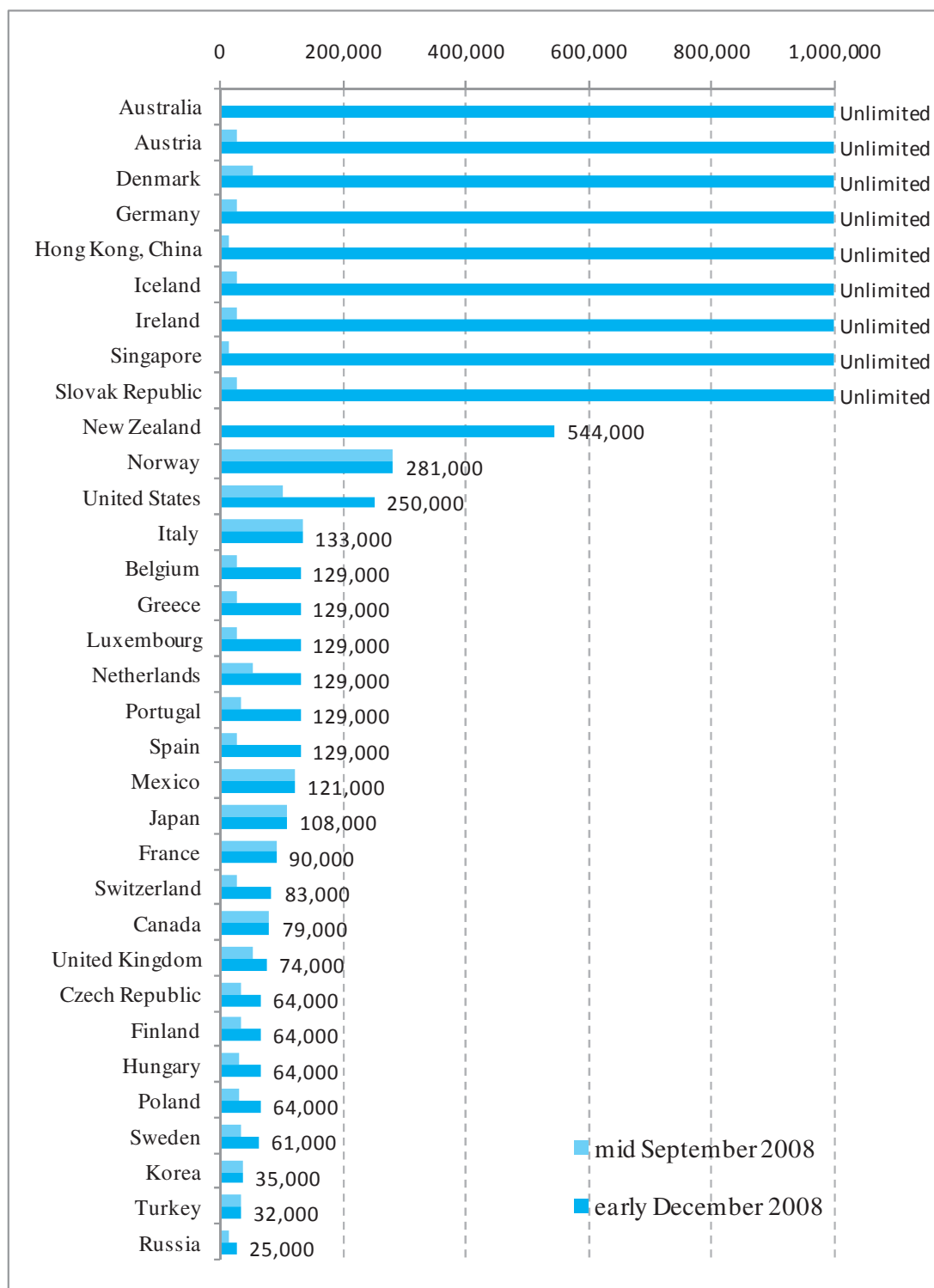
Another way to look at the data on changes that have taken place is provided in Figure 4. The figure shows the incidence of specific deposit insurance coverage limits, comparing the situations in early December 2008 with that in April of the same year (the date of the previous CMF meeting), using current exchange rates to convert local currencies into USD equivalents. Exactly the same USD brackets (*i.e.* at steps of USD 25,000 each) were considered as those suggested in the context of the CMF discussions at the meeting in April 2008. The figure shows that the mass of the distribution has now noticeably shifted rightwards since April (while the recent strengthening of the US dollar exchange rate would tend to shift the more recent observations to the left).

*It is not so clear whether there has been convergence of deposit insurance ceilings among CMF members*

As a result of these changes, one might expect there to have been some convergence among CMF member jurisdictions towards a specific higher level of maximum deposit insurance coverage. But whether such convergence has indeed taken place is not so clear. For example, figure 4 uses the same USD brackets that were considered in the context of the CMF discussions at the meeting in April 2008. It illustrates that, according to that specific distributional measure, there may not have been much convergence. At the time of the last CMF meeting, a majority of jurisdictions specified ceilings that ranged between the equivalent of USD 25,000 to 50,000. By contrast, in early December 2008, there was no such (single) range that contains the majority of jurisdictions. Clearly, observations based on this simple measure should not be used to make any firm conclusions, as the measure is highly sensitive to the choice of ranges and movements in exchange rates. In any case, looking forward, further convergence might be expected, especially among European CMF members.

Figure 3. **Deposit insurance coverage limits**

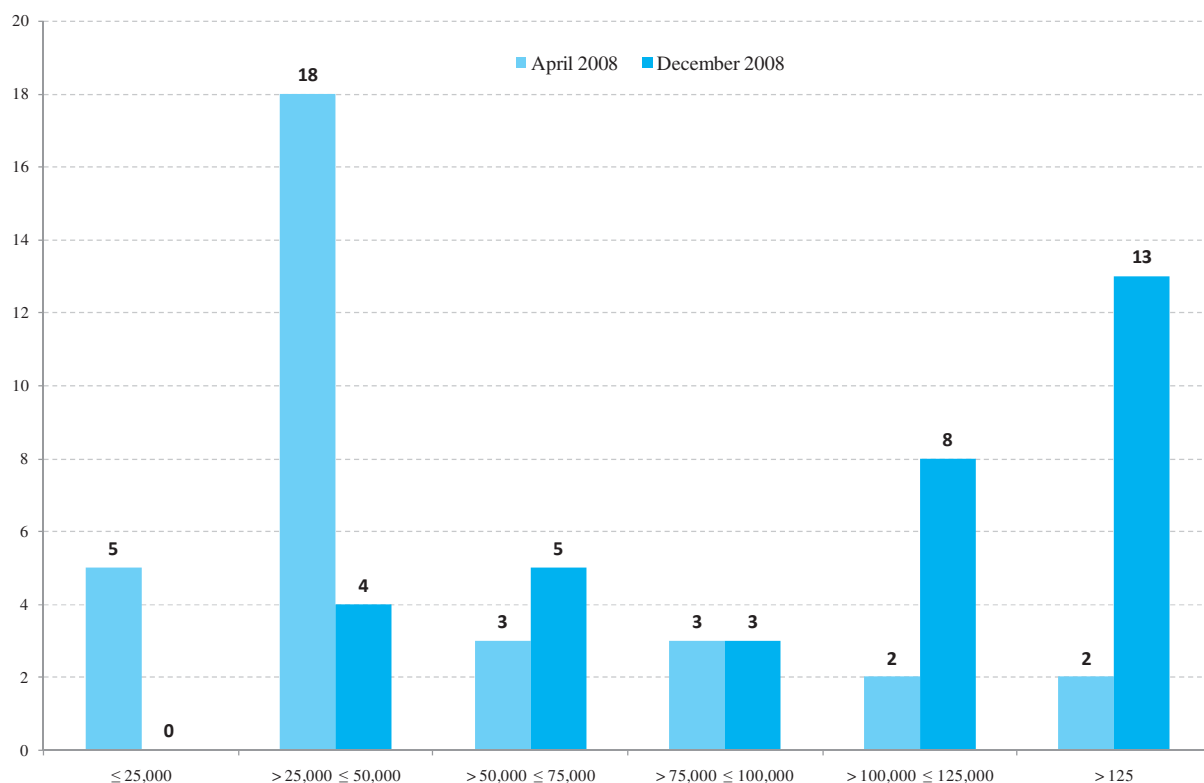
USD equivalents, at current exchange rates, as of mid-September and early December 2008



Note: Preliminary OECD Secretariat estimates. For more detail see tables A.1 and A.2 in the appendix. Exchange rates as of 8 December 2008.

Figure 4. Incidence of specific deposit insurance coverage limits

Numbers of constituencies, ranges in USD equivalents converted at current exchange rates, as of end-April and early December 2008



Note: Preliminary OECD Secretariat estimates. For more detail see tables A.1 and A.2 in the appendix. Exchange rates as of end-April and 8 December 2008.

### *Reducing the role of co-insurance arrangements*

#### *Co-insurance arrangements are being abolished*

The European Commission, in mid-October 2008, also recommended abolishing co-insurance arrangements (and the Economic and Monetary Affairs Committee of the European parliament backed that proposal in early December). In such arrangements, there typically is full protection up to a certain ceiling, beyond which (excessive) deposits are subject to co-insurance, requiring depositors to bear part of the cost in case of a banking failure. In Russia, the amendments made to the country's deposit insurance scheme abolished previously existing co-insurance arrangements.

While the method of co-insurance aims to reduce moral hazard risk on the part of depositors and banks, the very purpose of the insurance system to instill confidence could be undermined if there is a perception among depositors that adequate coverage is not available. This risk is large where the thresholds beyond which co-insurance arrangements enter are relatively low (or equal to zero), as was the case

in several CMF members prior to the fall 2008. Co-insurance arrangements have been abolished and/or deemphasized in several CMF member jurisdictions during the fall of 2008.

### *Taking steps to ensure timely access to insured deposits*

#### *Attempts are being made to provide near-immediate access to insured deposits*

As important as the level of the maximum amount guaranteed is that arrangements are in place giving depositors near-immediate access to their insured deposits. This situation is the case in the United States, where Federal law requires the FDIC to make payments of insured deposits "as soon as possible" upon the failure of an insured institution. In Europe, where pay outs were scheduled to be conducted within 3 months, recent plans foresee a "radical" reduction of the delay to a maximum of three days. In addition, the Commission is pursuing its work on early intervention mechanisms to develop a cross-border management toolkit, with the intention of publishing a White Paper in the first half of 2009. Earlier this year, Australia introduced an early access scheme, the purpose of which is to provide early access to deposits covered by this arrangement.

As specific bank failure resolution mechanisms can support the effectiveness of deposit insurance and raise the speed of access to insured deposits, work is being undertaken in this area as well.<sup>10</sup> Efficient bank resolution involves speed, specialist expertise, and a focused view on the interest of depositors and the general welfare. Having insolvency procedures specifically adapted to banks is likely to facilitate this aim. By contrast, general bankruptcy procedures can be very slow. In many countries, bank failures tend to be covered by general bankruptcy proceeding, though a few countries have specific procedures (Bank of England, 2007).

For example, the United States has a separate insolvency regime for banks and the Federal Deposit Insurance Cooperation (FDIC) has legal closure authority. Banks are closed when their equity capital to total balance sheet assets drops below 2 per cent. By ensuring that the bank is closed before the market value of its net worth reaches zero, direct losses are only suffered by shareholders. By contrast, if the bank was declared legally insolvent when the market value of its net worth is already negative, losses will not only fall on shareholders, but also on uninsured creditors and/or the insurance fund and the taxpayers.

Canada has developed a bank resolution regime that combines a court-driven approach which draws on aspects of general insolvency law with the provision of extensive powers for the bank supervisor and deposit insurance fund, representing a middle ground between the approach in the United States and that in many European countries, where banks are subject to normal corporate insolvency procedures (OECD Euro Area Survey, 2008).

In the United States too, “prompt corrective action” aims at turning troubled banks around before insolvency. Progressively harsher and more mandatory sanctions are applied by the bank regulators on weak financial institutions as their net worth declines. Sanctions include change in senior management, reductions in dividends or restrictions on growth and acquisitions. These measures attempt to slow a bank’s net worth deterioration and also allow it to return to health and/or restructure. Whatever the outcome, the close involvement of regulators ensures that they are ready to close the bank legally when necessary and not be caught by surprise.

### ***Extending coverage to a wider range of deposits***

As part of a broader strategy to restore public confidence, some governments have extended guarantees to unlimited coverage of retail deposits and of corporate deposits, as well as to other forms of unsecured bank debt. For example, in mid-October, the FDIC extended the coverage of its scheme to small business deposits. Already at the end-of-September, the Irish government had guaranteed all deposits held in its six largest banks.

Finally, where explicit deposit insurance schemes had not existed, depositor protection was raised through the introduction of such schemes. Australia, which had established an early access facility in June 2008, extended in October 2008 a three-year guarantee on all deposits in the country’s banks, building societies and credit unions. At the same time, the finance minister of New Zealand announced that the government had introduced an opt-in deposit guarantee scheme.

***Policy actions taken did not always appear to be closely co-ordinated across borders***

One important observation is that, overall, policy actions taken did not always appear to be closely co-ordinated across borders. Even though there was a widely shared sense that there was a strong need for communication and coordination of emergency policy actions, the actual implementation of measures, their timing, and sometimes also the statements accompanying the announcements themselves suggest that coordination was not as close as one might have hoped. Despite several efforts, including on the part of the European Commission, this observation also applies to the European Union. Perhaps notable exceptions were the responses by Australia and New Zealand, the announcements of which were co-ordinated, even though the respective measures taken differed.

### ***V. Challenges raised by recent policy measures***

***The measures taken were necessary to prevent a further deterioration of***

The measures adopted were helpful in preventing a further deterioration of confidence among depositors and perhaps also banks. This said, in some instances it may not have been clear how the (explicit or implicit) unlimited coverage would relate to the deposit

*confidence, but they are not costless*

insurance arrangements that were already in place. As a result, such announcements, being *ad hoc* in some cases, were perhaps not as successful in restoring confidence to the full extent intended. There are nonetheless potential costs associated with these measures. Some of the challenges raised by the expansion of existing guarantees or the introduction of new ones are discussed in the remainder of this section.

### ***Moral hazard***

*Deposit insurance can give rise to moral hazard both on the part of depositors and banks*

Perhaps foremost among the challenges is that, like any guarantee, deposit insurance coverage gives rise to moral hazard. Deposit insurance can give rise to moral hazard both on the part of depositors, who may reduce their monitoring and “policing” efforts, as well as on the part of banks, which may perceive the lessening of the threat of market discipline.

As regards the maximum amount of deposit insurance coverage, there are at least two, partly opposing, considerations affecting the choice of the level of (maximum) coverage. Specifying a too low coverage amount tends to be less effective in instilling confidence on the part of (retail) depositors, and it runs the risk of undermining the credibility of the deposit insurance scheme, thus increasing the likelihood of bank runs when problems occur. By contrast, the higher the extent of the guarantee the greater is the risk of moral hazard.

With most deposit insurance schemes, the response to this trade-off historically has been to establish coverage limits that gravitate towards covering the vast majority of small depositor’s balances while ensuring that large, especially corporate and interbank, deposits are exposed to market discipline. Despite this similarity in the approach across CMF members, there typically has been no agreement on a specific value of maximum coverage. More recently, abstracting from the special case of explicit or implicit unlimited coverage, there may have been some convergence with respect to the maximum coverage level per person and per bank. At the same time, more divergence may have been introduced by the fact that coverage of deposits in some jurisdictions has been extended beyond those of retail deposits to other types of deposits (as well as other types of liabilities).

*Arguably, moral hazard is most relevant in the case of unlimited coverage...*

Arguably, moral hazard is most relevant in the case of (either implicit or explicit) provision of *unlimited* deposit insurance coverage. This assessment partly explains why unlimited deposit insurance coverage has rarely been given. Some countries have provided such unlimited coverage in the initial response to a banking crisis, but they have typically attempted to withdraw full coverage once the crisis seemed to abate.

*... even if in the midst of a crisis, one should not be overly concerned with moral hazard*

Clearly, in the midst of a crisis, one should not be overly concerned with moral hazard. The immediate task is to restore confidence and guarantees can be helpful in that respect. Having said that, market discipline should be allowed to operate, at least to some extent, as it can help reduce the final costs of settling a banking crisis. Depositors can impose market discipline, as they have the option to shift deposits from one bank to another if they deem one bank more likely to fail than another.

Moreover, market discipline can play a significant role, in particular, in situations when the performance of regulatory and supervisory frameworks and authorities is not as smooth as had been intended. Indeed, in the view of many observers, such an assessment describes the performance of these frameworks during the recent turmoil. Strengthening regulatory and supervisory frameworks is one possibility of addressing moral hazard, but the need to rely on that framework is arguably lessened if market discipline is allowed to play a role.

*Absent a credible “exit strategy”, guarantees once implemented can be hard to withdraw*

To allow for a greater role for market discipline and limit moral hazard it is important to specify when the extra deposit insurance will end (as some governments have done), and this timeline needs to be credible. Absent a credible “exit strategy”, government guarantees once implemented can be difficult to withdraw. The difficulty, during the midst of a crisis, with specifying specific timetables for the phasing-out of extended guarantees is that there is considerable uncertainty about the duration of the crisis.

The experience of Japan illustrates the difficulties in withdrawing extended guarantees. After Japanese banks started to suffer from the nonperforming loans crisis in the 1990s, the Deposit Insurance Act was revised in 1996 to temporarily lift the deposit insurance coverage limit of Yen 10 million (about USD 95,000) per person per bank, so as to insure all deposits without limit. The original limit was intended to be reinstated in April 2001, but its reinsertion was then postponed to April 2002, and even then it was only gradually lifted; first for time deposits on that date, and subsequently for ordinary deposits. Other countries with experiences in transitioning from unlimited to limited guarantee regimes include Korea and Mexico.

*An interesting question is to what extent guarantees can effectively be withdrawn forever*

An interesting question is to what extent government guarantees can effectively be completely withdrawn under all circumstances. To be sure, government guarantees can be withdrawn once times get better, that is once the crisis abates. However, once a government ventures down this road, there may be a general perception that a government guarantee will always be made available during a crisis situation. This situation is likely to create moral hazard.

## *Funding issues*

### *Many schemes in CMF member jurisdictions have ex ante funding elements*

Sound funding arrangements are critical to the effectiveness and credibility of the deposit insurance system. Explicit deposit insurance systems can be either funded or unfunded or consist of a combination of both elements. Many schemes in CMF member jurisdiction have ex ante funding elements and in many cases, differential premiums are levied, some of which are risk-adjusted. While use of risk-based premiums tends to reduce the moral hazard problem associated with the provision of deposit insurance, it has proved difficult in practice to determine the correct levels of such premiums.

Ex ante funding involving a stand-alone deposit insurance fund ensures that funds will be available for depositor compensation when needed, provided premiums charged reflect appropriate assumptions regarding potential losses and other deposit insurance costs. Under such circumstances, the provision of timely access by depositors to their insured deposits is facilitated, as no additional government action or decision is required.

In this context, it is important to maintain an appropriate ratio between the size of the fund and the amount of total insured deposits; the “adequacy” of such a ratio depends on the goals of the deposit insurance system, that is, on the specific mix of consumer protection and financial stability objectives and the outlook for the latter. The information publicly available from deposit insurance agencies suggests that most of them do not have a specific quantitative target for the reserves in the fund as a function of the insured deposits. In the cases where the existence of such targets could be verified using publicly available information, their values range from a few decimal points of a per cent up to 10 per cent of total deposits.

### *When funding is inadequate, the difficult issue arises as to how funds should be collected after bank failures*

In the case of deposit insurance systems with ex ante funding elements, funding levels can turn out to be inadequate once bank failures accumulate.<sup>11</sup> In these situations, similar to the case of ex post funding, the difficult issue arises as to how funds should be collected after bank failures. This issue can be complicated by a difficult market situation in the wake of the bank failure(s), especially if the failure(s) was (were) not an idiosyncratic event. In such situations, efforts to raise additional funds would be confronted with the risk of reinforcing (downward) cyclical developments.

For example, in the United States, the failure of several depository banks including a large one during 2008 underscored the relevance of these funding considerations. As a result of the losses resulting from these failures, the FDIC’s reserve fund had been reduced significantly, although it should be noted that there is uncertainty about the *ultimate* losses associated with these interventions (i.e. much of that cost should be recovered in the future as the FDIC liquidates the assets held by those institutions).



The FDIC is required to maintain a specific minimum level of the fund in relation to the total amount of insured deposits. This minimum level is 1.15 per cent, with a target rate equal to 1.25 per cent. When the balance divided by the insured deposits slips below 1.15 percent or is forecast to fall below that level within six months, the Deposit Insurance Reform Act of 2005 directs the agency to take steps to reach the 1.15 percent ratio within five years. The Deposit Insurance Reform Act also requires that the FDIC issue rebates to the banking industry should the level of the deposit insurance fund rise above 1.50 per cent of total insured deposits. Over the decade from 1996 to 2006, the FDIC waived premiums that it normally would have collected to insure bank deposits. At the beginning of 2007 the Deposit Insurance Reform Act of 2005 came into effect and the FDIC charged fees in that year for the first time after about a decade. In the fall of 2008, as the reserve ratio fell to 1.01 per cent and was expected to remain below 1.15 per cent, the agency proposed a significant increase in the fees it charges banks on average.<sup>12</sup> The agency expects that its reserve funds' balance may fall further before it eventually stabilises as a result of the higher premium income flow. In any case, recent legislation (Emergency Economic Stabilization Act) increased the agency's authority to borrow from the Treasury to meet deposit insurance system funding needs, although absent the failure and resolution of a large institution, the FDIC thinks it unlikely it would have to utilize this additional borrowing authority.

*To make a guarantee credible it is important to specify the manner in which it will be provided*

To make a guarantee credible it is important to specify the manner in which it will be provided. Some deposit insurance funds are given an explicit borrowing line from the government among other means of emergency funding. The capacity of governments to provide for the implicit or explicit guarantees that they have announced may be questioned, however, especially when the guarantees suggest no limits to total coverage. In such a situation, the fiscal contingency created can be very large. In this context, it has been pointed out that some countries have financial institutions that are large in terms of deposits and assets compared to their own gross domestic product. In the case of some smaller countries, indeed, the assets of the largest bank or banks could exceed the country's gross domestic product by quite a large margin.

In those situations, international co-ordinated efforts may be necessary to allow for successful bank rescue operations. Clear frameworks for such operations do not exist, however. In this context, the recent Icelandic crisis has illustrated that additional costs can arise when there are no such frameworks and when international policy actions need to be decided during a crisis situation in a largely *ad hoc* fashion. By contrast, the mere existence of international policy arrangements set up in advance, perhaps in the form of mutual insurance arrangements, may prevent a crisis of confidence from occurring.

### *Issues raised by the coexistence of different levels of depositor protection*

#### *The provision of guarantees might provide some financial institutions or sectors with unfair competitive advantages*

Some policy statements announcing the introduction of new guarantees or increases in coverage levels under existing ones have made explicit references to the actions taken in other countries. For example, in the case of some of the announcements introducing blanket guarantees, such actions were justified as efforts to undo competitive disadvantages arising from the introduction of similar guarantees elsewhere. More generally, there is indeed a perception that the provision of guarantees might provide some financial institutions or sectors with unfair competitive advantages as compared to their peers that operate in the same or similar market segments but with more limited, if any, deposit insurance guarantees. The unfair advantage could be vis-à-vis other forms of savings (e.g. close substitutes to bank deposits) or vis-à-vis other deposit-taking institutions that do not enjoy the guarantee. The latter institutions could be located in the same country or elsewhere.

In this context, the Irish governments' guarantee to six large Irish banks led to inflows of funds into Irish bank offices in the United Kingdom, as deposits with these entities were covered by these guarantees. Such moves are arguably more likely the more limited transaction costs and exchange rate risks are, an example being the euro area countries, which share a common currency.<sup>13</sup> Against this background, the European Commission has continually stressed the need for co-ordinated policy actions, among other things in the context of efforts related to its "Financial Stability Roadmap". More recently, a press release by the Council of the European Union, backing these efforts, explicitly referred to the need to avoid competitive distortions.<sup>14</sup>

It would appear that the possibility of massive shifts of deposits as a result of differences in the generosity of deposit insurance systems across countries is more limited where currencies differ from one country to another, thus giving rise to currency risk in the case of cross-border deposits (in the currency of the home country). Also, there may be transaction costs, especially in the case of ATM and credit card transactions, and potential tax implications, that would make such moves unlikely in the case of most ordinary savers.

Perhaps more relevant is the possibility of significant shifts of deposits by sophisticated and wealthy retail and corporate depositors, as well as other banks or other financial institutions. One would expect that these depositors are capable of shifting their deposits quickly in response to differences in the extent of guarantee provided or in response to small differences in interest rates in situations where unlimited coverage is provided in either case. The expansion of guarantees or introduction of new ones has sometimes involved providing insurance coverage for depositors other than ordinary retail depositors. Also, other types of debt have also been guaranteed, and

these guarantees may have had a bearing on the decisions of investors buying bank debt.

*Conceptually, the value of an unlimited deposit is greater, the more reliant banks are on deposit funding*

Conceptually, the value of an unlimited deposit and broader debt guarantee is greater, the more reliant banks are on deposits and wholesale funding and the more they are exposed to the risk that these deposits might be withdrawn and/or that wholesale funding will not be rolled over. For example, a bank's loans-to-deposit ratio may thus give some measure of the extent to which it may benefit from such guarantees. In particular, the higher the loan-to-deposit ratio, the more valuable should be such guarantees. In this context, note that loan-to-deposit ratios differ considerably across banks and banking sectors; they are relatively high in some countries, such as the United Kingdom and Australia, and much lower in other jurisdictions, such as in Hong Kong, China. Having said that, such measures are crude and it is notoriously difficult to price such guarantees; hence, there is a risk that guarantees are mispriced even where governments undertake substantial efforts to levy risk-based charges.

*Also, within a country, different levels of deposit insurance for host country banks and branches of foreign banks can give rise to consumer protection issues*

Also, within a country, the coexistence of different levels of deposit insurance for host country banks and branches of foreign banks can give rise to consumer protection issues. For example, under current EU rules, depositors of a bank's foreign branch (rather than subsidiary) are protected under the laws of the home country of the bank. Thus, to the extent that the host country of a bank is a member of the European Economic Area (EEA) and has implemented EU Directive 94/19/EC on Deposit Guarantee Schemes, under current rules a minimum deposit protection of 20,000 EUR in the bank's branches operating in other Member States of the EU/EEA would also be provided (although that amount will rise temporarily to EUR 50,000 and subsequently to 100 000).

But whether these branches join a supplementary scheme in host countries which have a guarantee above the EU minimum level is another issue. There is a possibility that they do not participate in such supplementary schemes and that depositors are not be fully aware of such choices; rather, they may expect that these branches are covered by the supplementary schemes that exist in host countries. The relevance of this issue has been underscored by the experience in several EU countries with branches of at least one Icelandic bank.

Also, to the extent that other forms of deposits or bank liabilities do not enjoy a guarantee, an unfair advantage for the deposits enjoying such a guarantee might arise or perceived to exist, as a result of which there could be massive shifts of funds. To reduce the possibility of such shifts (and, more generally, as a means to restore confidence in banks) and the potential adverse implications associated with them, one approach has been to widen the guarantees to other forms of deposits or bank liabilities. In those situations, the difficult issue arises as to

where to draw the line. The same issue of where to draw the line has arisen with respect to other forms of investments that have characteristics that are close to those of bank deposits but are offered by different types of financial service providers. The relevance in practice of this issue was underscored by the experience in Australia, where the introduction of explicit deposit insurance (in an attempt to ensure a level-playing field for domestic banks compared to their international competitors) was followed by several adjustments of the scope and fee structure of that arrangement, required to ensure a level playing field among different financial service providers. As part of that process, the government even extended the guarantee to deposits in branches of foreign banks.

### *Addressing the root causes of confidence problems may become even more crucial*

#### *Provision of guarantees does not substitute for other measures that directly address the root causes of the lack of confidence*

A guarantee reduces the threat of bank failures by raising the likelihood that depositors, which provide a large part of funding for banks, continue to provide a stable source of such funds. The expansion of guarantees or the introduction of new ones thus buys time, as it increases the chances that existing deposits will not be withdrawn. Clearly, a full guarantee of bank deposits can be particularly helpful in that respect.

Having said that, while guarantees buy time, this time needs to be effectively used to solve the fundamental problems facing banks. Indeed, as regards the extension of unlimited retail deposit coverage, it is recognized that such measures, once implemented, should only be withdrawn when the financial system is resilient enough again. Otherwise, additional costs could arise. As an FSF working group put it: “After a country has suffered a financial crisis, it is best to ensure that most of the major problems relating to the financial crisis have been adequately addressed before transitioning to limited-coverage deposit insurance. However, if governments wait for all deficiencies in an economy or financial system to be address or the system to be reformed, blanket guarantees could become entrenched.”<sup>15</sup>

Recent changes to deposit insurance parameters are indeed just one type of a variety of very comprehensive measures undertaken to restore confidence and support financial intermediation. Some of these measures reflect a clear deviation from earlier case-by-case approaches and the general perception is that their comprehensive nature (Figure 2) may be successful in addressing the root causes of the current impairment of financial intermediation.

One risk, however, is that even the “new-generation” measures are not ambitious enough or not credible. This situation may lead banks and other entities covered by the guarantees to believe that the extended guarantees will stay in place for longer than the government

may have initially planned or announced. As a result, they may lose motivation to contribute to these efforts while deposits remain fully protected, thus creating additional moral hazard. As a consequence, the guarantees put in place would actually worsen the problem they are supposed to cure.

*The need for other decisive policy measures may even become greater*

Thus, the extension of existing or introduction of new guarantees does not substitute for other measures that directly address the root causes of the lack of confidence; rather, it increases the need for the latter type of actions.

## **VI. Concluding remarks**

### ***Overlap of deposit insurance and lender-of-last-resort functions***

*Provision of a safety net has been a key element of the policy response*

Government provision of a safety net for banks and other financial institutions has been a key element of the policy response to the current financial crisis. In the process, the design of different financial safety net elements, such as the lender-of-last-resort and the deposit insurance function, has been redrawn in many jurisdictions, although not in all.

*Liquidity and solvency issues are closely intertwined...*

Extensive use of the former function has been made since the beginning of the crisis, while adapting its design to the specific circumstances of the present environment. These conditions differ from the traditional textbook interpretation of the lender-of-last-resort function, according to which the central bank addresses the issue of illiquidity of otherwise solvent banking institutions. Recent developments have confirmed again that the two concepts are closely intertwined.

*...giving rise to potential tensions between the lender-of-last-resort and deposit insurance functions*

In such situations, tensions can arise between the lender-of-last-resort and deposit insurance functions. In particular, if the lender of last resort intervened to lend to an institution that subsequently becomes insolvent, the central bank is effectively reducing the collateral available to (insured) depositors. Recently, banks have reportedly created instruments specifically for the purpose of using them as collateral for central bank refinancing. There is a risk that banks continue risky lending practices to the extent that such loans can be used as collateral, thus perhaps further exposing depositors to greater risks.

Also, under some circumstances, the observation that an institution uses an emergency liquidity facility may be interpreted as signaling that the situation at that specific institution is much more dramatic than at its peers, thus perhaps reinforcing reservations among

other banks to lend to that particular entity. While this stigma associated with borrowing from the central bank's liquidity facility may have been limited at the peak of the crisis, as the crisis subsides however, the negative signaling effects of continued significant borrowing may be more significant. Some public authorities involved in the provision of the financial safety net concur that anonymity, even for a short period, can help alleviate the associated negative effects.

### *Issues raised by expansion of guarantees and introduction of new ones during Fall 2008*

#### *Extending existing and introducing new guarantees buys time...*

When distrust among banks accelerated and spread to the wider public during the fall 2008, governments took a number of radical policy actions including several related to the parameters of their deposit insurance schemes. In particular, governments extended existing guarantees and introduced new ones. Many of these measures were consistent with the basic thrust of the arguments developed by the CMF at its meeting in March 2008, although at least some of the changes may have gone beyond levels that, at that time, might have been considered adequate. In any case, such measures reduce the threat of bank failures by raising the likelihood that depositors continue to provide a stable source of refinancing for banks. These measures are thus helpful in buying time.

#### *...but such measures are not costless*

While they do not address the root causes of the lack of confidence, they are nevertheless helpful in avoiding a further accelerated loss of confidence. They are nonetheless not costless.

#### *Deposit insurance, especially if unlimited, gives rise to moral hazard*

- First, like any guarantee, deposit insurance coverage gives rise to moral hazard. Arguably, moral hazard is most relevant in the case of (either implicit or explicit) provision of *unlimited* deposit insurance coverage.

Clearly, in the midst of a crisis, one should not be overly concerned with moral hazard, as the immediate task is to restore confidence and guarantees can be helpful in that respect. Nonetheless, market discipline needs to be kept operational, among other things because it can help reduce the final costs of a financial crisis by limiting the build-up of further problems, and therefore an effort is needed to allow it to operate.

#### *A credible exit strategy is needed to limit moral hazard*

To allow for a greater role for market discipline and limit moral hazard, it is important to specify when the extra deposit insurance will end, and this timeline needs to be credible. Absent a credible "exit strategy", government guarantees once implemented can be hard to withdraw, as the experience of Japan during its last financial crisis has illustrated.

*The potential for unfair competitive advantages should be limited*

- Second, differences in retail deposit insurance guarantees across countries can also have implications for competition among banks. Cross-border co-ordination in that respect was not as close as one might have hoped, but it appears necessary in order to avoid that the potential for unfair competitive advantages to arise. Also, within a country, the coexistence of different levels of deposit insurance for host country banks and branches of foreign banks can also give rise to consumer protection and competition issues.

*To make a guarantee credible it is important to specify how it will be provided for*

- Third, to make a guarantee credible it is important to specify how it will financially be provided. Recent developments indeed underscore the need for sound funding arrangements to ensure the effectiveness and credibility of the deposit insurance system (as well as other types of guarantees). There is the possibility that the capacity of (some) governments to provide for the implicit or explicit guarantee that they have announced may be questioned.

*Looking ahead, policy focus will have to be on “exit strategies”*

Looking ahead, the policy focus will have to be on “exit strategies” and a question in this context is when and how to withdraw parts of the expanded and newly introduced guarantees, especially in those cases where clear and credible timeframes to that effect do not yet exist.

*Can new government guarantees be a one-off proposition?*

It is not clear to what extent expanded or new government guarantees can ever be fully withdrawn, under all circumstances. That is, can such government guarantees be a one-off proposition? There may be a general perception that, once a guarantee is extended in any given crisis, the specific type of government guarantee will always be made available during crisis situations.

***Timely opportunity to review the operation of financial safety nets***

The current financial crisis provides a timely opportunity to review the operation of financial safety nets and to rethink the design of its various elements and their interactions as well as of the challenges associated with the expansion of existing guarantees and the introduction of new ones. Once the crisis abates, a thorough analysis of the costs and benefits of these changes needs to be undertaken. In this context, it is interesting to note that some countries *did not* modify their deposit insurance arrangements. Such policy stances were perhaps facilitated by the fact that the banking sectors of the countries’ concerned have been less affected by the financial turbulence.

While there is currently no generally agreed standard for such arrangements, efforts to provide guidance for policy makers wishing to establish or reform such arrangements have been made (see also Box 2). The CMF work should provide a useful complement to such efforts, and the Committee suggested that future work could focus on challenges related to guarantee arrangements more generally.<sup>16</sup>

#### **Box 2. Related work on safety net interactions and guarantees**

While there exist no generally agreed templates for the design of deposit insurance systems, the *International Association of Deposit Insurers* (IADI) offers guidance to policy makers wishing either to establish a deposit insurance system or to reform their existing deposit protection arrangements. As noted within the context of the CMF's last discussions of financial safety net issues at its meeting in April 2008, IADI published on 4 April 2008 a set of draft Core Principles for Deposit Insurance, intended as a voluntary framework for effective deposit insurance practices. The report by the FSF on enhancing financial market and institutional resilience notes that IADI now plans to finalise the Principles by the spring of 2009 (Report of the Financial Stability Forum on Enhancing Market and Institutional Resilience - Follow-up on Implementation, 10 October 2008).

The FSF report also explains that the BCBS jointly with IADI will establish by year-end whether the IADI Principles can supplement the Basel Core Principles for Effective Banking Supervision in the area of effective deposit insurance systems. In this context, it should be noted that the Basel Committee *did not* include deposit insurance as a key principle in its 1997 Core Principles of Effective Banking Supervision, although it refers to deposit insurance in a separate appendix. The Core Principles note that the actual form of such schemes should be tailored to the circumstances in, as well as historical and cultural features of, each country. In particular, the special banking environment of the country that proposes to establish such a system will have to be taken into account at the design stage. This banking environment changes over time, however, and this aspect needs to be reflected in any discussion of design aspects of deposit insurance schemes. In this context, note that one of the functions of the CMF is to monitor and analyse structural changes in financial services, including in banking, and to identify the implications for policies related to these services.



## *Notes*

1. While there is a resolution mechanism for insured depository institutions (including commercial banks), there is no such process for investment banks or other systemically important non-depository financial institutions in the United States. As systemically important investment banks are now more directly benefitting from the LOLR function, there have been calls for tighter prudential regulation and supervision of these entities, as well as for the creation of a resolution process that ensures the financial system can withstand the failure of a large and systemically important investment bank. One proposal was for a public agency be given (emergency) authority to take over and liquidate investment banks in an orderly manner so as to limit temporary disruptions. A resolution process for investment banks, by allowing a more orderly liquidation, tends to reduce the costs of failure of these entities. Thus, if the existing system was such that the cost of failure was perceived as too high for large and complex financial institutions such as large investment banks to be allowed to fail, lowering these costs may be a worthy endeavour to redress the problem associated with the perception of “too-big-to-fail” (or to “complex-to-fail”) and associated moral hazard. The failure of Lehman is likely to have reduced that perception, however. Lehman Brothers Holdings Inc. (LEH) filed for Chapter 11 bankruptcy on September 15, 2008, after being in business for 158 years. At \$639 billion, the company’s bankruptcy filing was the largest in U.S. history.
2. Changes in systems to finance bank (mortgage) assets can also have important implications for the effectiveness of deposit insurance. These implications are in a way similar to those described above in the context of central banks taking collateral. In particular, to the extent that a specific pool of assets is pledged to a specific group of creditors, other creditors and depositors may suffer greater losses in the event of a default as a result of the fact that the secured creditors would rank ahead of other creditors and (unsecured) depositors. For example, in the United States, Treasury Secretary Paulson has been promoting the formation of a large and liquid market for covered bonds, a mortgage-financing vehicle widely used in Europe, as an alternative way to raise money for home buying in the United States. The Federal Reserve has already said that it would accept covered bonds as collateral at its discount window. If covered bonds come to be used widespread, it has been argued by some observers, they could magnify the losses the Federal Deposit Insurance Corporation (FDIC) suffers in the case of bank failures, as covered bond owners would rank ahead of (unsecured) insured depositors. As deposits are subordinated, the FDIC expressed its concerns in July 2008 that unrestricted growth of the covered bond market could excessively increase the proportion of secured liabilities to unsecured liabilities. Indeed, the more covered bonds are outstanding, the less unencumbered assets remain to satisfy unsecured creditors. As a result, the loss severity on the deposit insurance guarantee provided by the FDIC would increase. Against this background, the FDIC has limited the amount of covered bonds to 4 per cent of bank liabilities, with this ceiling subject to change depending on the results of a review of developments regarding these instruments over the next months. See United States Department of the Treasury (2008).
3. See Federal Deposit Insurance Corporation Improvement Act (FDICIA), 1991.
4. There has been a long-standing discussion on the choice of a point on the trade-off line between transparency and ambiguity, which may matter for the effectiveness of the lender of last resort function. On the one hand, greater transparency reduces uncertainty and, if combined with suggested credible policy solutions to the problems, may be helpful in installing confidence. On the other, greater ambiguity provides policymakers with a greater degree of flexibility, which may be needed to deal with unforeseen events.
5. It has also been argued that the country’s reliance upon general bankruptcy laws hampers supervisors’ ability to intervene and leads to delays in resolving banking failures when they do occur, thus weakening the effectiveness of deposit insurance arrangements (see e.g. “If Northern Rock Had Been in the United States”, Eisenbeis, R.A. and G.G. Kaufman, mimeo, 16 October 2007).

6. The Japanese government has submitted a bill (Amendment of the Act on Special Measures for Strengthening Financial Functions and the Act on Special Measures for Promotion of Organizational Restructuring of Financial Institutions) to the Diet (Japanese Parliament), which would enable the government to inject capital into financial institutions. The law had existed since 2004 but expired in March 2008. Another facility (allowing the government to inject capital into institutions that are severely under stress) has existed since 2001.
7. The Minister of Finance announced on 12 November that the Government will purchase up to an additional \$50 billion of insured mortgage pools, thus increasing to \$75 billion the maximum value of securities purchased through Canada Mortgage and Housing Corporation under this program. Under the Insured Mortgage Purchase Program, Canada Mortgage and Housing Corporation (CMHC) purchases securities comprised of pools of insured residential mortgages from Canadian financial institutions. These are high-quality assets that are backed not only by the overall strength of Canada's housing market, but also by the Government's own guarantee of the insured mortgages. The first tranche of the program, for purchases up to \$25 billion, was announced on October 10.
8. The Italian government rescue plan was realized through two emergency decrees (see DECRETO-LEGGE 9 ottobre 2008, n. 155, [http://www.bancaditalia.it/homepage/files/DL\\_155\\_091008.pdf](http://www.bancaditalia.it/homepage/files/DL_155_091008.pdf) and Decreto legge 13 ottobre 2008, n. 157, [http://www.bancaditalia.it/homepage/files/DL\\_157\\_131008.pdf](http://www.bancaditalia.it/homepage/files/DL_157_131008.pdf)). The creation of the capacity to expand retail deposit protection was accompanied by political declarations that a blanket guarantee would be provided if necessary. The government has not had to take that measure.
9. Schich, S. (2008), *Financial turbulence : Some lessons regarding deposit insurance*, OECD *Financial Market Trends*, Volume 2008/1, June.
10. In this context, national authorities are currently working within the Basel Committee on Banking Supervision (BCBS) to take stock of differences in national practices in bank failure resolution, with a stocktaking report scheduled to be provided to the FSF by the end of 2008. One specific task of this group is to identify areas where differences in national practices are most likely to be problematic in the event of strain on a bank active across borders. In addition, central banks of the G10 countries have launched an exercise to identify desirable features in resolution frameworks from central banks' perspective. Separately, the Task Force on Crisis Management of the European System of Central Banks (ESCB) Banking Supervision Committee has assisted EU central banks in the implementation of the Memorandum of Understanding (MoU) on cross-border financial crisis. Authorities in countries that lacked explicit early intervention frameworks or MoUs for cross-border cooperation and information exchange have engaged in the preparation of such MoUs. The European Commission is pursuing its work on early intervention mechanisms to develop the cross-border management toolkit, with the intention of publishing a White Paper in the first half of 2009.
11. Clearly, reducing the likelihood of this situation arising can be very costly. Opportunity costs are likely to arise as the funds collected ex ante would need to be invested in liquid securities with potentially lower returns, and such opportunity costs are higher the greater the targeted level of fund reserves.
12. Notices, Federal Register Vol. 73, No. 201, Thursday, October 16, 2008.
13. In Europe, government guarantees for deposits and depositor protection schemes may fall within the EU state aid rules. If they did and if they were considered to be in breach of state aid rules, they would be (legally) ineffective. In this context, the European Commission is reported to be in contact with Germany, Benelux, France and Ireland in relation to recent rescue measures, including those related to deposit guarantee insurance. The Irish government passed legislation to enable it to guarantee not only all deposits without limit with at least six of the Irish banks, but also with certain creditors. It appears that no state aid notification has been made and it is not clear whether the suggestion that the guarantee will be given on a "commercial basis" is sufficient this guarantee outside of the state aid rules.
14. See Council of the European Union, "The Council approved general approaches on four 'financial services' dossiers", Brussels, 2 December 2008. The press release states "harmonisation should make it possible to avoid the distortion of competition among banks which appeared during the financial crisis (in the form of massive deposit transfers from banks affiliated to a scheme offering a low coverage level to banks affiliated to a scheme offering a high coverage level)."

15. Financial Stability Forum Working Group on Deposit Insurance, “A Consultative Process and Background Paper”, June 2000, p.12.
16. Further work by the CMF could also involve information sharing and, perhaps, joint work with the OECD’s Insurance and Private Pensions Committee (IPPC), which has worked on the issue of pension fund guarantee schemes. The challenges discussed in the present paper are not unique to the banking sector. All guarantee schemes face similar challenges.

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## Annex

Table A.1. Coverage limits in jurisdictions of CMF members in mid-September 2008

Country Name	Explicit deposit insurance coverage limits	Co-insurance arrangements	Limits to full coverage (in USD at exchange rates as of mid-September 2008, rounded)
Australia	No explicit deposit insurance system	Not relevant	Not relevant
Austria	EUR 20 000	10 % co-insurance for non-individuals (companies etc.)	28 000
Belgium	EUR 20 000	10 % co-insurance	28 000
Canada	CAD 100 000	None	94 000
Czech Republic	EUR 25 000	10 % co-insurance	36 000
Denmark	DKK 300 000	None	57 000
Finland	EUR 25 000	None	36 000
France	EUR 70 000	None	100 000
Germany	Obligatory minimum of EUR 20 000 is generally largely exceeded. Private: not to exceed 30% of bank's equity capital. Public: no coverage limit;	None	> 28 000
Greece	EUR 20 000	None	28 000
Hong Kong, China	HKD 100 000	None	13 000
Hungary	HUF 6 million	90% for the amount in excess of HUF 1 million, up to maximum of HUF 6 million	36 000
Iceland	EUR 20 887 (equivalent to ISK 1.7 million as of 01/05/99)	None	> 28 000
Ireland	EUR 20 000	10% co-insurance	28 000
Italy	EUR 103 291.38	None	147 000
Japan	JPY 10 million	None	93 000
Korea	KRW 50 million	None	45 000
Luxembourg	EUR 20 000	10 % co-insurance	28 000
Mexico	UDIs 400 000 (~MXP 1 637 035)	None	155 000
Netherlands	EUR 40 000	10% co-insurance for amount in excess of EUR 20,000, i.e. from EUR 20,000 to 40,000	57 000
New Zealand	No explicit deposit insurance system	Not relevant	Not relevant
Norway	NOK 2 million	None	350 000
Poland	EUR 22 500	10% for the amount in excess of EUR 1,000, up to maximum of EUR 22,500	32 000
Portugal	EUR 25 000	None	36 000
Russia	RUB 400 000	10 % for the amount in excess of RUB 100,000	16 000
Singapore	SGD 20 000	None	14 000
Slovak Republic	EUR 20 000	10 % co-insurance	28 000
Spain	EUR 20 000	None	28 000
Sweden	SEK 250 000	None	37 000
Switzerland	CHF 30 000	None	27 000
Turkey	YTL 50 000	None	40 000
United Kingdom	GBP 35 000	None	63 000
United States	USD 100 000	None	100 000

Source: OECD Secretariat estimates, based on previous CMF discussions in April 2008, public information available from websites of authorities in CMF member jurisdictions, and communications with CMF delegates.

Table A.2. **Preliminary estimates of coverage limits in jurisdictions of CMF members, early December 2008**  
(including temporary arrangements)

Country Name	New explicit or implicit deposit insurance coverage	Previously	Co-insurance arrangements
Australia	Unlimited	Not relevant	No
Austria	Unlimited	EUR 20,000	No
Belgium	EUR 100,000	EUR 20,000	No
Canada	CAD 100,000	CAD 100,000	No
Czech Republic <sup>1</sup>	EUR 50,000	EUR 25,000	Abolished
Denmark	Unlimited	DKK 300,000	No
Finland	EUR 50,000	EUR 25,000	No
France	EUR 70,000	EUR 70,000	No
Germany	Unlimited	Different for each bank, but typically largely exceeding EUR 20,000	No
Greece	100,000	EUR 20,000	No
Hong Kong, China	Unlimited	HKD 100,000	No
Hungary	HUF 13 million	HUF 6 million	Abolished
Iceland <sup>2</sup>	Unlimited	EUR 20,887	No
Ireland	Unlimited	EUR 20,000	Abolished
Italy	EUR 103,291.38	EUR 103,291.38	No
Japan	JPY 10 million	JPY 10 million	No
Korea	KRW 50 million	KRW 50 million	No
Luxembourg	EUR 100,000	EUR 20,000	Abolished
Mexico	UDIs 400,000	UDIs 400,000	No
Netherlands	EUR 100,000	EUR 40,000	Abolished
New Zealand	NZD 1 million	Not relevant	No
Norway	NOK 2 million	NOK 2 million	No
Poland	EUR 50,000	EUR 22,500	Abolished
Portugal	EUR 100,000	EUR 25,000	No
Russia <sup>3</sup>	RUB 700,000	RUB 400,000	Abolished
Singapore	SGD 20,000	SGD 20,000	No
Slovak Republic <sup>4</sup>	Unlimited	EUR 20,000	De facto abolished
Spain	EUR 100,000	EUR 20,000	No
Sweden	SEK 500,000	SEK 250,000	No
Switzerland	CHF 100,000	CHF 30,000	No
Turkey	YTL 50,000	YTL 50,000	No
United Kingdom	GBP 50,000	GBP 35,000	No
United States	USD 250,000	USD 100,000	No

Source: OECD Secretariat estimates, based on previous CMF discussions in April 2008, public information available from websites of authorities in CMF member jurisdictions, and communications with CMF delegates.

Notes:

- On 8 December 2008, Czech President Vaclav Klaus signed into law an amended bill on the bank law, raising the insurance on retail deposits in banks to the maximum amount of EUR 50 000 (around Kc1.25m) from EUR 25,000. Under the new law, the insurance will newly cover the entire deposit, compared with the previous 90 percent. See [eske.noviny.cz](http://eske.noviny.cz), "Czech president signs bill on higher deposit insurance into law", 8 December 2008.

2. The Act no. 98/1999 on Deposit Guarantees and Investor Compensation Scheme has not been changed as regards the ceiling for retail deposit coverage, which specifies that the coverage of the Depositors' and Investors' Guarantee Fund is still 20.887 Euros (see official website <http://www.tryggingarsjodur.is/Payments/>). But the Government of Iceland did issue a statement (<http://eng.forsaetisraduneyti.is/news-and-articles/nr/3033>) on 6 October stating that deposits in domestic commercial and savings banks and their branches in Iceland will be fully covered (that is all retail and corporate deposits covered by the Deposit Division of the Depositors' and Investors' Guarantee Fund). Thus, the present article considers that a blanket guarantee has *de facto* been introduced. This assessment is consistent with a recent IMF publication (Laeven and Valencia, 2008).
3. The Russian President signed a bill on insurance of bank deposits, increasing the amount guaranteed to 700 000 rubles from 400 000 rubles. Amendments to the Federal Law "On Insurance of Household Deposits in Banks of the Russian Federation" took effect on 14 October 2008. The amendments also abolished previously existing coinsurance arrangements.
4. The Slovak government announced on 8 October 2008 that it would expand insurance to the full amount of retail bank deposits and, on 24 October, a government proposal to expand insurance to the full amount of retail bank deposits (natural persons and small enterprises) was approved by law.

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