

## Expanded Guarantees for Banks: Benefits, Costs and Exit Issues

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*This article argues that the expansion of existing and the introduction of new guarantees for financial institutions has been a key element of the policy response to the recent financial crisis. Essentially, the government expanded its role as the provider of the safety net for banks by adopting the function of a guarantor of last resort. Among the various policy response measures, the expansion of guarantees has the benefit of entailing lower upfront fiscal costs relative to other options. Guarantees are not without cost however. Even if they do not generate significant upfront fiscal costs, they create contingent fiscal liabilities. Other potential costs include those arising from distortions to competition and incentives (moral hazard). For example, there may be a perception that similar guarantees will always be made available at low costs. The fact that the expansion of guarantees has not been as closely co-ordinated across borders as might have been desired has resulted in additional costs. To avoid additional costs arising from inconsistencies in exit strategies, close communication and co-ordination regarding pricing and timing issues is required, especially as a more formal framework for the public provision of insurance would still need to be developed.*

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## EXECUTIVE SUMMARY

Interest in safety spiked in financial markets in autumn 2008 and, as private market participants were unable to satisfy that demand, governments stepped in and provided safe investments and stable funding for banks through government-provided guarantees. The expansion of existing and introduction of new guarantees for financial institutions has been a key element of the policy response to the current crisis. The guarantees have targeted both sides of these institutions' balance sheets, applying to large parts of many banking systems' total liabilities as well as to considerable parts of individual banks' asset portfolios. Essentially, the government expanded its role as the provider of the safety net for financial institutions by adopting the role as a *guarantor of last resort*.

Among the various policy response measures, the expansion of guarantees has the benefit of entailing lower upfront fiscal costs relative to other options. Moreover, in the case of guarantees for unsecured bank bonds as well as for excess losses on asset portfolios and sometimes also for guarantees of retail deposits, some additional fee income was even generated.

Guarantees are not without costs however. Even if they do not generate significant upfront fiscal costs, they create contingent fiscal liabilities, along with other potential costs, such as distortions to competition and incentives (moral hazard). In part, the distortions reflect that the expansion of guarantees has not been as closely co-ordinated across borders as might have been desired. To avoid additional costs arising from inconsistencies in exit strategies within and across borders, close communication and co-ordination regarding pricing and timing issues is required, especially as a more formal framework for coordinating the public provision of insurance would still need to be developed.

While the role played by the government as guarantor of last resort has been helpful, in some cases, it may have gone beyond what might have been strictly necessary to avoid a complete breakdown of the system. Be that as it may, there is now a need to focus on how one should make the transition away from unusual support measures. As for the pace of this transition, there is little disagreement with the premise that the exit needs to be made as quickly as the economic and financial environment permits. That said, exit issues differ depending on the type of guarantee involved. For example, most wholesale guarantee programmes have been designed to be of limited duration. As it turns out, however, the initial termination dates have not always been binding and extensions of the duration of coverage have been the norm rather than the exception. Where no fixed dates were specified by which banks must issue debt in order to receive a government guarantee, issuance of government-guaranteed bonds has declined by less than it has in segments where clear deadlines have been set. In the case of deposit insurance schemes, such arrangements will continue to exist, even in normal times, although the levels of protection need to be brought back to more "normal" levels in several cases. Unlimited guarantees, especially where not accompanied by commensurate premium charges, need to be withdrawn quickly.

More fundamentally, there is the issue of whether such guarantees can ever be fully withdrawn. Once a government has ventured down the road of extending comprehensive guarantees for bank liabilities and assets during one specific crisis, there may be a general perception that similar guarantees will always be made available for such entities during crisis situations. If true, and/or if the government indeed stands ready as a guarantor-of-last-resort function for systemically important financial institutions, it will be necessary to strengthen other elements of the financial safety net, including the prudential and supervisory framework, so as to limit moral hazard. The question, however, is how?

## EXPANDED GUARANTEES FOR BANKS: BENEFITS, COSTS AND EXIT ISSUES

### I. Introduction<sup>1</sup>

Interest in safety spiked in financial markets in autumn 2008 and, as private market participants were unable to satisfy that demand (with those previously providing such types of services struggling for their own survival), governments stepped in and provided safe investments and stable funding for banks through government-provided guarantees. The expansion of existing and introduction of new guarantees for financial institutions has been a key element of the policy response to the current crisis. The guarantees have targeted both sides of these institutions' balance sheets, applying to large parts of many banking systems' total liabilities as well as to considerable parts of individual banks' asset portfolios. Essentially, the government expanded its role as the provider of the safety net for financial institutions by adopting the role as a guarantor of last resort.

This paper provides an overview of the guarantees that have been expanded and/or introduced as part of the policy packages implemented in response to the financial crisis (section II). It also discusses the costs and benefits of the expansion of existing and the introduction of new guarantees (section III) as well as issues related to the exit from "unusual" types or levels of guarantees (section IV). The paper argues that guarantees have helped stabilise the financial system, but that they are not without costs, drawing particular attention to distortions to competition and incentives. Exit strategies should be designed so that they are consistent within and across countries so as to limit additional costs that would arise from inconsistencies. Section V discusses some of the implications arising from the adoption by the government of the role of the guarantor of last resort in this crisis. VI concludes.

It should be acknowledged at the outset that this paper does not attempt to conduct a fully-fledged cost-benefit analysis. Such an attempt is beyond the scope of the present paper, as it would not only require a comparison of the costs and benefits of the measures actually taken during the crisis but also of the *policy alternatives* that were available. Some of the latter are covered in more detail in Blundell-Wignall *et al.* (2009a) and OECD (2009b), however.

### II. Expansion of guarantee arrangements since autumn 2008

#### II.1 *Government-provided guarantees: a key element of policy responses*

*Policy support measures directly targeting bank balance sheets*

*Central bank actions have focused on*

Central banks have reacted quickly to the financial turmoil and the subsequent crisis, and in an internationally co-ordinated fashion, to alleviate the bank funding gaps that opened up as confidence in banks, including on the part

*short-term funding...*

of peers, fell dramatically. This lender-of-last-resort function has focused on *short-term funding of liabilities*, with liquidity being made available for maturities ranging from overnight to six months in general and as long as one year in the case of the Bank of England and the ECB.<sup>2</sup>

*...and central government actions on longer-term funding*

By contrast, central government interventions have mostly targeted *longer-term funding*, either directly or indirectly although (as will be argued further below) in a somewhat less tightly co-ordinated way when compared with central bank interventions. Many policy measures aimed at stabilising such funding of banks have directly targeted various parts of these entities' balance sheets, that is their assets, liabilities, and shareholders' equity. However, the various measures did not succeed, at least not initially, "to unlock longer-term liquidity" (ECB, 2009). Part of the liquidity that was injected either found its way into central banks' deposit facilities or was just being recycled in the overnight market.

*The policy response to the accelerated "flight-to-safety" consisted of a widening of the safety net*

But when the "flight-to-safety" accelerated in autumn 2008, and interest in guarantee arrangements and safety spiked and, as private market participants were unable to satisfy that demand (with those previously providing such types of services struggling for their own survival), policy makers abandoned their earlier approaches consisting mainly of case-by-case interventions in individual institutions. Instead, they responded by a *systematic widening of some elements of the financial safety net*, in the process expanding existing and introducing new guarantees for financial institutions, so as to stabilise short- and long-term funding.

Figure 1 provides a stylised overview of the policy measures taken or prepared in selected OECD countries between autumn 2008 and spring 2009, focusing on those actions that directly target bank balance sheets.<sup>3</sup> Such measures have targeted assets, liabilities, and capital, and included

- i. guarantees or
- ii. purchases of impaired "legacy" assets in attempts to ring-fence such assets,
- iii. strengthening retail deposit insurance arrangements to secure longer-term retail funding,
- iv. facilitating wholesale funding through government-provided guarantees, and
- v. capital injections.

These measures are shown as columns in Figure 1, with shaded cells indicating the cases where such measures have been chosen.

*Among the most common measures, explicit retail deposit insurance coverage has been expanded*

Among the most common measures, *explicit retail deposit insurance* has been introduced where it had not existed (among CMF members in Australia and – not shown in the Figure – New Zealand) and its coverage expanded in many cases where it had existed (e.g. Germany, the Netherlands, Spain, the United Kingdom, and the United States). As a matter of fact, looking beyond the countries shown in Figure 1, most CMF participating jurisdictions have

increased their deposit coverage ceilings per person and per bank, *i.e.* 25 out of the 33 jurisdictions.<sup>4</sup>

*Government-supported guarantees have also been extended to unsecured bank bond issues...*

Government-supported guarantees have also been extended, among other things, to ***other types of bank liabilities such as unsecured bond issues*** (*e.g.* Australia, Austria, Belgium, Canada, Denmark, France, Germany, Greece, Ireland, Italy, the Netherlands, New Zealand, Portugal, Spain, Sweden, the United Kingdom and the United States). In most of these countries the guarantees have been made available in the form of opt-in programmes (with the notable exception of the United States where banks were allowed to opt out) for newly issued bond debt, and banks have typically made considerable use of them to secure longer-term funding (with the exceptions of some countries such as Canada and Italy, for example, where facilities have not been used or not significantly so). Actually, even banks that were relatively unaffected by the crisis took advantage of such subsidised form of funding and issued considerable amounts of government-guaranteed bonds (including Australian banks, for example, that continue to carry double-A credit ratings). In at least one country, public authorities persuaded relatively stronger banks to issue government-guaranteed bonds so as to help avoid a stigma being associated with issuing such bonds. In some countries, guarantee schemes covered not only new but also *existing* unsecured bank bond debt (*e.g.* Denmark and Ireland).

*...other types of liabilities not covered in normal times by such guarantee arrangements...*

While the focus of debt guarantee programmes has been mostly on newly issued senior unsecured debt, some also included other types of liabilities that have not traditionally been covered by guarantee arrangements (that is other than retail deposits), at least not in normal times. For example, interbank borrowings are in principle covered in some cases, including in Australia, Germany and the United States. In the latter, coverage has been expanded to non-interest-bearing transaction deposit accounts above USD 250 000, regardless of dollar amount, at depository institutions that elected to participate in the programme (initially to be in effect until 31 December 2009).<sup>5</sup> Under the FDIC's Transaction Account Guarantee Program (TAGP), funds held through the Bank Deposit Programs are eligible for unlimited FDIC insurance although the beneficiary bank needs to pay a supplemental FDIC insurance premium in order to insure these deposits for its clients.

*...and governments have provided guarantees for assets held by banks*

Governments have also provided ***guarantees for assets held on bank balance sheets***. Measures for guaranteeing (or removing) such bank assets have been adopted only in a few countries, however, including the United States, the Netherlands, and the United Kingdom (Table 1). In most of these cases, the actions addressed problems at specific large and potentially systemically important individual institutions rather than taking a system-wide approach (BIS, 2009).<sup>6</sup> That said, some initiatives in the United States, Germany and Ireland proposed in 2009 have included comprehensive schemes for dealing with “bad” (or “legacy”) assets although at least some of these schemes have not always been sufficiently attractive to banks. In Switzerland, a Swiss National Bank (SNB) facility, a special purpose vehicle (SPV) called StabFund, acquired assets from one of the two large banks, UBS. The SNB provides 90% of SPV's financing in the form of a loan, while UBS provides 10% of capital and takes the first loss. Thus, the arrangement has an element that is similar to an excess loss guarantee.

Table 1. Excess loss guarantees for bank assets

|  | Citigroup | Bank of America | ING                        | RBS                   | Lloyds Banking Group |
|--|-----------|-----------------|----------------------------|-----------------------|----------------------|
| Date announced   | 23 Nov 08 | 16 Jan 09       | 26 Jan 09                  | 26 Feb 09             | 07 Mar 09            |
| Insured portfolio                                      | \$301bn   | \$118bn         | \$35.1bn                   | £325bn                | £260bn               |
| Portfolio as % of trading assets, investment and loans | 23.2%     | 8.4%            | 2.3%                       | 14.8%                 | 24.2%                |
| Guarantee fee as % of portfolio                        | 2.4%      | 3.4%            | Not disclosed <sup>1</sup> | 4.0-6.0% <sup>2</sup> | 6.0%                 |
| Bank's first loss as % of portfolio                    | 13.1%     | 8.5%            | None                       | 6.0%                  | 9.6%                 |
| Bank's subsequent share in loss                        | 10%       | 10%             | 20%                        | 10%                   | 10%                  |
| Government's subsequent share in loss                  | 90%       | 90%             | 80%                        | 90%                   | 90%                  |
| Max downside for government                            | \$228bn   | \$93bn          | \$28bn <sup>3</sup>        | £269bn                | £196bn               |

<sup>1</sup> The fee for ING has not been disclosed, but it is reported to be 17.5% of the insured portfolio value. <sup>2</sup> Includes £4.6 billion of deferred tax assets. <sup>3</sup> Less any income and fees received.

Source: Panetta *et al.* (2009).

*Guarantees have been a key element of many policy packages*

As highlighted by Figure 1, a large number of countries have chosen measures involving at least one of these three types of guarantees. Moreover, in many cases such guarantees have played a quantitatively important role (notwithstanding the conceptual difficulties involved in comparing guarantees with other support measures that involve upfront payments). For example, Figure 2 shows guarantees as a percentage of the total headline support provided in selected G-20 countries (not including deposit insurance provided by deposit insurance agencies, however). It illustrates that guarantees have accounted for a large share of the headline support provided in many cases, exceeding 50% in several countries. Also, guarantees provided in Ireland, the Netherlands, Sweden, the United Kingdom, and the United States are large relative to GDP, with the ratio ranging between around 30% of GDP (the Netherlands and the United States) to more than 250% (Ireland). For convenience, all the countries within the sample under consideration where guarantees amount to at least 10% of respective 2008 GDP are shown in bold in that figure.

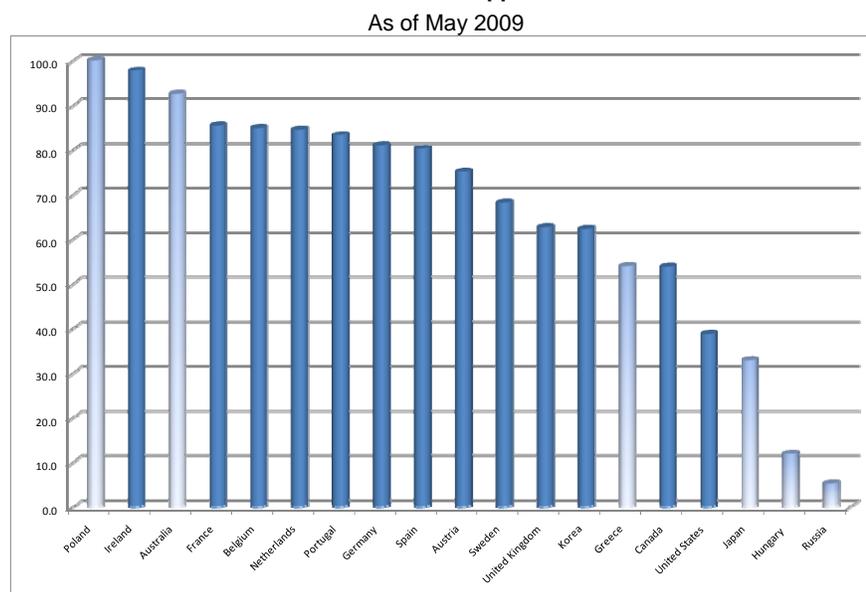
Figure 1. Measures directly targeting bank balance sheets adopted in selected OECD countries

|                | Assets                |                       | Liabilities and capital                      |                               |                         |
|----------------|-----------------------|-----------------------|--|-------------------------------|-------------------------|
|                | Asset Guarantee       | Purchase of assets    | Introduce or expand retail deposit insurance | Guarantee wholesale borrowing | Bank capital injections |
| Australia      |                       |                       | Introduced                                   |                               |                         |
| Canada         |                       |                       |  | Announced, not in use         |                         |
| France         | Standalone action     |                       |  |                               |                         |
| Germany        | Announced, not in use | Announced, not in use | Expanded                                     |                               |                         |
| Italy          |                       |                       |  | Announced, not in use         |                         |
| Japan          |                       |                       |  |                               |                         |
| Netherlands    | Standalone action     |                       | Expanded                                     |                               |                         |
| Spain          |                       |                       | Expanded                                     |                               | Announced, not in use   |
| Switzerland    | UBS scheme is similar | Standalone action     | Expanded                                     |                               |                         |
| United Kingdom |                       |                       | Expanded                                     |                               |                         |
| United States  | Standalone action     |                       | Expanded                                     |                               |                         |

**Notes:** Dark-shaded cells indicate that measures have been announced and/or are in use. “Standalone” actions are those that have targeted individual institutions and are distinguished here from system-wide measures. The assessment follows Panetta *et al.* (2009) and Schich (2009), except for the case of Switzerland. In the case of the latter, the arrangements related to the bank UBS are considered as including an element that is similar to an asset loss guarantee. A verbal commitment has also been made in Switzerland to provide a debt guarantee scheme, but no formal programme has been adopted (which, incidentally, is why that cell is not dark-shaded).

**Source:** OECD Secretariat estimates.

Figure 2. Guarantees as a share of total headline support announced in selected G-20 countries



**Notes:** Dark-blue bars indicate countries in which the share of guarantees of 2008 GDP is greater or equal to 0.5% and where total support (including guarantees and other headline support measures) is greater than 3% of 2008 GDP. Light-blue bars indicate countries for which either one or both of the above criteria do not apply. These estimates do not include deposit insurance provided by deposit insurance agencies.

**Source:** OECD Secretariat estimates based on IMF (2009).

*International communication and co-operation*

As noted above, most of the measures introduced by various countries took the form of increases in the retail deposit insurance ceiling and/or comprehensive bank support packages involving wholesale funding guarantees or those related to (excess) losses on bank assets. The similarity in the form or nature of governments' responses to the crisis was in large part a reflection of the global nature of the crisis, given the high degree of interconnectedness across financial institutions and markets. Indeed, recognition among authorities of this fact fostered increased efforts at policy co-ordination, on a regional, if not broader, basis. For example, a G-7 meeting on 10 October 2008 established guidelines for assistance to systemically relevant institutions, and as a follow-up, on 12 October, euro area countries adopted an action plan that was subsequently extended to all EU countries (BIS, 2009). In September 2008, the ECB Governing Council issued recommendations on government guarantees for bank debt. These various agreements formed the basis for the design of national packages in many EU countries.

*Policy measures taken have not been as closely co-ordinated as might have been desired*

On the surface, these agreements on the basic form of the response to the crisis reveal, in principle, the extent to which policymakers endeavoured to avoid gaps or the introduction of competitive distortions by adopting a common front in addressing the problems. But the reality has proved to be somewhat less co-ordinated than would appear from the afore-mentioned high-profile announcements.

For example, as a general rule, the announcements regarding extensions of retail deposit insurance did not explicitly refer to any of the afore-mentioned international co-ordination efforts. Actually, some announcements even made explicit reference to other countries' actions, explaining their own efforts as attempts to ensure a level playing field for domestic banks. Co-ordination appears to have been limited even where countries have financial systems that are closely integrated and where the similar timing of announcements regarding guarantees might suggest the existence of close co-ordination (including for example, the case of Australia and New Zealand; see Figure 3). For example, the Irish government took the very significant policy action of fully guaranteeing all bank deposits (as well as other liabilities) in the Republic of Ireland before any major international co-operative effort. This action created significant repercussions for other countries' banking sectors, heightening the need for co-operative efforts.

The observation (that co-ordination was not as close as might have been desired) applies in particular to announcements of expanded retail guarantee insurance, yet to a lesser extent for those related to wholesale funding arrangements, however. As regards the latter, significant co-ordination efforts have been undertaken within the euro area.

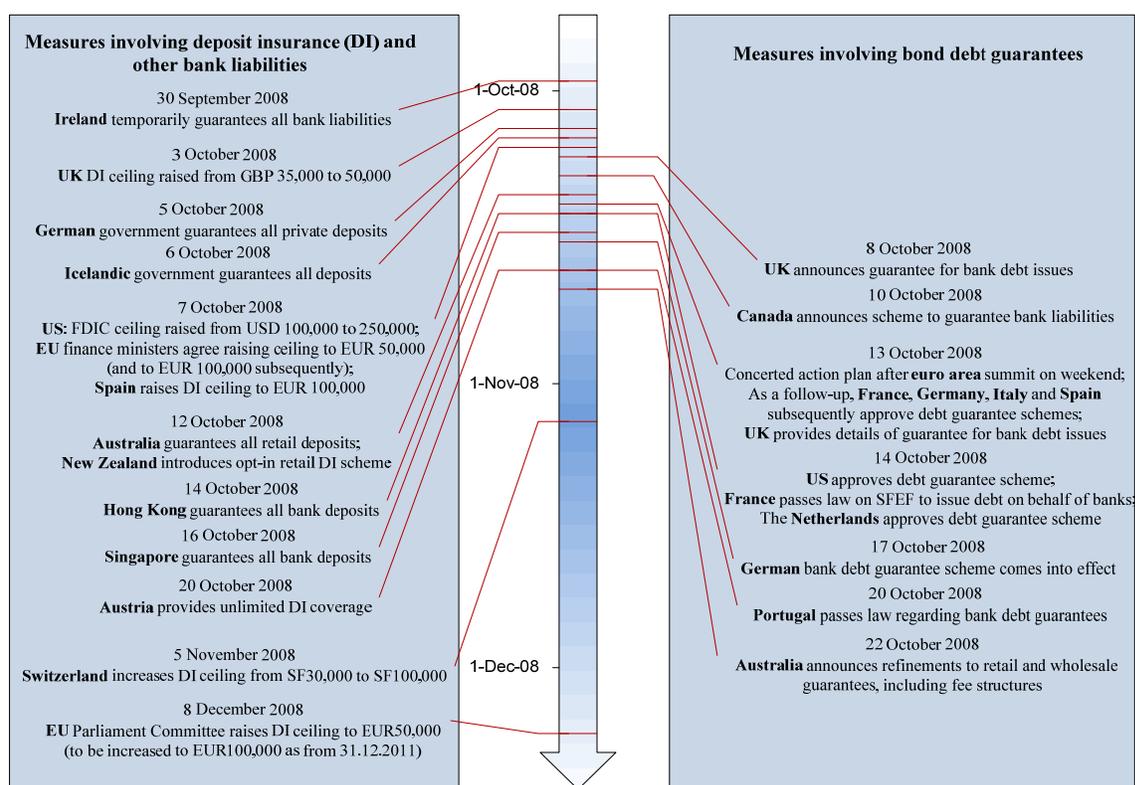
Moreover, liability guarantee schemes for financial institutions have been designed from scratch.<sup>7</sup> Against this observation, one might expect that the schemes put in place would be very similar. But in reality, despite similar aims and broadly similar designs, specific aspects of the structure, pricing and time horizons have differed, even within Europe. That said, the aim of close co-

ordination does not need to be similarity but consistency among schemes (see also discussions below in section III.3).

*No blueprints for policy co-ordination in the case of an international financial crisis had been developed*

One might argue that co-operation on a broad international basis – that is between major OECD jurisdictions – was not as close as might have been desired because no blueprints for policy co-ordination in the case of an international financial crisis had been developed. It turns out that there is no proper framework available for the international co-ordination of the provision of public insurance for financial institutions. The home-host compensation issue arising after the collapse of the Icelandic banking system was yet another example that testifies to the relevance of that observation.

**Figure 3. Timeline of announcements of selected system-wide policy measures involving guarantees**



**Source:** Secretariat estimates based on press reports and governmental/central bank websites.

### III. Costs and benefits of expanded guarantees

#### III.1 Benefits

*Guarantees have been successful in avoiding a further accelerated loss of confidence*

There is widespread agreement among policymakers that the expansion of guarantees has been helpful: these actions were certainly successful in avoiding a further accelerated loss of confidence. For example, a study based on a survey of 36 EU banks suggests that government measures, in particular the guarantees aimed at facilitating bank funding, were “*absolutely necessary and avoided a systemic crisis*” (ECB, 2009). Another study, which assesses the effects of government guarantees as well as capital injections and asset purchases, concludes that “*overall, it is fair to say that the rescue measures have contributed to an avoidance of ‘worst case scenarios’, in particular by reducing the default risk of major banks.*” Similarly, previous discussions at the OECD’s Committee on Financial Markets meeting in April 2009 concluded (Schich, 2009a): “*These [that is, the guarantees of bank liabilities] and the other actions have avoided a further accelerated loss of confidence on the part of depositors and other market participants, essentially through two channels:*

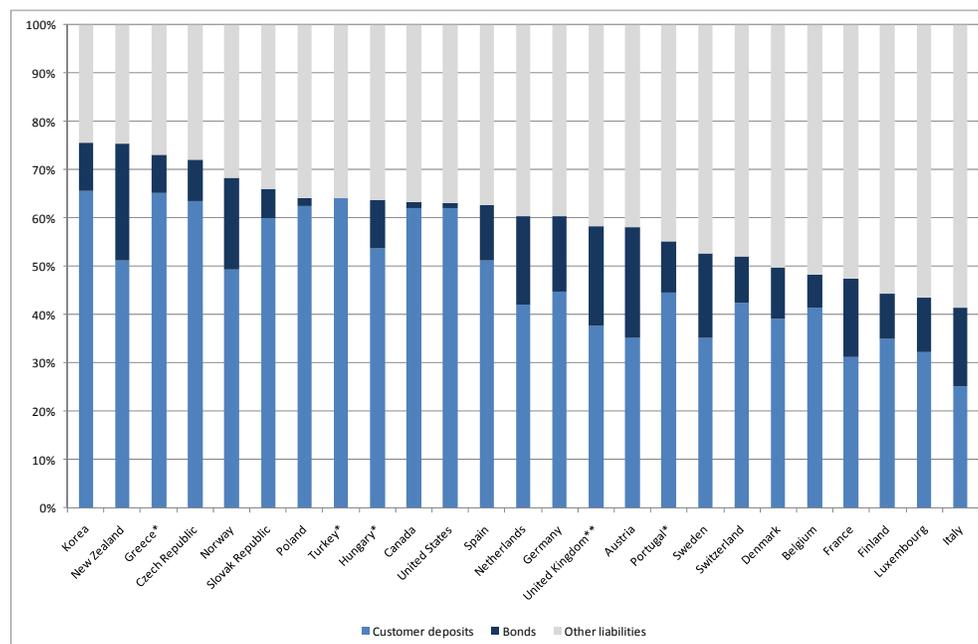
- *Guarantees of bank liabilities have reduced the likelihood of bank failures by raising the likelihood that depositors and creditors provide a stable source of funding for banks.*
- *Guarantees of newly issued bank liabilities have provided the kind of safe investment opportunities much sought after in the flight-to-safety episode.”*

*Deposits are a key source of bank funding*

As regards the first of the two effects above, ***dislocations in funding markets have been a defining feature of the current crisis***. Deposits are a key source of bank funding and interest in this (traditionally more stable) source of funding on the part of banks has increased during the crisis (see also discussion in the next section). Many banking systems in CMF-participating jurisdictions rely quite heavily on (customer) deposits, that is retail and wholesale deposits combined. Figure 4 shows a measure of the relative importance (on an aggregate level) of that type of funding for banking systems in selected OECD countries. It also highlights that such customer deposits, together with bank bonds (the dark-shaded element), account for close to and often more than 50% of total funding in many OECD countries. Thus, the government-provided guarantees for retail deposits and bank bonds have affected large parts of bank liabilities. In addition, guarantees for assets at specific individual banks have also involved between 2 and approximately 25% of these entities’ total assets.

*Government-guaranteed bonds provided much sought after investments during the flight-to-safety episode*

As regards the second of the two effects above, ***government-guaranteed bonds provided much sought after investments*** during the flight-to-safety episode. Since the first issuance of a government-guaranteed bond on 22 October 2008 by Barclays Bank in the United Kingdom, the (cumulative) issuance of such bonds has grown quickly in several countries, including the United States, the United Kingdom, France, and Australia (Figure 5), even if it has levelled off in most of these countries since mid-2009. Demand for investment in government-guaranteed bonds was vigorous, including on the part of banks themselves.

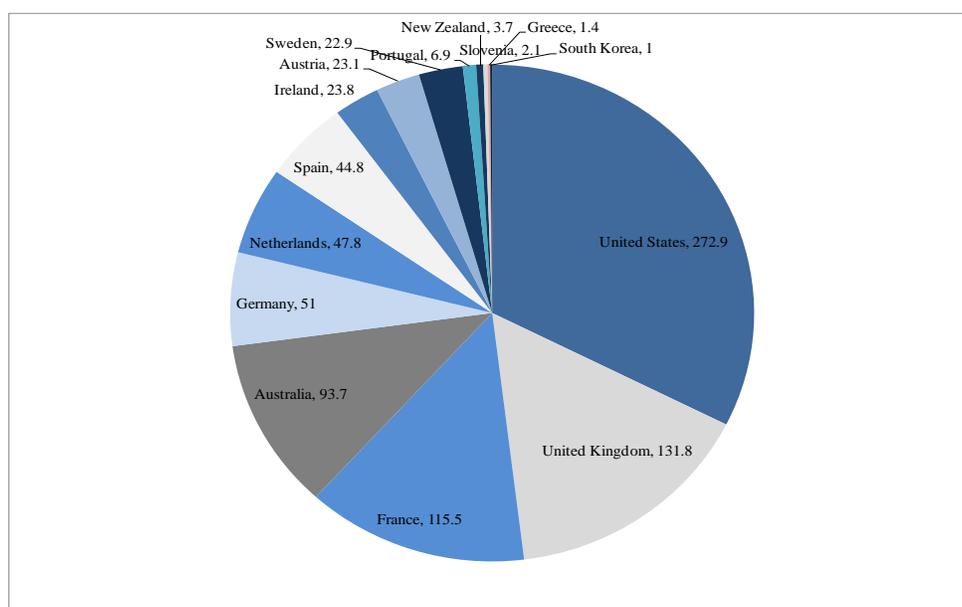
**Figure 4. Role of deposits and bonds in banking sector funding structures (pre-crisis)**

**Notes:** Customer deposits and bonds as a percentage of aggregate liabilities of banking sectors (“all banks”) for all countries except Greece, Hungary, Portugal, Turkey (\* denotes “commercial banks” only) and the United Kingdom (\*\* denotes “large commercial banks” only) as of 2005.

**Source:** Estimates based on OECD Bank Profitability.

**Figure 5. Government-guaranteed bank bonds**

Issued between October 2008 and July 2009, in USD billion



**Source:** Inquiry by the Senate Economics References Committee Into Bank Funding Guarantees – Joint Submission from the RBA and APRA, available at <http://www.rba.gov.au/PublicationsAndResearch/SubmissionsToParliamentaryCommittees/inquiry-bank-funding-guarantees-24072009.pdf>.

*The government took over the role of guarantor of last resort*

Private actors were not capable of providing the safe financial instruments that were in such high demand. Those private financial institutions that had previously provided such functions, including banks and financial guarantee insurance companies, were struggling for their own survival. In that situation, the government took over the role of guarantor of last resort (see also discussion in section V).

*Guarantees entail lower upfront fiscal costs relative to other options*

Among the various policy response measures, the expansion of guarantees has the benefit of entailing lower upfront fiscal costs relative to other options. As a general rule, guarantees have no immediate impact on the fiscal balance or debt unless there is a significant probability the guarantee will be called. Otherwise the fiscal balance would only be affected if and when the guarantee is actually drawn upon (IMF, 2001). The chance of such an event arising further down the road was deemed limited by policy makers and market participants given the political commitment to prevent any major institution from failing.

### III.2 Costs

Guarantees are not without costs however. Even if guarantees do not generate significant upfront fiscal costs, they i) create contingent fiscal liabilities, along with other potential costs, such as distortions to ii) incentives and iii) competition:

i) *Contingent fiscal liabilities* can be very large.<sup>8</sup> There has been a significant widening of sovereign bond spreads in many EU area countries versus German Bunds and sovereign CDS spreads widened across the board between autumn 2008 and March 2009. It appears that country-specific fiscal (and external) positions and, in particular the outlook for them, have contributed to the observed widening of sovereign bond and CDS spreads. This development essentially reflects that part of the banking sector risk has been transformed into sovereign risk.

ii) Like any guarantee, insurance coverage for bank liabilities and (excess losses on) assets gives rise to *moral hazard*. Moral hazard is an important and real (not just conceptual) issue that should not be ignored, even in the midst of a crisis. Granted, the immediate task in a crisis is to restore confidence, and guarantees have been helpful in that respect. But even in the midst of a financial crisis, authorities should not lose sight of the fundamental policy goal of supporting efficiently operating financial markets. In this context, market discipline needs to be supported, and, to allow for a greater role for market discipline and to limit moral hazard, a credible exit strategy needs to include the specification of a credible timetable for the withdrawal of unusual guarantees, as well as measures that help avoid the perception on the part of potential beneficiaries of guarantees that similar ones will always be available (see also discussion in section V).

iii) Also, government-provided guarantees for some financial institutions create *potential distortions to competition* for financial institutions and instruments.<sup>9</sup> Several observations are singled out for special attention in this context:

*Issuance of GGB has effects on the demand for and pricing of investment alternatives*

First, as discussed at the previous CMF meeting in April 2009, the issuance of bonds backed by guarantees from some highly-rated governments has also had profound effects on the *demand for and pricing of investment alternatives*. That is, on the demand for other securities not benefitting from such guarantees, including in particular relatively close substitutes for those guaranteed bonds, such as bonds issued by some lower-rated sovereign or supra-nationals or other financial intermediaries.

*The support measures tended to primarily help large banks*

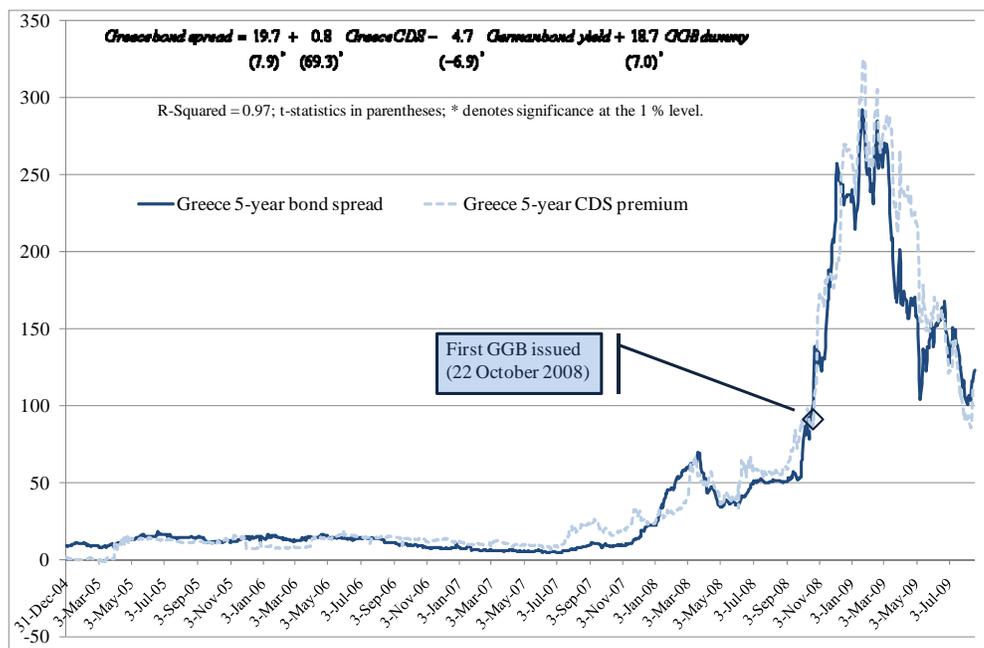
Second, within the banking sector, the *support measures were geared towards systemically important banks*, which tend to be, almost by definition, rather large banks (typically those considered as “too large to fail”). The latter tend to rely more heavily on funding through bond issuance than small banks do, thus they benefit disproportionately from the availability of government-provided bond guarantees.<sup>10</sup>

One might have speculated that larger banks – as they have tended to be weaker than smaller banks in this crisis (at least during the peak of it) – would have suffered a withdrawal of retail deposits in the absence of expanded retail deposit insurance. As it turns out, such outflows may not have been widespread. In the case of some countries, large banks may even have succeeded in increasing their reliance on (the relatively stable) retail funding during the crisis. The extension of guarantees may have undone part of the competitive advantage of banks with large retail bases, as the guarantees applied to *all* banks, essentially undoing the competitive advantage that more stably financed banks might have had in attracting retail depositors. For example, a recent survey of large and medium-sized European banks confirms that the increased interest on the part of some banks has tended to reduce the potential market share of other banks that were already reliant on retail deposits (ECB, 2009). In Australia, following the announcement of the guarantee scheme, there was a reversal in deposit outflows from a number of banks that had been evident in early October 2008, and there was a significant outflow from mortgage trusts. The interpretation of these various flows is complicated, however, by the difficulty in separating the effect of the guarantee from pre-existing trends and other factors.

*The level playing field between internationally competing banks from different countries is affected*

Third, given that the extent and costs of insurance coverage provided under deposit insurance arrangements and (to a lesser extent) bond guarantee schemes have differed across borders, the *level playing field between internationally competing large banks* from different countries might be affected. In particular, there is a risk that some policy makers put in place extensive support measures that are available at low costs to domestic institutions, thus providing them with a competitive advantage as compared to their international peers. The issue of pricing is discussed further below.

Figure 6. Pricing of an investment alternative



**Notes:** The text box shows the result of a simple OLS regression of the 5-year sovereign bond yield spread of Greece (calculated as the difference between the 5-year sovereign bond yield for Greece and the 5-year sovereign bond yield for Germany) on the 5-year credit default swap (CDS) premium for Greece, the 5-year sovereign bond yield for Germany, and a dummy variable that takes on the value of one from the 22 October 2008 onwards. Incidentally, the results for the Greek CDS premium and the dummy change little if the German 5-year bond yield is excluded from the regression.

**Source:** Secretariat estimates based on data from *Thomson Financial Datastream*.

### III.3 Pricing

#### *Adjusting fees for risk*

#### *Charging risk-based premiums limits distortions*

#### *The results in this regard have been mixed, however*

The basic premise here is that to limit distortions to competition and incentives (*i.e.* moral hazard), it is important to co-ordinate policy actions *and* specify risk-based premiums for government-provided guarantees.

Results in this regard have been mixed, however. As regards retail deposit insurance, it appears that some governments have not even attempted to levy fees for the extra government-supported insurance provided (including cases where unlimited retail deposit coverage was announced). There are, nonetheless, exceptions. They include Australia, where a fee is charged for the coverage of retail deposits beyond AUD 1 million per depositor and per bank. This fee is determined in a similar way to the fee charged for wholesale debt government-provided insurance.

Fees are also levied for the comprehensive guarantees (including coverage of retail deposits) extended in Ireland and Denmark and in the case of the bond debt guarantee programmes elsewhere. In Ireland, the banks that opted in the scheme paid fees for the government guarantee based on estimates of the

additional costs to the government's own funding costs. Although this arrangement has been approved under the EU state aid regime, the resulting fees tend to be low and somewhat different from what a market-based insurance premium might be.

All in all, the pricing of guarantees of bank bonds has tended to be somewhat similar across borders and has been risk-based. Typically, the fees were specified as a function of some risk measure of the issuer, for example, the issuer's current credit rating in the case of Australia or its record of historical credit default swap premiums (CDS). In the EU, costs for the bank bond guarantee schemes have converged towards a flat fee of 50 basis points plus the issuer's median five year CDS spread between 1 January 2007 and 31 August 2008 for issues with more than one year maturity. The reference period was different in the United Kingdom, however. As for the United States, fees were charged as a function of the maturity of the instrument to be issued.

### *Differences in details of fee structures for government-provided bond guarantees*

#### *Differences in details of fee structures matter*

The differences in the details of pricing schemes can imply considerable differences in the fees charged by different guarantors for a given "risk". Figure 7 shows estimates of the fees for government protection under different country's guarantee schemes. Specifically, it uses the example of six banks that have benefitted from government guarantees in their jurisdictions and compares the (estimated) costs that these entities would have to pay for a government guarantees in their own and selected other jurisdictions of a bond with maturity of 365 days. The figure shows that the implied charges can differ by up to almost 50 basis points for the *same* CDS history, as illustrated by the variation in fees that the same issuer would have to buy under different guarantor's schemes.

#### *Fees need not be similar but need to be consistent*

Convergence towards a common fee structure across countries would ensure a level playing field for internationally competing banks in situations where the quality of the sovereign guarantee was the same across countries (or where credible explicit or implicit cross-border sovereign bail-out arrangements existed). In practice, however, sovereign credit ratings differ between countries, including within the EU (and emergency funds for cross-border financial support are at best very limited, even at the EU level). Consequently, the quality of the (bank bond) guarantee differs depending on the credit quality of the sovereign guarantor. Thus, the aim of co-ordinated policies should not be to achieve *similarity* of fees across borders, but to achieve *consistency* among fees.

#### *The nationality of the guarantor matters for the costs of bank borrowing through GGBs*

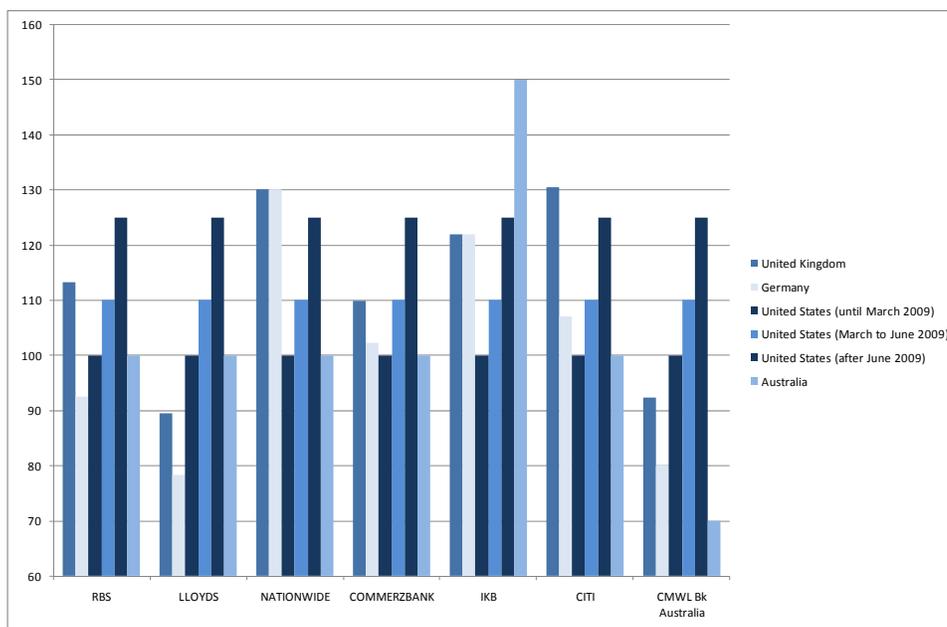
The spreads at issue of government-guaranteed bonds reflect the nationality of the issuing banks. For example, the Portuguese bank Caixa Geral de Depósitos paid a spread at issue compared with the mid-swap rate of 85 basis points in early December 2008. The bank is rated A+ by S&P. The German Commerzbank paid a spread of only 30 basis points for an issue about one month later in the same currency (euro), even though that bank was rated a notch lower at A. Only some of that difference can be explained by the difficult market environment in December 2008. More generally, primary issuance spreads have exhibited considerable variation especially as a function of the sovereign

guarantor (Figure 8). By contrast, other features of the bond issue such as issue amount or identity of the issuers appear to have a very limited influence on the spread at issue (Panetta *et al.*, 2009).

*The better the sovereign's rating, the more a sovereign guarantee is worth*

A sovereign guarantee is worth more the better the credit rating of the sovereign is. Hence, to level the advantage provided by a guarantee from a highly-rated sovereign, lower-rated sovereigns need to charge lower fees for their guarantees. A guarantee from a lower-rated sovereign brings down the credit spread of a bank bond issue by less than a guarantee from a top-rated sovereign. Note, in this context, that the value of a sovereign guarantee changes over time, reflecting, among other things, variations in the sovereign's own credit risk. For example, the announcement of banking system rescue plans sparked a sharp rise in (developed) sovereign CDS premiums with greater discrimination between issuers. These developments are very visible evidence for part of the costs associated with bank support packages for the guarantor.

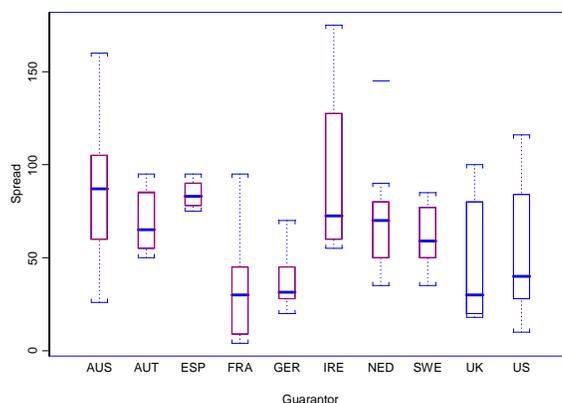
**Figure 7. Estimated fees charged for government-provided insurance for selected issuers**



**Notes:** Cost of guarantee (annually in basis points) under different guarantee schemes, as of mid-2009. In Germany, in addition to the sum of 50 basis points and the median of five-year CDS rates from 1 January 2007 to 31 August 2008, there is also a 10 basis point commitment commission for the undrawn part of the guarantee (see ECB, 2009), which is not factored into the estimates shown above.

**Source:** Secretariat estimates based on data on CDS spreads and credit ratings from Thomson Financial Datastream and information on fee structures from public authorities' websites, Table I.4.1 in Schich (2009) and ECB (2009).

Figure 8. Selected determinants of the primary issuance spread of GGB



**Notes:** Boxplot showing, from top to bottom, maximum, upper quartile, median, lower quartile and minimum of the spread at issue of bank bonds with government guarantees from different guarantors, compared to the mid-swap rate in the respective issuing currency (here either US dollar, British Pound or Euro). The bonds are 'major' issues, with a principal amount exceeding USD 1 million, and have maturities ranging from 2 to 5 years, but concentrated between 2 and 3 years. The mid-swap rate is an important reference value for refinancing on the capital market; it describes the fixed rate side of an interest rate swap between AA-rated banks. Only those guarantors for which the dataset considered here (containing altogether 185 issues) included at least four issues have been taken into consideration.

**Source:** Secretariat estimates based on data from Barclays Capital and additional information obtained through informal communications from CMF member country authorities.

#### IV. Exit from expanded guarantees

##### IV.1 The need for exit from expanded government-provided guarantees

*Governments have expanded their roles...*

During the recent financial crisis, there has been a dramatic adjustment of the roles played in the financial sphere and the real economy by markets on the one hand and governments on the other. Governments and public authorities have expanded their roles when addressing the problems that markets obviously were unable to solve (Mather, 2009). Among other things, the government became the guarantor of last resort as market participants themselves were unable to generate safe assets and avoid bank runs, the freezing of core money markets and the collapse of financial intermediation more generally.

*...and need to re-evaluate the balance between state and markets*

That said, the expansion of public authorities roles' may in some cases have gone beyond what might have been strictly necessary to avoid a complete breakdown of the system. In any case, there is now a need to focus on the issue of what the balance between the state and markets should be in the medium- to long-term, as well as how one should make the transition to that balance from the current situation.<sup>11</sup>

*It is noteworthy that the role of the former has not increased everywhere*

The need for exit from unusual government-provided guarantees is obviously limited, however, where little, if any, additional support has been provided by central governments in response to the financial crisis. While the discussion in the present article places a sharp focus on the expansion of public insurance, it is also interesting to note that some countries have not (or only

marginally) altered schemes involving government-provided guarantees during the financial crisis.

For example, there were no changes to deposit insurance ceilings in eight of the 33 CMF-participating jurisdictions. And while new facilities for guaranteeing bank liabilities and assets have been introduced in many CMF-participating jurisdictions, recourse to such facilities has not turned out to be necessary in some of them. For example, Japan, Mexico, Norway, and Turkey have neither expanded their deposit insurance coverage nor introduced a bank debt guarantee scheme.<sup>12</sup> These observations suggest that these aspects of the safety nets in place have been considered adequate to cope with the shocks facing them. Examples of CMF jurisdictions where the capacity for the expansion of government-provided guarantees for bank liabilities has been created but its use remains null or limited include Canada and Italy.

This situation may reflect the robustness and credibility of the arrangements already in place. If true, these experiences should be taken into account where exit strategies are being designed, as the latter involves addressing the question of what to exit to. That said, the limited need for change of safety nets in some countries may simply reflect the fact that the shocks facing these countries have been more limited than elsewhere. To the extent that the latter is true, it cannot be excluded that the country will be less “fortunate”, going forward. In any case, the effects of existing guarantees need to be carefully analysed everywhere (even where they have not been altered recently), given the potential of such guarantees to create distortions to competition and incentives.

## IV.2 The pace of exit

*Exit needs to be made as quickly as the environment permits*

As for the pace of the transition away from unusual support measures, there is little disagreement that exit from such measures needs to happen as quickly as the economic and financial environment permits (BCBS and IADI, 2009). The key trade-off is as follows: On the one hand, an early exit at a time when the financial system and the overall economy are still fragile runs the risk of reviving concerns about the health of financial institutions and the system. Such a development would effectively undermine the effects of past support measures and could lead to a situation where governments would feel obliged to reinstate support measures, including government-provided guarantees. On the other hand, a rapid transition away from expanded guarantees is required to limit the costs arising from the distortions to incentives and competition discussed in the previous section.<sup>13</sup>

*“Automatic exit” can be achieved by making the pricing of guarantees increasingly more realistic over time*

Unfortunately, there are no tested financial market indicators available that would allow policy makers to pick a specific point in the spectrum of policy choices defined by these two opposing effects. To avoid the additional costs that would be incurred if one failed to pick the appropriate exit time, “automatic exit” can be achieved by making the pricing of guarantees increasingly more realistic over time, thus, making them less attractive. Such an approach has been used in the case of both exit from expanded wholesale funding guarantees (including in the United States, for example) and from retail deposit guarantees (e.g. New

Zealand). In both cases, the duration of the guarantee schemes were prolonged, with higher premiums charged for coverage.

On a related issue, the improving situation in financial markets has allowed some banks to consider returning part of the government support,<sup>14</sup> and the question has arisen as to under what circumstances and conditions institutions benefitting from government support should be allowed to withdraw from such support. This question is particularly relevant in the case of support measures provided under specific conditions, such as restrictions on compensation policies and conditions on lending strategies. As a general rule, such conditions seem to have been more limited in the case of liability guarantees, when compared with other types of support measures, such as asset guarantees and capital injections. Nonetheless, some debt guarantee schemes have also included specific conditions. For example, the emergency guarantee facility provided by the FDIC after the expiry of TLGP on a case-by-case basis foresees the specification of conditions regarding compensation and dividend policies. On a conceptual level, these conditions are a form of additional charge levied for the guarantees, and governments should make sure that they are beneficiary institutions do “pay” (although it is notoriously difficult to define when such conditions have been effectively met).

### **IV.3 The need for consistency**

#### *Exit strategies need to ensure consistency among the different types of guarantees*

Exit issues differ depending on the type of guarantee involved (although these issues need to be jointly addressed). For example, most wholesale guarantee programmes have been designed to be of limited duration although they have typically been effectively prolonged. In this context, it is important that the reasons for the extension are clearly explained and credible expiry dates for the extensions specified. More recently, banks that had made use of facilities such as government-provided guarantees for unsecured bank bonds have reduced their reliance on such funding and, instead, started to issue non-guaranteed bonds again (see also next section), suggesting that an “automatic exit” might take place in at least some instances.

In the case of deposit insurance schemes, however, such arrangements will continue to exist, even in normal times although the levels of protection need to be brought back to more “normal” levels in some cases. Defining what is “normal” is difficult, however. Past CMF discussions suggest that the response may not be the same for every country, and that “normal” levels could be significantly higher in some countries compared with others.<sup>15</sup>

Table 2. Examples of timing of scheduled exit

| Selected countries | Scheduled termination date for “extra” retail deposit coverage            | Scheduled end of validity of bank bond guarantees                              |
|--------------------|---|--|
| Australia          | <b>Oct 2011</b><br>(Unlimited coverage)                                   | <b>Unspecified</b> (67 months after “Final Application Date” to be determined) |
| Austria            | <b>Dec 2009</b><br>(Unlimited coverage)                                   | <b>Dec 2014</b> , extended from Jun 2014 (implied by 5y bonds to be issued )   |
| Denmark            | <b>Sep 2010</b><br>(Unlimited coverage)                                   | <b>Dec 2013</b> , extended from Sep 2010                                       |
| Germany            | <b>Unspecified</b><br>(unlimited coverage)                                | <b>Dec 2014</b> , extended from Dec 2012                                       |
| Ireland            | <b>Sep 2010</b><br>(unlimited coverage)                                   | <b>Sep 2010</b> , to be extended to Sep 2015 (pending EU approval)             |
| New Zealand        | <b>Dec 2011</b> , extended from Oct 2010<br>(coverage up to NZD 500,000)  | <b>Unspecified</b>   |
| United Kingdom     | Not temporary.<br>(from 35,000 to GBP 50,000)                             | <b>Dec 2014</b> , extended from Apr 2012                                       |
| United States      | <b>Dec 2013</b> , extended from Dec 2009<br>(from 100,000 to USD 250,000) | <b>Dec 2012</b> , extended from Jun 2012                                       |

**Notes:** In **Ireland**, the draft Credit Institutions (Eligible Liabilities Guarantee) Scheme 2009, expected to be enacted into legislation before the end of 2009, would cover bonds with maturities up to five years provided they are issued before 29 September 2010. The existing scheme, scheduled to expire in September 2009, covers all liabilities outstanding, irrespective of maturities although that guarantee is scheduled to end on 29 September 2010. In **New Zealand**, the government announced an extension of the Retail Deposit Guarantee Scheme until 31 December 2011, with changes to some of its terms and conditions. The earlier scheme was scheduled to end on 12 October 2010. In the **United Kingdom**, as part of the government’s additional measures to encourage lending by financial institutions (announced on 19 January 2009), it extended the drawdown window of the Credit Guarantee Scheme (CGS) from 9 April 2009 to 31 December 2009, subject to state aid approval. All other aspects of the scheme were to remain the same, including the final maturity date of 9 April 2014. In the **United States**, the Temporary Liquidity Guarantee Program ended in October 2009 (see information related to FDIC Board meeting 20 October 2009). There is, however, a six-month facility, which foresees that the FDIC can approve any firm requesting emergency funds on a case-by-case basis. This emergency window is scheduled to be open until the end of April 2010.

**Source:** Secretariat estimates based on information from websites and informal communications with public authorities.

#### IV.4 Exiting from “unusual” types of guarantees

##### *Unsecured bank bonds*

*Guarantee schemes for unsecured bank bonds typically have specific termination dates*

Politically, it is much easier to introduce guarantees than it is to withdraw them. The task of withdrawing guarantees is facilitated, however, when the initial programmes that establish the guarantees include specific dates for termination. And, in fact, most recent guarantee schemes for unsecured bank bonds have indeed specified dates by which banks must apply for guarantees and/or set limits on the duration of the validity of guarantees. Exceptions are Australia and New Zealand.

*Typically, such schemes have been revised and effectively prolonged, however*

As it turns out, however, these termination dates have not always been binding. Indeed, several bond debt guarantee schemes have had to be revised and effectively prolonged. Moreover, extensions of the duration of coverage have been the norm rather than the exception and have taken various forms, including postponing the final application dates and/or the expiration dates for the validity of the guarantee, and increasing the maximum length of bond maturities covered by the scheme. Countries where schemes have been prolonged in one or several ways include Austria, the United Kingdom, and the United States. In the latter, the TLGP ended in October 2009, although an emergency facility will continue to be available for another six months.<sup>16</sup> In Ireland, for instance, a new guarantee scheme proposed in September 2009 would allow liabilities with up to five years of maturity to be guaranteed under the scheme, with such liabilities to be incurred until September 2010.

*One concern was to avoid a “bunching” of refinancing needs*

One concern that led to prolongations of some of the schemes was the desire to avoid a “bunching” (or “cliff” effect) of refinancing needs. Such an effect was more likely to have occurred where bonds eligible for government guarantees had been restricted to those with a maturity between two and three years. To spread out over time the refinancing need created by the maturing of GGB, several governments have extended the range of maturities allowed (up to five years maximum), as well as postponed the final dates for guaranteed issuance. Where a maximum eligible maturity but no maximum maturity date has been specified (Australia and New Zealand), the issue of “bunching” of refinancing needs has been avoided, at least in theory.

*To discourage further issuance, fees have been raised...*

To discourage further issuance, public authorities have made the pricing of guarantees more prohibitive over time (*e.g.* in the United States). Implementing pricing schedules where prices gradually increase to make them more similar to market prices or real costs is helpful (and consistent with the OECD 2009a reform and exit strategy principles), as it provides for an “automatic exit”.

*...and unguaranteed funding alternatives made more attractive*

At the same time, public authorities have made efforts to increase the attractiveness of alternatives to guaranteed bonds. Among the measures having such an effect was the decision by the ECB to accept covered bonds (to some extent) as collateral in its refinancing operations. Subsequently, there was indeed an increase in the outstanding volumes of European covered bonds.

*Many banks have ceased to rely on government-guaranteed bond issuance*

During the course of 2009, in an environment of improving capital market conditions, the spread between guaranteed and non-guaranteed bank bonds has declined in several instances (see Figure 9 for an example). To what extent this development reflects improvements in the credit fundamentals of the debtor, a generally heightened risk appetite or a perception that institutions with government-provided debt guarantees may benefit from an implicit government guarantee on their non-guaranteed debt is not clear. One delegation at the CMF meeting in October 2009 noted that the spreads on guaranteed debt continue to be markedly lower than those on non-guaranteed debt, suggesting that debt outside the guarantee programme is perceived as less than fully guaranteed.

During 2009, several market participants have increasingly turned towards the issuance of senior unsecured debt. So much so that some analysts have suggested that there would be adverse ‘signalling effect’ of any further reliance

on GGB. The issuance of government-guaranteed debt instruments (GGB) declined noticeably in several market segments. Figure 10 illustrates the trend decline. For example, in Australia, the proportion of banks' long-term issuance that is unguaranteed has been increasing: it rose from next to nothing at the end of 2008 to around 75% in October 2009 (Edey, 2009). That said, issuance in Australia did not fully match the extent of the trend decline in GGB issuance observed elsewhere, as reflected in the increase in the share of Australian GGBs over the last four months shown in Figure 11.

*In some instances, no specific termination dates were announced*

In Australia and New Zealand, no fixed dates are specified by which banks must issue debt in order to receive a government guarantee, but any debt that receives a government guarantee needs to have a maximum maturity of five years (implying a sort of “five-year rolling window approach”). This approach has sought to avoid problems that other governments have confronted, *e.g.* having to extend key parameters such as eligible maximum maturity of debt or final date for guaranteed issuance (*e.g.* in order to avoid a bunching of refinancing needs). However, as long as the guarantee scheme is conceived as a temporary scheme and is subject to an eventual expiration date, the possibility of such bunching cannot be ruled out. Thus, the intent must be for the scheme to remain in place until funding conditions normalise, so that the issue of bunching at refinancing windows would not arise.

In Australia, the Senate Economics Committee held an inquiry into bank funding guarantees, with several submissions focusing on pricing and exit issues. At least one AA-rated bank has argued that the guarantee should not be removed quickly and that the pricing has allowed it to continue lending. Other submissions, including those from lower-rated banks, pointed out that the Australian fee structure has a relatively large differential between banks with different ratings (with AA-rated banks paying 70 basis points and lower-rated banks paying either 100 or 150 basis points, depending on their specific rating).<sup>17</sup> It was also noted that, over time, the pricing of the Australian guarantee has become somewhat out of line with pricing in other jurisdictions, at least in the case of the better-rated banks (which, as it turns out, have used the guarantee extensively). In particular, at the time the Australian scheme was introduced, the premium charges were similar to those in the United States, but the latter were revised upwards in the meantime. But given the changes that have taken place elsewhere, the pricing of the Australian guarantee for long-term debt now is relatively low in the case of AA-rated banks (see also the example of the Commonwealth Bank of Australia, an AA rated bank, in Figure 7). In any case, while mortgage originators argue that the scope of the guarantee should be extended to include securitised mortgages, some government officials have signalled that Australian banks need to be weaned off the guarantee.

**Figure 9. Yields of guaranteed and non-guaranteed bank bonds**

Simple average of selected issues with similar but not identical maturities, in per cent



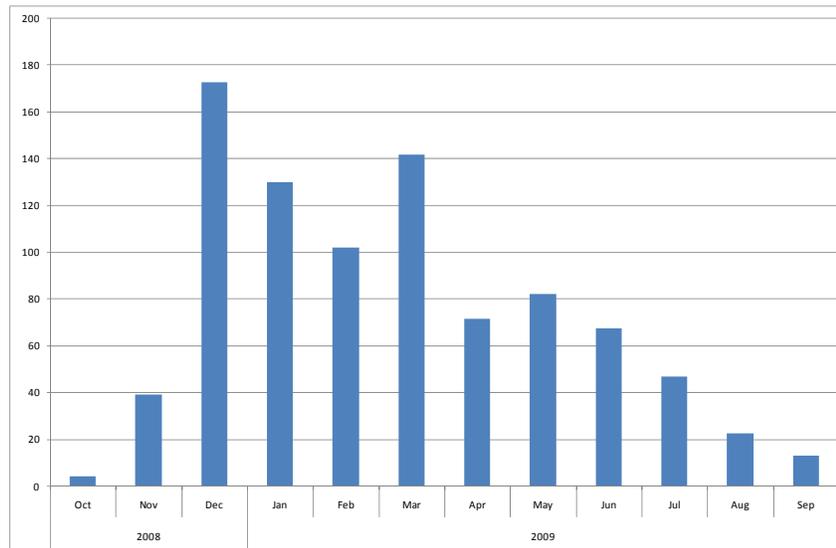
Source: Thomson Reuters Datastream

**Notes:** Simple average yield of four issues of non-guaranteed and guaranteed bank bonds, respectively. Issuers are JP Morgan, Morgan Stanley, Citi Group, and Wells Fargo. There is a maturity mismatch between the guaranteed and non-guaranteed bonds; in particular, the maturity dates of guaranteed bonds are either December 2010 or December 2011, while the maturity dates of non-guaranteed bonds range from August 2011 to September 2012. The average yields shown here are not adjusted for that maturity mismatch.

**Source:** OECD Secretariat estimates based on Thomson Financial Datastream.

**Figure 10. Issuance of government-guaranteed bank bonds by selected guarantors**

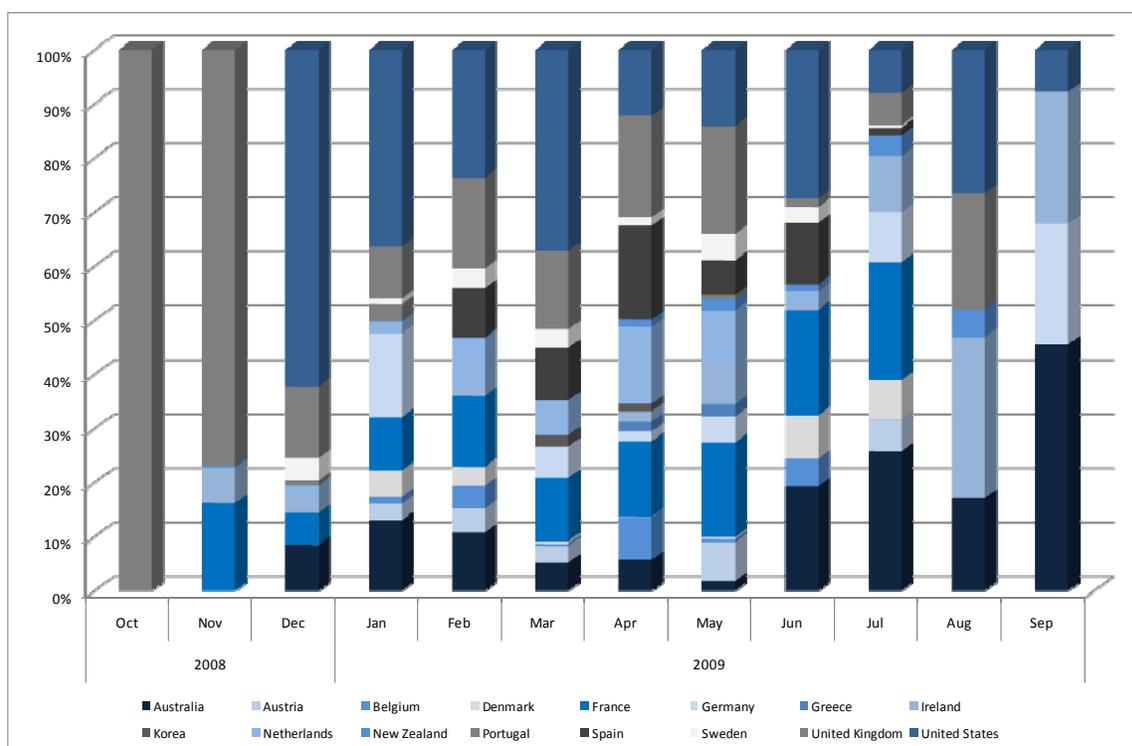
In USD billions, October 2008 to mid-September 2009



**Notes:** Issues guaranteed by Austria, Australia, Belgium, Denmark, France, Germany, Greece, Ireland, Korea, the Netherlands, New Zealand, Portugal, Spain, Sweden, the United Kingdom, and the United States.

**Source:** OECD Secretariat estimates based on data from Barclays Capital, Thomson Financial Datastream and communications with participants at the CMF meeting.

**Figure 11. Issuance by nationality of guarantor**  
Selected major guarantors, in per cent of total



**Source:** OECD Secretariat estimates based on data from Barclays Capital, Thomson Financial Datastream and communications from participants at the CMF meeting.

#### IV.5 Exiting from “unusually” high levels of guarantees

##### *Retail deposit insurance*

*Historically, choices made when transitioning from unlimited deposit insurance coverage have differed across countries*

Similar to the context of exiting from “unusual” types of guarantees, the choice of pace of exiting from “unusually” high levels of deposit insurance coverage involves a trade-off between limiting moral hazard and other distortions on the one hand and avoiding fuelling renewed concerns about the health of financial institutions on the other. The choices actually made in past episodes – for example, when transitioning from unlimited to more limited deposit insurance coverage – have differed from one country to another, reflecting the specific economic, political and financial system circumstances.

*Experience shows that unlimited guarantees are typically not withdrawn after a couple of years*

Even so, these experiences show that unlimited guarantees are typically not withdrawn after a couple of years, even in cases where withdrawal is considered as having been “fast” (see Appendix Table 1). The viability of a quick exit depends crucially on the progress made regarding stability of and confidence in the banking sector, which requires policy makers to address the root causes of the crisis. It could be argued that the expansion of guarantees does not replace the need for policy actions to address financial system stress, but may actually heighten such need as it tends to increase distortions to incentives (moral hazard). In a sense, guarantees buy time, but that time needs to be effectively used to address the core problems.<sup>18</sup>

*Exit needs to be faster where costs are greater and/or no extra fees were levied*

It is argued here that a key parameter that should determine the pace of the transition to more limited and/or withdrawal of specific insurance arrangements is the net costs raised by the existence of such guarantees. In this context, it appears reasonable to suggest that the pace of exit from expanded government-provided guarantees be faster where the associated costs (in terms of distortions to incentives and competition) are greater and/or where no extra fees were levied for the additional guarantees. Incidentally, the latter situation characterises some of the cases where policy maker statements essentially implied unlimited retail deposit protection (*e.g.* Germany). Consideration should be given to withdrawing such guarantees as soon as possible.

*To what extent political commitments to provide unlimited coverage can be withdrawn is not clear, however*

To what extent such political commitments can be fully withdrawn however is not so clear; unlike in the case of guarantee expansions that were accompanied by legal changes, the actual withdrawal could not be made by means of another legal change. Once a government has ventured down that road, there might be a perception that such guarantees would always be made available in similar situations. If true, and banks effectively enjoy an implicit guarantee, a premium needs to be charged in exchange for that contingent insurance.

Such a premium could consist of fees for funding deposit insurance arrangements *ex ante*. As it turns out, one aspect that has attracted increasing attention recently is that of the funding of guarantee arrangements for financial institutions: for some time already, there has been a trend towards a greater degree of advance funding and a push towards the charging of risk-based premiums for deposit insurance schemes. One might expect this trend to be reinforced by the recent experience of the financial crisis. The strengthening of the deposit insurance guarantee system currently under discussion in Switzerland, for example, involves the setting up of an insurance fund at the level of 3% of total insured deposits, with insurance fees to be specified as a function of the amount of covered deposits and the specific risk of the individual bank. The specific risk of the individual bank would be determined, among other factors, by its capital base and leverage ratio.

*Unlimited guarantees for transaction accounts*

*Another type of “unusual” guarantee...*

Another type of “unusual” guarantee is the blanket guarantee for non-interest bearing deposits (typically accounts that business customers use to pay their employees and other expenses) provided by the FDIC under the Transaction Account Guarantee Programme (TAGP). While accounts of business customers are included in several countries (including the United States), among those covered by deposit insurance, *unlimited* coverage is unusual. That said, this type of coverage resembles the practice Japan adopted in April 2005 (see below).

*is currently subjected to review*

In the United States, the coverage provided by the TAGP has been popular and, as of May 2009, only about 1 100 institutions had opted out (note that banks have to opt out rather than opt in or apply for coverage). The FDIC proposed in mid-2009 to either let the programme expire at year-end or extend it for another six months until mid-2010 and raise the premium rates charged for the insurance

(from 10 to 25 basis points). In the discussions about the pros and cons of such an extension, some commentators pit small banks against large banks, arguing that the former tend to favour an extension. Among other things, an extension would be helpful for small banks as it would help offset the perception that large banks are safer because of their size. Other commentators favour an extension on the grounds that the current situation of many institutions and the economy is still fragile. On 26 August 2009, the FDIC decided to extend the Transaction Account Guarantee (TAG) portion of the Temporary Liquidity Guarantee Program for six months, until 30 June 2010.

*This type of guarantee is not unprecedented, however*

Incidentally, some commentators have suggested the programme be extended indefinitely. Such an approach would resemble the one taken in Japan. In that country, unlimited guarantee for many types of deposits was removed in April 2005, while a new category of deposits was introduced (so-called “transaction accounts”) with the unlimited guarantee being maintained for deposits that match the defining criteria for that category.<sup>19</sup> The relative share, as of total insured deposits, of that type of deposit (*i.e.* transaction account deposits) is estimated to have risen from less than 5% in 2004 (that is before the change in coverage) to more than 10% in subsequent years. This development likely reflected the more extensive protection enjoyed by that type of deposit.

## V. Expansion of the safety net to include the insurer-of-last-resort function

*The expansion of guarantees was not always the result of a proper cost-benefit analysis*

Was the expansion of guarantees in autumn 2008 going too far? Answering this question is beyond the scope of the present paper. But what is noted here is that the choice of policy measures taken was not always the result of a proper cost-benefit analysis. Such an analysis would have to involve not only an account of the costs and benefits of the measures taken (as is done here in an *ex post* and partial manner; see also for some preliminary lessons Box 1) but also of the potential costs and benefits of alternatives. Actually, it appears that many policy makers, which had not experienced similar crises previously, have not even attempted to undertake such analyses given the immediacy of the need for policy decisions.<sup>20</sup>

*Once the government reveals itself as an insurer of last resort, the beneficiaries need to pay a premium in exchange*

As a general rule, once the government reveals itself as an insurer of last resort for banks, the latter need to pay a premium for this insurance. But in what form? Such a premium could consist of requiring banks to hold larger capital (or liquidity) buffers than they otherwise would choose to do. Indeed, a number of recent proposals revolve around the idea of the size of buffers, as well as their allocation between entities within financial conglomerates.<sup>21</sup>

Such buffers may not be sufficient, however, and banks may need to accept more intrusive regulation, which would specify limits to risk-taking and leverage, compensation structures and levels, and/or the range of activities allowed or prohibited. In this context, the idea of narrow banking – allowing deposit-taking institutions that benefit from specific guarantees only a limited range of activities such as investments in relatively safe instruments – has recently been reiterated by several commentators.<sup>22</sup>

*Should the framework for public provision of insurance be improved and, if so, how?*

One recent academic proposal presented at the Jackson Hole Symposium in August 2009 focuses directly on the public provision of insurance for (systemically important) financial institutions (which, as has been argued in this paper, is very much what policy makers have done in response to this crisis), arguing that such a course of action is an optimal policy response to a systemic crisis. The authors argue that a proper framework for the smooth functioning of such a mechanism still needs to be developed, however. One specific recommendation in that context is that public authorities should issue tradable options on public insurance provision (Caballero and Kurlat, 2009).

*Several proposals have recently been made that could be useful complements to broader regulatory reform measures*

Clearly, this and other similar proposals cannot act as a substitute for the broader reform of regulation including that of capital, but they could be useful complements.<sup>23</sup> Such contingent strategies could offer the system an extra degree of flexibility, without making the overall costs of capital regulation too burdensome (the alternative of simply imposing a higher capital non-contingent capital charge tends to be less efficient).

One advantage of the suggested issuing of tradable public insurance options is that the (contingent) government support is being priced in the markets and is not available for free. Without such pricing, the availability of insurance is likely to influence the behaviour of potential beneficiaries of the insurance in undesired ways.

However, the issue of moral hazard still needs to be carefully considered. To the extent that the scheme does not *de facto* increase the government-provided guarantees available to financial institutions (for example, as long as the scheme succeeds in converting an already existing implicit into an explicit guarantee without expanding its scope), it would not necessarily increase moral hazard. Arguably, it could be designed in ways to control the latter. As always, the devil of such a proposal lies in the detail; there was broad agreement that future work by this Committee could further explore the issue. For example, one difficulty is to agree on some kind of objective (or parametric) rules that would trigger the conversion of the insurance options on public insurance to actual insurance.

In addition, one has to deal with the boundary issue, *i.e.* where to set the outer limit of that aspect of the safety net. The current crisis has highlighted that financial institutions other than banks can become systemically important. Furthermore, it is worth recalling that segments other than the banking sector also tend to be subject to panic-driven runs and that the consequences of such runs could be severe as well. Indeed, runs in short-term funding markets have been a common feature of many financial crises, with the run in the Asset-Backed Commercial Paper Market during this crisis adding to the list of such examples (see also Covitz *et al.*). Even if there has been no suggestion of extending the safety net to include such segments, additional considerations might need to be given to the issue of destabilising runs outside of the banking sector. There is also the question of why the establishment of guarantees has not been considered necessary or desirable in other segments where such runs tend to occur.

### Box 1. Preliminary lessons regarding the insurer-of-last-resort function

A number of tentative preliminary lessons are emerging from recent experiences regarding the role of and exit from government-provided insurance of last resort, and some of them are suggested underneath:

- Policymakers should not lose sight of the fundamental policy goal of fostering efficiency of financial markets, even when the main concern in the midst of a crisis is to avoid a systemic breakdown.
- The public provision of insurance for financial institutions is helpful to avoid such a systemic breakdown, but it is not without costs. Costs include those arising from potential distortions to competition and incentives (moral hazard).
- The form in which the expanded government-provided insurance is provided (e.g. opt-in versus opt-out, fee structures, types of liabilities covered, etc.) determines the level and distribution of subsidies across beneficiary institutions.
- Politically, it is typically much easier to expand guarantees than it is to cut them back. Thus, withdrawing (unusual) guarantees is easier when their introduction is accompanied by a credible timeline for expiration.
- The design of exit strategies is influenced by the design of safety nets in place before the crisis occurred, and the changes deemed necessary to those safety nets to improve their functioning may differ from one country to another.
- Efforts need to be made to levy risk-adjusted charges for the provision of guarantees. Moreover, specifying a fee structure that makes government-provided guarantees increasingly costly as time progresses can help facilitate their withdrawal as it encourages potential users of the guarantees to search for alternatives.
- Measures to make funding alternatives to the issuance of government-guaranteed bonds more attractive can also be helpful (such as acceptance of some types of covered instruments as collateral in central bank refinancing operations).
- Even after explicit guarantees are withdrawn, there is the risk that implicit ones remain. Implicit guarantees are arguably more harmful for financial market efficiency since they are typically not accompanied by commensurate charges levied on the beneficiary.
- A more tentative suggestion, going beyond the discussion in the present article, is as follows: To reduce the likelihood that the perception of implicit guarantees gives rise to higher risk-taking by financial firms, government intervention may have to be more intrusive. This influence could take the form of specifying the range of allowed or prohibited activities and/or requiring higher capital charges or specifying other ratios that have to be respected. Also, to reduce the perception of the existence of implicit guarantees, *ultimately* firms need to be allowed to fail (in a way that does not jeopardise the system's stability).

## VI. Concluding remarks

### *Exiting from expanded government-provided guarantees*

*The public provision has been helpful and involved limited upfront fiscal costs*

The systemic nature of the financial crisis has induced policy makers to expand (parts of) financial safety nets to an unprecedented extent. The broadening of existing and the introduction of new guarantees for financial institutions has been a key element of that policy response and it has helped avoid an accelerated loss of confidence in banks. The public provision of insurance, when compared with several other policy options, also has the advantage of generating limited upfront fiscal costs. In fact, in the case of many types of guarantees, which is particularly the case for, but not limited to, the guarantees for unsecured bank bonds, some income was actually generated.

*But it is not cost-free; costs include potential distortions to competition and incentives*

But even so, the expansion of guarantees is not cost-free. While upfront fiscal costs may be limited, contingent fiscal liabilities are being created. That such liabilities are relevant is reflected by the fact that they seem to be factored into sovereign credit risk ratings and debt prices. Other costs of the provision of public insurance include those arising from potential distortions to competition and incentives, especially through the creation of moral hazard.

Moral hazard is not just an abstract theoretical notion, but a very real issue. It is particularly relevant when banks can borrow at very low interest rates (as they can do now) and deploy the funds against the background of explicit and implicit guarantees from the government.

These factors tend to impair the efficiency of financial markets and – even though the main policy concern in the midst of a crisis is avoid a systemic breakdown – one should not lose sight of the fundamental policy goal of fostering that efficiency when formulating policy responses to the crisis.

*Termination dates should be similar, while pricing structures need not always be similar but consistent*

Strategies to exit from expanded guarantees need to be designed and implemented in such a way so as to ensure consistency with the withdrawal of other support measures, both domestically as well as across borders. Domestically, different institutions are involved in the provision of guarantees and there is a need for close co-ordination between them. Internationally, exit strategies need to be more closely co-ordinated and consistent with respect to pricing and scheduled termination dates for the “extra” protection provided. Termination dates should be similar, while pricing structures need not always be similar but consistent, reflecting among other things the quality of the guarantee provided. Inconsistencies in these regards are likely to create additional costs.

Clearly, where no extra charges have been levied for the additional insurance, withdrawal of such “extra” insurance should be as fast as possible. Where charges have been levied, their level should be subjected to changes with the aim that the protection becomes increasingly “realistically” priced. In this context, where private market alternatives are becoming available again, the latter can provide a benchmark. At least some convergence between the costs of government-provided guarantees and those available in the market would be expected to occur as time progresses. To achieve an “automatic exit”, increasingly penalising fees can be levied.

*Credible timelines for the withdrawal can be helpful*

A clear and credible timeline for the withdrawal can be helpful. Timelines had been set in many cases, even if in some cases they have already been extended. In those cases where timelines have not been specified (or where they have been specified as a function of future events or developments), there is a risk that market participants will not yet have focused their minds on the situation after the end of the guarantees. For example, where the end of the guarantee for bank bonds is not known, issuance of such bonds has continued (e.g. in Australia), while it has effectively come to an end elsewhere.

***The difficulty of achieving “full exit”******The expansion of guarantees was not always the result of a proper cost-benefit analysis***

Answering the question of whether the expansion of guarantees in autumn 2008 was going too far is beyond the scope of the present paper. But what is noted here is that many policy makers have not even attempted to undertake a proper cost-benefit analysis given the immediacy of the need for policy decisions. In this context, what is sometimes less appreciated is that perhaps more important than the crisis itself is the policy response to it in influencing the future behaviour of financial market participants and the functioning of the markets.

***There may be a perception that (implicit) guarantees are available***

A key question remains: can expanded guarantees, including in particular unlimited retail deposit guarantees, effectively be withdrawn under all circumstances? It is argued here that once a government has ventured down the road of extending comprehensive guarantees for bank liabilities and assets during one specific crisis, there may be a general perception that similar guarantees will always be made available for such entities during crisis situations (at low costs). Such a perception constitutes another cost related to the expansion of government-provided guarantees. Clearly, this argument is not restricted to the case of expanded guarantees, but might apply to the massive financial sector rescue measures more generally (as well as the “too big to fail” problem).

***Once the government reveals itself as an insurer of last resort, the beneficiaries need to pay a premium in exchange***

In any case, once the government reveals itself as an insurer of last resort for banks, the latter need to pay a premium for this insurance. Such a premium could consist of requiring banks to hold larger capital (or liquidity) buffers than they otherwise would choose to do. Indeed, a number of recent proposals revolve around the idea of increasing the size of buffers, as well as their allocation between entities within financial conglomerates.

Banks may also need to accept more intrusive regulation, which would specify limits to risk-taking and leverage, compensation structures and levels, and/or the range of activities allowed or prohibited. In this context, the idea of some form of narrow banking – allowing deposit-taking institutions that benefit from specific guarantees only a limited range of activities such as investments in relatively safe instruments – has recently been reiterated by several commentators.

***Introducing tradable options on public insurance?***

Coming back to the issue of the expanded public provision of insurance for financial institutions, on a conceptual level at least, it might have constituted an optimal response to the recent systemic crisis. That said, a proper framework for the smooth functioning of such a mechanism still needs to be developed. In this context, one specific recommendation is that public authorities should issue tradable options on public insurance provision. Without substituting broader regulatory reform measures, such a strategy could be a useful complement for the former. However, there are considerable difficulties in determining the practical details of such proposed frameworks, including how to specify trigger points for the conversion of public (insurance) options to actual insurance. And of course, the issue of moral hazard continues to be relevant and needs to be carefully considered.

## NOTES

- <sup>1</sup> At the meeting of the Committee on Financial Markets (CMF) on 9 and 10 April, the Committee discussed issues related to expanded government guarantees for bank liabilities, as part of its wider discussion on the OECD strategic response to the financial and economic crisis. In light of the extensive discussion of the topic by delegates, the Committee decided to pursue further work in this area, suggesting the Secretariat continues to monitor developments with respect to bank bond guarantees, including potential distortions arising from them, as well as related exit issues. The current article has been written pursuant to that suggestion.
- <sup>2</sup> The ECB held its first 12-month Long-Term Refinancing Operation on 29 September 2009.
- <sup>3</sup> An overview of a wider set of support measures, including those related to bank borrowers and investors in key credit markets and the economy in general, is provided *e.g.* in Furceri and Mourougane (2009). The annex of BIS (June 2009) provides an overview of direct support programmes for such borrowers and investors.
- <sup>4</sup> This count includes Australia and New Zealand; more details are provided in Schich (2008).
- <sup>5</sup> On 26 August 2009, the FDIC extended the Transaction Account Guarantee (TAG) portion of the Temporary Liquidity Guarantee Program for six months, until 30 June 2010. For institutions that choose to remain in the program, the fee will be raised and adjusted to reflect the institution's risk.
- <sup>6</sup> In all five cases shown in Table 1, the asset guarantee arrangement was accompanied by capital injections. In return, the beneficiary institution paid a fee (typically paid in the form of preferred shares) and accepted specific requirements with respect to its lending behaviour, compensation practices and dividend and share repurchase actions. In yet another example involving asset guarantees, France and Belgium extended a guarantee to cover a USD 16.98 billion asset portfolio of Financial Security Assurance (FSA), a US financial guarantee insurance company and a subsidiary of Dexia (actually, a subsidiary of Dexia Holdings Inc., which in turn is 90% owned by Dexia Credit Local S.A. and 10% owned by Dexia, with Dexia Credit Local S.A. being also a subsidiary of Dexia). Under the arrangement, Dexia bears the first loss up to USD 5.4 billion, France bears 37.6% of subsequent losses, and Belgium bears the remaining losses. The arrangement was effected in connection with the agreed purchase of FSA by Assured Guaranty from Dexia, and that purchase was completed in July 2009 (<http://www.assuredguaranty.com/Documents/Assured%20Closing%20Release%20vF.pdf>).
- <sup>7</sup> By contrast, deposit insurance schemes have been in place in many countries for some time now and have traditionally differed across them (and even within a country in some of the cases where schemes for different institutions exist), reflecting each country's specific historical developments in this area and those related to the structure of its financial and economic system. This situation tends to complicate the formulation of consistent policy responses in the area of deposit insurance across countries. The International Association of Deposit Insurers (IADI) facilitates co-ordination among deposit insurance schemes, however, and also provides recommendations regarding the design of such schemes (*e.g.* Core Principles for Effective Deposit Insurance Systems, June 2009). Its members include many but not all OECD jurisdictions.
- <sup>8</sup> For estimates see, *for example*, IMF (2009), FitchRatings (2009), and Deutsche Bank Research (2009).
- <sup>9</sup> The relevance of this issue is underscored by the conclusions of a study by the OECD's Competition Committee, stating that "government interventions during the current crisis give rise to competition issues. Competition authorities should play a part in the design and implementation of exit strategies." (OECD, 2009b).

- <sup>10</sup> The design of funding arrangements of existing guarantee schemes may also have had undesired effects in the context discussed above. Where ex ante funding of deposit insurance schemes turned out not to be adequate and where ex post funding involves the collection of fees that are not perfectly risk-based (but instead are at least partly based on size measures such as assets or deposit), the latter effectively involves an element of subsidisation of weaker by stronger entities. See for a discussion of selected funding issues Box I.4.1 in Schich (2009a).
- <sup>11</sup> One of the key questions to be addressed in this context is where to exit to. The OECD has proposed a set of reform and exit strategy principles for successful exit from unusual support measures and preconditions, and a summary of them is provided in OECD (2009a).
- <sup>12</sup> Note that the coverage per depositor and per bank in Norway (currently approximately the equivalent of USD 350 000) has already been high compared with other CMF jurisdictions before the crisis. See also the related discussion in Schich (2009a).
- <sup>13</sup> Note, in this context, that delays in rapidly resolving failing banks also tend to raise the overall costs to taxpayers and perhaps deposit insurance funds and depositors (Lumpkin, 2008).
- <sup>14</sup> Many measures of the financial health of institutions and the confidence in them had improved by October 2009. Credit default swaps had declined markedly from their peaks and equity prices risen, and financial institutions had been able to raise capital through the issuance of equity and unsecured (non-guaranteed) bonds. Furthermore, indicators of market sentiment, such as measures of implied equity market volatility that are sometimes referred to as fear-gauge indicators, have returned to levels close to those seen before the accelerated flight-to-safety in autumn 2008.
- <sup>15</sup> There is in fact not just one but many aspects that define the extent of deposit insurance coverage. Sometimes, deposits are only partially insured, although such (co-insurance) arrangements have in many cases been abolished in response to this crisis, and replaced by full coverage (up to a ceiling). Deposit insurance may or may not include coverage of foreign currency deposits; where it is included, the compensation is often paid in local currency. Interbank deposits are usually not protected. Typically, coverage applies equally regardless of whether depositors are residents or non-residents. In most countries, membership is compulsory. Finally, but perhaps most importantly, there are insurance coverage limits per person and per bank, the amount of which differs between countries.
- <sup>16</sup> See resolution regarding the Temporary Liquidity Guarantee Program Final Rule, FDIC Board Meeting 20 October 2009, available at <http://www.fdic.gov/news/board/Oct098.pdf>.
- <sup>17</sup> See, for example, “Inquiry by the Senate Economics References Committee Into Bank Funding Guarantees – Joint Submission from the RBA and APRA”. This and other submissions, as well as the final report are available at the Committee's website [http://www.aph.gov.au/Senate/committee/economics\\_ctte/bank\\_funding\\_guarantees\\_09/index.htm](http://www.aph.gov.au/Senate/committee/economics_ctte/bank_funding_guarantees_09/index.htm).
- <sup>18</sup> See, for example, Schich, S., “Financial Crisis: Buying Time Through Expansion of Deposit Insurance Arrangements”, in *India Economy Review*, Quarterly Issue, December 2008: Mending the Meltdown: Engineering a Recovery. pp. 138-143.
- <sup>19</sup> As from April 2005 onwards, in Japan, full coverage only applied to deposits that met the following conditions: i) bearing no interest, ii) being redeemable on demand, and iii) providing normally required payment and settlement services. See also Schich (2009b).
- <sup>20</sup> Clearly, the results of such cost-benefit analysis should be taken with a pinch of salt; they are based on a large number of assumptions, most of which relate to the unobservable counterfactual.
- <sup>21</sup> In this context, some observers have identified the cross-subsidisation in financial institutions and the incentive problems arising in this context as a key issue explaining why such firms might engage in excessive risk-

taking. A number of regulatory responses have been suggested to eliminate such incentives. They range from a positive list of allowed activities, the disallowance of certain activities, the imposition of an extra capital charge for the group as a whole to the ring-fencing of different parts of a group. One recent proposal, discussed in OECD (2009a), has been to require financial institutions to adopt specific corporate structures that ensure the separation of capital for the different types of uses. Specifically, it has been proposed to require financial institutions that pursue more than one type of financial activity to adopt the structure of a non-operating holding company. See also Blundell-Wignall et. al. (2008).

- <sup>22</sup> Todd (2009) draws attention to a proposal for separation of commercial from investment banking operations made by Robert Litan in 1987. Under this proposal, the retail bank would resemble a regulated public utility company. It could operate without deposit insurance because all its assets would be marked to market daily and would be safe investments. As it turns out, under certain circumstances, a banking system thus designed could even do without deposit insurance as deposit-taking institutions would not take significant risks meaning deposits would be safer, anyway.
- <sup>23</sup> Several proposals have recently been made based on the idea of introducing options. As it turns out, the options suggested by Caballero and Kurlat (2009) would actually be (call) options on put options. Other recent proposals include those for capital insurance policies (or options) that would pay off in countries when the overall banking sector is in a sufficiently bad state. Triggers could be specified in the form of either aggregate losses or firm-specific developments (e.g. with banks issuing reverse convertible debentures, which convert to equity when a bank's share price falls below a threshold). See also Kashyap et. al. (2008).

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**APPENDIX TABLE 1. SELECTED RECENT EPISODES OF UNLIMITED DEPOSIT INSURANCE COVERAGE REGIMES**

| Country                 | Date announced or placed | (Estimated) Date of removal | (Estimated) Duration in years | Comments   |
|-------------------------|--------------------------|-----------------------------|-------------------------------|--|
| <b>Australia</b>        | Oct 2008                 | Oct 2011                    | 3?                            | An unlimited guarantee was announced on 12 October 2008, to remain in place for a period of three years. Guarantee is not automatic and a fee is payable for deposits exceeding AUD 1 million per person and bank.   |
| <b>Austria*</b>         | Oct 2008                 | Dec 2009                    | ~1?                           | The Austrian National Council put forward a bank rescue package on 20 October 2008, including the provision of unlimited deposit insurance for savers until end of 2009 (thereafter to be limited to EUR 100 000).   |
| <b>Denmark*</b>         | Oct 2008                 | Sep 2010                    | 2?                            | In October 2008, the Danish government guaranteed all claims by depositors and senior debt (unsecured unsubordinated debt) for two years, requesting contribution from banks in exchange (with payments due monthly according to the size of the capital base in the individual bank).                           |
| <b>Finland*</b>         | Feb 1993                 | Dec 1998                    | 6                             | A deposit insurance system was in place before the introduction of an unlimited guarantee; that system was revised in 1998.  |
| <b>Germany*</b>         | Oct 2008                 | Not specified               | ?                             | On 5 October 2008, Chancellor Merkel and Finance Minister Steinbrück publicly declared that all private savings were guaranteed by the German government.  |
| <b>Honduras</b>         | Sep 1999                 | Sep 2002                    | 3                             | Removed after three years.   |
| <b>Hong Kong, China</b> | Oct 2008                 | Dec 2010                    | 2?                            | On 14 October 2008, the Government of Hong Kong, China announced a guarantee of the repayment of all customer deposits held with all authorised institutions in Hong Kong (including licensed banks, restricted-licence banks and deposit-taking companies), which was to remain in force until the end of 2010. |
| <b>Indonesia</b>        | Jan 1998                 | Jan 2007                    | 8                             | The blanket guarantee scheme was replaced by an explicit and limited deposit insurance scheme operated by the Indonesian Deposit Insurance Corporation (DIC), as stipulated in the Indonesian Deposit Insurance Law (Act No. 24 of 2004). In October 2008, the limit was raised significantly.                   |
| <b>Iceland*</b>         | Oct 2008                 | Not specified               | ?                             | A blanket guarantee has been extended <i>de facto</i> covering all deposits in domestic, commercial and savings banks and their branches in Iceland, that is all retail and corporate deposits covered by the Deposit Division of the Depositors' and Investors' Guarantee Fund.                                 |

|                         |          |               |     |   |
|-------------------------|----------|---------------|-----|---|
| <b>Ireland*</b>         | Sep 2008 | Oct 2010      | 2?  | On 17 October 2008, legislation was passed by the Irish Parliament that gives effect to the bank guarantee announced by the Irish Government on 30 September 2008. The guarantee scheme covers almost all bank liabilities of specific banks for two years from October 2008 (with reviews every six months).   |
| <b>Jamaica</b>          | Jan 1997 | Aug 1998      | < 2 | The full guarantee was removed at the time when limited explicit deposit insurance was introduced.  |
| <b>Japan</b>            | Jun 1995 | Mar 2005      | 9   | The unlimited guarantee was announced in June 1995, enacted into law in June 1996, and withdrawn for time deposits in March 2002 and for ordinary deposits in March 2005. One type of payment and settlement deposits continues to be fully covered.  |
| <b>Jordan</b>           | Oct 2008 | Dec 2009      | ~1? | The Central Bank of Jordan announced a full guarantee of all bank deposits until the end of 2009.   |
| <b>Korea</b>            | Dec 1997 | Dec 2000      | 3   | Limited explicit deposit insurance, first introduced in 1996 (and then overridden by the unlimited guarantee), was reintroduced in 2001.  |
| <b>Malaysia</b>         | Jan 1998 | Sep 2005      | 8   | An explicit deposit insurance system was put in place, effective as of September 2005, specifying a limited coverage level.   |
| <b>Malaysia</b>         | Oct 2008 | Dec 2010      | 2?  | The limited guarantee was replaced again by an unlimited one, to be withdrawn by December 2010.   |
| <b>Mexico</b>           | 1990     | Jan 2005      | 15  | Starting around 1990, government-owned banks were privatised; the Banking Savings Protection Fund was put in place, and there was an understanding that the government would effectively provide unlimited coverage for deposits. An explicit deposit insurance system was put in place in 1999. Since January 2005, the coverage limit has been set to 400 000 UDIs. |
| <b>Singapore</b>        | Oct 2008 | Dec 2010      | 2?  | The Singapore Government has guaranteed 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 (MAS); to remain in place until 31 December 2010.  |
| <b>Slovak Republic*</b> | Oct 2008 | Not specified | ?   | The Slovak government announced on 8 October 2008 that it would expand insurance to the full amount of bank deposits to be effective as of 1 November 2009. On 24 October, Slovak lawmakers approved a government proposal to expand insurance to the full amount of bank deposits.   |
| <b>Sweden*</b>          | Jan 1993 | Jul 1996      | <4  | Explicit deposit insurance was introduced for the first time in 1996 to replace the unlimited guarantee.  |
| <b>Taiwan</b>           | Jul 2001 | Jul 2005      | 4   | Unlimited deposit guarantee was extended once by one year.  |
| <b>Taiwan</b>           | Oct 2008 | Dec 2009      | 1?  | The Government of Taiwan announced, on 7 October 2008, a temporary guarantee of all deposits in full amount until 31 December 2009. A one-year extension is currently being considered.   |

|                             |          |            |      |  |
|-----------------------------|----------|------------|------|--|
| <b>Thailand</b>             | Aug 1997 | Aug 2012   | > 12 | An explicit guarantee system was introduced in August 2008 with the formation of the Deposit Protection Agency. It was envisaged that the unlimited guarantee be phased out gradually between August 2009 and August 2012. A limit of THB 50 000 000 applied from August 2011, and then THB 1 000 000 from August 2012.  |
| <b>Turkey</b>               | May 1994 | June 2000. | 6    | Unlimited deposit insurance coverage between May 1994 and June 2000. Coverage limited to TRL 100 000 between June 2000 and December 2000. Blanket coverage, including all creditors of the bank, between December 2000 and July 2003 in response to the 2000-2001 financial crisis. Between July 2003 and July 2004, unlimited insurance coverage only for depositors but not all creditors. Coverage further limited to TRL 50 000 from July 2004 onwards. In Turkey, deposit insurance covers only real and not legal persons. |
| <b>United Arab Emirates</b> | Oct 2008 | Oct 2011   | 3?   | All savings and checking accounts of local and foreign banks with significant presence operating in UAE will be guaranteed for the full amount for three years.  |

**Note:** \* The European Commission has proposed a revision to EU rules on deposit guarantee schemes that puts into action the commitments made by EU Finance Ministers on 7 October 2008. The European Parliament has adopted amendments to the Commission proposal in its plenary meeting (first reading) of 18 December 2008. The Council has adopted these amendments on 26 February 2009, and the final text (Directive 2009/14/EC) reads as follows: "By 31 December 2010, coverage for the aggregate deposits of each depositor should be set at EUR 100 000, unless a Commission impact assessment, submitted to the European Parliament and the Council by 31 December 2009, concludes that such an increase and such harmonisation are inappropriate and are not financially viable for all Member States in order to ensure consumer protection and financial stability in the Community and to avoid distortions of competition between Member States." The Directive applies to EU and EFTA members.

**Source:** IADI/Asia Regional Committee (2005), Schich (2009), IMF Staff Report for the 2008 Article IV Consultation with the United Arab Emirates (December 2008) and Jordan (May 2009), informal communications with experts from deposit insurance agencies, and comments from CMF participants.