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Guarantee Arrangements for Financial Promises: How Widely Should the Safety Net be Cast?

by

Sebastian Schich and Byoung-Hwan Kim*

Guarantees have become the preferred instrument to address many financial policy objectives. The incidence of financial sector guarantee arrangements that address specific policy objectives, such as supporting financial stability, protecting consumers and influencing credit allocations, has increased markedly over the past decades and additional schemes are under consideration. This report identifies considerations regarding consistency and affordability that policymakers should take into account before introducing additional guarantee arrangements. One of them is that the safety net cannot be expanded without limits. In fact, as regards the strength of the net of government-supported guarantees for financial promises, the wider that net is cast (without altering its other key parameters), the thinner it becomes.

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* Sebastian Schich and Byoung-Hwan Kim are Principal Administrator and Financial Markets Analyst, respectively, in the Financial Affairs Division of the OECD's Directorate for Financial and Enterprise Affairs. This article is part of the Committee on Financial Markets' (CMF) work produced in the context of its Strategic Response to the Financial Crisis. An earlier version of the article was discussed by the CMF at its meetings in April 2011; the present article takes into account these discussions as well as written comments received subsequently. It was also tabled at the meeting of the OECD's Insurance and Private Pensions Committee in June. The article was first released in June 2011. All remaining errors are those of the authors. This work is published on the responsibility of the Secretary-General of the OECD. The opinions expressed and arguments employed herein are those of the authors and do not necessarily reflect the official views of the Organisation or of the governments of its member countries.

Executive Summary

Guarantees have become the preferred instrument to address many financial policy objectives. The recent financial crisis has put the spotlight on the use of guarantees as a policy tool to support financial stability. But arrangements that guarantee certain financial claims exist even during normal times. Many of them reflect the pursuit of specific financial policy objectives other than supporting financial stability, such as protecting consumers or influencing credit allocation to achieve preferable outcomes.

A key finding of this report is that guarantee arrangements for financial claims, including in particular those that provide protection against the risk that a counterparty to a financial contract will not make the promised payment to the other party due to institutional failure or other reasons, have become an intervention mechanism of choice to address the various policy objectives mentioned above. As a result, the incidence of such arrangements has undergone a marked increase over the past few decades.

Policy makers are currently considering additional guarantee schemes for specific types of financial claims. In each case, guarantee arrangements would address a different mix of financial policy objectives and cover different types of risk; thus, the pros/cons of and the alternatives to introducing a new arrangement differ depending on the type of claim under consideration. That said, some considerations are common to all guarantees, and this report proposes a simple general framework consisting of four criteria (effect on incentives, effect on competition, consistency, and affordability) that policy makers should take into account when considering the introduction of new guarantee arrangements. The report argues that consideration of these four criteria implies, among other things, the following:

First, explicit guarantees are preferable to implicit ones. The case for establishing explicit guarantee arrangements is stronger if an implicit guarantee already exists, and for whatever reason, cannot be withdrawn. An explicit guarantee improves on that situation in that it allows one to define what the outer limits of the guarantee is, in terms of what is protected and what is not. Moreover, it allows one to charge an appropriate premium in exchange, which is difficult if not impossible in the case of an implicit guarantee. Explicit, ex ante funded guarantees can limit the need for undifferentiated ex post bailouts.

Second, some guarantees or the interaction between them could give rise to undesired effects. The final effect of the safety net in terms of protection and risk-taking is uncertain. While this observation applies already to individual specific guarantees, the complexity increases when considering the net of various (explicit and implicit) guarantees. Special efforts on the part of policy makers are needed to ensure internal consistency in the net of guarantee arrangements, as well as its consistency with the regulatory and resolution framework. There is a risk that elements of the safety net, especially when ill-designed, give rise to moral hazard and thus create additional risk-taking and vulnerabilities further down the road.

Third, the safety net cannot be expanded without limits. As regards the strength of the net of government-supported guarantees for financial promises, the wider that net is cast (without altering its other key parameters), the thinner it becomes. This observation is particularly relevant at a time when mature economies are faced with mounting challenges of fiscal sustainability. In this context, the recent sovereign debt stresses have underscored that more consideration needs to be given to how to protect sovereign risk from specific financial-sector risk, given expanding government guarantees. Even when arrangements have private origins, and when there is limited explicit public support, expectations may be that they enjoy implicit government support (under some circumstances at least), and these expectations are difficult to counter.

Fourth, guarantees need to be limited and affordable. To make the net affordable, its outer borders need to be clearly defined and appropriate measures need to be adopted so that financial claims are being protected without undue burden on the taxpayers, who implicitly or explicitly, are the ultimate underwriters of many of these arrangements.

I. Introduction

The extension of government-supported guarantees for financial claims was a key element of the policy response to the financial crisis

The financial systemic safety net was at the core of the policy response to the recent financial crisis, with the safety net being adjusted significantly in response to that crisis. Much of that adjustment consisted extending the scope of the lender-of-last-resort and deposit insurance functions, which was reflected in increases of central bank balance sheets, the introduction of new officially supported guarantees and the expansion of existing ones. The government and the central bank together, in line with their roles as ultimate providers of capital and liquidity in a situation of a systemic crisis, acted as guarantor of last resort for financial claims on (and held by) financial institutions, especially where the latter were considered systemically important. This policy was an extraordinary response to an extraordinary financial crisis.

But a variety of guarantees exist even during normal times

But a variety of government-supported arrangements that provide guarantees for certain financial claims exist even during normal times, and they address several different financial policy objectives. In addition to safeguarding the stability of the system, these arrangements protect consumers and investors and influence the allocation of credit, with many of them providing protection against the risk that a counterparty to a financial contract will not make the promised payment to the other party due to institutional failure or other reasons

In fact, a key finding of this article is that the incidence of such arrangements has undergone a marked increase over the past few decades. That said, the incidence, scope and design of such arrangements differ from one country to another, and within countries, from one type of financial claim to another.

Now is a timely opportunity to question the role of guarantee arrangements for financial claims

Many extraordinary guarantees introduced in response to the crisis have been or will be withdrawn, a development that requires policy makers to define what the net of (explicit) government-supported guarantees for financial promises should look like in the future. In fact, now is indeed a timely opportunity to question the role of guarantee arrangements for financial claims, which claims are considered worth protecting and for what reasons, and how far such protection should go. In particular, how widely should one cast the net of government-supported guarantees for financial obligations?

This question is relevant as there has been an increase in the incidence of guarantee arrangements, motivated by such concerns, and it is uncertain whether the recent financial crisis will reinforce (or break) this trend. Obviously, the existence and modalities of the various guarantees affect the functioning of financial markets. What is not so clear, however, is the net overall effect of the various guarantee arrangements on the different types of actors and their incentives, in terms of stability, consumer protection, resource allocation and risk-taking. In fact, there is little if any comprehensive research available on the incidence (let alone the role and overall effects) of government-supported guarantees within financial systems, taking into account the whole range of financial claims to which such guarantees are attached.

This article aims to facilitate that discussion

This article is a first attempt to fill that gap, by providing an overview of some common types of guarantee arrangements, focusing only on those arrangements that are commonly observed at the domestic level. Policy makers

are currently considering the introduction of additional specific guarantee arrangements, especially to protect consumers (see section III of this report). In this context, this report does not weigh in on the desirability of any specific type of guarantee arrangement; it does however provide (in section IV) some considerations that policy makers should take into account prior to establishing specific new guarantee arrangements. Some tentative suggestions are provided in section V.

II. Some common guarantee arrangements for financial claims

1. Overview

Well-functioning financial systems enhance the overall efficiency of resource- and risk-allocation in the economy, both spatially and inter-temporarily. By facilitating the allocation of resources and risks through time, as well as between different entities (to those most willing and, hopefully, capable of managing them), financial institutions facilitate growth in real activity, capital formation, and wealth accumulation. Companies and individuals can then undertake projects in which they would otherwise not be willing to engage owing to the risk involved. Individuals can smooth consumption over and they can insure against a variety of different risks, including those related to retirement funding. Risk exposures are pooled and aggregate losses shared across the economy more effectively than without a functioning financial system. By contrast, when financial institutions and markets are not performing well, real activity is adversely affected.

The recent financial crisis has revealed shortcomings in the functioning of guarantee arrangements for financial claims

The recent financial crisis has revealed a whole range of issues related to the functioning of financial systems and the adequacy of the institutional, regulatory and supervisory infrastructure surrounding their activities. Several of these issues relate to guarantee arrangements for financial claims:

- The design of some of these arrangements has turned out to be inadequate, failing to achieve the desired effect when needed.[1]
- Other types of guarantees became unavailable at the moment when they were most needed.[2]
- Yet other guarantees have proven to be counterproductive (more on this issue later).

Guarantee arrangements exist for different types of financial claims, often addressing specific financial policy objectives

Guarantee arrangements exist for different types of financial claims, and they are thus related to different types of financial functions. Such arrangements address financial market inefficiencies (although sometimes they can create others), and many of them reflect attempts to fulfil one or several specific financial policy objectives, including:

- safeguarding the stability of the system;
- protecting consumers and investors; and
- addressing market failures that impede a more preferable allocation of resources.

2. Institutional failure and the role of guarantee arrangements

Financial contracts involve uncertainty

Financial contracts often involve both time and uncertainty. Many contracts require one or several initial payments from one party to another, typically to be offset by subsequent payments in the opposite direction. The offsetting payments are either explicitly state-contingent (*e.g.* in the case of dividends from equity investments, claims on insurance contracts, defined-contribution pension fund policies) and/or implicitly subject to complete or partial default (*e.g.* in the case of bond obligations, defined-benefit pension fund policies).

The parties have conflicting interests and information is incomplete

During the lifetime of a financial contract, the two parties involved have conflicting interests. Moreover, one party often knows something that the other party does not; in other words, the information is asymmetric and hence incomplete. Information may be complete when the transaction is agreed upon. But subsequently, one party might take an action unobserved by the other party or receive information relevant to the transaction that the other party does not have (moral hazard with hidden action or hidden information). Or, information may be incomplete from the start of the contract; that is, one party may be aware of some significant information related to the transaction while the other party is not (adverse selection).

The specific risks involved differ very significantly from one type of financial contract to another. Some contracts involve a single or several payments on demand, while for others, such payments are at pre-specified intervals or contingent on other factors. Some products have very short-term life spans, while others, such as those related to retirement savings or life insurance, span long time horizons. As a result of these differences, and the differences in the risks inherent in the balance sheets of the financial institutions that are the typical counterparties to such contracts, each type of financial claim faces vastly different risks.

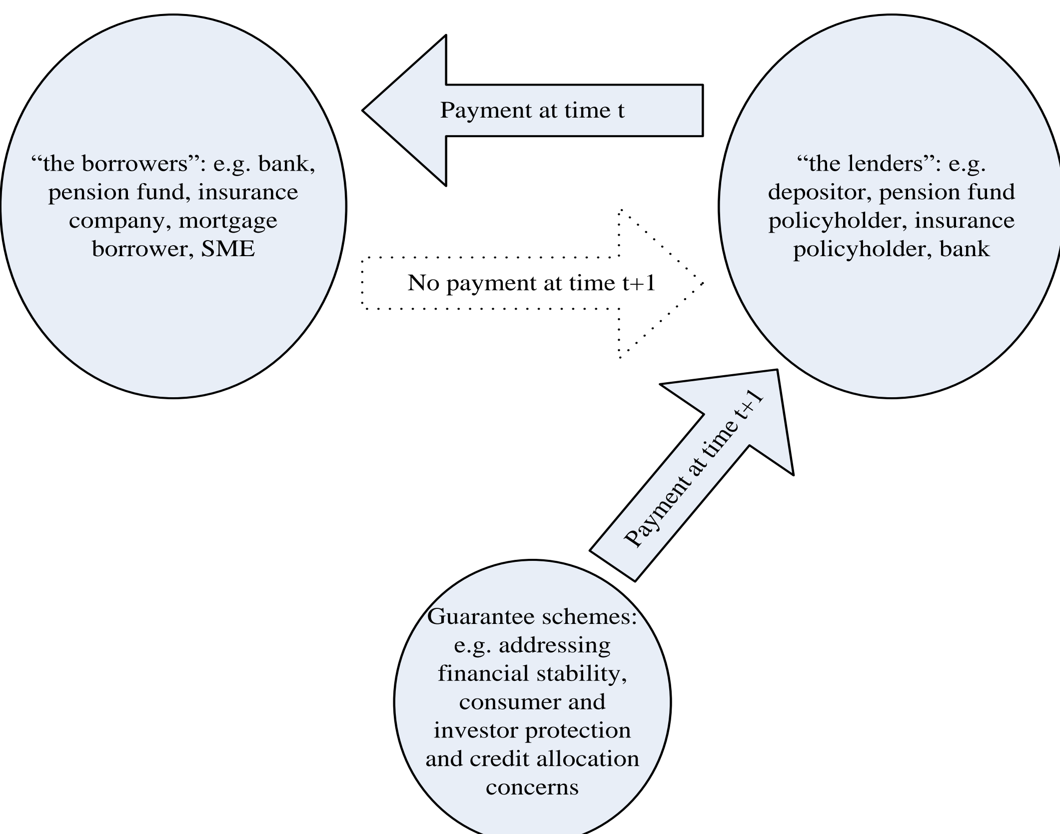
Contracts cannot typically be structured so as to take into account every possible contingency

That said, what is common to many financial contracts is that it is generally not feasible to structure them so that they can handle every possible contingency that may arise during the life of the financial transaction. As a result of this contractual incompleteness, the financial system may not be providing its various functions efficiently, and this situation can justify government intervention.

A significant risk is that of counterparty credit risk, and many guarantee arrangements address that risk

One type of intervention consists of government support for establishing, managing or funding guarantee arrangements for financial claims. Many (though not all) guarantee arrangements, be they private or public or a mixture of both, essentially substitute for the "borrower" under some circumstances (Figure 1), especially when the "borrower" does not make the promised payment(s) to the "lender" because of institutional failure or other reasons. Such guarantee arrangements indeed exist for a variety of financial claims and some of them address specific policy concerns, although the mix of policy objectives differs from one type of guarantee arrangement to another. A stylised overview of common arrangements is provided in Table 1.

Figure 1. Stylised view of the role of guarantee arrangements for financial claims



3. Policy objectives pursued through guarantee arrangements

a) Safeguarding the stability of the system

Deposit-taking banks have been considered key to the stability of the financial system

Banks have traditionally been considered special by policy makers for two main reasons: *(1)* their key role in the payment and settlement system and the transmission of monetary policy; and *(2)* their particular balance sheet structure, which involves lending long-term on the basis of deposits that can be withdrawn on short notice. As a result of this mismatch in maturities, a bank is typically unable to satisfy *all* legitimate claims for deposits at any one time, which implies that being among the first to withdraw deposits is preferable should questions about the solvency of a bank arise. Experience shows that depositor and creditor confidence can erode quickly, and this may have a severe effect even on relatively healthy institutions. As a result, so-called bank runs can and do occur.

To avoid such runs and maintain confidence, depositors and creditors require timely assurance regarding the safety and availability of their deposits and claims. An effective deposit insurance arrangement provides such assurance. The deposit insurance function, together with the lender-of-last-resort function and the regulatory and supervisory functions constitute the so-called financial (system) safety net, which is meant to ensure the safety of the system.

Due to the particular nature of their liabilities, banks are typically exempt from general bankruptcy procedures; instead, special resolution regimes often apply. Where such regimes exist, it has been shown that involvement by the deposit insurer tends to dampen the negative (moral hazard) effect that deposit insurance has on banks' risk-taking. Indeed, in several cases, resolution of a problem bank is undertaken by the deposit protection agencies.

Table 1. Categorisation of guarantee arrangements for selected financial claims

Type of claim	Institutional involvement	Type of guarantee arrangement	To the extent guarantees address policy concerns, the concerns addressed include…		
			…financial stability	…consumer/ investor protection	…influencing credit allocation (and other motives)
Retail deposits	Liability of bank	Deposit insurance	Yes	Yes	
Insurance policy	Liability of property/casualty insurance company	Policyholder and beneficiary protection		Yes	
Life insurance policies	Liability of life insurance company	Policyholder and beneficiary protection		Yes	
Securities	Assets of clients held by securities firm	Securities holder protection		Yes	
Defined benefit pension claims	Defined benefit (or hybrid) pension funds	Pension benefit guarantee		Yes	
Loans to small and medium-sized enterprises	Assets of banks	Credit guarantee			Yes, to improve credit access
Mortgage credit	Asset of specialised mortgage lender or bank	Mortgage credit insurance		Yes?	Yes, to improve credit access and increase home-ownership

Note: Most of the arrangements shown here provide compensation when the "borrower" does not make the promised payment to the "lender" because of institutional failure or other reasons. Investor protection arrangements are different from the other types of guarantees listed above, in that coverage does not relate directly to either the asset or liability side of the financial institutions' balance sheet. Investment return guarantees tend to be a common feature in products with a savings element sold by life insurance companies, although the guarantees are underwritten by the insurer and there are typically no separate guarantee arrangements.

Source: OECD Secretariat assessment.

A distinguishing feature of the response to the recent crisis has been the heavy reliance by the government on guarantees as part of its headline support for the financial system. The measures that were undertaken by many governments in support of financial institutions included ones that effectively transformed implicit guarantees covering financial institutions' liabilities into explicit and sometimes blanket guarantees, thereby enlarging the financial system safety net – resulting in the *de facto* creation of an explicit guarantor of last resort. Banks were the main beneficiaries of this new function, and a lingering question is whether the other elements of the safety net need to be further adjusted so that banks pay an effective premium in exchange for that new function (Schich, 2011).

Parts of the safety net were made available to non-bank financial institutions during the crisis

But this crisis has also highlighted that the nature of the liabilities of financial institutions other than banks can make these entities vulnerable to run-like behaviour on the part of creditors or other counterparties (Annex 1). Thus, while the financial system safety net traditionally focused on deposit-taking institutions, in this crisis aspects of that safety net were also made available to other types of financial institutions, partly also because the latter were significant counterparties of banks, in effect making them also systemically important.

b) Protecting financial consumers and investors

Financial stability is positive for consumers, but it is unlikely to be sufficient

Financial stability is positive for consumers of, and investors in, financial products. Thus, ensuring the stability of the financial system and institutions is the most basic way to protect consumers and investors. But this approach is unlikely to be sufficient. In fact, a variety of regulatory measures directly address concerns regarding the protection of financial consumers and investors (see Box 1).

Box 1. A sharpened focus on financial consumer protection

As a general rule, disclosure rules and transparency requirements figure prominently among (financial) consumer protection measures. Disclosure is necessary to allow for informed choices on the part of financial consumers and investors. It is not sufficient, however. Consumers and investors also require the capacity to effectively use the information received to make the appropriate choices, given their own specific needs and risk tolerance levels. Recent research has highlighted that consumers may not behave as time-consistent, rational utility maximisers and that consumers often have present-biased preferences (see e.g. Campbell et. al., 2010). Thus, measures other than just disclosure may be required under these circumstances.

Regulations to protect financial consumers have also received greater emphasis in the context of the recent global financial crisis. For example, some observers argue that ill-informed choices by consumers in the increasingly complex mortgage market contributed to the buildup of unsustainable housing-market-related developments in the United States, which were at the core of the financial crisis.

Perhaps more fundamentally, there is concern that consumers are being asked to take increasingly more direct responsibility for their own financial well-being during retirement, and that many households are not well prepared for this task. Enhancing the capacity of households to make such choices is the explicit aim of the OECD's ongoing "financial education" efforts, and these efforts support the comprehensive consumer protection measures aimed at creating an improved framework for financial institutions to offer appropriate products and services.

Specific measures to protect consumers if a financial institution fails include the provision of explicit guarantee arrangements

In addition to the measures discussed in Box 1, other measures protect consumers and investors in case of failure or insolvency by financial institutions. Examples are the specification of priority rankings for different types of creditors and guarantee arrangements that fully or partially protect some creditors. In fact, the incidence of the latter is quite widespread.

- Deposit insurance arrangements are common among CMF participating jurisdictions. Such arrangements serve the dual purpose of protecting ***depositors*** and ensuring financial system stability.

- To protect the ***beneficiaries of (defined-benefit) corporate pension arrangements*** from losses, due to the sponsor firms going bankrupt or leaving the pension plans underfunded, several countries have put in place so-called pension-benefit-protection arrangements. In the United Kingdom, the Pension Protection Fund operating since 2005 pays compensation to members of defined-benefit occupational plans and the defined-benefit elements of hybrid pension plans. Similar arrangements exist elsewhere, including in the United States (the Pension Benefits Guarantee Corporation, PBGC), the Canadian providence of Ontario, and in Germany, Japan, Sweden and Switzerland.

- Several countries have some form of ***insurance policyholder*** protection arrangements, which safeguards the interests of insurance policy holders and beneficiaries in the event insurance companies are unable to fulfill their contractual commitments. Such arrangements can offer protection by paying compensation to policy holders or beneficiaries, or by securing the continuation of insurance contracts. In countries where such arrangements exist, they may be limited in terms of coverage (*e.g.* covering only very specific classes of non-life insurance policies) or exist only for either life insurance or general (property and casualty) insurance. In a few countries, such arrangements cover both life insurance and non-life insurance.

- Many countries offer arrangements that compensate ***investors*** for losses incurred when an investment firm fails to return their assets due to fraud, administrative malpractice or operational errors. For example, in accordance with the *EU Directive on Investor Compensation Schemes*, all EU Member States have implemented such schemes. In the United States, the Securities Investment Protection Corporation (SIPC) was established in 1970 to shield investors from losses arising from the failure of broker-dealers; investments covered by the SIPC include the cash and (eligible) securities of customers at a financially distressed brokerage firm. In the United Kingdom, compensation is provided even beyond the amount of existing liabilities in so far as investors are compensated for losses arising from the bad advice of financial advisers, which are incidentally required to participate in the UK guarantee programme.

c) Influencing the allocation of credit

Credit rationing

Restricting lending can be a rational response to the presence of certain risks

Assessing higher interest charges and fees for borrowers considered to be risky is the norm in lending activities. A combination of higher rates and fees, as well as close monitoring, do address some of the risks, but they do not completely eliminate them. Therefore, lenders in some circumstances may be inclined to restrict lending to maintain risk below a certain level, either by cutting back on the amount of credit provided or denying credit altogether for certain categories of borrowers.[3]

There are alternatives to rationing credit in order to address agency problems and the information asymmetries associated with lending. In fact, banks and other primary lenders often attempt to overcome the risks inherent in debt finance by asking for collateral to cover losses in the event of insolvency. A borrower's willingness to supply collateral of the required quality and amount can be construed as a signal of its creditworthiness or of the validity of its prospects. Collateral ensures that the borrower bears some risk of loss and provides the lender with an alternative source of repayment should the firm's business climate deteriorate. In many situations, however, potential borrowers are unable to mobilize such collateral. The situation is often further complicated by the fact that potential borrowers often also lack a credit history, while data relevant to conduct borrower risk assessment might be sparse or of limited reliability.

SMEs may not benefit from access to finance to the same extent as other borrower groups

Small and medium-sized enterprises (SMEs) are a classic example. They are often regarded by many policy makers as not benefitting from access to finance to the same extent as other borrower groups, even though their activity tends to create a number of positive externalities. While it is difficult to show empirically that the size of the SME sector has a causal effect on growth, economic growth depends on *new and innovative* enterprises, which are often small. The contribution of such enterprises to employment growth is also substantially higher than their size would suggest, as they account for more than half of all private-sector employees in most OECD economies, and for 60% to 80% of new employment growth. Against the background of these observations, policy makers have devised a number of policies and institutions to overcome the perceived market failure regarding SME financing.

Credit guarantee arrangements

Credit guarantee arrangements are a commonly used tool to improve access to credit by SMEs

Credit guarantees are one of these tools and, even if credit guarantee arrangements started out as and often continue to be private ventures, credit guarantees seem to have become the direct policy intervention mechanism of choice for improving the access of SMEs to credit. Although the specifics of support programmes vary, there are two main types of guarantee arrangements: (1) *mutual guarantee associations*, which are established by groups of SMEs, by business foundations, or Chambers of Commerce, often in collaboration with banks; and (2) *loan guarantee funds*, which are most often publicly funded by regional or national authorities.[4] Government guarantee arrangements typically involve formulas under which banks share the risk with the official guarantor, and

in which the interest rate paid includes a premium to compensate the authorities for providing the guarantee. There is a requirement that the arrangement cover costs and, in most cases, that the credit guarantee arrangements do not represent a drain on budgetary resources and that they benefit the targeted audience.

Policy makers place a sharp emphasis on the attractive features of credit guarantee arrangements

A credit guarantee scheme (CGS) has several features that might allow it to overcome the credit constraints SME borrowers often face. A CGS is a risk-transfer and risk-diversification mechanism. It lowers the risk of the lender by guaranteeing repayment of part of the loan upon occurrence of a default event, thus having the credit guarantee fund absorb the risk of default by the borrower. Also, to the extent that the CGS develops a more diversified portfolio than individual banks, *e.g.* by guaranteeing loans across different sectors or geographical areas, it diversifies its own credit risk, the benefits of which could be shared. In addition, there can be informational gains, as the CGS is able to accumulate specialised information on SMEs given its interactions with many such borrowers over extended periods. From a policy point of view, CGS can be more effective and less costly, under some circumstances, than direct lending in expanding access to external financing; they are also politically attractive as they seem to be rather market-friendly, given that the lending decision mostly rests with the private lender. CGSs played an important role during the recent financial crisis, with many such schemes maintaining or increasing their activity, even as some other forms of financial intermediation ceased to be available.

Mortgage guarantee arrangements

Some types of credit guarantee arrangements reflect the pursuit of specific policy goals, such as increasing homeownership

Another example of a guarantee scheme is a mortgage guarantee arrangement. The objective of such an arrangement is broadly similar to that of a credit guarantee arrangement -- to address market failures and/or other policy objectives. Market failure arises from the presence of asymmetric information and leads to credit rationing. In addition, promoting homeownership is an important goal of many national housing policies. Thus, to increase access to homeownership, especially by middle- and lower-income groups, governments have introduced grants, subsidised loans, tax relief measures and mortgage guarantee arrangements. A mortgage guarantee arrangement facilitates mortgage lending to those who otherwise might not have access to loans, by protecting lenders (at least partly but sometimes even fully) against losses due to borrower defaults. Unlike some of the other policy tools, the provision of guarantees typically is not associated with any significant upfront fiscal outlays, which explains to some extent the widespread use of such arrangements across countries. That said, in many such arrangements governments are typically responsible for any shortfall. While a variety of fee structures exist in some arrangements, in some cases the mortgage guarantee is granted free of charge by local governments to the lending bank (Elsinga, 2009), suggesting that there is significant policy interest in the availability of such guarantees.

Incidentally, government-supported guarantees also characterise some of the secondary markets in mortgages. For example, in the United States, the two government-sponsored enterprises (GSEs), Fannie Mae and Freddie Mac, purchase mortgages from mortgage lenders and repackage those loans into mortgage-backed securities, which carry a guarantee from these entities. In

addition, the mortgages and loans guaranteed by the Veterans Administration are backed by the full faith and credit of the US government when packaged as "Ginnie Mae" securities (by the Government National Mortgage Association, part of the Department of Housing and Urban Development). The market clout of these entities loomed large in the United States, with the former two enterprises owning or guaranteeing roughly half of all outstanding mortgages in that country at one point in time. The two GSEs were privately owned but enjoyed the perception of an implicit government guarantee; they were placed in conservatorship in 2008. There is currently a discussion in the United States as to what role the public sector should play in the secondary mortgage market (see *e.g.* US Department of Treasury et al., 2011).

The various guarantees related to mortgage debt played a role in the run-up to the recent financial crisis, which originated in the US subprime mortgage debt segment. Such guarantees exist not just in the United States, however. They are in fact quite widespread. Many of them reflect attempts to achieve the financial (or, better yet, public) policy objective of high rates of homeownership, and they subsidise related risk-taking by households and financial institutions to facilitate attainment of that goal. The overall effects of such policies continue to be controversial, and there is a growing recognition that at least some aspects of such guarantees have been counterproductive.

4. Guarantee arrangements as part of the financial system landscape

Guarantee arrangements have become a significant part of the financial landscape

Guarantee arrangements have become a policy intervention mechanism of choice in some parts of the financial sector. One of the attractive features of such arrangements is that they require limited, if any, upfront fiscal outlays. Moreover, to the extent that the risks covered do not materialise, fiscal costs will never arise, at least not as a *direct* consequence of the provision of the guarantees. Thus, to influence credit allocation and to avoid that shocks to financial institutions propagate and affect the broader economy, policy makers have encouraged the development of guarantee arrangements regarding many types of financial claims, although specific country choices have differed in this regard.

Countries have differed in the provision of financial system guarantees

Prior to the global financial crisis, CMF member jurisdictions differed considerably in their policy towards the use of guarantees for providing an additional degree of protection to financial consumers and investors.

- Some countries tended to pursue conscious policies of building some form of firewall into financial systems to prevent large shocks to either the real economy or the financial system from propagating through the latter.
- Others placed more emphasis on the potential costs associated with such arrangements in terms of potential distortions to incentives and competition. Clearly, while various types of guarantees prevent the propagation of shocks, like any guarantee, they can also cause distortions and induce excessive risk-taking, which in turn can create additional volatility and shocks.

In this context, Wylie (2009) suggested that the United States and Australia can be considered as opposite ends of the spectrum in the policy use of guarantees to address financial policy objectives. In the United States, government-supported guarantee arrangements for depositors and pension fund beneficiaries (as well as an implicit government guarantee for the mortgage pools provided by Fannie Mae and Freddie Mac) have played a significant role in the domestic financial market. Australia, on the other hand, did not even have deposit insurance prior to the recent crisis. That country's policy vis-à-vis guarantee arrangements reflected very much the results of the Wallis Inquiry Report of 1997, which -- broadly speaking – judged financial system guarantees as potentially harmful due to the sense of complacency fostered among the beneficiaries. Whether the contrast between the countries is indeed as stark as has been suggested is not so clear, however. In any case, the financial crisis may trigger a re-assessment in many countries of the role of guarantee arrangements in their financial systems.

III. Are additional guarantee arrangements needed during normal times?

Should new explicit guarantee arrangements be introduced?

While the financial crisis has put a sharp spotlight on guarantee arrangements to support the financial system stability and raised the question how widely to cast the financial system safety net (Annex 1), it has also raised questions regarding the role of, and need for, guarantee arrangements to protect consumers.

There is still the open question as to whether and what extent the variety of guarantees actually contributed to the build-up of unsustainable positions in the run-up to the crisis, and a careful analysis of the potential consequences of guarantees beyond the short term is needed. That observation notwithstanding, policy makers in various jurisdictions react to perceived shortcomings in financial consumer protection in part by proposing to augment certain existing guarantee arrangements and introducing new ones in areas where they did not previously exist. Such measures are intended to help maintain consumer and investor confidence in the system, with some examples given below.

- In July 2010, the European Commission launched a public consultation regarding methods for improving protection for insurance policy holders, including the possibility of setting up such arrangements in all Member States. Similarly, the OECD (2010) report "The Impact of the Financial Crisis on the Insurance Sector and Policy Responses" concludes: *"**Policyholder protection schemes:** Well-designed systems of deposit insurance, with adequate levels of protection, are believed to have played an important role in maintaining consumer confidence in the banking system. While the insurance sector may not have the same liquidity challenges as banks, considerations of consumer confidence and protection may still arise and provide grounds for the establishment of a policyholder protection scheme. There is therefore the issue of whether policyholder protection schemes should be augmented (or where they do not exist, established). Consideration could be given by the OECD to cross-sectoral work in this area, involving a review and comparative analysis of compensation arrangements for banking, insurance, and private pensions."*[5] In 2010, Greece introduced a general life insurance policyholder protection scheme.

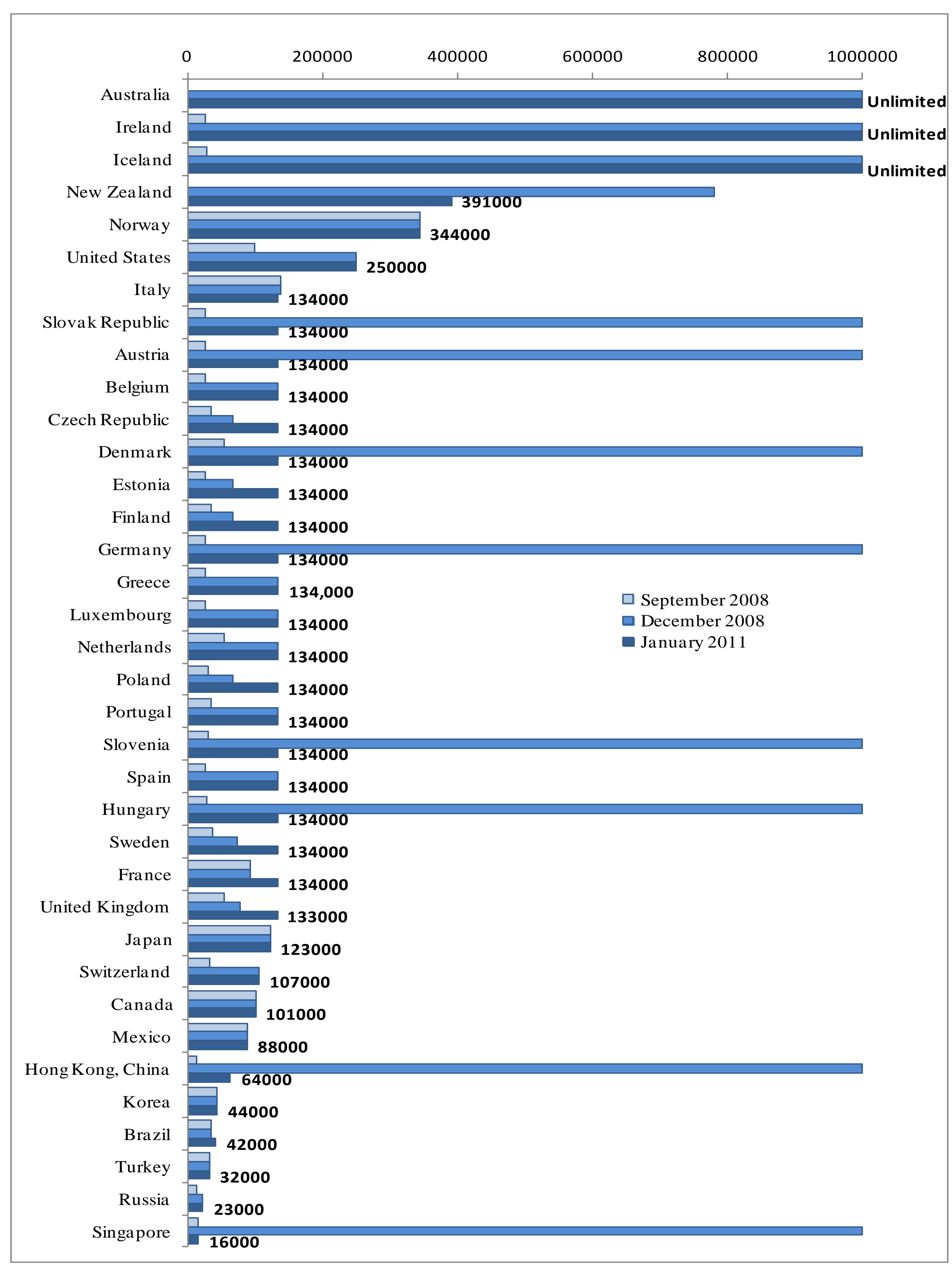
- Given the increasing role of defined contribution (DC) pension plans in several countries, as well as increased financial market volatility, recent attention has focused on the *market risks* (as well as *counterparty credit risks*) inherent in plans for which the actual pension benefits received after retirement will vary depending on the type of financial products chosen and evolving financial market conditions. To protect retirement savers from potential variations in market conditions, there are proposals to introduce guarantee arrangements that would ensure a specific minimum return regardless of market conditions. In fact, legislation in some countries requires DC plan providers to offer an absolute rate of return guarantee. A recent report prepared for the IPPC's Working Party on Private Pensions (OECD/WPPP, 2010) on the role of guarantees in defined contribution (DC) pensions "endorses the introduction of capital guarantees that protect the nominal value of contributions in DC pension plans".[6] However, discussions at the meeting failed to reach a consensus on this issue and the role of governments in this context.

- The suggestion to establish a guarantee (arrangement) for DC pension plans appears to be motivated primarily by market risk, as opposed to counterparty credit- risk (which is addressed by many of the guarantee arrangements discussed in section II), even if both of these risks appear to be relevant. Counterparty credit risk is particularly relevant in guarantee arrangements for defined benefit (DB) arrangements. The importance of such pension plans in many countries, as measured e.g. by total assets held by such funds, is declining, while that of DC pension funds is often increasing. Against the background of these developments, the issue of whether to establish additional guarantee arrangements for DB arrangements is currently not high on the political agendas of most countries.

- Explicit deposit insurance arrangements have now become a standard feature of national financial systems, although not every country has them. Among CMF participating jurisdictions, only Israel and New Zealand do not have permanent explicit deposit insurance arrangements. In Israel, the central bank can extend guarantees for deposits and other bank liabilities under certain circumstances. In New Zealand, the current temporary arrangements are up for review, with a decision due in 2011. In Australia, the Financial Claims Scheme implemented in October 2008 is intended to be permanent, but its coverage and other features are to be reviewed by November 2011.[7]

- Deposit insurance arrangements serve the dual purpose of protecting the financial system and consumers. Consumers who cannot be expected to carefully assess the riskiness of their banks but for whom the loss of deposits would cause significant hardship have traditionally been considered worth protecting through such arrangements. The increases in deposit insurance coverage levels that occurred since October 2008 and were primarily motivated by financial stability, as opposed to consumer protection concerns (Mayes, 2011), imply that protection now goes well beyond a small group of particularly "vulnerable" households. Indeed, under current coverage limits (Figure 2), only a small portion of eligible deposits are not covered in many countries (often less than 30%), although the distribution and role of bank savings differ from one country to another. One could argue that the consumer protection motive is likely to have been already achieved at lower coverage levels.

Figure 2. Deposit guarantee coverage limits, including political commitments[8]



Note: see endnote 8.
Source: OECD Secretariat estimates based on FSB (2010).

IV. Considerations regarding the introduction of additional guarantee arrangements

1. Specific and general considerations

Some considerations regarding the desirability of a new arrangement are common among different types of financial claims

Specific considerations regarding the desirability of new guarantee arrangements differ depending on the type of financial claim. As well, the alternatives to guarantee arrangements differ depending on the type of financial claim. As a result, it is difficult, if not impossible, to make general assessments regarding the desirability of guarantee arrangements that apply irrespective of the specific type of financial claim.

However, this article argues that there are also a number of considerations common to the issue of establishing a new arrangement, which policy makers should take into account in developing a policy response (regardless of the specific type of arrangement being discussed). These considerations include:

- Effect on incentives (moral hazard);
- Effect on competition;
- Consistency of the net of guarantee arrangements;
- Capacity to provide for the net of guarantee arrangements.

2. Selected general considerations

a) Effect on incentives (moral hazard)

Any guarantee arrangement can give rise to moral hazard just like any other type of insurance

Any guarantee arrangement can give rise to moral hazard just like any other type of insurance. That assessment is true regardless of whether the arrangement is of a private or public nature, as long as it is credible. The policy response to the recent financial crisis consisted to a large extent of extending guarantees for banks. The observation that many banks have continued to augment their balance sheets as investors took comfort in the existence of such arrangements and attractive promised rates of return is indirect evidence suggesting yet again that moral hazard is not just a theoretical concept, but is very relevant in practise.

Moral hazard is not a fatal flaw of guarantee arrangements

That said, moral hazard is not a fatal flaw of guarantee arrangements. Addressing moral hazard requires careful design of the guarantee arrangements and an adequate and possibly strengthened supervisory and regularly framework. Specific solutions can include the enhancement of authorities' monitoring and intervention powers (which in the case of deposit insurance has been shown to limit the ultimate cost for taxpayers), as well as specification of deductibles and limits for insurance coverage. To the extent that such remedies are not fully successful, however, the existence of guarantee arrangements risks creating the same vulnerabilities that they are supposed to address in the first place.

As a general rule, the case for establishing explicit guarantee arrangements is stronger if an implicit guarantee already exists and for whatever reason cannot be withdrawn; an implicit guarantee already tends to give rise to moral hazard. An explicit guarantee improves on the latter situation in that it allows one to

define what the outer limits of the guarantee are, in terms of what is protected and what is not. Moreover, it allows one to charge an appropriate premium in exchange, which is difficult, if not impossible, in the case of an implicit guarantee.

A specific issue is that institutions' product mixes change over time

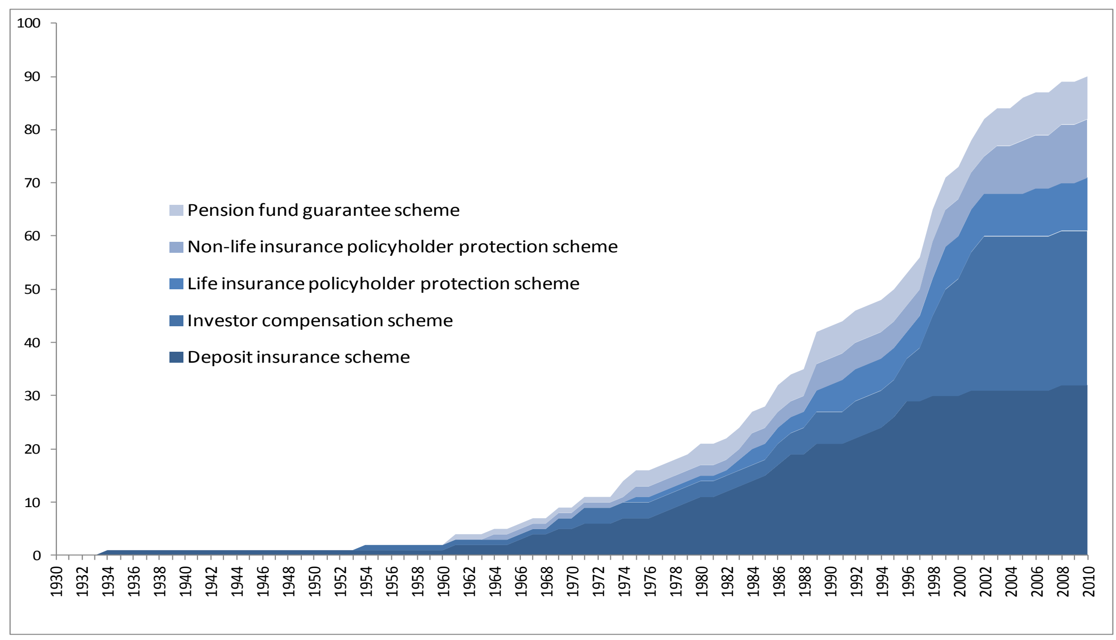
Charging commensurate premiums is also particularly difficult where the guarantee arrangements relate to specific types of institutions, but where these institutions are parts of larger financial groups. The various specific functions performed by the financial system involve different types of products,[9] end-users, and providers, all of which may evolve over time. In this context, one of the major trends in the changing financial landscape has been the increasing degree of conglomeration, whereby institutions of various types provide different mixes of products and functions that cut across sectoral boundaries.

But guarantee arrangements generally remain linked to particular types of institutions rather than to products

But while institutions' strategies and product mixes change over time, guarantee arrangements generally remain linked to particular types of institutions, rather than specific functions or types of financial claims. As a result, certain institutions benefit from the availability of guarantee arrangements conceived for very specific functions, even though some or most of their activity pertains to other, unrelated functions. As a result, and to the extent that guarantees are not actuarially fairly priced, there is potential for cross-subsidisation and resulting additional risk-taking in other parts of the institution.

Figure 3. Incidence of guarantee arrangements for various types of financial claims

In OECD jurisdictions



Notes: The number shown for each year pertains to the incidence of guarantee arrangement per the five featured categories of arrangements (as indicated in the legend) in OECD jurisdictions. If there is more than one arrangement within each specific category, these are counted only once. Thus, the maximum number of incidences at any point in time is 170 (34 countries times a maximum of five types of guarantee arrangements each).

Source: OECD Secretariat estimates based on International Association of Deposit Insurers (IADI); Oxera (2005, 2007) and Stewart (2007).

b) Effects on competition

Guarantee arrangements to protect consumers are a significant part of the financial landscape

Guarantee arrangements that provide consumer protection in regard to financial claims, such as deposits, life and non-life insurance policies, pension claims, and securities (holdings) appear to have become a significant part of the financial landscape. For example, judged by the incidence of (at least one) guarantee arrangements related to each one of these five type of financial claims, Figure 3 illustrates that there has been a marked increase in the incidence of such arrangements among CMF participating jurisdictions over the past few decades.

Developments in this regard have differed depending on the specific type of financial claim concerned. The number of deposit insurance arrangements has been increasing gradually since the 1980s. The number of jurisdictions with investor compensation arrangements remained broadly constant during the 1970s and 1980s, but has grown rapidly since the late 1990s. In 1997, the EC Directive on investor compensation was formally adopted and now all EU member countries have such arrangements. Growth in the number of jurisdictions with guarantee arrangements for life and non-life insurance policyholders has been less dynamic, although the EU is currently considering a new insurance guarantee directive, which could lead to the wider introduction of such arrangements, at least within the EU (on the specific issue of *general* insurance policyholder protection arrangements see Box 2). There are eight jurisdictions that provide pension-fund policyholder protections (Table 2). The overall incidence of guarantee arrangements has remained broadly stable over the last decade, although it has picked up slightly during recent years.

Box 2. The specific issue of general insurance policyholder protection arrangements

General insurance policyholder protection arrangements are less common than deposit insurance arrangements, based on the number of countries that offer this type of guarantee. While *de facto* deposit insurance arrangements have become the norm, with only a few exceptions, there continues to be considerable controversy among both academics and policymakers surrounding the desirability of establishing (general) non-life or life insurance policyholder protection arrangements. On the one hand, protection is required when bankruptcy occurs, despite all supervisory efforts made and buffers created at the institutional level, and such protection could increase confidence in the industry more generally. An argument is also being made that, given the convergence of financial institutions providing banking and insurance functions and the widespread incidence of deposit insurance arrangements, establishing further (general) insurance policyholder protection arrangements would level the playing field. Such arrangements might also facilitate a smooth exit of failed insurers. On the other hand, other provisions to safeguard policyholder interest already exist, such as giving policyholders priority rights in case of insolvency, strong regulation covering technical reserves and asset investments. And like any guarantee, policyholder protection arrangements might give rise to competitive distortions and moral hazard, especially if and where protection for policyholder is provided without limits (as is indeed often the case). Also, there is a possibility that the additional financial burden associated with such arrangements might weaken insurance companies' internal buffers.

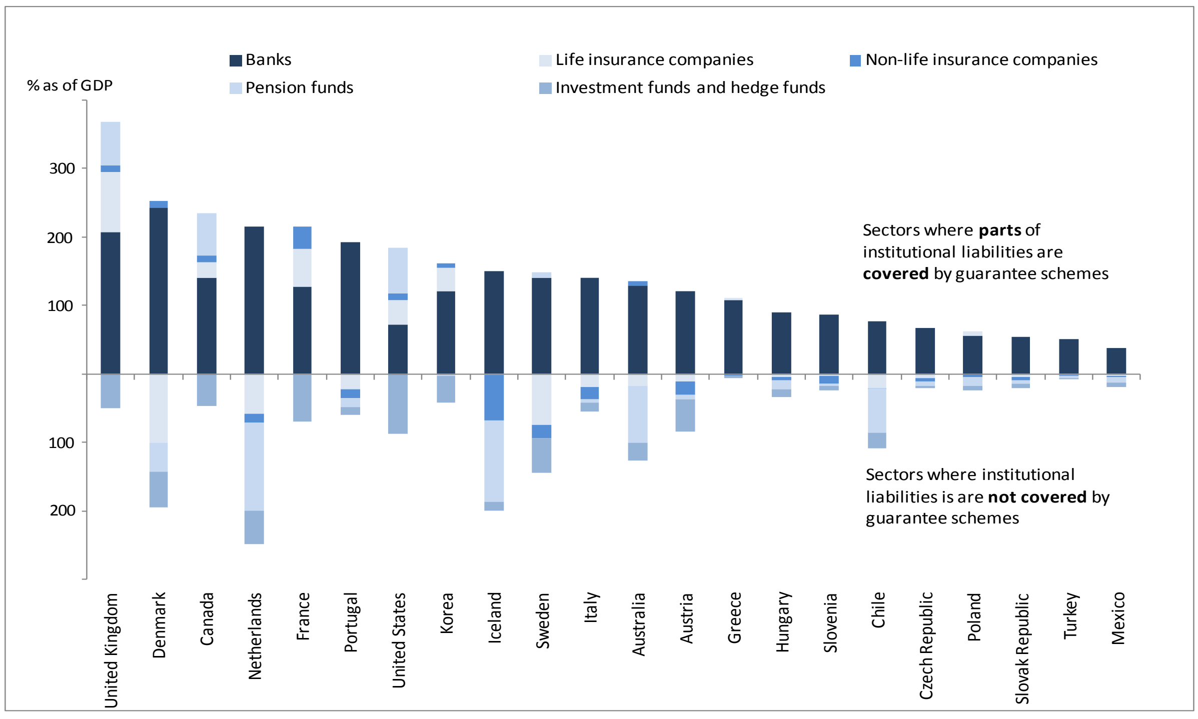
Based on these considerations, only a limited number of countries have introduced policyholder protection arrangements that provide protection in the event of a bankruptcy of an insurance company to policyholders of generally all the lines of insurance of that company. Relatively more common, however, are guarantee arrangements that focus on specific lines of insurance, in particular, compulsory ones. Guarantee arrangements typically supplement compulsory insurance systems because they can ensure that the goal of (insurance) regulation is achieved, even when the insurer is insolvent and hence unable to pay claims arising from compulsory insurance. For an overview of arguments regarding the desirability of general policyholder protection arrangements and related design aspects see e.g. OECD (2001), Oxera (2007) and work currently being done by the OECD's Insurance and Private Pensions Committee.

The availability and terms of guarantees affect competition

As a result of the increase in the number and variety of guarantee arrangements, the balance sheets of many financial institutions are now at least partly affected by the operation of one or more guarantee arrangements. At the same time, the liabilities of certain other financial institutions are not, at least not directly (Figure 4). Among financial institutions whose liabilities are at least partly covered by some form of guarantee, banks are by far the most dominant, as measured by assets. To a lesser extent, the liabilities of pension funds and life insurance companies are also supported by general guarantee arrangements, while there are no guarantee arrangements, under normal circumstances, that pertain to investments in hedge funds and investment funds.

It is clear that the incidence (and design) of guarantee arrangements determines the extent of competitive neutrality between different types of financial institutions, some of which offer similar types of products. But given that access to guarantee arrangements for certain products goes typically hand-in-hand with tighter regulation of the beneficiary institution, the net effect on costs for, and profitability of, financial institutions and on the competition among them is difficult to assess.

Figure 4. Asset size of selected financial sectors in selected countries (as of 2009 GDP)



Notes: Estimates based on data for total financial assets of selected financial sectors and estimates of the incidence of guarantee arrangements as shown in Table 2. Estimates of pension fund assets refer to the aggregate of defined contributions, defined benefit and hybrid arrangements, obtained from OECD global pensions statistics. Estimates of insurance assets are based on OECD insurance statistics, except for the United States and the United Kingdom, where the OECD's Institutional Investors database is used. Where no breakdown into life and non-life insurance was available, the data for "composite" insurance companies was used to obtain an estimate of such a breakdown (applying the ratio of reported gross operating expenses related to either life or non-life insurance business reported for "composite" insurance companies).

Source: OECD Secretariat estimates based on OECD statistics for pension and investment fund and insurance company assets and World Bank for bank assets.

Table 2. Incidence of (non-temporary) guarantee arrangements in OECD countries

	Deposit guarantee arrangements	Investor compensation arrangements	General arrangements for life insurance	General arrangements for non-life insurance	Pension fund guarantee arrangements	Credit guarantee arrangements and related policy interventions
Australia						
Austria						
Belgium						
Canada						
Chile						
Czech Republic						
Denmark						
Estonia						
Finland						
France						
Germany						
Greece						
Hungary						
Iceland						
Ireland						
Israel						
Italy						
Japan						
Korea						
Luxembourg						
Mexico						
Netherlands						
New Zealand						
Norway						
Poland						
Portugal						
Slovak Republic						
Slovenia						
Spain						
Sweden						
Switzerland						
Turkey						
United Kingdom						
United States						

Notes: Shaded area denotes that at least one general arrangement is in place for the specific type of financial claim shown in the headers. Dark-shaded areas indicate that one agency manages several arrangements in different sectors; that is, all arrangements that are highlighted by that dark shading. There are also special arrangements covering one or a few specific branches of non-life insurance (not shown in the table). In the case of life insurance, the assessment follows OECD (2010), except for Austria, Greece, the Netherlands, and Turkey. In the case of non-life insurance, the assessment of specific arrangements follows OECD (2010), except for Estonia and Greece.

Source: OECD Secretariat estimates based on IADI (2008), World Bank (2005) and IMF(1999) for deposit insurance; Oxera (2005) for investor compensation; Oxera (2007) and OECD (2010) for insurance; Stewart (2007) for pension arrangements; OECD (2009) and Beck (2010) for credit guarantee arrangements; and websites of various agencies managing the arrangements.

c) Consistency of the net of guarantee arrangements

Consistency with the regulatory framework

A key issue is the relationship between the guarantee arrangement and the regulatory and prudential framework

When introducing additional explicit guarantee arrangements, a key issue is the relationship between the guarantee arrangement and the regulatory and prudential framework. The latter differs from one country to another, but some general guidance on how to explore the interrelationships can be obtained from the Davis (2004) report produced for the Australian government. This report provides a careful review of the pros and cons of guarantees across a whole range of financial institutions. It explores the interrelationships between any type of guarantee arrangement and the existing regulatory and prudential framework, as well as the consequences of a limited explicit guarantee system. There needs to be internal consistency between a guarantee arrangement and the regulatory and prudential framework, and the latter may need to be adjusted if new explicit guarantee arrangements are introduced.

One specific risk is that the availability of guarantees might reduce incentives for policy makers to develop alternative burden-sharing instruments

The availability (and presumed smooth functioning) of guarantee arrangements to protect consumers and foster financial stability should not reduce incentives for policy makers to develop other burden-sharing instruments. In this context, the generally accepted philosophy is that the first line of defense against the materialisation of risks for financial institutions should be the capital buffers they hold. Where these are inadequate, the entity should be allowed to fail in an orderly fashion, which implies losses for shareholders and for creditors according to their seniority. Achieving this outcome requires appropriate failure- resolution regimes. Such regimes were not considered applicable in the recent crisis to many systemically important financial institutions. Since then, for example, the Federal Deposit Insurance Corp. (FDIC) in the United States has extended its failure resolution powers to include non-bank, systemically important financial institutions. Guarantees need to go hand-in- hand with mechanisms that ensure that the covered financial institutions can fail in an orderly and smooth fashion so as to limit the ultimate costs associated with guarantee arrangements and thus the potential burden for the taxpayers.

Internal consistency

Some guarantees transfer risk, while others consciously encourage additional risk-taking

Many guarantee arrangements focus on the liabilities of financial institutions and protect financial consumers from the effects of institutional failure. They thus reduce the chance that excessive risk-taking and stresses in the financial sector spill over to other sectors of the economy. Other guarantee arrangements consciously encourage specific types of risk-taking by some financial institutions. The net result of the different intended effects -- and those that arise unintended -- from the presence of the various guarantee arrangements is difficult to determine. Ensuring the consistency and coherence of net effects from government-supported guarantee arrangements would appear to be an important policy aim.

The prevalence of different types of guarantee arrangements can give rise to inconsistencies, which could hamper the achievement of financial policy objectives. There is a multitude of guarantee arrangements focusing on different types of financial claims. Some guarantee arrangements apply to the liabilities of

financial institutions and others to the assets. The liability-oriented protections aim at protecting financial consumers and investors from excessive risk-taking by the financial institution on which they hold claims. Other types of guarantee arrangements focus on the assets of financial institutions and attempt to overcome specific market failures and to encourage greater risk-taking on the part of financial institutions. At least conceptually, some conflicts could arise.

For example, in terms of policy objectives, deposit guarantee arrangements aim to prevent excessive risk-taking by an individual bank from spreading to households and other sectors, while credit guarantee arrangements actually support banks' risk-taking, encouraging banks to lend to the corporate sector. Also, some temporary guarantee arrangements introduced in response to the financial crisis provided protection for the holders of bank debt, while at the same time encouraging banks (as a condition for eligibility) to maintain existing leverage ratios or the extend additional credit. The net effect on bank-sector risk, risk-allocation and on risk-taking is uncertain.

There is a need for policy makers to understand the effects of the various guarantee arrangements and to ensure internal consistency among them. While consistency might be facilitated by concentrating the management and funding of different types of guarantees within one single agency (possibly with different accounts), such an approach is not very widely taken (Table 2). This observation suggests there are drawbacks to this type of institutional-pooling arrangement that are considered relevant.

d) Capacity to provide for the net of guarantee arrangements

In response to the recent crisis, a number of new temporary guarantee arrangements were put in place, and the scope of existing arrangements was extended, most of these pertaining to bank liabilities. While many of the extended arrangements have since been retracted, there are lingering questions about whether the various guarantees can be effectively withdrawn forever, under all circumstances, and to what extent implicit guarantees will continue to prevail.

For example, where the scope of existing deposit insurance arrangements has been extended, it is likely to remain above pre-crisis levels. In fact, a ratchet effect has been typically observed in the development of coverage ceilings of specific deposit insurance arrangements. Figure 2 provides additional evidence supporting this hypothesis. It illustrates the changes in deposit insurance coverage ceilings over the past three years. It shows that such ceilings have increased in most instances in response to the crisis, with the notable exception of countries that either already were characterised by relatively high ceilings or where banks did not experience large shocks associated with the crisis. An important observation is that even though ceilings have now again been lowered in many cases, they still are at least as high as they were before the crisis. In fact, in 28 cases, they now stand above pre-crisis levels.

Guarantee arrangements create contingent liabilities for the guarantor

An important consideration is that guarantee arrangements create contingent liabilities for the guarantor, and that these can turn into actual liabilities if the covered risk materialises. These inter-linkages are understood by market participants, and in addition to actual sovereign debt levels, the extent of assumed government support for the domestic banking sector is taken into account by the rating agencies in assessing the creditworthiness of the sovereign.

Depending on the size of the banking sector, the total of actual and contingent liabilities can be significantly higher than actual liabilities (Figure 5). Between 2008 and 2010, estimated contingent liabilities have increased in some countries and decreased in others (Figure 6), with a particularly notable development being the significant increase and decrease in contingent liabilities in the case of Ireland and Iceland, respectively. As early as 2009, the stressed situation in the banking sector implied adverse sovereign rating actions in some countries, although the spotlight was not put more squarely on sovereign risk until 2010.

One could argue that potential contingent liabilities could arise for the government also from the liabilities of other financial institutions, such as life insurance companies and pension funds, even when there are no explicit government backstops provided. Expectations of implicit government support may exist, and these expectations are difficult to counter.

Currently, for example, rating agencies do not factor in the liabilities of pension funds when assessing sovereign creditworthiness, noting that their long-term investment horizons enable them to take the corrective measures necessary to avoid unsustainable imbalances and the need for government intervention. Indeed, the explicit support provided by governments for the guarantee arrangements backing the liabilities of non-bank financial institutions is more limited than for banks (Annex II).

The financial crisis has shown, however, that government support will be extended for specific financial claims, regardless of whether any explicit government support had previously existed. This problem exists because potential political pressures and/or concerns about systemic, social and other consequences tend to lead governments to provide State support beyond whatever their explicit commitments might have been.

To avoid situations in which the balance sheet problems of financial institutions spill-over to the sovereign through such mechanisms, a considerable degree of *ex ante* funding of guarantee arrangements to cover claims on these financial institutions (or those held by them) is necessary. The experience during the recent systemic crisis suggests that *ex ante*-funded systemic crisis resolution arrangements, together with strengthened failure resolution powers, are helpful in limiting the overall cost of crisis resolution (Schich and Kim, 2010). Similarly, the more extensive the *ex-ante* funding for guarantees on financial claims, the weaker the effect that financial institutions' balance sheet problems should have on sovereign credit risk.

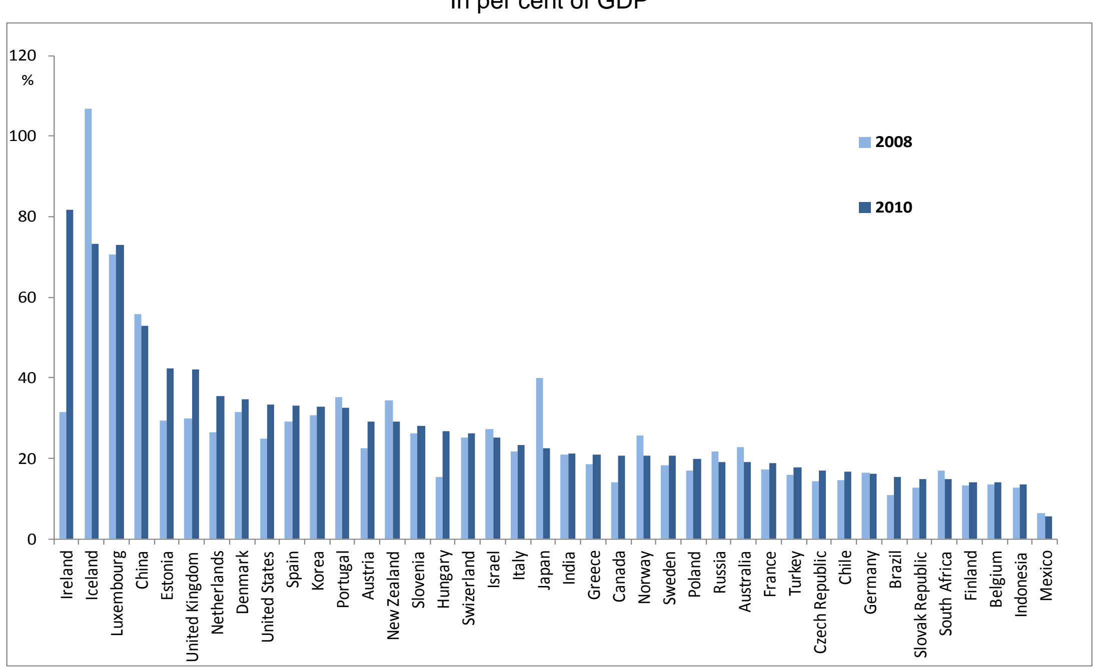
Figure 5. Government debt, including contingent liabilities, in CMF jurisdictions

In per cent of GDP

Notes: Sovereign's potential contingent liability arising from banking sector liabilities "during a reasonable worst-case banking crisis", as defined by Standard & Poors.
Source: OECD estimates based on S&P Sovereign Risk Indicators (2010).

Figure 6. Contingent liabilities in CMF jurisdictions

In per cent of GDP



Notes: See notes for previous Figure 5.
Source: OECD estimates based on S&P Sovereign Risk Indicators (2010).

V. Concluding remarks

Guarantee arrangements for financial claims address a number of policy objectives, which include macro-prudential goals, such as supporting financial stability, as well as other objectives, such as protecting consumers and influencing credit allocation.

Some general considerations should be taken into account when formulating policies regarding the desirability of new guarantees

An issue that has received heightened policy attention of late is whether to establish additional guarantee arrangements for financial claims, especially to protect consumers. At a micro level, the answer to that question as well as the policy alternatives, differ from country to country and depend on the specific type of financial claim under consideration. But there are some general considerations policy makers should take into account when formulating policies in regard to *any* new guarantee arrangement. They include the effects on incentives (moral hazard) and competition and the issues of consistency of the net of government-supported guarantee arrangements and the capacity of the guarantor to provide for the net of guarantee arrangements. Four considerations are singled out for special attention:

- **First, explicit guarantees are preferable to implicit ones.** The case for establishing explicit guarantee arrangements is stronger if an implicit guarantee already exists, and for whatever reason, cannot be withdrawn. An explicit guarantee improves on that situation in that it allows one to define what the outer limits of the guarantee are, in terms of what is protected and what is not. Moreover, it allows one to charge an appropriate premium in exchange, which is difficult if not impossible in the case of an implicit guarantee. Explicit, *ex ante*-funded guarantees can limit the need for undifferentiated ex post bailouts.

The wider the net of guarantees is cast, the thinner it becomes

- **Second, the net of government-supported guarantees for financial promises cannot be expanded without limit**. The wider the net of guarantees is cast (other parameters unchanged), the thinner it becomes. This observation is particularly relevant at a time when mature economies are faced with mounting fiscal challenges. In this context, the recent sovereign debt stresses have underscored that more consideration needs to be given to the issue of how to protect sovereign risk from specific financial-sector risk given expanding government guarantees. Even when arrangements have private origins, and when there is limited explicit public support, expectations may be that they enjoy implicit government support (under some circumstances at least), and these expectations are difficult to counter. Choices regarding the establishment of any new explicit guarantee arrangement need to consider the capacity of governments to provide for the net of guarantees, including implicit guarantees that might become explicit under some circumstances.

Some arrangements transfer risk, while others consciously encourage additional risk-taking

- **Third, some guarantees or the interaction between them could give rise to undesired effects**. A multitude of guarantee arrangements already exist affecting the balance sheets of financial institutions in different ways. This article documents the noticeable increase in the incidence of guarantee arrangements, even during normal times: Some apply to the liabilities of financial institutions, while others apply to their assets; some transfer risk, while others consciously encourage additional risk-taking. What the net result of the various types of guarantee arrangements is in

terms of protection and risk-taking is not clear. Special efforts on the part of policy makers are needed to ensure internal consistency among guarantee arrangements and their consistency with the regulatory framework.

Appropriate measures are needed to limit the burden on taxpayers

- **Fourth, guarantees need to be limited and affordable; policy makers need to address which types of financial claims are being protected and which are not**. For claims considered worth protecting, a rethink of some of the design aspects of the arrangements may be necessary in order to reduce the burden on taxpayers, who implicitly or explicitly, are the ultimate underwriters of most of these arrangements. Put simply, the net of guarantee arrangements for financial claims needs to be affordable, and its outer borders clearly defined.

While there was broad agreement among delegates of the Committee on Financial Markets that the net of government-supported guarantees cannot be extended without limits (other parameters unchanged), it is not clear precisely how far the financial safety net and other financial sector guarantees should be extended, in addressing other policy objectives such as protecting consumers and achieving more desirable credit allocation. In this regard, delegates suggested that it would be helpful for future work to adopt a broad perspective, one that integrates previous CMF discussions on the use of guarantees as a policy tool to support financial stability, as well as the most recent discussion on the incidence of guarantee arrangements in normal times. Another particularly important but difficult issue is that of implicit guarantees An example of institutions believed to benefit from these guarantees are systemically important financial institutions, to which the above proposed simple framework could be applied.

Some nuances were expressed regarding the issue of consistency in the net of financial sector guarantees. In fact, while internal consistency -- and consistency with the regulatory and failure resolution framework -- are desirable, efforts to ensure such consistency present significant challenges. Already, any single guarantee has uncertain effects on risk allocation and risk-taking. Policy makers need to focus on each individual guarantee and ensure that it is being used for the appropriate policy objective, and that it is the most effective and efficient tool for achieving that objective. To ensure effectiveness, guarantees need to be credible and affordable, which in turn requires having in place appropriate resolution regimes and funding arrangements. As regards the latter, *ex ante* funding is widely regarded as preferable to *ex post* bailouts.

Note, in this context, that a previous CMF discussion in October 2010 had concluded that in the specific case of large, systemic crises, ex ante-funded systemic crisis resolution arrangements, together with strengthened failure resolution powers, are in principle adequate to help fill the funding gap left by existing deposit insurance arrangements. In particular, significant ex ante funding of such arrangements should help weaken the potential link between financial sector and sovereign risk.

Annex 1

SHOULD THE FINANCIAL SYSTEM SAFETY NET BE EXTENDED BEYOND DEPOSIT-TAKING BANKS?

One specific issue highlighted by the recent crisis is that financial institutions other than deposit-taking banks can be systemically important and, under some circumstances, enjoy government-supported guarantees that are similar to those commonly available for deposit-taking institutions.

This situation raises the question whether, and to what extent, the various functions of the traditional safety net should apply to financial institutions other than banks, such as e.g. mutual funds with long-term investments and shares redeemable with short delays, systemically relevant parts of insurance companies, central counterparty clearing houses, etc.

The recent financial crisis has added to the list of examples indicating that "runs" are not confined to banks but can affect financial markets and institutions other than deposit taking banks. The crisis has highlighted the potential systemic role of the short-term funding markets. Investors that do not roll over their investments in commercial paper, in effect, "run" on the issuer of commercial paper. In the recent crisis, as investors became reluctant to roll over asset-backed commercial paper, yields on new issues soared and amounts outstanding plummeted. That contraction, in turn, sparked concerns about whether banks that explicitly (or implicitly) provided back-up liquidity as program sponsors would be able to meet their obligations, which then led to a freeze in the interbank lending market (see e.g. Covitz *et al.*, 2009).

Classic models of bank runs focus on debt holders, but the issue of "runs" also extends to equity holders, such as investors in a hedge fund or mutual fund. To the extent that withdrawals by investors are so large that increasingly illiquid assets need to be sold by the fund, possibly at fire-sale prices, there may simply not be enough net asset value to satisfy all demands. A first-mover advantage exists, and this situation can make financial institutions in general -- not just banks -- subject to runs. For example, in the case of life insurance companies, even if runs are typically avoided by the existence of significant withdrawal costs, the first-mover advantage also applies to the liabilities of these entities. In addition, even when the issue of runs is less relevant for a financial firm given its specific core business, it may be subject to runs if it is part of a large financial conglomerate, and customers become concerned about potential adverse spill-over effects from one part of that conglomerate to another.

In fact, in response to the recent financial crisis, several guarantee programmes were made available temporarily to (and sometimes used by) non-bank financial entities that would not enjoy such guarantees under normal circumstances (Appendix Table 1). Many of them targeted institutions engaging in similar activities as banks. These non-bank entities were not part of the traditional systemic financial safety net, but they presented very similar vulnerabilities to banks due to their engagement in maturity, credit and liquidity transformation.

This situation has raised the question whether such arrangements should be made permanent and whether, and to what extent, other elements of the safety net (including the regulatory and supervisory framework) need to apply more fully and in more potent form to such entities. These issues are being addressed as part of the work by the FSB regarding the potential regulation and oversight of the shadow banking system, with specific recommendations expected by 2011.

Appendix Table 1. Expansion of guarantees during the recent crisis in selected OECD countries

Type of institution	Type of claim	US	UK	GE	FR	AU	NZ	IR	CA	JP	NL	CH
Banks	Retail deposits[6]	●	●	●	●	●	○	●	⊗	⊗	●	●
	Interbank borrowing	○		○	○[4]	○		○				
	CP	○	○	○	○[4]	○	○	○	○		○	
	Unsecured bonds	○	○	○	○[4]	○	○	○	○		○	
Life Insurance companies	Policies	●[1]	⊗[3]	⊗	⊗				⊗	⊗		
	Unsecured bonds	○[2]		○			○		○[5]			
Non-life Insurance companies	Policies	⊗	⊗[3]		⊗	●			⊗	⊗		
	Unsecured bonds	○[2]		○			○					
Securities firms	Securities held	⊗	⊗[3]	⊗	⊗			⊗	⊗	⊗	⊗	
Pension funds	Pension claims	⊗	⊗							⊗		⊗
MMF	Certificates	○										
ABS	Securities		○									

Notes: ● indicates permanent guarantee arrangement currently exists, which has undergone significant changes in response to the recent crisis.

⊗ indicates permanent guarantee arrangement that has remained broadly unchanged during the crisis.

○ indicates guarantee arrangement temporarily made available in response to the crisis.

1) The National Association of Insurance Commissioners (NAIC) changed the coverage cap for annuities from $100 000 to $250 000 and established a new $300 000 cap for long-term care and disability insurance in 2009.
2) Guarantee available to insurance companies that are subsidiaries of a financial holding company.
3) Some slight changes in coverage limits.
4) Stand-alone guarantee provided to Dexia.
5) The Canadian Life Insurers Assurance Facility was a temporary program that was launched in May 2009 and expired in December 2009. It was open to all regulated life insurance companies, but it was not used.
6) New rules under EU Directive 2009/14/EC took effect at the end of 2009 calling for coverage of the aggregate deposits of each depositor to be set at a level of EUR 100.000 by 31 December 2010.

Source: OECD Secretariat estimates based on FSB' database on financial sector rescue plan (as of June 2010); OECD (2010); Levy and Schich (2010); and websites of national public authorities.

Annex 2

WHAT IS THE EXTENT OF EXPLICIT GOVERNMENT SUPPORT FOR GUARANTEE ARRANGEMENTS?

There is a strong public interest in the proper functioning of guarantee arrangements, be they of private or public nature, and this situation implies that an implicit guarantee may exist under some circumstances, even if the explicit support is limited.

While measuring the extent of implicit guarantees is very difficult, if not impossible, measuring the extent of explicit government involvement in guarantee arrangements is not straightforward either, not least because the support can be provided in an indirect form. Governments are involved in various aspects of the arrangements. They may operate the arrangements directly, develop related regulations, influence the management of, and provide back-up funding for these arrangements. As a general rule, there exists some specific legislation applying to guarantee arrangements and many arrangements report to, or are supervised by, public authorities. Some types of financial institutions are required to obtain third-party guarantees for part of their liabilities in order to operate. For example, regulated deposit-taking institutions are typically required to participate in deposit insurance arrangements.

Some empirical estimates of direct government support are available for certain types of guarantee arrangements, and they typically focus on scheme management and funding aspects. For example, a World Bank survey of 76 credit guarantee schemes in 46 countries shows that governments are involved in either funding or managing such arrangements in about half and one fourth, respectively, of the arrangements surveyed (Beck *et al.*, 2010). Only 21 arrangements out of the 76 surveyed have no government involvement at all, as measured by the criteria considered in that study. As regards deposit insurance arrangements, the World Bank database on financial system structures categorises management as fitting into one of three categories: public, private or mixed. The assessment is based on responses by national public authorities to a questionnaire that includes the question "*Who manages the insurance fund? Is it managed....(a) solely by the private sector (b) jointly by private and public officials (c) solely by public sector*". According to the most recently available responses, the management of deposit insurance arrangements in 20 selected OECD countries falls more or less equally into one of these three categories, with publicly managed arrangements slightly dominating, however. Unfortunately, the data do not allow one to extend coverage of this analysis to other types of guarantee arrangements.

Annex Table 2 shows the results of a similar type of empirical assessment, this time not relying on survey responses, but on specific observed institutional aspects. In particular, this measure focuses on the role of the government in the composition of the Board of the agency that is operating the arrangement, where there is a separate agency, or in the direct operation of the arrangement, where there is no separate agency. The results of the World Bank database-assessment are generally confirmed in regard to deposit insurance: the management of deposit insurance arrangements is characterised by considerable government influence. Looking across different types of guarantee arrangements, one finds that, in fact, government involvement in deposit insurance arrangements may be more pronounced, based on the specific criterion used here.

Government influence appears to have increased over time by some measures. More recently set-up deposit-insurance arrangements have tended to have strong government involvement, more often than not. In this context, it should be noted that the principles developed by IADI and the BCBS emphasise that arrangements should be insulated *both* from undue political and industry influence, suggesting that

some degree of government influence, as opposed to a purely private industry-based solution, is regarded as preferential.

As regards funding, a very limited number of arrangements other than deposit insurance arrangements have a government-provided, back-up funding facility (Annex Table 3). In fact, where there are such back-up facilities for investor protection arrangements, such as in the case of Korea, Denmark and the Netherlands, the same agency operates deposit insurance and other types of arrangements. There exist public back-up funding facilities in the case of some non-life and life insurance policyholder protection arrangements, but no such options are explicitly foreseen for pension fund policyholder protection.

Annex Table 2. Government influence on selected management aspects

	Deposit Guarantee	Investor Protection	Life Insurance Policyholder Protection	Non-life Insurance Policyholder Protection	Pension Guarantee
Austria	Private				
Belgium	Mixed				
Canada	Public				
Denmark	Mixed				
Finland	Private				
France	Private				
Germany	Mixed				
Ireland	Public				
Italy	Private				
Japan	Mixed				
Korea	Public				
Mexico	Public				
Netherlands	Public				
Norway	Private				
Poland	Mixed				
Spain	Mixed				
Sweden	Public				
Switzerland	Private				
United Kingdom	Public				
United States	Public				

Notes: The text in the column for deposit insurance indicates the assessment made in the World Bank financial structure database regarding the management of the guarantee arrangement. The colour shading provides a simple assessment of government influence in the composition of the Board of the agency operating the guarantee arrangement. The darker the shade, the greater the influence of the public sector on the composition of the Board. Incidentally, the finding that the management of investor protection arrangements is characterised by relatively strong government participation results from the fact that deposit insurance and investor protection arrangements are in several cases conducted by the same agency.

Board members of agency in charge of guarantee arrangement appointed by (private) member institutions.

Board members appointed i) from member institutions and ii) by the government (including central bank).

Board members appointed i) from non-member and member institutions and ii) by the government.

Public officials are part of the board and/or government-owned institutions administer arrangement.

Government (including central bank) directly operates the arrangement.

Source: OECD Secretariat assessment based on International Association of Deposit Insurers, Oxera (2005, 2007), Stewart (2007), and websites of various agencies.

The different types of measures discussed above are useful, among other things, as they provide some reference for assessing the potential contingent liabilities for the government from guarantee arrangements that are not fully funded *ex ante*. In this context, it seems reasonable to assume that the higher the degree of government involvement in the governance and funding of guarantee arrangements, the higher the likelihood that the government will act as a guarantor of last resort. That said, the measures discussed above are very crude and, in any case, they focus only on aspects of the *explicit* government support during normal times. The recent financial crisis has shown, however that under certain circumstances, government support will be extended for specific guarantee arrangements, regardless of whether any explicit government support had previously existed.

Annex Table 3. Explicit back-up funding from the government for guarantee arrangements

In selected OECD countries

	Deposit Guarantee	Investor Protection	Life Insurance Policyholder Protection	Non-life Insurance Policyholder Protection	Pension Guarantee
Austria	○	○			
Belgium	○	○			
Canada	●	○	○	○	○
Denmark	●	●		○	
Finland	○	○			
France	○	○	○	○	
Germany	○	○	○		○
Ireland	○	○		●	
Italy	○	○			
Japan	●	○	●	●	○
Korea	●	●	●	●	
Mexico	●				
Netherlands	●	●			
Norway	●	○		●	
Poland	●	○	○		
Spain	●	●	○	○	
Sweden	●	○			○
Switzerland	○				○
United Kingdom	●	●	●	●	○
Unites States	●	●	○	○	○

Notes: ● indicates that the arrangement has explicit back-up funding from the government
○ indicates that the arrangement has no explicit back-up funding from the government
A blank space indicates that relevant arrangement does not exist

Source: OECD Secretariat estimates based on IADI; Oxera (2005, 2007) and Stewart (2007) and websites of various agencies.

Notes

1. For example, in the United Kingdom, deposit insurance arrangements did not avoid a bank run, in part because of very limited maximum coverage levels. In that country, as well as in all but eight of the 32 jurisdictions participating in the CMF in October 2008, deposit insurance coverage levels were subsequently raised.

2. Some types of insurance were difficult to obtain or ceased to be available at all. Trade credit insurers withdrew their services from the market during the crisis. Financial guarantee insurance, which backed almost half of all municipal debt in the United States at one point, became essentially unavailable, as the private financial institutions that had been lending their top-ratings to debt issuers were struggling for their own survival and lost that (top) rating, which formed the basis for their financial guarantee activity.

3. Theory suggests that this response on the part of lenders may be perfectly rational. Stiglitz and Weiss (1981) first raised this point in their seminal article, which presented arguments why banks would be reluctant to rely on higher interest rates to address risks above their comfort level. In particular, the authors showed that in a market otherwise in equilibrium, but characterised by asymmetric information, it may be rational for banks to engage in credit rationing of the sort whereby some borrowers are denied access to credit regardless of their willingness to accept more stringent terms. The rationale is that by relying solely on the rationing effects of higher interest rates banks may succeed only in driving out higher quality borrowers, leaving behind a riskier loan portfolio (*i.e.* adverse selection).

4. In fact, there will often be several schemes in place in any given country, and ownership, management, and funding structures will tend to vary widely from one scheme to another. Formal credit guarantee schemes date back to at least the mid-19th Century.

5. A thorough analysis of the pros and cons of establishing policyholder protection schemes, by taking a sector-specific perspective, was provided in OECD (2001). This report was motivated by the observation that there was an apparent trend towards the creation of such guarantee schemes, apparently “mostly triggered by the failure of one or more of the larger insurance companies in the countries” (OECD, 2001, p.20).

6. Such promised returns could be equivalent to zero, in which case the amount of accumulated savings at retirement would be guaranteed not to fall below a certain level. One advantage of such guarantees is that they can protect retirement income against major investment losses and thus, by enhancing savers’ appreciation of and confidence in DC pension arrangements, can also boost the demand for such plans (the stimulation of such demand is yet another financial policy objective). Related discussions have revealed that the rationale for any such return guarantee depends critically on the overall design of the pension system and, in particular, whether there are already strong benefit guarantees embedded in public pensions, old-age safety nets, occupational defined-benefit pensions, and some insurance products that may be bought during the working years, such as deferred annuities.

7. Principles guiding the design aspects of deposit insurance arrangements have been developed jointly by IADI and the BIS, and a methodology for assessing compliance with these principles has now become available (BCBS and IADI, 2011).

8. The figure shows the USD equivalent of the legal or “political” maximum deposit guarantee coverage as of early January 2011, mid-September 2008 and early-December 2008. Bilateral exchange rates for end December 2010 are used for the conversion of national currency amounts. The limits include political commitments and those for temporary schemes introduced in response to the financial crisis. The limit shown for New Zealand (of 500 000 NZ dollars) refers to the maximum amount paid in the event of a default by an approved institution that is a registered bank. The maximum paid in the case of default of an approved institution that is not a bank is only half that amount; all seven institutions that initially opted into the extended NZ Deposit Guarantee Scheme were non-banks. As regards the political commitment to provide unlimited guarantee coverage (in the chart illustrated for simplicity by bars going up to USD 1 million), the classification naturally entails some judgement, as the coverage increases

announced through policy statements did not necessarily involve legal changes. In this regard, the authors follow the classification as unlimited guarantee coverage published in FSB (2010). For example, in Germany, the government announced on 5 October 2008 that "the state guarantees private deposits in Germany". No formal time limit was specified for that commitment and it was not accompanied by any change in law. Also in Germany, it should be noted, widespread voluntary arrangements provide additional coverage as compared to the official, obligatory coverage limit that currently stands at EUR 100.000. Thus, in that country, in practise, the coverage limit depends on the institute in question (see also Deutsche Bundesbank, Monthly Report, July 2000). For Greece, on 6 October 2008, the Prime Minister confirmed the earlier statements of the Minister of Finance regarding a full guarantee of deposits. No formal time limit was specified, however, for that commitment and it was not accompanied by any change in law. For Hungary, the assessment is based on the Letter of Intent of the government of Hungary to the International Monetary Fund as of 4 November 2008. In the case of Portugal, the classification as unlimited political guarantee made by FSB (2010) is not followed here. While a communiqué by the Portuguese Ministry of Finance and Public Administration "Initiatives for Strengthening Financial Stability" (October 12, 2008), available at *http://www.c-ebs.org/getdoc/63dfdf04-8225-4c89-a00a-8cfe620f4ba0/2008-10-12-Portuguese-initiatives-to-strenghten-fi.aspx,* included indeed a form of political guarantee, the same communiqué announced an increase of the official coverage to EUR 100 000, which was subsequently translated into legislation, Portuguese authorities therefore do not consider that "unlimited guarantee coverage" describes the situation after October 2008. For Italy, the limit shown for January 2011 is in fact the limit that came into effect in May 2011.

9. The financial system is most often described in terms of the functions it performs rather than in terms of the types of institutions, as institutions evolve over time, while functions are more or less stable.

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