MANAGING CRISES WITHOUT GOVERNMENT GUARANTEES—
HOW DO WE GET THERE?

by

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Abstract

Experience illustrates that, for successful crisis management, there is no substitute for early intervention and, if possible, a private sector solution in preserving value in the firm and limiting externalities. Early intervention, in turn, calls for strong supervision. Even with a much stronger cross-border resolution process, some type of contingent arrangements in reserve will continue to be necessary. Despite their associated problems, guarantees and market backstops have been an important element in preserving liquidity and restoring market functionality and it would be difficult to manage financial crises without them. Other forms of intervention are likely to be more intrusive.

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OECD work on financial sector guarantees

OECD work on financial sector guarantees has intensified since the 2008 global financial crisis as most policy responses for achieving and maintaining financial stability have consisted of providing new or extended guarantees for the liabilities of financial institutions. But even before this, guarantees were becoming an instrument of first choice to address a number of financial policy objectives such as protecting consumers and investors and achieving better credit allocations.

A number of reports have been prepared that analyse financial sector guarantees in light of ongoing market developments, incoming data, discussions within the OECD Committee on Financial Markets. The reports show how the perception of the costs and benefits of financial sector guarantees has been evolving in reaction to financial market developments, including the outlook for financial stability. They are available at www.oecd.org/daf/fin.

- Financial safety net interactions
- Deposit insurance
- Funding systemic crisis resolution
- Government-guaranteed bank bonds
- Guarantees to protect consumers and financial stability

As part of that work, the Symposium on “Financial crisis management and the use of government guarantees”, held at the OECD in Paris on 3 and 4 October 2011, focused on bank failure resolution and crisis management, in particular, the use of guarantees and the interconnections between banking and sovereign debt. Conclusions from the Symposium are included at the back of this article. This article is one of nine prepared for presentation at this Symposium.

- Managing crises without guarantees: How do we get there?
- Sovereign and banking debt interconnections through guarantees
- Costs and benefits of bank bond guarantees
- Impact of banking crises on public finances
- Fault lines in cross-border banking: Lessons from Iceland
- The macro-prudential authority: Powers, Scope and Accountability
- Effective practises in crisis management
- The Federal Agency for Financial Market Stabilisation in Germany
- The new EU architecture to avert a sovereign debt crisis
1. Introduction

I want to thank the conference organizers for inviting me to this very timely and relevant conference. I will be expressing my own views, and not those of the Federal Reserve System or the Federal Reserve Bank of New York.

The times are extraordinary, and the conference agenda reflects it. The years of financial turbulence that we have experienced and continue to experience have illuminated both the power and the limitations of government intervention in managing financial crises. These years have illustrated how much more we need to understand about good design principles for intervention and sound strategies for the restoration of financial and banking market function following a crisis. And these years have highlighted the interaction between the fiscal condition and capacity of countries and the size and health of the domestic financial system. The conference agenda touches on all of these.

I speak of government intervention broadly, because the answer to the provocative question I am to discuss—how can we conduct crisis management without financial guarantees—depends a great deal on which types of government intervention we hope to avert. Certain guarantee or contingent arrangements can short-circuit incipient instability or stabilize already roiled financial institutions and markets; we do not want to end them. Other interventions are more intrusive and involve more socialization of loss; we want to reduce their necessity.

Guarantee has a legal meaning—for example, the Federal Reserve is not authorized to issue a guarantee—but I will use the word more broadly to describe contingent arrangements. Definitions of guarantee are variations of: “a warrant, pledge, or formal assurance given as security that another's debt or obligation will be fulfilled”; in the financial sector, that primarily means credit risk protection.

Guarantees, insurance and options have similar structures. They are contingent, they have prices and triggers, and the payout is meant to cover a specific risk. Because guarantees, like insurance, change the risks to the guaranteed party and its creditors, both third-party guarantees and insurance can change the affected parties’ behavior in an adverse way, and therefore create moral hazard. Thus, the provision of a guarantee also involves various control activities - underwriting, monitoring, imposing penalties for deviation from terms - intended to correct those incentives. The cost of the guarantee therefore is not only the cost of hedging and absorbing credit risk, but also the costs of control activities and an adjustment for any social efficiency gains or losses.

One reason that I draw the connection between guarantees, insurance and options is that the theory and technique for valuing insurance and options have advanced substantially in the last three decades. Thus, guarantees can in concept be valued. I stress “in concept” because those valuation efforts are still approximate. But the measures show promise. For example, Deborah Lucas and Robert L. McDonald in a 2006 Journal of Monetary Economics paper used a “stress value at risk” measure to capture the risk in the implicit government guarantee to Fannie Mae and Freddie Mac and obtained values that indicated the large and growing risk of those institutions. The value of a guarantee, even an approximation of its value, provides a potentially powerful signal of risk to the financial authorities.

Let me now turn to the US experience during the recent financial crisis to describe an approach to characterizing the spectrum of government interventions.

2. The US experience with intervention during the 2008-09 financial crisis

Of course, no one can do justice in a few minutes to the unprecedented central bank and government interventions during the 2008-09 financial crisis. Fortunately, much information is available on the
internet; for example, www.federalreserve.gov contains a section called “Credit and Liquidity Programs” with a wealth of detail on the Fed’s actions during the crisis.

The US employed four major types of interventions in the financial crisis. The first interventions were expanded programs providing liability insurance. The Federal Deposit Insurance Corporation (FDIC) raised the standard deposit insurance coverage limit. The FDIC established a Temporary Liquidity Guarantee Program with two arms - a transaction (checking) account program that effectively covered corporate deposits and a debt guarantee program that covered unsecured short- and medium-term financial company debt. In addition, the US Treasury offered insurance for money market mutual funds to curb “run risk” in those funds.

The second interventions were the market liquidity facilities provided by the Federal Reserve. While the Fed has authority to lend on a collateralized basis to banks, a large proportion of US short- and medium-term funding for financial and nonfinancial firms now occurs in markets. The triparty repo market finances securities holdings for broker-dealers; the commercial paper market provides working capital for corporations; the asset-backed commercial paper and securities markets fund receivables and loans arising in business activities.

Under section 13(3) of the Federal Reserve Act, in unusual and exigent circumstances, the Federal Reserve can make loans to nonbank borrowers. As funding markets came under duress in 2008 and 2009, the Federal Reserve acted in a series of these markets. The common problem in each market was concern that an obligation would not be repaid at maturity because the obligor might experience either credit problems or liquidity constraints.

The interesting “contingent” aspect of these liquidity facilities was the pricing. The price, expressed as a borrowing rate, was set to stand well above the interest rates that prevailed prior to the crisis, but well below the rates then posted in strained markets. The pricing created a dynamic in which the availability of the facility eased funding pressures, borrowing rates in that market began to fall, and as markets gradually normalized, the market rate eventually fell below the rate charged by the Federal Reserve. With that fall in the market rate, borrowing tailed off and the facility gradually wound down. The volume of transactions in the facility and the market pricing gave the Federal Reserve—and market participants—insight into the program’s impact and the market’s recovery.

The third interventions were more firm specific: loans and other support to AIG, assistance to the Bear Stearns merger and an asset guarantee program announced for two financial institutions and implemented for one. The fourth and most well-known interventions were the capital injections in financial firms using funds from TARP, the US government’s Troubled Asset Relief Program.

These various interventions can be arrayed along two dimensions. The first is the nature and extent of loss absorption inherent in the design of the intervention—just how much “tail” or catastrophe risk the government is taking on. For deposit insurance arrangements, long experience suggests that the cost of the “tail” of losses during even a very distressed period is low relative to the benefits of prevention of runs and contagion. Similarly, the Fed’s market liquidity facilities were meant to provide a backstop for market funding, predicated on the soundness of the underlying collateral assets and their margining. Moreover, both types of programs required little upfront investment of cash. In contrast, the direct loan to AIG, while collateralized, and the TARP investments involved substantial risk-taking and massive funding.

The second dimension is the economic cost of the intervention—just how intrusive the intervention is. All forms of intervention require some kind of underwriting, monitoring and enforcement, and many distort private market incentives and function, as I noted earlier. Ideally, I would include measures of both administrative costs and economic distortion in total cost.
Each intervention involved administrative burdens of varying extent. The FDIC’s and Treasury’s liability insurance programs rested largely on the existing licensing and supervision of regulated financial companies. The Federal Reserve’s liquidity facilities rested on eligibility standards for borrowers and collateral, with a heavy reliance on the existing market infrastructure and processes for controls. By contrast, the firm-specific interventions required significant firm and examiner resources and extensive new financial controls. The TARP capital injections involved not only statutory constraints, most notably on executive compensation, but also a high level of scrutiny through public reports by the Congressional Oversight Panel and the Special Inspector General for TARP.

There are actual and potential programs that fall between the poles on both dimensions. The Term Asset-Backed Securities Loan Facility (TALF) created by the Federal Reserve to restart asset securitization markets lent to investors against asset-backed securities for terms of three and five years. Arguably, the Fed took on more risk of loss with the term of the loan, its non-recourse nature, and the type of collateral than it did in its other facilities. For that reason, TALF was complemented by arrangements for any workouts of defaulted collateral and was supported by TARP funding. On the administrative side, both borrowers and collateral had to meet eligibility requirements; the Federal Reserve Bank of New York extensively reviewed potential collateral and conducted compliance reviews at dealers arranging TALF borrowing.

The types of interventions for any given country will reflect its financial system structure and its institutional setting. The US approach reflected the heavy reliance on markets and nonbanks for financing specific to our financial system. In addition, judgments about how much government loss absorption and intrusion are appropriate in central bank and government interventions will reflect country-specific circumstances and preferences.

As a final note, what didn’t work well in the US experience were implicit guarantees—that is, assumptions that the government would protect holders of certain liability and equity instruments that had no explicit guarantee. Official actions that laid bare the absence of the explicit guarantee—the imposition of losses on equity and subordinated debt investors when Fannie Mae and Freddie Mac were taken into conservatorship and on senior unsecured bondholders in the resolution of Washington Mutual—contributed to the dynamic of escalating panic in Fall 2008. Each action was one more shock at the time, but the investors’ shock also pointed to the lack of hoped-for monitoring and market discipline by debt and equity investors in the run up to the crisis.

3. **Contingent arrangements and financial institution failure**

Guarantees as I described them earlier are about protection against failure to meet financial obligations, that is, against default and insolvency. The alternative to escalating government intervention during the crisis was accepting a higher rate of financial institution insolvencies. The consequences of multiple failures of large, complex and international organizations were largely unknowable. They included the likelihood of disruption of systemically important financial activities (such as payment services, where the customer need is immediate and customers cannot quickly switch to another provider) and the almost certain contagion to other institutions. The September 2008 bankruptcy of Lehman Brothers Holdings, Inc., underscored the difficulty of controlling the ramifications of the failure of just one large cross-border institution and the cost, complexity and extreme inefficiency of the existing cross-border insolvency process.

The “too big to fail” problem—the expectation that a large financial institution insolvency would be too disorderly and too destructive of wealth for financial authorities to risk—has frustrated financial authorities, legislators, and academics since at least the failure of Continental Illinois Bank in 1984. In the
wake of the crisis, the frustration is now shared by the public. Having intervened so forcefully in the crisis, financial authorities and others also worry that moral hazard has increased as a result.

An important avenue to tackle the too-big-to-fail problem is to improve the feasibility of cross-border resolution of large financial firms. The Financial Stability Board (FSB) in 2009 commissioned work on improving the process for cross-border resolution of systemically important financial institutions. The work since then is reflected in a set of proposed principles published for consultation by the FSB in July 2011, Key Attributes of Effective Resolution Regimes.

The Key Attributes paper is more than a set of principles or emerging standards; the paper also maps out a series of actions to be taken in order to improve the feasibility of resolving a systemically important financial firm. The goal is to take actions that ease and speed the resolution of the largest firms while preserving critical functions and reducing the contagion and destruction of value that occurs in liquidation and, most important, to do so without recourse to public funds that exposes taxpayers to risk of loss.

The FSB proposes that all jurisdictions have a set of resolution powers, among them, the ability to create a bridge or similar institution, into which the healthy parts of a financial firm, including its critical activities, can be placed. In addition, the resolution authority needs the power to transfer, sell and restructure all or part of the firm. These powers have been used successfully by the FDIC in the US, and a number of jurisdictions have adopted or have plans to adopt similar powers. The increased international use of bridge institutions is likely to require jurisdictions to recognize bridge banks from other countries, in order that some business functions, such as payment activities, can seamlessly transition to the successor bridge institution.

The bridge institution concept is quite powerful. The FDIC recently published a paper in its Quarterly that described how it could have handled the Lehman bankruptcy using its new powers under the Dodd-Frank Act to resolve systemically important nonbank financial institutions. The FDIC outlines how it could have created a bridge institution for the Lehman holding company, how it could have transferred to the bridge Lehman’s equity holdings in its key subsidiaries, including its major broker/dealers, potentially avoiding their insolvency, and how it could have funded the London broker/dealer, a key problem following Lehman Holdings’ bankruptcy in New York. Selling the broker/dealer subsidiaries as going concerns would preserve far more of their value and continuity of operations, as illustrated by the sale of most of Lehman’s US broker/dealer, which did not immediately enter insolvency.

The FDIC’s article offers a promising path toward a workable cross-border insolvency process, a potential solution to a daunting problem, especially when viewed against the meaningful, but small progress made in the efforts of the past two decades. To build out the FDIC’s proposed path to a workable cross-border insolvency process requires conforming changes to laws and rules across most jurisdictions. I do not want to minimize the challenges in developing the approach further, but simply highlight its potential to ameliorate a problem we would all like solved.

The FSB also proposes to make the process of recovery planning by firms and resolution planning by financial authorities an important principle. This planning, already underway for many systemically important financial firms, is being carried out by firm-specific crisis management groups, made up of regulators and resolution authorities from the jurisdictions where a given firm has its principal operations. The FSB also sets a broad direction for involving and communicating with host country jurisdictions where the host authorities view the financial firm to be of local systemic importance.

The FSB further proposes that the home country authorities, collaborating and coordinating with the crisis management group, produce an annual resolvability assessment. This assessment would identify a
set of impediments to resolution and provide a list of follow-up actions, potentially some for the firm, but also some for the jurisdiction. Progress on the follow-up actions would be assessed in the following year.

The stated goal of the FSB’s work is to make possible the resolution of systemically important financial institutions without exposing taxpayers to risk of loss. That will not happen overnight. In my view, we should be striving year by year to improve the feasibility and possibility of cross-border resolution. That means a dynamic assessment process that seeks improvement against the current baseline and addresses key changes in the firm and in the industry that either facilitate or complicate resolution. A stronger, more common resolution framework, a meaningful resolution planning process, and an annual resolvability assessment to ensure progress should make resolution a stronger alternative to government intervention.

4. Final thoughts on crisis management without government guarantees

Financial authorities are never really out of the crisis management business. The recent US experience with crisis has illuminated vulnerabilities in the US financial system, such as the role and structure of the government sponsored enterprises (GSEs), Fannie Mae and Freddie Mac, and the need for reform in the triparty repo market and the money market mutual fund sector.

The systematic search for such points of vulnerability and new ones should be an important and permanent part of the work at the domestic and the international levels by financial authorities. What we need in the financial system is defence in depth, a series of actions both macro- and micro-prudential, that help prevent crises and help us manage them more effectively when they occur. The preventive measures include the new proposed Basel rules on capital and liquidity, intended to make financial institutions more resilient, especially systemically important firms; the international effort to strengthen the market infrastructure and supervisory oversight of financial derivatives; in the US, the extension of comprehensive supervision to systemically important nonbank financial firms; and our ongoing efforts to reform the GSEs, the triparty repo market and the structure of money market mutual funds.

So let me conclude with some thoughts on the question of how close we might get to crisis management without government guarantees. For me, the paradigm of managing crises was the US response in the early 1990s to its real-estate and leveraged buyout problems; while smaller than the more recent problems, the potential losses then threatened to engulf some of our largest banks. The paradigm consisted of three interconnected elements: identifying and isolating the problem assets for dedicated work-out management; replenishing the capital and liquidity of the firm; and drawing up new and credible business plans demonstrating the future profitability of the firm. The supervisors sought to be pre-emptive and proactive—propelling firms to acknowledge problems and take actions earlier than they might otherwise would have.

Where this paradigm was applied, we avoided failure. That experience illustrates that there is no substitute for early intervention in preserving value in the firm and in limiting externalities and other spillovers. Early intervention calls for strong supervisory oversight, as envisioned by the Basel Committee on Banking Supervision. It is significant that the FSB’s Key Attributes paper on resolution highlights the important role of recovery planning by firms. Recovery planning and the dialogue with and among supervisors that accompanies it should facilitate early intervention. The recovery plan will already be on paper and the supervisory dialogue begun even before the firm starts to experience difficulty.

Early intervention will also be essential in resolution if recovery efforts fail. The Key Attributes highlights the need for resolution authorities to be able to act before technical insolvency. Resolution planning should once again facilitate that difficult decision to place a firm into an insolvency proceeding when it is necessary.
Second, government intervention measures such as those I described at the outset cannot substitute for the hard work that goes on in a private restructuring or in resolution. For example, even after the passage of a massive TARP fund and the injection of capital into the largest banks, market pressures continued for some banks, and those pressures only eased with more intervention, the thorough Supervisory Capital Assessment Program, also called the stress tests, for which results were disclosed, and a plan for specific capital actions by some firms. Problems need to be identified, capital and liquidity raised, new business plans put in place and old ones abandoned. Delays in taking and executing these hard, for the firm often life-changing, decisions contribute to the necessity for further intervention.

Third, I believe having some types of contingent arrangements in reserve will continue to be necessary, even with much a much stronger cross-border resolution process. The role of deposit insurance in stemming financial crises is well-documented. A period of multiple financial institution failures, even with a strong resolution process, might trigger the same risk aversion in funding markets that we saw in 2008 and 2009. The ability to backstop key funding markets could prove valuable, and the Dodd-Frank Act preserved for the Fed authority under 13(3) to provide market liquidity facilities even while eliminating other aspects. But in designing these interventions, an exit strategy needs to be clear. Leaving those arrangements in place too long distorts incentives and erodes private market function.

And for those contingent arrangements that are ongoing, such as deposit insurance, measuring the value of the guarantee could be an important test of overall design of the guarantee and the accompanying monitoring regime. Continuing to refine our ability to value guarantees would provide a useful measure for supervisory authorities and for the deposit insurers, especially when they consider changes to deposit insurance. The value of guarantees also would complement other measures being developed for financial stability monitoring. Further, I suggest that all guarantees should not only be measured, but documented and reported, and not left as implicit.

Fourth, it will still be important to have a set of progressive actions that government can turn to if human judgment or the tools available at a time of incipient financial crisis prevent financial authorities from defusing the crisis. While such measures buy time and cannot substitute for more permanent solutions, sometimes time is the scarce resource. Deterioration in financial conditions - at individual financial institutions and in the economy - is inevitable as a crisis wears on in a financial system, given its leverage. Understanding that, financial authorities should feel great urgency to apply the progressive measures when they are needed, doing so with the force and size that truly arrest the crisis forces, and to entertain the usually difficult measures needed to resolve the fundamental problems behind the crisis.
Symposium on “Financial crisis management and the use of government guarantees”*

(OECD, Paris, 3 and 4 October 2011)

Background

Almost three years after what many observers had considered the peak of this global financial crisis, we are still waiting for normalcy to prevail. Instead, tensions in funding markets have risen very significantly in recent weeks mainly as a consequence of the sovereign debt crisis in Europe. Currently, we find ourselves once again contemplating guarantees, with some observers calling for the creation of explicit government-supported arrangements for guaranteeing bank debt, such as those temporarily put in place by many governments in 2008/09. In this context, the Symposium on “Financial crisis management and the use of government guarantees” held on 3 and 4 October 2011 turned out to be very topical, certainly more topical than policy makers would have wished.

The Symposium was characterized by an open and frank dialogue between policy makers, policy consultants and other academics on the policy response to the financial crisis, the use of guarantees, failure resolution, banking and sovereign debt interconnections, as well as other financial safety net aspects. The mix of participants from academia and the public and private sector, and both from the economic and the legal profession helped participants appreciate some of the institutional details that get lost in much of the public debate on the topic. Numerous policy suggestions were made as to how to improve the use of government-supported guarantees and the design of the financial safety net, so as to improve existing mechanisms to avert future crises or check them at an early stage. One key message was that guarantees can be a powerful policy tool, but that they need to be employed with limits and priced appropriately.

Costs and benefits of the use of government guarantees

The use of guarantees, where they worked well and where they precipitated other problems, were issues that came up throughout the Symposium. Together with measures to enhance liquidity and capital of financial institutions, sovereigns effectively provided the function of the guarantor of last resort for financial claims in response to the global banking crisis. Despite the rather ad hoc nature of some policy measures, the policy response helped avoid the worst outcome, which could have been a series of failures of systemically important financial institutions, with dire consequences for real activity. Despite their associated problems, guarantees have been an important element in preserving liquidity and restoring market functionality, and it would be difficult to manage financial crises without them. Moreover, other forms of intervention are likely to be more intrusive.

Nonetheless, guarantees were not without cost. Further to administrative costs, they created significant contingent potential liabilities for sovereigns, which was compounded by a failure to charge fees commensurate with the risk which created additional costs. The costs of such underpriced insurance included potential distortions to competition and incentives, which give rise to moral hazard and the potential for additional problems down the road.

Pricing government guarantees

In principle, pricing structures should be designed in such a way that the premiums paid by beneficiaries of guarantees reflect the costs that they would have incurred if markets had functioned properly. As it turns out, however, pricing was not always appropriate. For example, the case of Ireland has highlighted the risk of underestimating losses from already existing claims, but where the ultimate extent of losses arising from those claims is uncertain. Guarantees have also been introduced for new liabilities, such as bank bonds, in many OECD in an effort to help banks regain access to markets. This effort was generally considered a success. However, fees typically were set as a function of the characteristics of the issue or the issuer and, in practice, were on average broadly flat across countries. In Europe, an effort was undertaken to harmonise fee structures across borders, making them a close function of a measure of the history of credit default swap spreads for the issuer, with the explicit aim being to avoid competitive distortions between banks.
Unfortunately, the costs for banks of issuing such government-guaranteed bonds turned out to be significantly affected by the identity of the guarantor. This is not so surprising, as theory suggests that the market value of a sovereign guarantee is not only a positive function of the weakness of the borrower but also a positive function of the creditworthiness of the sovereign. Thus, to avoid competitive distortions, the strength of the sovereign should be taken into account in the pricing of government-provided guarantees.

Crisis management experiences and changes in the financial safety net

The costs and benefits of guarantees have to be weighed against the alternatives. In Iceland, for example, an all-encompassing guarantee would not have been credible. The more limited guarantee announced together with the resolution approach adopted implied that shareholders were wiped out and that unsecured non-priority creditors bore losses. The link between bank and sovereign credit risk was severed. Whether that approach was available elsewhere is questionable. In fact, extensive guarantees were in many cases introduced precisely because alternative tools for resolving severe problems were either not available or not trusted to work smoothly enough to avoid a systemic fallout. In particular, effective failure resolution mechanisms for some types of troubled financial institutions tended to be absent.

In the meantime, special legislation for dealing with stressed financial institutions has been introduced in many countries, which has successfully addressed some issues. For example, new institutions and legal frameworks have been introduced that facilitate the restructuring of stressed banks and the rescue of systemically relevant parts of banks. Other issues prevail, however, including the issue of how to resolve stressed large financial institutions in a cross-border context. For example, further reforms are needed for cross-border banking activities in the European Single Market, where the issue is to match the European passport for banks with a pan-European safety net including deposit insurance and supervision.

While use of guarantees was a central theme, the Symposium also analyzed other aspects of the design of safety nets. There is a need for policymakers to elaborate on the specific roles of the various safety net participants and stakeholders so as to better understand how the financial safety net should work during times of crisis. Moreover, the traditional three-tier safety net, consisting of a lender of last resort, bank deposit insurance, and a (micro-prudential) regulator-supervisor was considered incomplete, which led to calls for the creation of additional players or functions, including:

- a macro-prudential authority, with the power to alter the composition of central bank assets, to adjust capital adequacy and liquidity ratios, and to propose fiscal and structural changes affecting financial intermediaries.

- an institutionalized tiered systemic crisis insurance function, inspired by mechanisms developed for funding resolution of natural or man-made catastrophes. To limit moral hazard, a layered approach with self-insurance as the first layer, private insurance and reinsurance as another layer and the government as a reinsurer of last resort was suggested.

- a bank failure resolution fund, which would be separate from the general government budget and funded through ex ante contributions of financial intermediaries according to their systemic importance, to finance resolution measures that require the rapid availability of funds in systemic crises.

- an institutionalized investor of last resort, which would establish ex ante conditions for providing support and establish credible bounds to the extent of support in systemic crises, thus helping to legitimize future support measures and limit associated moral hazard.

* OECD Secretariat assessment, facilitated by the rapporteur James McCollum. The opinions expressed here do not necessarily reflect the official views of the Organisation or of the governments of its member countries. For further enquiries please contact Sebastian Schich at Sebastian.Schich@oecd.org.