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## MORE THAN ONE STEP TO FINANCIAL STABILITY

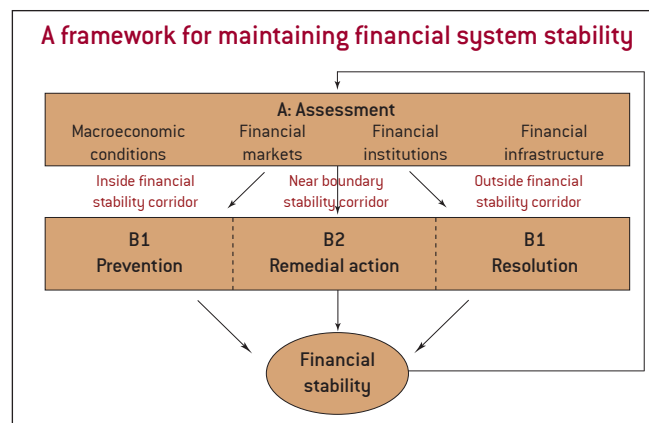
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**SUMMARY** The European Union is establishing a framework for safeguarding financial stability, including a new macroprudential supervisor, the European Systemic Risk Board (ESRB), and strengthened microprudential supervision through a European System of Financial Supervision (ESFS). This is a bold step towards a more effective early-warning system for imbalances such as a credit bubble. But the ESRB will lack binding powers, and the proposed microprudential framework may also lack impact. Early-warning systems will continue to be unreliable. Europe needs a legislative framework to resolve the insolvency of systemically important financial institutions (SIFIs). Other structural vulnerabilities revealed by the crisis also remain to be addressed.

### POLICY CHALLENGE

Effective financial supervision is essential but no early-warning system will prevent future crises. EU countries must therefore create enforceable mechanisms for resolving insolvent European cross-border SIFIs. A second priority is to ensure that the ESRB has the instruments it will need to mitigate systemic risks and vulnerabilities. Third, the European Central Bank will be at the heart of the ESRB, and the independence of euro-area monetary policy must be ensured, while the ECB's financial stability toolbox should be strengthened. Finally, the Commission's financial supervision blueprint must be aggressively implemented, so systemic risks are spotted early.



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**EUROPEAN UNION FINANCIAL-SYSTEM REFORM EFFORTS** now under way are designed to address the systemic weaknesses revealed by the global crisis<sup>1</sup>. They do so by establishing a framework for safeguarding European financial stability. The proposed reforms also represent part of Europe's contribution to G20 cooperation at the head-of-state level, a new, more inclusive process initiated at the Washington summit (November 2008) and continued at the London (April 2009) and Pittsburgh (September 2009) summits. This higher-level global governance – which replaces the G8 as the premier forum for international economic cooperation<sup>2</sup> – came to fruition in no small part through the efforts in October 2008 of French President Nicolas Sarkozy (who was then also President of the European Council) and European Commission President José Manuel Barroso.

Why are these reform efforts necessary – is there not already a framework in place to deal with financial difficulties? A key lesson of the global crisis is that the supervisory and regulatory framework in place prior to the crisis

failed to detect, to accurately calibrate, and to prevent the global systemic crisis. The pre-crisis framework comprised a series of lines of defence (shown by the rows in Table 1) against sources of systemic risk (columns, Table 1). The framework was designed and evolved over time as financial systems evolved. It is now evident that this framework failed to keep pace with modern global finance. All lines of defence failed to prevent and adequately address the kind of imbalances that created systemic risk and systemic events, including private risk management, market discipline, banking supervision, and market surveillance.

To address weaknesses, the European Commission proposed on 23 September 2009 legislation to improve existing microprudential supervision and to establish a macroprudential supervisor to oversee the entire European Union financial system. While the legislation creates new European entities and focuses on European priorities, it also reflects some of the principles of reform agreed by the G20 – as do reform proposals in the United States. Although EU

and US reforms are designed to address different financial structures, regulatory frameworks, and economies, they have common features (see Box 1 on page 4). These include creation of a macroprudential supervisor; improvement of microprudential supervision of financial institutions, especially systemically important financial institutions (SIFIs)<sup>3</sup>; regulation of over-the-counter derivatives markets; and reforms of rules-based capital adequacy and liquidity requirements.

**EFFECTIVE PREVENTION REQUIRES EARLY WARNINGS**

The key to preventing European crises is the establishment of a process to identify, monitor, and assess sources of financial risk and vulnerabilities that threaten financial stability, such as a housing market bubble. This is easier said than done. The broad experience with prevention and prediction of crises is not encouraging. There are no failsafe early-warning systems. Although improvements are possible and this should be pursued aggressively, it is unlikely that a reliable framework will be developed that can keep pace with financial innovation. Reform legislation should fully reflect this scepticism and reality.

The key to improving early-warning systems is the early identification of sources of financial imbalances before they become large enough to pose a systemic risk or create vulnerabilities (Table 2 provides a list of sources)<sup>4</sup>. Prior to the crisis, imbalances and vulnerabilities arose and accumulated in financial institutions, markets, and infrastructures, and it should

**Table 1: Pre-crisis oversight framework**

	Sources of global systemic financial risk		
	Global financial institutions	Global money and OTC derivatives markets	Unregulated activities
<b>Lines of defense</b>			
<b>Market discipline</b>	Partial	Primarily	Exclusively
<b>Financial regulation</b>	National with cooperation	Not really; over-the-counter transactions	No
<b>Prudential supervision</b>	National and home/host issues	N/A	No
<b>Market surveillance</b>	Indirect as participant	Direct; national and international	Indirect as participant

Source: Adapted from tables in Schinasi (2007), 'Remarks on causes and conditions for cross-border threats to financial stability', chapter in FRB Chicago Conference Volume.

1. These proposals are the outcome of the work of a high-level group appointed by President Barroso in the autumn 2008 led by Jacques de Larosière. See de Larosière (2009).  
 2. Paragraph 19 of the Pittsburgh communiqué.



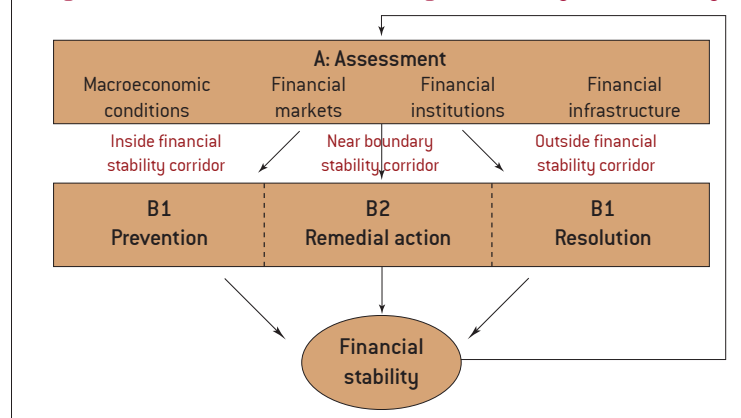
be expected that they will arise again in different forms and ways. But identification is not enough. Risks and their implications must be calibrated in terms of their potential adverse impact on economic stability. It is not well understood how to do this. Basic research will be required to develop methodologies and analytical techniques.

One way of envisioning a process for preventing and resolving problems is represented in Figure 1. It is essential that the process be a continuous one of information gathering, technical analysis, monitoring, assessment, and calibration. Because the ultimate objective is maintaining the stability of the economy, the process should encompass both economic and financial analyses, and take advantage of institutional knowledge about the financial system as a whole.

The process should be comprehensive and analytical (as illustrated by the top bar in Figure 1), and should entail information-gathering about, and monitoring of, the macroeconomy (and at times microeconomic aspects as well) and the various aspects of the financial system through supervisory, regulatory, and surveillance functions. Each of the financial-system monitoring components should cover both macroprudential and microprudential characteristics. The process must be systematic and forward-looking for possible sources of risk, and must calibrate the likelihood of risks and their adverse impact if not mitigated. This will not be easy to accomplish.

Table 2: Sources of risk to financial stability	
Endogenous	Exogenous
<p>Institutions-based:</p> <ul style="list-style-type: none"> <li>Financial risks                             <ul style="list-style-type: none"> <li>Credit</li> <li>Market</li> <li>Liquidity</li> <li>Interest rate</li> <li>Currency</li> </ul> </li> <li>Operational risk</li> <li>Information technology weaknesses</li> <li>Legal/integrity risk</li> <li>Reputation risk</li> <li>Business strategy risk</li> <li>Concentration risk</li> <li>Capital adequacy risk</li> </ul> <p>Market-based:</p> <ul style="list-style-type: none"> <li>Counterparty risk</li> <li>Asset-price misalignment</li> <li>Run on markets                             <ul style="list-style-type: none"> <li>Credit</li> <li>Liquidity</li> </ul> </li> <li>Contagion</li> </ul> <p>Infrastructure-based :</p> <ul style="list-style-type: none"> <li>Clearance, payment and settlement system risk</li> <li>Infrastructure fragilities                             <ul style="list-style-type: none"> <li>Legal</li> <li>Regulatory</li> <li>Accounting</li> <li>Supervisory</li> </ul> </li> <li>Collapse of confidence leading to runs</li> <li>Domino effects</li> </ul>	<p>Macroeconomic disturbances:</p> <ul style="list-style-type: none"> <li>Economic-environment risk</li> <li>Policy imbalances</li> </ul> <p>Event risk:</p> <ul style="list-style-type: none"> <li>Natural disasters</li> <li>Political events</li> <li>Large business failures</li> </ul>

Figure 1: Framework for maintaining financial system stability



3. *Microprudential* supervision focuses on individual financial institutions and other important components of the financial system, such as payments systems, exchanges and clearing houses. Its primary aim is to ensure the soundness of individual institutions. *Macroprudential* supervision focuses on the financial system as a whole. Its aim is to assess, monitor, calibrate and mitigate the adverse consequences of system-wide problems that pose a threat to financial-system functioning and stability, and ultimately to economic activity and stability. *Systemic risk* is the concern that financial (liquidity or solvency) problems in individual institutions or in key financial markets could pose a risk to the smooth functioning and stability of the financial system as a whole and ultimately the broader economy.

4. See Schinasi (2006), Chapters 4-6 for further details about such a framework. See Haldane (2004) and some later work for an alternative approach.



BOX 1: KEY ELEMENTS OF EU AND US PROPOSALS FOR REFORM

EU and US reform proposals have the same broad aims, but pursue significantly different approaches.

Elements of EU reform proposals<sup>5</sup>:

- *Macroprudential supervision*, through the creation of the European Systemic Risk Board (ESRB) – comprised of EU central bank governors and possibly chaired by the ECB President – with a mandate to assess systemic risks, to issue financial-stability risk warnings, and to recommend and monitor implementation of macro-prudential actions by national supervisory authorities.
- *Microprudential supervision*, through the creation of the European System of Financial Supervisors (ESFS), comprised of three new authorities – the European Banking Authority, European Insurance Authority, and European Securities Authority – to ensure consistency of national supervision and strengthened oversight of cross-border entities through supervisory colleges and agreement on ‘a European single rule book applicable to all financial institutions in the single market’.
- *Market reform* of over-the-counter derivatives – require standardisation and trading on platforms/clearing houses to make them more robust and transparent.
- *Raise international standards*, including regulation of alternative investment managers; amendments to capital requirements for trading-book exposures and highly complex re-securitisations<sup>6</sup>; enhanced disclosure of complex securitisation exposures; and bank remuneration policies.

Elements of US proposed reforms<sup>7</sup>:

- *Macroprudential supervision and regulation*, with the Federal Reserve assuming responsibility for microprudential supervision and regulation of all systemic firms, tighter prudential standards for large and interconnected firms, registration of hedge funds, and the creation of a Financial Services Oversight Council chaired by the Treasury to identify emerging macroprudential risks and coordinate agencies.
- *Market reform*, including enhanced transparency and strengthened incentives for securitisers (‘skin in the game’), and better regulation of credit-rating agencies and over-the-counter derivatives markets.
- *Consumer and investor protection*, with the creation of a Consumer Financial Protection Agency, and stronger and more uniform rules.
- *Crisis-management tools*, namely for non-bank resolution and revised emergency lending powers for the Federal Reserve (requiring written approval from the Treasury Secretary).
- *Raise international standards*, including through stronger and better-coordinated capital and liquidity standards and crisis-management arrangements.

ARE EU AND US MACROPRUDENTIAL REGULATORS CREATED EQUAL?

Although each macroprudential ‘regulator’ will be responsible for systemic-risk assessment and recommending changes to mitigate risks, they will not be ‘created equal’.

Explaining why requires some perspective on how the US regulator is being envisioned. Two changes are under consideration in the US: a broader oversight perimeter for the Federal Reserve and a new multi-agency Systemic Risk Council chaired by the US Treasury

Secretary. Under current plans, the members of the Council will likely include existing supervisory and regulatory bodies, each of them possessing policy instruments to bring about risk-mitigating changes: the Federal Reserve System, the Federal Deposit Insurance Corporation, the Securities and Exchange Commission, the Commodities and Futures Trading Commission, the US Comptroller of the Currency.

These agencies have overlapping responsibilities, competing interests, and are subject to various private and public influences. Conflicts will no doubt arise in assessing risks and deciding necessary actions. But all are federal agencies. Once consensus is reached, each has legal authority to effect change in financial institutions and markets.

The main decision-making body of the European Systemic Risk Board (ESRB), the General Board, will have voting members who are also top-level policymakers: the governors of national central banks, the president and vice-president of the European Central Bank (ECB), a member of the European Commission, and the chairpersons of the three European Supervisory Authorities. In addition there will be members of the Board without voting rights, one high-level representative per member state of the competent national supervisory authorities and the president of the Economic and Financial Committee. The ECB will be the secretariat of the ESRB and provide analytical support to the process of the identification and assessment of systemic risks and vulnerabilities.

5. See European Commission (2009a).

6. See European Commission (2009b).

7. See US Treasury (2008). Also see Schinasi (2009) and IMF (2009) for more details and analyses on these proposals.

8. European Commission (2009) also states, ‘The ESRB should therefore have access to all the information necessary to perform its duties while preserving the confidentiality of these data. The ESRB will be able to rely on the broad set of data already collected through the Eurosystem by the ECB on Monetary and Financial Institutions...’



But the similarities stop there. As stated in European Commission (2009), “The ESRB will not have any binding powers to impose measures on Member States or national authorities. It has been conceived as a ‘reputational’ body with a high level composition that should influence the actions of policy makers and supervisors by means of its moral authority.” It will have the mandate to assess systemic risks and access to the information required to assess Europe-wide risks and vulnerabilities (including microprudential information and data)<sup>8</sup>. But it will not have legal authority to force through change. Instead, national authorities are responsible for taking action. But they are not legally obliged to do so.

*‘The ESRB will assess systemic risks but will not have legal authority to force through change.’*

The ESRB will have authority to make policy recommendations. When it identifies a risk or vulnerability, it can make a formal recommendation about what needs to be done to reduce the risk and vulnerability and who should act. While a member country may not agree with an ESRB assessment and recommendation, it cannot simply ignore the call for action. The member state is required to express why it disagrees with the ESRB’s assessment and is not taking the recommended action. This could be an improvement over the *status quo* but, as mentioned, the ESRB’s recommendations are not binding. It is possible that in some cases this weakness could be overcome; Article 99 of the treaty provides the Council with the authority to make similar recommendations on

the basis of an assessment of the Economic and Finance Committee, where the ECB is represented. An improvement over the *status quo* could come about through a strengthening of the role of central banks in the ESRB. It is not clear that this will make a difference; Article 99 was not called on to encourage some member states to take policy actions during the crisis that were deemed to be necessary.

Despite the absence of binding policy instruments, it is possible that the ‘moral authority’ of the ESRB would also help to improve outcomes. Among the voting members, the ECB has an explicit mandate to oversee the smooth functioning of the Target payments system, and

has several years of experience in assessing sources of risks and vulnerabilities within the context of its semi-annual publication, the Financial Stability Review. In addition, other voting members from national central banks also having supervisory authority will be part of the assessment process. They have direct access to microprudential information on systemically important financial institutions and supervisory powers to affect change. By virtue of being on the Board, they will learn about the macroprudential risks and vulnerabilities and thereby be better informed to supervise financial institutions.

*‘No European country has an effective process for dealing with the insolvency of a SIFI in an orderly manner.’*

**IF IT BECOMES NECESSARY, IS EUROPE BETTER PREPARED THAN THE US TO RESOLVE THE INSOLVENCY OF SEVERAL SIFIS?<sup>9</sup>**

Another systemic vulnerability revealed by the global crisis is that no country in the world has an effective legal and enforceable process for dealing with the insolvency of a SIFI in an orderly manner. Consider the actions necessary in the US to restore financial stability and market functioning. Several SIFIs faced insolvency and there was no insolvency regime to resolve them. US authorities had to underwrite and provide bridge loans for mergers, extend Federal Reserve System loans, and recapitalize institutions with unprecedented amounts of taxpayer dollars. Despite these actions, US financial markets experienced unprecedented stresses and strains and systemic dysfunction.

Europe too faced the insolvency of financial institutions. But with the exception of some systemically important financial institutions in the United Kingdom, which required large sums of taxpayers’ money, most other European institutions were either smaller institutions or had limited cross-border exposures and business models. For example, the resolution of Fortis’s difficulties involved only three countries. Thus in most cases, European institutions that were reaching the point of insolvency proved not to be systemically important enough to threaten the stability of the entire European financial system. Europe

...Additionally to fulfill its tasks and ensure the necessary consistency between the micro-supervisors and the ESRB, the ESRB, through its secretariat, will also be able to request the ESAs [European Supervisory Authorities] to provide information in summary or collective form. Should this information be not available (or not made available), the ESRB will have the possibility to request data directly from national supervisory authorities, national central banks (NCBs) or other authorities of Member States. The regulation furthermore creates a general obligation on the ESAs, the NCBs and the Member States to provide to the ESRB all the information needed for the fulfillment of its tasks, thus guaranteeing a wide access to the data needed for the macro-prudential analysis.”

9. See Pisani-Ferry and Sapir (2009) for an evaluation of how Europe has resolved its crisis so far relative to expectations.



did not escape a systemic crisis, but with the exception of the UK, it did not entail the kind of widespread insolvencies that occurred across the Atlantic.

In the event, Europe was fortunate not to have faced the challenges of resolving an insolvent SIFI. Nevertheless, Europe has some 40-45 large banks with significant cross-border exposure across the European landscape.

Urgent action is required in Europe. Each member state has its own resolution regime and a strong incentive to design its resolution strategies to satisfy national objectives. Moreover, it is clear from how Fortis was resolved – national ring-fencing and solutions – that Europe’s existing architecture for coordinated resolutions is ineffective and is not designed to resolve cross-border institutions. Note that the resolution of Fortis involved only three member states with considerable experience of coordinating policies. In light of the crisis and this specific European experience, it would be prudent for Europe to establish as quickly as possible legal and enforceable procedures for resolving, in an orderly manner, the insolvency of one or more European SIFIs with significant and widespread cross-border exposures. No country has been able to do this as yet because it is a complicated legal and policy issue. But discussions should begin in earnest now<sup>10</sup>.

**MEETING THE CHALLENGES POSED BY OTHER UNADDRESSED WEAKNESSES REVEALED BY THE CRISIS**

There are several other areas

where further thinking and reforms are necessary.

*Ensure that central banks have tools to co-manage monetary and financial stability*

Central banks by design are the immediate providers of liquidity in all of the major financial centres. They are the only public institutions with the ability to intervene in markets, and in some cases institutions, to provide liquidity and thereby manage and contain the adverse consequences of the onset of market turbulence and system-wide crises. All central banks have the mandate to maintain monetary stability to promote low inflation, and therefore sustainable growth, even though their specific targets and monetary operations may differ considerably. One lesson of the crisis is that monetary and financial stability are inextricably intertwined. Decision-makers should make it a priority to ensure that central-bank independence is fully maintained in the pursuit of monetary-policy objectives and that they also have the necessary tools and flexibility – that is, discretion – to help to maintain financial stability in so far as it threatens the maintenance of monetary stability.

*Consider global regulation and surveillance of the global over-the-counter derivatives markets*

These markets are truly global and systemic. Both the EU and US proposals would require that many of the over-the-counter derivative

transactions that are now traded and risk-managed on a bilateral basis be traded and settled within multilateral central clearing houses<sup>11</sup>. This would help to mitigate some of the inherent systemic risk by having the larger institutions that trade these instruments do so by pooling risks within a central clearing house, in which losses could be burden-shared to some extent, and failed contracts could be unwound in-house in a more orderly manner. There are many similarities between the EU and US

*‘There are similarities between the EU and US proposals, but there is also fierce competition.’*

proposals, but there is also fierce competition between the financial centres in Europe and the United States. It would be unfortunate if these competitive tensions led to a ‘race to the bottom’ in regulating these systemically important markets. Uncoordinated solutions will not work. And reforms falling short of global solutions could lead to the persistence of regulatory arbitrage, complexity, opacity, and systemically threatening counterparty relationships. For these reasons, leadership at the head-of-state level may be required to forge a consensus that a global regulatory framework and platform is necessary for the regulation of these markets.

*Reconsider the inter-temporal benefits and costs of too-big-to-fail SIFIs*

Some financial institutions were considered to be too big to fail, and the crisis has revealed that some were too big to manage and too difficult to save without massive injections of taxpayers’ money.

10. See Posen and Veron (2009) for a proposal for resolving some of Europe’s banking losses.

11. See European Commission (2009) and US Treasury (2009) and references therein for further details on the broad outlines of these proposals.

12. See de Jonghe (2009), Laeven and Levine (2006), Lelyveld and Knott (2008), and Schmidt and Walter (2006). Volcker (2008) believes that “...systemically important investment banking institutions should be regulated and supervised along at least the basic lines appropriate for commercial banks that they closely resemble in key respects.”



Over the years, authorities in all of the major financial centres have, through explicit policies or inaction, either promoted, encouraged, or acquiesced in the emergence of very large US global institutions and very large and complex European national champions. This has often been permitted on the basis of claims of economies of scale and scope. However, the extensive economics and finance literature is inconclusive when judging the actual economic efficiency gains from economies of scale and scope, contrary to SIFI claims<sup>12</sup>. Accordingly, leaders and policymakers should be asking, in the light of the inter-temporal social costs now being experienced, what exactly are the inter-temporal efficiency gains to their societies of combining mergers and acquisitions, asset management, securities origination and underwriting, foreign-exchange trading, commercial banking, and other financial services all under one roof? Can the claimed gains be captured by more specialised institutions that are less likely to generate the social costs? It would seem entirely appropriate for these and other important related subjects to receive as much analytical and policy attention as the efforts now being expended in both Europe and the US on formulating reforms of the SIFI surveillance, regulation, supervision, and governance framework, regardless of whether they are global or national champions<sup>13</sup>.

#### PRIORITIES FOR ACTION

1. Because early-warning systems are likely to continue to be unreliable in identifying systemic risks and vulnerabilities

in a timely fashion, crises will continue to occur. **The first priority is to create early-intervention and resolution mechanisms for allowing for the early and orderly closure of SIFIs when warranted.** No country now has such a resolution mechanism. The first order of business is for Europe to address this systemic vulnerability so that the insolvency of a single or multiple large, complex, cross-border institution does not lead to another systemic financial crisis any time soon. A reasonable starting point is Recommendation 13 of the de Larosière Report. This said that a transparent and clear framework for managing crises should be developed; all relevant authorities in the EU should be equipped with appropriate and equivalent crisis-prevention and crisis-intervention tools; and legal obstacles standing in the way of using these tools in a cross-border context should be removed, with adequate measures to be adopted at EU level. Europe can also consider the benefits of developing an early intervention mechanism for SIFIs along the lines of the prompt-corrective-action mechanism successfully employed by the US Federal Deposit Insurance Corporation (FDIC) in which small and medium-sized insolvent institutions are placed into an administrative procedure once they reach a specified capital adequacy threshold. Within the mechanism, the financial institution continues to perform key functions, including servicing deposits, while the FDIC is

arranging a merger or selling off the bank's assets.

2. In crafting EU financial-system reforms, **decision-makers should strive to ensure that central banks *retain* the independence required to conduct successful monetary policies and *obtain* the necessary authorisations, discretionary instruments, and policy mandates required to ensure the smooth functioning of financial markets and the stability of financial systems more generally<sup>14</sup>.** The ECB is likely to face serious challenges in these respects. Similarly, it is also likely to continue to face political pressures that could impinge on its independence and operational abilities to deal effectively with future systemic crises.

3. Assessment is an important element of crisis prevention. But is of little value if those assessments fall on deaf ears or if actions required to mitigate the risks and vulnerabilities are not taken sufficiently and in a timely manner. One way to safeguard against inaction is to **provide specific authority to effect change to the same institutions that make the assessments.** In this regard, Europe is lagging. The ESRB might well emerge as an effective instrument for identifying sources of vulnerabilities in the European financial landscape, but it will be to no avail if it does not also have the authority and policy instruments to impose action to mitigate the risks assessed and reduce the vulnerabilities identified.

13. Bank of England Governor Mervyn King made this point in a speech on 20 October 2009. He said that the structure of banks should be rethought, and "the belief that appropriate regulation can ensure that speculative activities do not result in failures is a delusion" (King, 2009).

14. Padoa-Schioppa (2003) states, "The role of central banks in financial stability was thus part of their genetic code. It was – and, I would be inclined to say, still is – an integral part or an inseparable component of the central bank as a bank, of its monopoly on ultimate liquidity, of its role as the bankers' bank, and of commercial banks as creators of money themselves." See also Schinasi (2003) for a discussion of the natural role of central banks in financial stability.



4. Even though early-warning systems cannot be failsafe, Europe nevertheless should strive aggressively to improve the effectiveness of official oversight of the financial system. This will require extensive reforms in the supervision of financial institutions – not only banking institutions – especially those that are large, complex and systemically important.

Many of the institutions that were at the core of the crisis fell into this category, many of them actually causing the crisis through excessive risk-taking and leveraging. Surveillance and monitoring of institutions, markets and infrastructures also needs to be improved significantly. Even though the creation of an effective early-warning system for systemic risk is a

never-ending challenge, authorities should nevertheless strive to build the best systems possible – grounded in reliable information and data, and mandated to develop the best analytical capability possible – for assessing sources of risk and vulnerabilities. This will require significant resources, but it is a worthwhile investment to minimise the cost of crisis resolution.

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