

Euro Area Policies: Selected Issues

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EURO AREA POLICIES

Selected Issues

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Approved by the European Department

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EXECUTIVE SUMMARY

The selected issues accompanying staff report cover the effectiveness of monetary policy in the euro area in the context of the financial crisis (¶28 and Box 3 of the Staff Report), the need for special resolution regimes for financial institutions in the European Union (EU) (¶20), and the proposed new EU financial stability arrangements (¶23).

Chapter I analyzes the European Central Bank's (ECB's) response to the global financial crisis and discusses ways forward. The results suggest that even during the crisis, the core part of the ECB's monetary policy transmission—from policy rates to market rates—has continued to operate, but at a decreased efficiency. The chapter finds some evidence that the ECB's enhanced credit support measures, namely the lengthening of the maturity of monetary policy operations and the provision of funds at the fixed policy rate reduced money market term spreads, facilitating the pass-through from policy to market rates. Furthermore, the results imply that the substantial increase in the ECB's balance sheet may have reduced government bond term spreads somewhat.

Chapter II outlines the case for establishing or improving resolution regimes for financial institutions in EU countries. It notes that in the present circumstances, policymakers face an unappealing choice when dealing with unviable financial institutions: disorderly bankruptcy or costly and recurring taxpayer bailouts. Thus the resolution toolkit should be expanded as a matter of urgency—if necessary through a review of existing legal frameworks—to allow national authorities to take control of financial institutions at an early stage and implement resolution action as needed. To avoid hold-ups, the effect of such action must not depend on the prior consent of shareholders or creditors, but instead be subject to ex post judicial review.

Chapter III provides an overview of the new EU financial stability arrangements as endorsed by the European Council of June 2009. It describes the main elements of the new framework, notably the organization and functioning of the European Systemic Risk Board and the European System of Financial Supervisors, and discusses some remaining challenges and unresolved issues.

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I. EURO AREA MONETARY POLICY IN UNCHARTED WATERS¹

A. Introduction

1. **The global financial crisis has substantially impaired the functioning of the financial sector of the euro area, raising several questions about the conduct of monetary policy.** In particular, how effective have been the unconventional measures implemented by the ECB in dealing with tensions in the interbank market? Have these measures helped maintain price stability? Given the significant problems in the financial system, how effective is monetary policy in forestalling strong disinflationary pressure, particularly when policy rates are very low? Finally, how can policymakers balance the potential need for additional unconventional measures to fight deflation in the context of the euro area with an exit strategy?
2. **With respect to the assessment of monetary policy's effectiveness to deal with the crisis, the analysis suggests two findings.** *First*, even during the crisis, policy rate changes have still been transmitted to market rates, albeit more slowly (the lags have become longer) and less effectively (as credit spreads initially increased and only recently eased), meaning that the policy reaction needed to stabilize the economy has become stronger. *Second*, the unconventional monetary policy measures implemented so far have helped the transmission by reducing the liquidity premia in money markets, and there is some evidence that these measures may have had some beneficial effects also on government bond term spreads in the euro area.
3. **Given the severity of the financial crisis and the depth of the economic recession, the risk of deflation remains, however.** While there are some tentative signs of improvement, it is unclear when the euro area economy will pull out of recession. Headline inflation has declined significantly mainly due to the sharp fall of commodity prices, but the deterioration of economic activity has also contributed. The large and increasing output gaps and growing unemployment are likely to depress further firms' pricing power and wage demands. Deflationary pressures might intensify, if adverse feedback loops between financial and real sector continue, given that policy interest rates are close to the lower bound.
4. **Hence, to counter potential deflationary pressures, the ECB will need to continue to consider all its options, while securing a safe exit strategy.** Intensification of deflationary risks may well require the ECB to utilize further unconventional measures, but these measures should continue to be designed to allow for a nondistortive exit. Exiting from the measures already implemented by the ECB should be relatively straightforward, as bank demand for ECB liquidity should ease when market conditions in the banking sector normalize. The large amount of term liquidity provided by the ECB may prove more costly to mop-up quickly if necessary, but it should not overly aggravate a timely exit.

¹ This is a summary of Čihák, Harjes, and Stavrev (2009, forthcoming).

B. ECB's Policy Response to the Crisis²

5. **At the onset of the financial crisis, the ECB responded promptly with significant adjustments in its liquidity management operations.** Liquidity was provided in large amounts, including at term maturities, and collateral requirements were eased to prevent them from becoming a constraint for increased ECB funding. While the overnight rate remained on average close to the policy rate target, term spreads surged, reflecting both a sharp rise in counterparty default risk and liquidity risk due to severe funding pressure at longer term maturities (Čihák and Harjes, 2008).

6. **Meanwhile, the ECB emphasized in its communications the distinction between its two core functions:** (i) liquidity management with the primary goal to mitigate the risk that protracted liquidity shortages turned into bank solvency problems; and (ii) ensuring price stability by choosing an appropriate monetary policy stance. The stress in money markets resulted in sharp spikes in spreads between unsecured and secured rates for term funds and affected the transmission of monetary policy in a crucial fashion. Nevertheless, the ECB insisted that its liquidity provision would not interfere with monetary policy objectives.³

7. **As interbank trading ground to a halt in mid-September 2008, the ECB significantly stepped up its liquidity provision.** This was achieved by: (i) introducing a new “fixed rate full allotment” tender procedure, including at six month maturity, thus granting banks access to essentially unlimited liquidity at policy interest rate at maturities of up to six months; (ii) extending further the (already long) list of collateral assets; and (iii) increasing the (already large) number of counterparties eligible to participate in ECB's refinancing operations from 1,700 before the crisis to 2,200.⁴

8. **In early May 2009, the ECB took further steps to help the banking system.** In particular, it (i) extended maturity of long-term refinancing operations to twelve months; (ii) included the European Investment Bank into the list of counterparties for monetary policy operations to ease funding difficulties for SMEs; (iii) announced a program to purchase covered bonds to the amount of 60 billion euros; and (iv) announced that the extended collateral list will be in place till end-2010.

9. **ECB's measures helped to lower spreads in money markets.** Following unlimited provision of longer-term funds at fixed-rates by the ECB, which began at the end

² For a full description of all measures taken by the ECB, see Annex I in the June 2009 ECB Monthly bulletin: <http://www.ecb.int/pub/pdf/mobu/mb200906en.pdf>

³ In that regard, as argued in Berger, Harjes, and Stavrev (2008), the ECB's two pillar approach, which gives high prominence to monetary aggregates in assessing the policy stance, may have made communication more challenging. Bulíř, Čihák, and Šmídková (2008) arrive at a similar conclusion.

⁴ The number of *active* counterparties before the crisis was about 450 (compared to 20 in the United States), which increased to 750 during the crisis.

of October 2008, term money market spreads dropped sharply and now correspond closely to measures of counterparty risk, while liquidity premia seem to have been eliminated (Figure 1). Spreads are still at elevated levels, but they are not likely to fall much further until perceptions of counterparty risk in the banking sector normalize.

C. Has the Transmission Been Impaired?

10. **The reduction of the policy rates has been transmitted to market rates, although the pass-through was less than full and varied across market segments and maturities.** Given the tensions in the money market, short-term bank lending interest rates moved broadly in line with historical regularities versus the three-month Euribor rate. For example, from September 2008 to February 2009, bank lending rates on new loans declined by: (i) between 20 and 60 basis points for consumption purposes; (ii) between 50 and 180 basis points for house purchases; and (iii) between 70 and 250 basis points for non-financial corporations. At the same time, short-term money market rates dropped by around 300 basis points, and spreads declined but remained elevated (Figure 2).

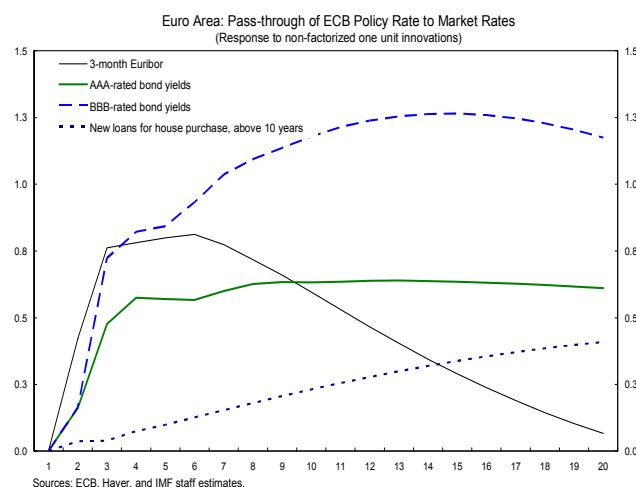
11. **To gauge the effectiveness of the monetary policy transmission, it is, however, necessary to look beyond the interest rate response.** In particular, analyzing only the transmission of policy rates to market rates is insufficient for assessing the effectiveness of monetary policy in achieving its ultimate goal of price stability. In that regard, the effective functioning of all transmission channels, namely, the interest rate, the bank lending, and the broad credit channels, is key. Also, the ability of the central bank to maintain inflation expectations in line with the definition of price stability is crucial for the effective working of the transmission mechanism.

12. **A comprehensive analysis was conducted to determine various aspects of the effectiveness of monetary transmission** (for details see Čihák, Harjes, and Stavrev, 2009). Several bi-variate VARs, comprising the policy rate and a set of market interest rates, are used to assess the pass-through of policy rates to several market rates pre- and post-crisis by comparing the impulse responses of the models estimated over the pre-crisis sample and the full sample. This is combined with a theory-based framework to analyze in a general equilibrium setup the functioning of all channels as well as the role of expectations. The relative importance of each channel and the role of expectations are assessed by looking at the variance decomposition. The functioning of the transmission mechanism pre- and post-crisis is evaluated by comparing the impulse response to standard shocks (demand, supply, and monetary policy) from models estimated over the pre-crisis sample and the full sample. For both models, the residuals are used to gauge the degree to which the functioning of the channels was affected by the crisis.

Results

VAR model

13. **The VAR analysis shows that policy rate changes have been transmitted to market rates, although the degree and the speed of pass-through vary.** The impact on 3-month Euribor rate is close to one-for-one and the speed of adjustment is fast, with the maximum impact transmitted within a month. The initial impact on corporate bond yields and new loans to non-financial corporations is similarly quick, although the full adjustment is more protracted and the impact on higher-grade bond yields is smaller than on lower-grade bond yields (0.6 to 0.7 percentage point for AA- and AAA-rated bonds versus 1.2 for BBB-rated bonds). However, the pass-through of the policy rates on loans to households for house purchases is somewhat smaller and the speed of adjustment slower.⁵



14. **The results suggest that the pass-through to all market rates has slowed and become somewhat less reliable during the crisis.** In particular, impulse responses from the bi-variate VARs (in first difference) imply that the time for the full adjustment of market rates has increased to over 12 months, from between 3 months and 6 months before the crisis (the results from the bi-variate VARs in levels estimated both with OLS and Bayesian methods show a similar picture). The transmission to lower grade corporate bonds seems to have been particularly affected—the initial response of the BBB-rated corporate bond yields has switched from positive before the crisis to negative thereafter (Figure 3). The behavior of the residuals for the market rates suggest that the transmission has become less reliable, with larger residuals since the beginning of 2008, and in most cases significantly so (Figure 4). Analyzing the pass-through to market rates after the crisis, IMF (2008) also provides empirical support for the less efficient pass-through over the past year, pointing to the dislocation of the markets for short-term bank financing as the most likely cause.

15. **More importantly, as bank lending standards have tightened following the crisis, quantity effects may be at play that could further impair monetary policy effectiveness.** Indeed, the role of the interest rate pass-through for monetary policy effectiveness needs to be viewed in the context of tightening lending standards. While

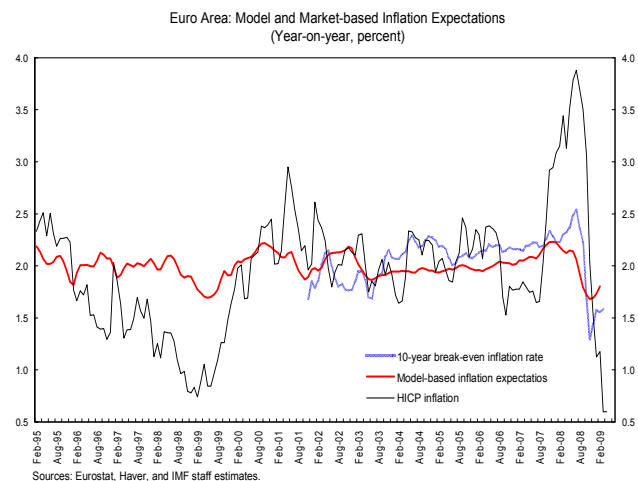
⁵ These results are consistent with the finding by IMF (2008) that the 3-month Euribor rates have more stable and reliable relation with the policy rate than other lender rates.

interest rate pass-through provides an important signal for monetary policy effectiveness, in times of significant stress in credit markets quantities are also important. Indeed, the April 2009 ECB bank lending survey suggests further tightening of lending standards, albeit at a slower pace. In this situation, banks may have significantly reduced lending by cutting loan originations rather than raising interest rates. Also, the shift of loans from special investment vehicles back to banks' balance sheets, the so-called re-intermediation, as well as continuing funding pressures for the banks may put additional pressure on banks' capital needs, thus slowing further new credit creation.

Theory-based (general equilibrium) framework

16. **Impulse responses from the theory-based model support the results from the VARs that after the crisis the overall transmission has slowed.** For both supply and demand shocks, the policy reaction needed to stabilize the economy is somewhat stronger, with the time needed for the policy feedback to pass through rising to about 2½ years, from about 1½ year before the crisis (Figure 5, first column). Similarly, the time for a full transmission of monetary policy shocks to inflation has increased after the crisis to close to three years, from about two years before the crisis (Figure 5, upper right panel). Compared with the findings from the VAR, these results suggest that not only the first stage of the transmission, the pass-through to policy rates, but also the overall working of the transmission mechanism seems to have become less effective after the crisis.

17. **Another sign of the decreased efficiency of transmission is the significant decline of inflation expectations in the last quarter of 2008.** Inflation expectations derived from the model declined notably in the fourth quarter of 2008, but as policies eased significantly to counter the strong disinflationary pressures, inflation expectations recovered since the beginning of 2009. This development of the model-derived inflation expectations agrees with market-based measures of inflation expectations, although the latter were likely affected by dislocations in inflation-linked bond and swap markets. Note also the high correlation between the model-derived and market-based inflation expectations—about 75 percent.



18. **Going beyond the impact of the crisis on the transmission, the model results suggest that the interest rate channel is the dominant transmission channel.** In particular, it accounts for over 30 percent of inflation variation and close to 50 percent of output variation. Importantly, the results imply a major role of expectations, which account for around 40 percent of inflation variation and about 30 percent of output variation. The results

also suggest some role for the bank-lending and credit channels, which explain about 15 percent and 10 percent of output variation, correspondingly.

19. **The above results are in line with findings in the literature.** For example, Angeloni and others (2002) conclude that the interest rate channel is the most important for monetary policy transmission in the euro area. They also find that the bank lending channel plays a role, although its relative importance differs among euro area countries.

D. Monetary Policy and The Return of The Liquidity Trap

20. **The ECB's enhanced credit support measures introduced since October 2008 may have helped mitigate deflationary risks.** Although these measures may have been primarily implemented to ease systemic liquidity risk in the banking sector and support the transmission of lower policy rates to money market rates, they may have also affected the term spreads of euro area government bonds. Such an effect should be expected, if markets increasingly interpreted the various unconventional measures implemented by the ECB as signaling low interest rates for an extended period. Also, the relative increase in money supply compared to government bonds may lower the yield curve if money and bonds are imperfect substitutes. A macro-financial model introduced by Bernanke, Reinhart, and Sack (2004) is used to study these effects (for details see Čihák, Harjes, and Stavrev, 2009).

Overview

21. **Overnight interest rates have come close to their lower bound in many advanced economies, including in the euro area.** Such situations in which conventional monetary policies become constrained or ineffective, despite the need for further monetary easing, were famously described as liquidity traps by Keynes (1936). The experience of Japan in the 1990s and 2000s and the possibility of deflation in the U.S. in the mid 2000s reignited interest in this topic. The emergence of deflationary risks in many economies across the globe has again brought this issue to the fore of many debates.

22. **Central banks have three sets of practical measures with which they may be able to further ease the policy stance once the policy rate has reached its lower bound:** (i) shaping the public's expectations about future settings of the policy rate; (ii) changing the composition of the central bank's balance sheet by providing liquidity to specific markets considered dysfunctional ("credit easing"); and (iii) increasing the central bank's balance sheet beyond the level needed to set the policy rate at zero ("quantitative easing").

Shaping the expectations about future policy rate

23. **If a central bank can convince the markets that its policy rate will remain low for longer than markets previously expected, it may add further stimulus to the economy.** Usually, central banks do not provide unconditional commitments for policy rates, especially over the medium term. Some central banks, including the U.S. Fed and the Bank

of Canada, have recently emphasized that they expect to keep rates low as long as deflationary risks persist, or inflation remains significantly below the target. However, markets, if rational, may have expected this already and such market expectations may not be sufficient to avoid a protracted period of deflation. A much stronger signal than communicating to keep rates low as long as needed is the provision of term funds at the policy rate. While the ECB's policy in this regard has initially been targeted at reducing liquidity premia in term money markets, further extension of maturity and explicit commitment to continue such operations for a clearly defined period is a powerful tool in adjusting and managing policy rate expectations.

Credit easing

24. **A key characteristic of the current financial crisis has been the breakdown of several specific credit markets.** In particular, markets for asset-backed papers, that were an important funding/credit source, especially in the United States, have dried up, as the sharp increase in credit risk for these securities virtually stopped any new issuance or secondary market activity. Given the importance of these markets in the United States, the Fed decided to intervene directly to restart private activity and bring down liquidity premia. The ECB initially supported such markets indirectly by broadening its collateral requirements, and more recently also announced direct interventions in the covered bond market. Such measures are targeted at restoring the transmission of policy rates. Moreover, if successful, they should also stimulate activity and lower the risk of deflation.

Quantitative easing

25. **A permanent increase in money supply that would effectively raise inflation expectations would also have a stimulating effect on the economy.** The monetary base can be expanded by open market operations, such as central bank purchases of assets, or by other (more "passive") measures. Following the switch to the fixed-rate full-allotment tender procedure—implying that banks' temporarily elevated demand for central bank reserves would be fully accommodated at the policy rate against eligible collateral—the Eurosystem's balance sheet almost doubled, reaching some 16 percent of GDP in early 2009. In principle, for this expansion of the balance sheet to transmit to higher inflation expectations through the portfolio-rebalancing channel, a subsequent increase in other broader monetary aggregates would be required. However, markets may interpret the expansion as a signal that the ECB intends to keep policy rates at low levels, thus resulting in a flatter yield curve over the near-to medium-term. Quantitative easing carried out through outright purchases of long-term government bonds may flatten the yield curve further because of portfolio-balance effects, although in the absence of financial frictions, there should be no such effect (Eggertsson and Woodford, 2003).

Empirical Results

26. **The predicted yields from the model track actual bond yields very closely** (Figure 6, left column). The estimates of the long-run “risk-free” yields during January 1999 to January 2009 are slightly above 3 percent. Short-term (two-year) model residuals (Figure 6, right column) do not have an obvious trend, but model residuals for long-term government bonds have been more or less consistently negative since 2004–05. This reflects the fact that, as in the United States, long-term rates did not rise much with short-term rates, as the ECB raised its policy rates. The residuals have fluctuated since the onset of the crisis, but turned sharply negative in October 2008 when the ECB introduced a host of new unconventional measures. As a result, the actual yield curve is lower and flatter than the predicted yield curve for the latest observation, January 2009 (Figure 6, lower panel).

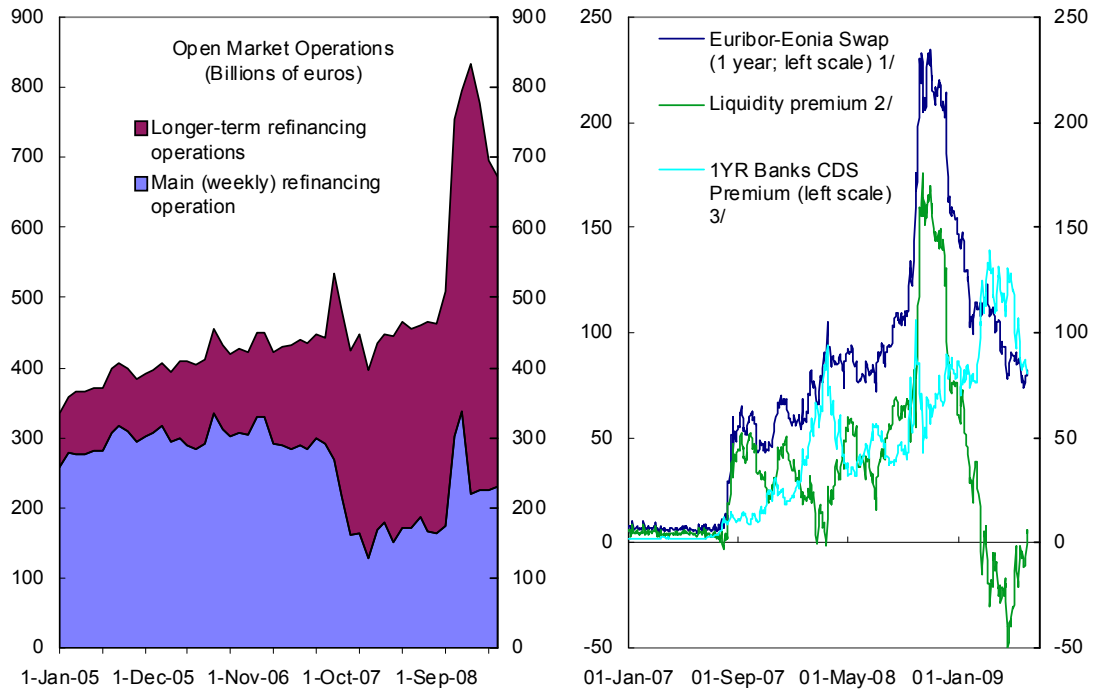
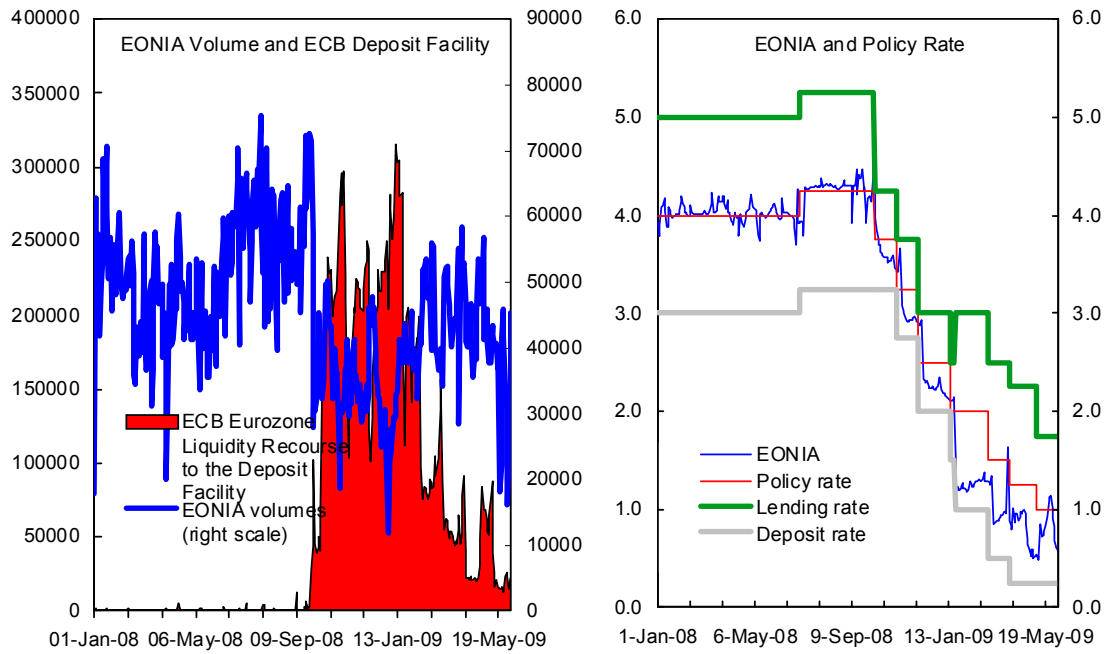
27. **The lower level of the yield curve may reflect the increase in the monetary base and the relative supply of money relative to bonds, as suggested by the portfolio rebalancing channel.** Moreover, the flattening of the yield curve could reflect the perception, not backed by ECB communication, though, that through its non-standard policy actions the ECB would implicitly commit to keep policy rates low longer than implied by the simple VAR. However, the flattening has been most pronounced at the long end, while market expectations of an increased period of low policy rates should have a greater effect at the short end of the yield curve. Also, there are other possible explanations for the observed behavior in the residuals, including capital flows associated with “flight to safety.” Nevertheless, the fact that the level of the yield curve has been lower and the slope flatter over the past months than predicted by the macroeconomic variables is suggestive of some effect of unconventional measures on the yield curve.

E. Conclusions

28. **Since the onset of the financial crisis, traditional transmission channels of monetary policy (interest rate, bank lending, and broad credit) have continued to operate, but at a lower efficiency.** During the crisis, the transmission has slowed down (the lags have become longer), the policy reaction required to stabilize the economy stronger, and the transmission subject to more noise. Also, inflation expectations, while remaining broadly stable, declined significantly in the last quarter of 2008, reflecting the major deterioration in economic activity and requiring a strong policy reaction.

29. **The ECB’s unconventional measures, such as the lengthening of its monetary operations and the increase in its balance sheet, likely have contributed to reducing term spreads in money markets.** They may also have had some beneficial effects on government bond term spreads and the level of the yield curve. Given the potential for deflationary pressures, all options for further unconventional measures will need to be kept open. At the same time, care must be taken to continue to ensure that a credible exit strategy is in place.

Figure 1. Euro Area: Recent Developments of the ECB's Liquidity Operations
(In units as indicated)



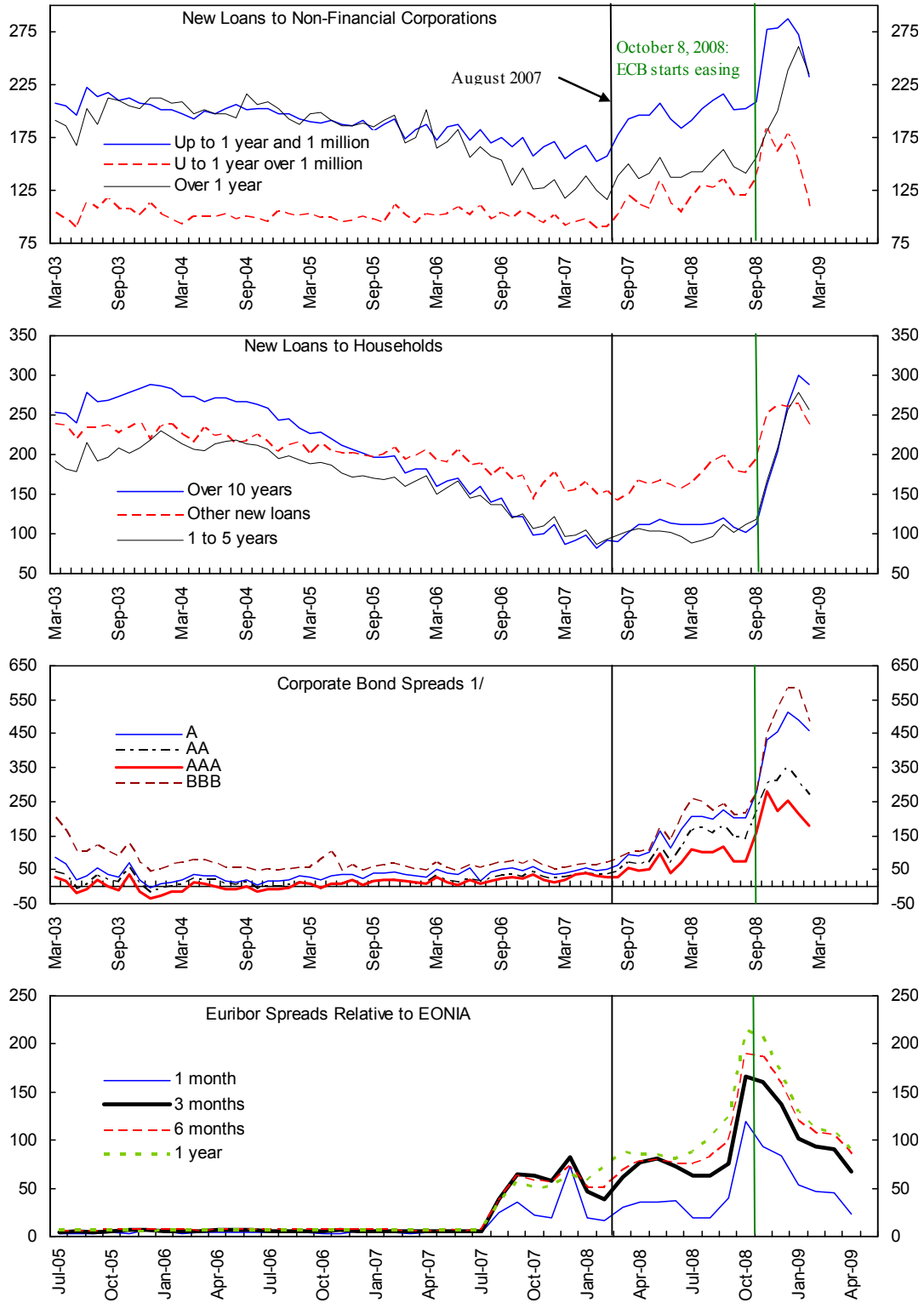
Sources: DataStream; and Bloomberg.

1/ Euribor refers to "the best price between the best banks" provided by Euribor panel members.

2/ The liquidity premium is the difference between the Euribor - Eonia Swap spread and the CDS premium.

3/ The one-year banks CDS premium is the average of premia for the "best" five Euribor panel banks out of 24 with the lowest premium.

Figure 2. Euro Area: Cost of Borrowing by Businesses and Households
(Spreads relative to the ECB policy rate, basis points)



Sources: Haver and IMF staff calculations.

1/ Corporate bonds 3-5 year maturity relative to 5-year benchmark government bond index.

Figure 3. Euro Area: The Impact of Crisis on Policy Rate Pass-through
(VARs in first Difference, Response to Cholesky One S.D. Innovations)

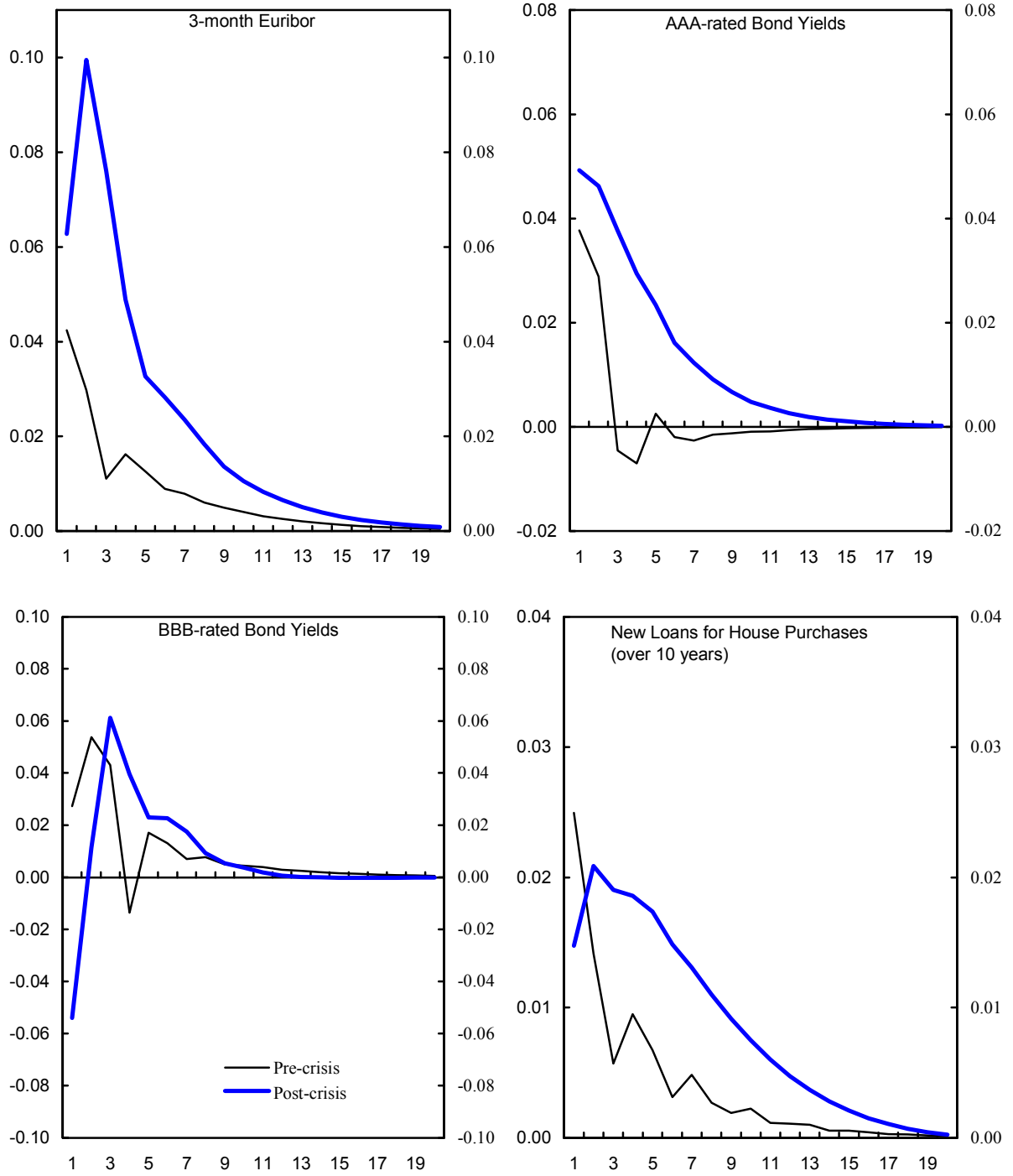
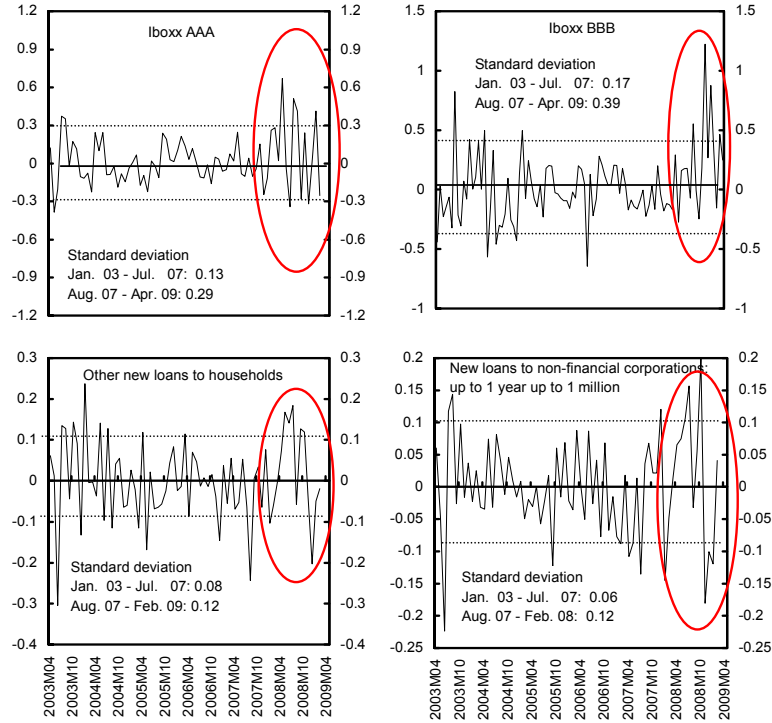
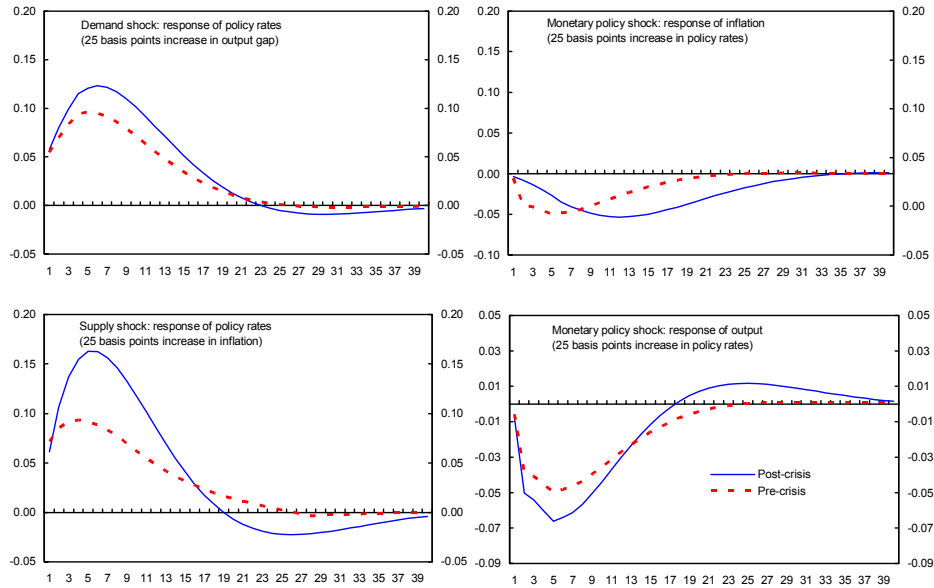


Figure 4. Euro Area: VAR Residuals of Market Rates (Percentage points)



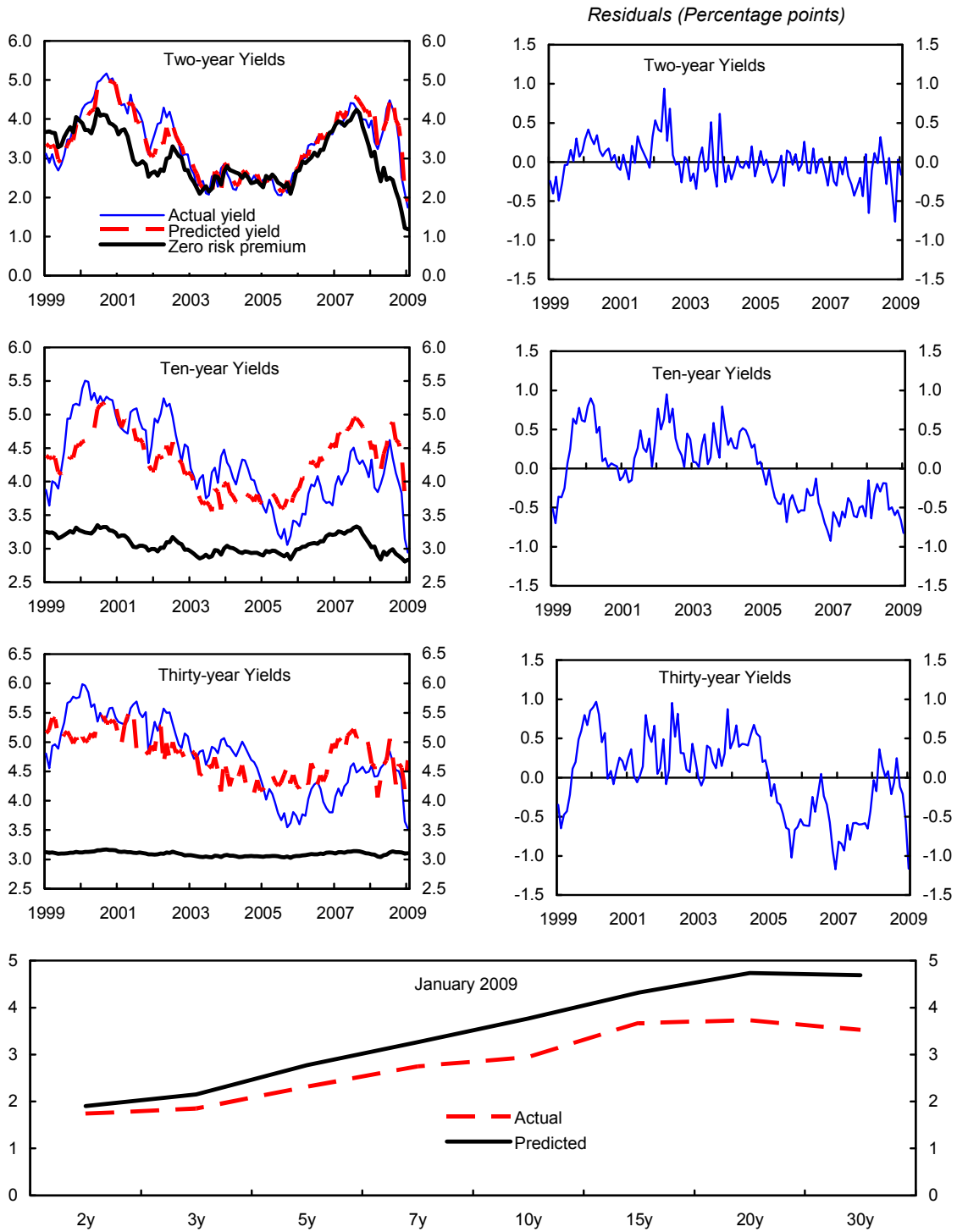
Sources: ECB; and IMF staff estimates.

Figure 5. Euro Area: Effectiveness of Monetary Policy (Pre- and Post-Crisis in basis points)



Source: IMF staff estimates.

Figure 6. Euro Area Macro-Financial Model: Government Bond Yields and Model Estimates 1/
(Percent)



Sources: DataStream; and IMF staff calculations.

1/ Euro area synthetic government bond yields.

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II. THE NEED FOR SPECIAL RESOLUTION REGIMES FOR FINANCIAL INSTITUTIONS—THE CASE OF THE EUROPEAN UNION¹

A. Introduction

1. The global financial crisis has illustrated the limits of ordinary resolution regimes in dealing with failing financial institutions. The absence or limited scope of such regimes has been shown to be lacking globally, including within the EU. For the financial stability framework to be effective, it needs to include a dedicated resolution regime that expands the set of tools available in crisis management beyond the “default options” of ordinary bankruptcy and fiscal support for failing financial institutions. Such a regime can reduce the systemic impact of a potential failure, afford control to the authorities; shift the financial burden away from taxpayers, reduce moral hazard and increase market discipline.

2. **It is pressing for countries across the EU to review the effectiveness of their resolution frameworks and to introduce legislation where necessary to prepare to address possible further difficulties in banking systems across the region.** To restore confidence in the financial system, EU countries need to be in a position to deal effectively with individual non-viable institutions, and to be able to contain the total fiscal cost of a more comprehensive restructuring of the banking system, should such restructuring be necessary to restore confidence and the normal functioning of the financial system.

3. **A revision of the national frameworks for the resolution of financial institutions can be in the interest of each member state of the EU, as well as in the interest of the EU as a whole.** The absence of robust resolution frameworks will make it more likely that national authorities resort to propping up failing financial institutions. Such support may conflict with the general principle underlying Articles 92–94 of the Treaty of Rome that State Aid distorts competition and runs counter to a common market.

4. **Establishing a dedicated resolution regime for cross-border institutions at the EU-level would have clear benefits.** However, even the introduction of special resolution regimes in individual member countries can substantially reduce the overall fiscal burden incurred in resolution, and is likely in and of itself to be conducive to more effective management of cross-border failures.

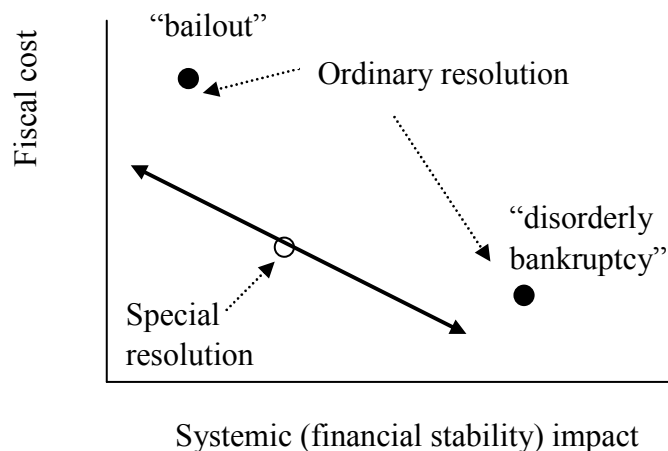
B. Resolution Regimes: Crisis Lessons

5. **The absence or inadequate scope of resolution tools to deal with failing financial institutions has been revealed during the global financial crisis.** Authorities were often confined to two alternatives: (i) corporate bankruptcy, as chosen for instance by the U.S. authorities in the case of Lehman Brothers, a global financial-services firm; and (ii) an injection

¹ This is a summary of Čihák and Nier (2009, forthcoming).

of public funds, as chosen by the U.S. authorities in the case of the American International Group (AIG). Events have shown that both these options can be very costly. A disorderly bankruptcy (as in the case of Lehman Brothers) can magnify the systemic impacts of the failure of a financial institution. When the authorities aim to avoid these impacts (as in the case of AIG, or in the German cases of Hypo Real Estate and IKB), and inject capital to support the institution, events have shown that the fiscal outlays incurred in the course of an open-ended injection of capital can be large. A special resolution regime allows authorities to avoid the choice between “disorderly bankruptcy” and “injection of public funds” and results in an efficiency improvement, by containing both fiscal costs and systemic impact (Figure 1).

Figure 1. Fiscal Cost and Systemic Impact in Resolution Regimes



Source: IMF staff

6. **Both ordinary bankruptcy and capital injections may afford little control to the authorities charged with overseeing financial stability.** In ordinary bankruptcy proceedings, authorities have limited control over actions taken by the courts, and may struggle to uphold wider financial stability considerations. When the authorities seek to avoid ordinary bankruptcy, by providing public support, they may have little formal powers to replace the management of a failing institution. They may also have limited control over the actions taken by the firm’s owners or managers, creating moral hazard.

7. **The efficient solution from the viewpoint of financial stability may be different from that achieved by either ordinary bankruptcy or capital injection.** For example, the efficient solution may involve a sale of the institution to another financial institution as a going concern. However, existing shareholders—either large blockholders or the majority of small shareholders—may hold out and block the resolution option taken by the authorities. This is likely to happen whenever the resolution option involves a loss of value or a loss of control for existing shareholders. The cases of Fortis and HRE are examples of shareholder control delaying or closing off the resolution path preferred by the authorities.

8. **When ordinary bankruptcy is viewed as too costly by the authorities, bankruptcy ceases to be a credible threat, creating moral hazard** If in the absence of other options, public infusion of capital becomes the only alternative, this is certain to create moral hazard and reduce the force of market discipline. Empirical research has documented that institutions that expect to receive public support hold smaller amounts of tangible common equity relative to total assets, on average (Nier and Baumann, 2006). This research also shows that expectations of public support reduce the force of market discipline.

9. **In many European countries, the general insolvency law applies to financial institutions and is administered by bankruptcy courts.** This is a major difference from countries such as Canada and the United States, where the law provides for special rules for bank insolvency, administered by the supervisor or the deposit protection agency. Nonetheless, there is substantial diversity among the EU member countries when it comes to features of their resolution regimes for financial institutions. Also, some EU countries are either in the process of reviewing, or have recently revised, the relevant legislation.

C. Principles and Design of the Framework

10. **A consensus is beginning to emerge as to the features that a special resolution framework should comprise.** In particular, sound practice is for the framework to (i) allow the authorities to take control of the financial institution at an early stage of its financial difficulties, through “official administration”; (ii) empower the authorities to use a wide range of tools to deal with a failing financial institution, without the consent of shareholders or creditors; (iii) establish an effective and specialized framework for liquidation of the institution that assigns a central role to the authorities; (iv) ensure clarity as to the objectives of the regime and the scope of judicial review; and (v) promote information sharing and coordination among all authorities involved in supervision and resolution.

11. **The resolution regime needs to specify a regulatory threshold, such that when the threshold is crossed, the resolution authority is entitled to take control of the firm and to commence the restructuring process.** The regulatory threshold reflects the very essence of special resolution proceedings—to permit the authorities to intervene in a financial institution at an early stage of financial difficulty when the institution may still have positive net worth. This contrasts with the “balance sheet threshold” often applied in ordinary bankruptcy proceedings, which permits proceedings to be initiated only after net worth is virtually exhausted. Taking control at an early stage permits the authorities to explore the most appropriate resolution option prior to a full deterioration of capital, while seeking to prevent further weakening of the institution’s condition.

12. **Actions in the resolution stage should be complemented by supervisory “early remedial action”.** Early remedial action is a phase of heightened supervisory involvement, aiming to reduce the chance of entering the resolution stage. This may involve supervisory

“assistance” in the design of a plan to address incipient financial weakness and the monitoring of the plan’s execution by the supervisory authority.

13. **Effective resolution needs to expand the set of tools available to authorities in the resolution phase beyond the “default options” of liquidation and capital support.** The following tools have been found particularly useful:

- **Acquisition by a private sector purchaser.** This solution can provide continuity of services, protects the public purse and protects the interests of counterparties, whose exposures to the failing institution are replaced by claims on a stronger institution. Importantly, the resolution authority needs to have the power to effect a private sector sale on terms that do not require the consent of existing shareholders. In cases where some of the assets are difficult to value, an alternative is for the authorities to sell the institution as a whole, but to provide some form of financing or a guarantee to the acquirer.
- **Bridge bank.** A bridge bank is a temporary institution created by the resolution authority to take over the operation of the failing institution, and preserve its going concern value. It is attractive particularly in cases of failure of large and complex organizations, where due diligence examinations by potential purchasers can take time, and where it is important to keep up critical services.
- **Partial transfer of deposits and assets to a “good bank”.** When some of the institution’s assets are nonperforming or difficult to value, it may not be possible to find an acquirer for the whole institution. In these cases, the resolution authority needs to have the powers to effect a partial sale of assets and liabilities. In a “good bank” solution, only easy-to-value or “clean” assets are transferred in addition to deposits and (a fraction of) the bank’s other liabilities. The residual institution (a “bad bank”) continues to be owned by existing shareholders, whose capital therefore continues to be at risk from a loss in value of the toxic assets.
- **Temporary public control.** As a last resort, the government needs to be able to take temporary ownership of the failing institution. This may be appropriate where a significant injection of public funds is needed. It may be particularly useful if the system is highly concentrated and options for a sale to private bidders are limited.

14. **Given that control over the resolution proceedings rests with the banking authorities rather than with the courts, judicial review needs to be provided for ex post.** The review mechanism should only seek to determine whether the banking authorities have acted legally and should not allow the court to reassess their exercise of discretion. The onus is instead on the legal framework to clearly set out the objectives that the resolution framework seeks to achieve, such as the preservation of financial stability, and to define clearly the extent of discretion afforded to the banking authorities in pursuit of these objectives. This is important

since the authorities' actions will typically have a bearing on property rights, e.g. of existing shareholders.

15. **The resolution framework needs to be consistent with the general considerations that govern the conditions under which personal property rights can be constrained by the authorities.** This includes national constitutional law as well as the European Convention on Human Rights. Where the relevant actions of the banking authorities inflict damage on a bank's owners without proper justification, the remedy can be in the form of monetary compensation. However, the legal framework should establish clear limits on the circumstances in which such damages may be awarded, and it should grant immunity for banking authority officials from liability for actions they have taken in good faith.

16. **Introduction of special resolution regimes requires careful reflection of the appropriate scope of the regime.** At a minimum, all deposit-taking institutions (banks) need to be within the scope of the regime. It may be desirable for the scope of the regime to be robust to a potential trend away from business models that involve funding through retail deposits and to apply more broadly to those financial institutions that can pose a systemic risk, as per suitably defined criteria.²

D. Cross-Border Issues

17. **The introduction of special resolution regimes at the national level could be a useful element to help achieve a more effective resolution of financial institutions operating across European borders.** By virtue of the Winding-Up Directive, resolution actions taken by authorities in accordance with their national (special) resolution framework have full legal force across the EU, in cases where the failing institutions has branches in other member states. When the failing institution has subsidiaries, this does not hold necessarily, by law. Nonetheless, even in these cases, special resolution regimes are likely to have a positive effect on the cross-border resolution, in the following three ways:

- An effective regime will tend to reduce the fiscal burden involved in resolution. When the overall burden is reduced, an agreement among national authorities on sharing the burden, and on the appropriate resolution path, is likely to be easier.
- Special resolution regimes are likely to reduce difficulties associated with situations where the subsidiary is systemic in a host country, but the parent is not considered systemic in the home country. In the absence of a special resolution regime in the home country, the host authorities may be concerned that the home authorities let the institution fail. If a special resolution regime were in place that would provide the home

² G-20 Leaders have asked the IMF to prepare (with the FSB and BIS) guidelines on how national authorities can assess the systemic importance of the components of the financial system. The guidelines are to be prepared by the next meeting of G 20 Finance Ministers and Central Bank Governors, scheduled for November 2009.

authority with the power to effect a forced sale of the institution, the home country authorities could well judge that the cost of using this option is small relative to the cost of letting the institution fail, with obvious benefits to the host economy.

- The “bridge bank” is likely to be particularly helpful as an interim solution in complicated cross-border cases, when negotiating a permanent solution may be time consuming. Where a special resolution regime is in place in the home country of a complex cross-border group, the authorities can initially transfer the group to a bridge bank institution. This leaves intact the rights of the host authority with respect to potential action relative to the subsidiary, and creates some time for negotiation.

18. **National special resolution regimes may not be sufficient to fully address all cross-border issues.** They may need to be complemented by a EU-level special resolution regime for cross-border institutions. A resolution regime that applies at the fully consolidated level may come to be an element in a dedicated European regime for cross-border financial institutions, such as the one discussed in Čihák and Decressin (2007). In addition to the resolution framework, the regime might include a European banking license, a European deposit insurance scheme, covering deposits issued by branches and subsidiaries, and strong supervision and information sharing among relevant authorities. While this is a useful medium-term goal, a more realistic approach at the current stage is for the European authorities to encourage individual EU countries to introduce or strengthen their national frameworks, which are needed in any case.

E. Conclusion

19. **There is a strong case for financial institutions to be subject to a special insolvency regime.** Standard judicial insolvency regimes do not necessarily take into account financial stability considerations and are typically cumbersome and slow, while in financial crises speedy and decisive action is necessary.

20. **Special resolution regimes can contribute to overall financial stability, and improve the trade-off between the need to stabilize the banking system and to minimize fiscal costs and longer run-costs of moral hazard.** By expanding the toolset at the disposal of authorities, a special regime may come to facilitate a decisive restructuring of weakened financial institutions, should such an effort be needed as part of an overall strategy to restore confidence in the financial system.

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III. A NEW EU CROSS-BORDER FINANCIAL STABILITY FRAMEWORK¹

A. Introduction

1. The EU has embarked on a comprehensive overhaul of its cross-border financial stability framework. This overhaul aims to more effectively monitor, assess, and manage systemic risks through a formal system for macro-prudential oversight, and enhance trust, efficiency, accountability, and consistency in cross-border micro-prudential supervision, consistent with the objective of a single financial market.² The outlines of the overhaul have been agreed (see organigram in Figure 1), concrete legislative proposals are due by the early autumn, and full implementation is envisaged in the course of 2010. The new framework will be reviewed no later than three years after its establishment.

B. Main Elements of the Reforms

Macro-Prudential Oversight

2. A European Systemic Risk Board (ESRB) will be established to monitor and assess macro-financial risks and issue warnings and recommendations to address them.

3. ***Set-up and composition.*** The ESRB will be organizationally closely tied to the ECB and ESCB,³ including for logistical and analytical support, and will not have separate legal personality or binding powers. It will be composed of the President of the ECB, the Governors of the EU's central banks, the heads of the European Supervisory Authorities (ESAs, see below), and a representative of the European Commission. The president of the Economic and Financial Committee (EFC)⁴ and one representative per country of the national supervisory agencies will participate as observers, the latter alongside their central bank Governors in a 1+1 formula. The Chairman will be a central bank Governor or the ECB President (in the latter case, the ECB will be represented by its Vice-President) and will be

¹ Prepared by Wim Fonteyne.

² The proposed reforms were endorsed by the European Council on June 19 (Council of the European Union, 2009b). They are based on the recommendations of the De Larosière Group (De Larosière Group, 2009), a set of Commission proposals on the basis of these recommendations (European Commission, 2009), and the conclusions of the June 9, 2009 ECOFIN meeting (Council of the European Union, 2009a).

³ The European System of Central Banks (ESCB) reunites all EU central banks, regardless of whether their country has adopted the euro. Central banks of euro area member states also form the Eurosystem, whose membership therefore constitutes a subgroup of the ESCB.

⁴ The Economic and Financial Committee brings together senior officials of the EU's Ministries of Finance. Its main task is to prepare the meetings of the Ministers of Finance in the ECOFIN Council. A subgroup of the EFC, the Euro Working Group (EWG) prepares the meetings of the Eurogroup.

elected by the members of the General Council of the ECB,⁵ essentially the central bank Governors. The Vice Chairman will be elected by the ESRB members.

4. **Mandate.** The ESRB will focus on analyzing risks that arise from macroeconomic developments and developments within the financial system as a whole. It will issue risk warnings and, where necessary, recommendations and advice on measures to address these risks, including possible legislative ones. The risk warnings and recommendations can be either of a general nature or concern individual member states or groups of member states. Accountability will be vis-à-vis the European Parliament and the EU Council.

5. **Functioning.** A small Steering Committee will set the work agenda and prepare decisions.⁶ The ESRB will meet at least quarterly and decide based on simple unweighted majority voting. It is expected that most of the analytical and preparatory work will be conducted by the ECB, in coordination with the other central banks within the ESCB. The existing Banking Supervision Committee will be transformed into a broader technical advisory body to the ESRB that will bring together all national supervisory agencies. The ESRB will also be able to draw on the advice of other parties and is expected to liaise closely with the Financial Stability Board, the IMF, and other international bodies.

6. Risk warnings and recommendations will generally be addressed to the ECOFIN and, as appropriate, to the ESAs. They will normally be kept confidential, but could be made public on a case-by-case basis after consultation with the ECOFIN. The ESRB will be required to follow up on its risk warnings and monitor the implementation of its recommendations. While these recommendations will be non-binding, non-implementation will have to be explained (“act or explain”).⁷ The option of publication should also help to encourage action.

Micro-Prudential Supervision

7. **Set-up.** A European System of Financial Supervisors (ESFS) will be established, bringing together the EU’s national supervisory agencies with three new independent, sectoral, supranational European Supervisory Authorities (ESAs): the European Banking Authority (EBA), the European Securities and Markets Authority (ESMA), and the European Insurance and Occupational Pensions Authority (EIOPA). The ESAs will be formed out of

⁵ The ECB’s General Council is composed of the President and Vice-President of the ECB, as well as the Governors of the central banks of all EU member states.

⁶ Comprising the Chairman, Vice-Chairman, and two additional central bank members of the ESRB, the Chairs of the ESAs, the representative of the European Commission, and the EFC president.

⁷ A similar “comply or explain” mechanism was recently introduced by the Level-3 Committees of supervisors, and has reportedly proven to be effective.

the existing Level-3 committees in the Lamfalussy structure, and have the same sectoral coverage.⁸ They will have legal personality. A Steering Committee will be established to coordinate and ensure consistent approaches among the three ESAs, seeking in particular effective supervision of conglomerates and a level playing field between sectors.⁹

8. The ESAs will have significantly strengthened governance systems, powers, and operational autonomy compared to the Level-3 Committees. They will have full-time, independent chairpersons and secretary-generals, a Supervisory Board composed of the highest-level representatives of the corresponding national supervisory authorities, and a Management Board composed of representatives of the same national authorities. It is envisaged that decisions will be made on the basis of qualified majority voting, using the Treaty weights of the member states. The ESAs will have increased resources and staff levels compared to the secretariats of the current Level-3 committees.

9. **Mandate.** The ESAs will be tasked with building a common supervisory culture, ensuring consistent supervisory practices, and establishing uniform procedures and consistent approaches across supervisory colleges. Specifically, they will seek to establish a single rule book (see below), ensure consistency in the interpretation of these rules, collect feedback on practical issues that arise in the implementation of these rules, issue guidelines on practical supervisory issues, coordinate supervisory analyses, conduct peer analysis with a view to achieving consistency in supervisory outcomes, develop common training programs, and provide input into international issues. The ESAs will be directly accountable to the EU Council, the European Parliament, and the European Commission.

10. **Functioning.** While the ESAs will have direct supervisory powers over rating agencies (and possibly central counterparty clearing houses), other institutions will continue to be supervised by the national supervisory authorities, this is, the national level of the ESFS. For cross-border groups, supervisors will set up colleges, in which the ESAs will be able to participate as observers.

11. **Enforcement and conflict resolution.** The ESAs will fulfill an important role in enforcement and conflict resolution within the ESFS. Two important tools are envisaged. First, in case of a manifest breach of EU Law or the ESAs' binding technical standards, the ESAs will be able to address recommendations to the relevant national supervisor. If non-compliance nonetheless persists, the ESAs can refer the case to the European Commission so

⁸ The Committee of European Banking Supervisors (CEBS) will become the European Banking Authority (EBA), the Committee of European Securities Regulators (CESR) will become the European Securities and Markets Authority (ESMA), and the Committee of European Insurance and Occupational Pensions Supervisors (CEIOPS) will be turned into the European Insurance and Occupational Pensions Authority (EIOPA).

⁹ The Steering Committee will comprise representatives of the three ESAs and the European Commission.

that the latter can use its enforcement powers to resolve the matter.¹⁰ Second, in case of disagreement between national supervisors or within a college of supervisors, the ESAs will be able to initiate a binding process of mediation, in which they facilitate a dialogue and assist the supervisors in coming to a joint agreement. If no agreement can be reached after a phase of reconciliation, the ESAs will have the power to settle the matter with a binding decision. However, the areas in which such binding decisions can be taken remain to be clarified at the time of writing, as the June 19 European Council agreed that such binding decisions can not impinge on the fiscal responsibilities of the member states. Binding decisions will be subject to judicial review in the EU's Community Courts.

Regulation

12. The ESFS is expected to establish a “single rule book applicable to all financial institutions in the Single Market.” A three-pronged approach is envisaged to achieve this goal:

- a review of existing Directives to remove national exceptions and achieve greater harmonization;
- a new mechanism that would turn the ESAs into rule-setting bodies: within areas specified in EU legislation, the ESAs will be able to set binding harmonized technical standards that come into effect from a fixed date, provided the European Commission endorses them;¹¹
- the ESAs will also draw up non-binding standards, recommendations and interpretative guidelines, which would be applied by the national authorities in taking individual decisions. While non-binding, application will be on a “comply or explain” basis, which has proven to be effective in achieving compliance.

Information Gathering and Sharing

13. An integrated system for collecting, managing, and sharing prudential information is envisaged. It will comprise the following elements:

¹⁰ Under the Lamfalussy process, enforcement (Level 4) was the task of the European Commission. This new arrangement shifts the task essentially to the ESAs, using the (threat of the) European Commission's existing enforcement powers to give the ESA recommendations teeth.

¹¹ Compared to the existing Lamfalussy process, this implies that the rulemaking functions of Levels 2 (detailed technical rules) and 3 (technical advice and industry consultations on such rules) are largely merged in the ESAs.

- the ESAs will be responsible for the definition, collection and aggregation of all relevant micro-prudential information emanating from national supervisors (who will remain the point of contact for the prudential reporting of financial institutions);
- a central European database will be established and managed by the ESAs;
- the information in the central European database will be made available to the relevant authorities in the colleges of supervisors;
- the ESFS Steering Committee will organize the sharing of this information with the ESRB, subject to specific confidentiality arrangements; and
- the European Commission has been asked to review existing legislation in order to facilitate the functioning of this system.

C. Challenges and Unresolved Issues

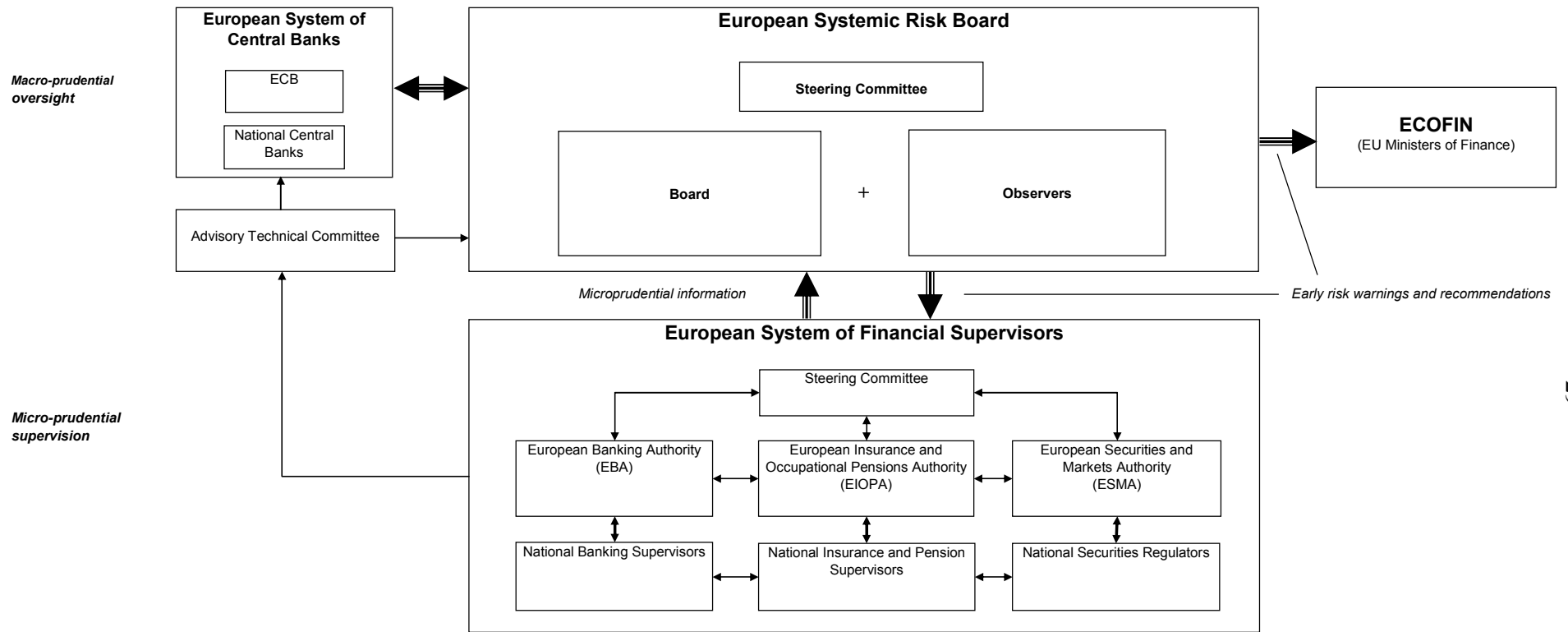
14. The reform package leaves crisis management and resolution largely untouched. However, the European Council has asked the European Commission to accelerate its work under the existing crisis management roadmap, with a view to establishing a comprehensive cross-border crisis management framework for the EU. In this context, it has asked for proposals to give the ESAs a strong coordinating role in crisis management.

15. In the absence of comprehensive solutions for cross-border crisis resolution and the related question of fiscal burden sharing, the envisaged binding powers for the ESAs have been controversial. The argument against is that these binding powers could lead to fiscal (crisis management and resolution) costs in member states and that this would impinge on member states' responsibilities for fiscal policy. The European Council took a middle road, deciding that binding powers are needed but that these should not impinge in any way on the fiscal responsibilities of member states. It asked the European Commission to come up with detailed legislative proposals to achieve this balance.

16. The extent to which the ESFS will be able to succeed in producing a single rulebook will depend on the design and quality of the legislative framework, and the scope that the legislator will provide in individual Directives for rule-setting by the ESAs. In addition, a long-standing challenge is that of ensuring rapid transposition of the common rules at the national level, where rule-setting mechanism still vary greatly.

17. Establishing the single EU prudential database will likely require significant legal reforms in member states in order to alter the current country-based confidentiality regimes.

Figure1 . The EU's New Financial Stability Framework



Source: European Commission, IMF Staff

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