Supervisory arrangements, LoLR and crisis management in a single European banking market

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In this paper I discuss some key issues related to supervisory arrangements in the EMU countries, and particularly those relating to the LoLR structure and crisis management. The focus will be on the responsibilities and powers of individual countries and national central banks vis-à-vis the actors at the European level (the EU and the ECB). In this context various issues will be raised relating to the effectiveness and efficiency of the arrangements, and specifically the role and positioning of the lender of last resort (LoLR) in light of the fragmented supervisory structure.

1. Introduction

The fragility of the financial system is a key public policy concern. It is widely acknowledged that stability concerns and systemic risks in banking are real and warrant regulatory scrutiny. These issues have become more pertinent with the further integration of financial markets and the increasing cross-border footprint of financial institutions. For the European banking market Schoenmaker and Oosterloo (2005) document a sizable increase in the cross-border externalities coming from the growing number of banking groups that have a significant cross-border presence. Also, as highlighted in De Nicoló and Tieman (2005), real activities have become more synchronized, exposing EU member countries more and more to a common European business cycle.1 These developments point at the need for an international perspective on regulation and supervision.

The focus in this paper will be on the responsibilities and powers of

Simultaneously, domestic financial sectors have become more dynamic, less predictable and more exposed to competition. This has ignited a lively debate on the interaction between stability and competitiveness; see Boot and Marinc (2006) for an analysis on the interaction between competitiveness, stability and the effectiveness of regulation.

My primary focus is on the lender-of-last-resort (LoLR) and the related crisis management structure. individual countries vis-à-vis the EU and the ECB. In this context various questions will be raised, in particular relating to financial stability and the effectiveness and efficiency of regulatory and supervisory arrangements. My primary focus is on the lender-of-last-resort (LoLR) and the related crisis management structure. However, I will indicate that this role, and the allocation of tasks between ECB and national central banks, cannot be assessed independently from supervisory arrangements in the EU in general. Both supervisory and LoLR arrangements are fragmented with primary responsibilities at the national level. Key political concerns related to national sovereignty and (too much) concentrated authority at EU and ECB levels could explain this decentralized structure. I will critically evaluate these arrangements. My primary conclusion is that centralization of the LoLR function is desirable, and actually could help facilitate convergence – and ultimately – centralization of prudential supervisory practices. As I will argue some burden sharing arrangements are however needed to make this possible.

The organization of the paper is as follows. Section 2 provides a characterization of (prudential) supervisory practices in the EU, and notes the limited role of the ECB in this area. In section 3 the focus shifts to the LoLR arrangements. I discuss here three things: the sources of fragility and systemic risks, the allocation of LoLR responsibilities between ECB and national central banks, and the lack of fiscal authority at the EU level. The latter may well complicate the allocation of LoLR and crisis management responsibilities because of the potential budgetary consequences of LoLR support and crisis resolution. Section 4 asks the question whether current arrangements are sustainable, and particularly what distortions the present decentralized nature of arrangements may induce. In section 5, I discuss which improvements could be made. Section 6 concludes.

2. A characterization of ECB and EU arrangements

The European regulatory structure is best described as fragmented with primary responsibilities at the level of the individual nation states.

The European regulatory architecture is best described as fragmented with primary responsibilities at the level of the individual nation states. Under the principles of only minimum essential harmonization, home country control and mutual recognition of supervision embedded in the Second European Banking Directive, prudential supervision remains solidly with the home country (i.e., the member state in which the financial institution has been licensed).

At this national level a diverse assortment of institutional arrangements continues to thrive. If there is a trend, it seems that a domestically centered cross-sector integration of supervision is underway, with at the extreme the fully integrated FSA supervisory model in the UK.

Simultaneously, a 'twin peaks' type structure - separating prudential supervision and conduct of business supervision – is becoming more popular. Nevertheless, for now, a wide diversity of arrangements continues to exist. This is further highlighted by the fact that in some countries the central bank is the prudential supervisor, while in other countries – like in the UK – prudential supervision is the task of an independent supervisory agency.

At the European level, several arrangements are in place to facilitate the supervision of cross-border activities of financial institutions. For example, the European Central Bank has a limited coordinating role for the LoLR facilities that are placed in the hands of national central banks.² Also various multilateral arrangements exist. Within the ECB, the Banking Supervisory Committee (BSC) brings together banking supervisors of all EU countries to discuss financial stability issues, provide macro-prudential oversight, and assess draft EU and national banking legislation.

At the level of the EU, several cooperative arrangements are in place. Up to 2004 these arrangements included the Banking Advisory Committee (BAC) that advises the EU on policy matters related to bank legislation, and the Insurance Committee. In 2004, the European Parliament and the EU Council adopted a 'Lamfalussy type' framework (Committee of Wise Men, 2001) based on work by the Economic and Financial Committee (EFC) – a committee advising the Ecofin Council (EFC, 2002). This framework, which initially was designed for streamlining the regulatory and supervisory practices for the European securities markets, was subsequently applied to the financial sector at large. It introduces a structure for financial sector rule making at the European level.³ In this restructuring and further formalization of the EU regulatory and supervisory framework the existing sectoral Banking Advisory Committee (now CEBS) and Insurance Committee (CEIOPS) both were being given important roles.4

These sectoral committees (banking, insurance but also securities, the CESR) and a separate committee addressing financial conglomerate issues, are essentially put under control of the finance ministers and kept at a distance from the ECB and national central banks. Non-supervisory national central banks and the ECB have observer status, but no voting

² The ECB has primarily a *facilitating* role for systemic issues. For example, its statute points explicitly at its role in promoting the smooth functioning of the payment system (Art. 3.1. and 22 of the Statute; see also Art 105(2) of the Maastricht Treaty).

³ The Lamfalussy approach encompasses a four-level regulatory approach: level 1 involves broad framework principles for legislation; level 2 detailed rules; level 3 aims at cooperation between national regulators, and level 4 addresses enforcement issues (see also Lannoo and Casey, 2005).

⁴ These committees have a role at level 2 in the Lamfalussy type four layer framework (see EFC, 2002). Also the existing supervisory oriented Groupe de Contact has a role to play.

The hope is that the Lamfalussy approach at the EU level will lead to a further streamlining and coordination in supervisory and

legislative practices.

rights. This effectively gives the ECB no formal role in (micro) prudential supervision.5

Some convergence and increasing coordination in supervisory practices is observed. A recent development is the EU Directive on Financial Conglomerates that allocates group-wide supervisory responsibilities to a single coordinator located in the Group's home country. The hope is that the Lamfalussy approach at the EU level will lead to a further streamlining and coordination in supervisory and legislative practices, and – ultimately - convergence between member states.6

3. Lender of Last Resort

Bagehot's classical motivation for the LoLR was that it would lend freely to solvent but illiquid banks against good collateral at a premium price (Rochet, 2004). The reality of LoLR support in various countries in the world has been different in that net infusions of cash in troubled institutions have been quite common, in part because distinguishing between liquidity and solvency problems might be difficult.

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This potential confusion and uncertainty about the true nature of illiquidity problems may have worsened over time. In particular, the proliferation of financial markets and the ways in which risks can be shifted through the system, undoubtedly complicate the assessment of the fragility of the financial system. For my analysis, an understanding of the sources of fragility, and their relative importance is important because it may impact the role that LoLR support plays, and this role might have changed over time. In turn, the assessment of the role of LoLR support in today's financial sector is of preeminent importance for evaluating the present EU arrangements when it comes to LoLR support and crisis management in general.⁷ In subsection 3.1, I will further elaborate on this.

Another important issue is how the LoLR role is organized in the euro countries. The general principle is one of delegation (subsidiarity) with the LoLR role being given to national central banks. Understanding these arrangements is crucially important for assessing the effectiveness of crisis management in the euro area. The allocation of responsibilities between

The ECB has been careful in defining its role in prudential supervision. While it downplays potential conflicts of interest that may arise in combining central banking and prudential supervision (ECB, 2001), suggesting with that possibly a bigger role for itself, it simultaneously expresses that it is not aiming at a bigger role in supervision but only attempts to broaden cooperation (Duisenberg, 2003).

⁶ Other arrangements are in place as well. Various bilateral arrangements, cq Memoranda of Understanding (MoU's) between national supervisors, help coordinate cross-border supervision. They further clarify, on a voluntary basis, the cooperation mandated in EU directives regarding information exchange, mutual assistance, establishment procedures and on-site examinations.

⁷ I will focus on crisis management in the context of systemic concerns. In this case, there is a direct link between the LoLR and crisis management.

national central banks and ECB with respect to LoLR support needs to be evaluated in the broader context of EU supervisory arrangements. In subsection 3.2, I will discuss the present allocation of responsibilities. A brief evaluation is contained in subsection 3.3.

3.1. ROLE OF LENDER OF LAST RESORT (LoLR)

In the classical interpretation, a financial crisis is directly linked to the notion of bank runs. In a fractional reserve system with long term illiquid loans financed by (liquid) demandable deposits, runs may come about due to a coordination failure among depositors (Diamond and Dybvig, 1983). Even an adequately capitalized bank could be subjected to a run if the deadweight liquidation costs of assets are substantial. Regulatory interference via LoLR support, deposit insurance and/or suspension of convertibility could all help, and could even fix – in this simple setting – the inefficiency. Observe that the externalities that a bank failure could create possibly provide a rationale for regulatory interference. These externalities could be directly related to the bank that is subjected to a potential run, but also be motivated by potential contagion effects. Many have generalized this simple setting by allowing for asymmetric information and incomplete contracts; see Rochet (2004) for a review. The general conclusion is that fragility is real, and information based runs are plausible.

For the purpose of this paper two observations are important; both are related to the proliferation of financial markets. First, access to financial markets weakens the liquidity insurance feature of demand deposit contracts. To see this note that the root cause of the fragility in the Diamond-Dybvig world is the underlying demand deposit contract. The rationale for this contract – as brought forward by Diamond and Dybvig (1983) – is the desire for liquidity insurance on the part of risk averse depositors with uncertainty about future liquidity needs. However, as shown by Von Thadden (1998), the very presence of financial markets allows depositors to withdraw early and invest in the financial market which puts a limit on the degree of liquidity insurance. This is related to the earlier work of Jacklin (1987) who shows that deposit contracts have beneficial liquidity insurance features provided that restricted trading of deposit contracts can be enforced.8 In any case, these arguments suggest that the proliferation of financial markets weakens that liquidity provision The proliferation of financial markets weakens the liquidity provision rationale of deposits, which may help explain the lesser importance of deposits for banks.

⁸ Actually, Jacklin (1987) shows that with the 'extreme' Diamond-Dybvig preferences, a dividend-paying equity contract can achieve the same allocations without the possibility of bank runs. However, for basically all other preferences, a demand deposit contract does better provided that trading opportunities are limit-

rationale of deposits, which may help explain the lesser importance of deposits for banks.

A second observation is that the proliferation of financial markets may suggest that the LoLR role in providing liquidity loses importance. What I mean is that in Bagehot tradition one could ask the question whether the LoLR has a role to play in providing liquidity to liquidity constrained yet solvent institutions when capital markets and interbank markets are well developed. Goodfriend and King (1988) argue that solvent institutions then cannot be illiquid since informed parties in the repo and interbank market would step in. In this spirit, the former ECB board member Tommaso Padoa-Schioppa suggested that the classical bank run may only happen in textbooks since the "width and depth of today's interbank market is such that other institutions would probably replace those which withdraw their funds" (as guoted in Rochet and Vives, 2004).

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While these remarks rightfully suggest that the proliferation of financial markets could weaken the need for a LoLR in providing liquidity support, it would go too far to see no role for a LoLR, particularly when information asymmetries are considered. More specifically, an extensive literature on aggregate shocks has moved away from the pure 'sunspot' bank run equilibriums, as in Diamond and Dybvig (1983), focusing instead on fundamentals. This literature builds on the empirical evidence in Gorton (1988) showing that banking crises – prior to the creation of the Federal Reserve – were predicted by leading economic indicators. In a recent contribution Rochet and Vives (2004) show that a coordination failure in the interbank market may occur particularly when fundamentals are low, and that this may lead to a need for liquidity support by the LoLR for a solvent institution.9

Even though the proliferation of financial markets has improved risk sharing opportunities between banks, these very same interbank linkages may well have increased systemic risk.

Overall the preceding discussion warrants the conclusion that the proliferation of financial markets (including interbank markets) has improved the risk sharing opportunities between banks, and possibly has reduced sunspot type bank run problems on individual institutions. 10 But these very same interbank linkages may well have increased systemic risk, i.e. the probability of propagation of liquidity and solvency problems to the financial system as a whole. It is therefore at the very least premature to trivialize the need for a LoLR.

Actually, a more market-centered view on systemic risks has gained ground, at the expense of a more institutionally-focused view of systemic

Another line of research points at asset price bubbles as potential source or cause of fragility and contagion (Allen and Gale, 2000). See Allen (2005) and De Bandt and Hartmann (2002) for surveys on contagion.

Whether total insolvency risk of individual institutions has come down depends on the actual risk taking and capitalization. Evidence in De Nicolo and Tieman (2005) suggests that the insolvency risk of European institutions has more or less remained the same over the last 15 years despite increases in capital over time and a wider geographic range of operations.

risk. The propagation mechanisms for systemic crises have become substantially more complicated and possibly far reaching as well. For example, the revolution in structured finance and securitization may introduce all kinds of systemic issues. The risks in the markets for securitized assets are ill understood. Once big defaults would occur in this market a meltdown is not excluded, and systemic risks are possibly acute.¹¹

3.2. LOLR RESPONSIBILITIES IN THE EURO AREA

The ECB has primary stability responsibilities when it comes to the payment system. But the ECB does not have an explicit task of preserving the stability of the financial system in general. This is left to the national central banks. These national central banks also have the LoLR role, and not the ECB. This formal description is of importance, but the practical allocation of tasks in the Eurosystem could deviate considerably, particularly because of the euro area wide consequences of the manifestation of systemic risks.

The practical allocation of tasks and responsibilities as it relates to the LoLR role in the euro countries between ECB and national central banks only became clear in 1999. At the presentation of the 1998 annual report (October 26, 1999) then ECB-president Duisenberg commented that on the part of the ECB "there is a clearly articulated capability and willingness to act if really necessary" (Duisenberg, as reported in Vives, 2001). He added on the procedural issue that "The main guiding principle within the Eurosystem with reference to the provision of emergency liquidity to individual financial institutions is that the competent national central bank would be responsible for providing such assistance to those institutions operating within its jurisdiction". For a general liquidity crisis in the payment system Duisenberg indicated that a direct involvement of the ECB could be expected. 12 The latter is directly in line with the mandate of the ECB that stipulates its role in the smooth functioning of the payment system (Article 105(2) of the Maastricht Treaty).13

This interpretation of the LoLR role of the ECB and the national central banks is in line with the rather flexible wording of the role of the ECB in the Treaty. The LoLR function is primarily a national responsibility, and the provision of liquidity support is under the responsibility and liability of

¹¹ Problems include the mighty role of credit rating agencies, the dependence on monoliners, etc.; see Boot, Milbourn and Schmeits (2006) for an analysis of the growing importance of credit rating agencies for the functioning of financial markets.

¹² I am not distinguishing in the text between the European System of Central Banks (ESCB), which is the Eurosystem that Duisenberg is referring to, and the ECB. This simplification is not totally correct because the relevant decision making body at the center is the ESCB, and not the ECB as standalone organization.

¹³ See also Schinasi and Teixeira (2005).

The LoLR function and the provision of liquidity support are primarily the responsibility and liability of national central banks. national central banks. Nevertheless, also the ECB could engage in liquidity support, though it uses stricter collateral requirements. Moreover, the scope of the LoLR involvement at the ECB level is restrained by the lack of fiscal authority at the European level.

3.3. EVALUATION OF LOLR ARRANGEMENTS

The central role of individual national central banks in LoLR activities and the secondary role of the ECB is somewhat curious. Systemic concerns at the EU level, the increasing integration of the EU economies and the introduction of the common currency (euro) would seem to dictate a more well-defined LoLR role at the level of the ECB. However, one may argue that national central banks are often better able to assess the immediate liquidity needs of local financial institutions. This may well be valid, but only addresses the practical operational organization of the LoLR role. It does not explain why the responsibility of LoLR support is left to national central banks.

Political considerations. the lack of fiscal powers at the European level and the decentralized and fragmented nature of EU banking supervision, have all contributed to the resulting patchwork of national supervision and European-wide coordination.

The right way of looking at this is that political considerations have led to these arrangements. In particular, the Maastricht Treaty may have tried to prevent the emergence of an overly powerful ECB at the expense of national central banks. I do not think that there is a much deeper rationale for this, and I am reluctant to put forward more sinister arguments. For example, one could argue that preserving these powers locally serves the desire of national authorities to have better control over their home country financial institutions via the national central bank. This may well be the case. Such local power could help defend these 'national interests' when a crisis would occur. This would not be without cost since it would cast doubt on the desired independence of central banks. Nevertheless, I would more readily subscribe to the idea that a desire to protect national sovereignty has prevented national authorities from agreeing to more powerful EU and Euro area institutions.

Also the lack of fiscal powers at the European level is in part, or mostly, motivated by the same balance between national sovereignty and effective EU decision making. This lack of fiscal authority has made it more complicated for the ECB to assume broader powers in the LoLR role. That is, liquidity support is often provided in circumstances where losses may occur; the question then comes up who is responsible for these losses.

To complicate this picture even further, the decentralized and fragmented nature of EU-banking supervision, with primary responsibilities at the level of individual member states, and only a coordinating and facilitating role at the EU level, in all likelihood further reduces the power of

the ECB vis-à-vis the national central banks. National central banks in practice will be a natural partner to the primary local supervisory agencies. Indeed, in many countries the national central bank is also the local supervisory agency. Important in this respect are also the national – home-country – linked deposit insurance arrangements. Again, national authorities are in charge and the national treasury incurs the (contingent) financial obligations.

These contingent financial obligations combined with the absence of fiscal powers at the EU level, are a strong obstacle for the further centralization of both supervision at the EU level and LoLR responsibilities in the ECB. The well known motto, "who foots the bill decides", underscores the existing decentralized focus. I see no reason why this would be different here. The contribution of Goodhart and Schoenmaker to this workshop addresses this important financial matter.

4. Are current arrangements sustainable?

The resulting patchwork of national supervision and European-wide coordination has so far upheld itself reasonably well. The key questions are, however, how this system will work in crisis situations, and to what extent it accomplishes the efficiency objectives of regulation and supervision in general. In crisis situations important concerns can be raised about the adequacy of information sharing and cooperation between the various supervisors, the European Central Bank and the national central banks. In particular, in such situations the question about who will be in charge might become very urgent. Potential tensions can easily be envisioned between supervisory agencies, national central banks and the ECB.

Policy makers are aware of these issues. For example, the new Directive on Financial Conglomerates gives the home country supervisor the single coordinating responsibility in all member states for group-wide supervision of the financial conglomerate. Issues of financial stability however remain the responsibility of the host countries.

The question is how to coordinate these potentially diverse interests. Particularly in crisis situations these issues are of paramount importance. The core message of the second Brouwer-report (EFC, 2001) was that no mechanism was in place to coordinate in case of such crisis. For that reason a Memorandum of Understanding between virtually all European national central banks and supervisors was formulated that specifies principles and procedures for cooperation in crisis management situations (ECB, 2003). The fiscal side, in particular the budgetary obligations imposed on member states in case of bail-outs, however also requires the approval of national finance ministries that have to incur the potential

One key question is how to coordinate potentially diverse interests, not least in a crisis situation. financial obligations. In a follow-up Memorandum of Understanding these finance ministries were also included (ECB, 2005).

Several questions can be raised about the efficiency of the arrangements in general. The decentralized structure may give rise to potential conflicts of interest between the national authorities and 'outsiders'. For example, national authorities might be prone to TBTF (too-big-to-fail) rescues. 14 Alternatively, national authorities may not sufficiently appreciate (that is, internalize) the disrupting consequences that a domestic bank failure could have in other countries. Efficiency might be hampered in other ways as well. For example, the national scope of supervision may help encourage the emergence of 'national champions'. More fundamentally, the decentralized structure could give rise to level playing field and regulatory arbitrage issues.

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Casual observation and reasoning would seem to suggest that integration and further coordination (if not centralization of authority) of both regulation and supervision might yield substantial efficiency gains not only for the supervisory authorities but also, and maybe more importantly, for the supervised financial institutions themselves. There are currently more than 35 supervisory authorities responsible for prudential supervision in the EU, and a typical large financial institution might have to report to more than 20 supervisors (Pearson, 2003).

Yet, practical considerations suggest that a full integration of all requlatory and supervisory functions at the European level may not (yet) be feasible. While it is clear that regulatory and supervisory integration needs to keep pace with the development of the size and the cross-border footprint of the covered banks, the heterogeneity of underlying supervisory systems and the implied costs of integration should not be underestimated. An interesting illustration is the evidence reported by Barth, Caprio and Levine (2002) on the variation across the European Union countries in supervisory institutions and practices. Their conclusion is that supervisory arrangements within the EU are as diverse as in the rest of the world. Also, illustrating this point further, the EU countries are current or former standard bearers of all major legal origins. A vast literature now documents how legal origin matters for the shape and functioning of the financial system (see La Porta, et al, 1998). 15

While common sense suggests that ultimately a more integrated regulatory and supervisory structure is desirable¹⁶, the way we would get

¹⁴ One could replace too-big-to-fail with too-big-to-close to emphasize that replacing management, wiping out equity holders, etc. could still be done to mitigate moral hazard.

Bank regulation and supervisory practices differ also considerably between civil and common law countries, with a more flexible and responsive approach in the latter.

¹⁶ Actually, some theoretical work points at the potential value of competition between regulators, see also Kane (1988).

there is far from clear. The Lamfalussy approach may bring us in the right direction but it does not provide for authority at the pan-European level. Indeed, practical considerations, including political concerns, dictate for now a fragmented structure on which a coordination layer needs to be super-imposed; the lead regulator model is one example of that.¹⁷

However, the struggle for an efficient pan-European coordination and integration of regulation and supervision is more then just a practical issue that will be sorted out over time. Two things stand out. The first is that the scope of regulation and supervision needs to be contained. Effective supervision and regulation – given the mushrooming cross-sector and cross-border footprint – requires a better demarcation of safety and systemic concerns. The cross-sector integration of financial institutions and the ever more seamless integration of financial markets and institutions have enormously broadened the scope of regulation and the potential sources of systemic risk.

This also relates to the issue of fire-walls. For example, does a subsidiary structure reduce systemic concerns? I do not think that an answer is readily available. More generally, what type of constraints, if any, should be put on the corporate structure of financial institutions? While we tend to think of further deregulation in the financial sector possibly leading to even bigger and broader financial institutions, it is far from clear what the future will bring. In any case, changes in the industrial structure of the financial sector are of paramount importance for the design and effectiveness of regulation and supervision. ¹⁹ If these issues cannot be satisfactorily addressed, I am not very optimistic about the possibilities for effective and efficient pan-European regulation even in the long run.

The second issue is that very little is known about the efficiency and effectiveness of various regulatory and supervisory structures. As Barth et al (2003) put it, "there is very little empirical evidence on how, or indeed whether, the structure, scope or independence of bank supervision affect the banking industry". Their own research suggests that the effect is at best marginal but measurement problems are paramount. They conclude

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The second issue is that very little is known about the efficiency and effectiveness of various regulatory and supervisory structures.

An important distinction needs to be made between business conduct regulation and prudential regulation. I have focused on the latter. The former is closer to the functioning of financial markets and lends itself more readily for centralization at the European level. In the context of these financial markets, the 'real' Lamfalussy report (Committee of Wise Men, 2001) does not directly propose authority at the EU level but it states that if its proposed approach is not successful the creation of a single EU regulatory authority should be considered.

¹⁸ The earlier discussion on the precise source and propagation mechanism as it relates to systemic risk is actually pointing at the same issue.

¹⁹ Earlier I referred to the concentration in the credit rating business and the importance of ratings for the markets for structured finance (securitization). It is interesting to ask the question what impact a meltdown of one of the main credit rating agencies would have on these markets, and what this in turn would imply for participants in these markets.

from this that we may thus choose to only focus on the effect that regulation has on systemic issues. But also here little is known. What this means is that we need much more work that tries to pin point the costs and benefits of different regulatory and supervisory arrangements. Obviously in the context of the widely different national supervisory arrangements the lack of evidence does not really help in evolving to a harmonized 'superior' model.

5. What should be done?

The missing command structure in EU arrangements (the various MoU's and the Lamfalussy framework) as well as that with respect to LoLR facilities needs to be addressed. It is clear that further improving coordination and cooperation between supervisory bodies makes sense. The EFC (2002) proposals (based on the Lamfalussy approach) and the recent crisis management MoU's (ECB, 2003, 2005) are steps in that direction. Further improvements can be made by harmonizing accounting standards and improving procedures. But this is not enough. Ultimately more is needed than just good intentions and procedures.²⁰ The missing command structure in EU arrangements (the various MoU's and the Lamfalussy framework) as well as that with respect to LoLR facilities need to be addressed.

As stated already, an EU-wide regulatory and supervisory authority cannot be expected anytime soon. The LoLR function is directly related to crisis management, and in those circumstances a clear line of control is most important. But accomplishing improvements and particularly changing powers between national authorities and the ECB at the center is – as stated – a political issue. So far, whatever improvements have been made, were predicated by crises. Indeed, crises create urgency. The BCCI crisis was particularly important because this crisis led to willingness to address pan-European coordination failures in supervision. It is then immediately clear that – unless a major crisis would come about soon – there is for the moment no urgency for change. Matters might be even worse. With no crises in sight, complacency could set in.

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My own assessment is that current initiatives, including the lead supervisor designation for banking groups, are improvements in the right direction. The Lamfalussy framework I see favorably as well. It will in my view indeed improve the efficiency of the legislative and rule-making process, and encourage convergence in regulatory and supervisory practices. Also the less formalized cooperative initiatives like the Banking Supervisory Committee within the ECB and the widely supported BIS ini-

²⁰ Cooperation between a system of dispersed (semi-autonomous) central banks and dispersed and autonomous prudential supervisors is very complicated. Decentralized systemic responsibilities combined with decentralized prudential responsibilities with each involving different bodies offer multiple coordination problems.

tiatives clearly put us on the path to further improvements and harmonization. These initiatives facilitate a continuous process for improving the supervisory process without having to make highly political and controversial choices. This process I judge very favorably. Nevertheless, a fear for complacency is in order. We need to continue to put improvements in supervisory practices and cooperation among supervisors high on the agenda, and be constantly critical about the speed, efficiency and effectiveness of the process. To speak with Lamfalussy, if the process slows down, more heavy-handed interventions should be considered.²¹

I am much less convinced that the same gradual process should apply to the LoLR structure. The LoLR role is intricately linked to crisis management, and that does not lent itself for a gradual approach or 'soft' agreements on cooperation. While the MoU's (ECB, 2003, 2005) help in overcoming some of the lacunae identified in the Brouwer crisis management report (EFC, 2001), I do not think this is a sufficient response. This is not to say that I would criticize these MoU's. Actually, I fully endorse them. The 2005 MoU that addresses cooperation and information sharing (including views and assessments) between supervisors, central banks and finance ministries is an important document. What it does not do (and does not intend to do) is bring the LoLR responsibility to a more central level. To the contrary, it remains with national central banks which possibly do not, and often cannot, sufficiently take into account the pan-European systemic problems that may have arisen in a crisis situation. This national authority then diffuses the command structure, while the LoLR should be at the heart of crisis management.²²

In my conversations with some national central bankers in the euro area an amazing group feeling and feelings of collective responsibility are expressed. The suggestion is that such collective feeling of responsibility will effectively guarantee a central command structure at the ECB level because any serious problem with potential euro area repercussions would immediately be brought to the ECB, or more correctly the European system of central banks (ESCB). While one should be enthusiastic about the trust in each other and collective feeling of responsibility that has been

²¹ These more positive comments on the developments in supervisory arrangements in the EU do no imply that I fully endorse the current state of affairs. One issue that deserves much more attention is how to address too-big-to-fail (TBTF) concerns. US practice with clear-cut timely interventions could be particularly helpful in EU banking markets considering the massive domestic consolidation (see Eisenbeis and Kaufman,

²² In my view the central role given to national central banks is really an artifact of the past when the then rather segmented markets allowed the local central bank to resolve a bank crisis by "forcing" the surviving institutions to take care of the problem. This no longer works because local banks in the increasingly open banking market do no longer feel the same responsibility for resolving problems in their home market. A case in point is the recent failure of a very small Dutch bank with only local Dutch operations (Van Der Hoop). Despite the potential reputation damage to the local financial sector, the (many times bigger) surviving institutions were not willing to step in. A further complicating factor is that due the substantial consolidation in domestic markets, a typical failure might be very difficult to handle for the surviving local insti-

created at the ECB level, one has to be careful with trusting such informal approach when it comes to crisis management situations. Those situations are rare, involve novel occurrences that are rather unpredictable and can have very severe consequences for individual member states. In those situations national interests may collide with euro area wide responsibilities, and mutual trust might not be sufficient for aligning national interests with Euro-area interests. For this very reason a clear command structure at the euro level is important. This would imply that the ECB should get primary responsibility over the LoLR role.²³

But is this feasible without other changes in EU arrangements? Particularly the fragmented domestically-centered regulatory and supervisory structures and the lack of fiscal authority at the EU level are problematic. To start with the latter, any more serious role of the ECB in LoLR operations (and crisis management) should go hand in hand with some burden sharing arrangements to cover potential losses in those operations. In my view, this is doable but needs to be arranged. More problematic is the fragmented supervisory arrangement. Several things can be said about this. As already stated, only over time can this be changed. In my view, it is important and absolutely necessary that this is dealt with.²⁴ But for now this will just not happen for all the reasons given before.

Considering the pan-European nature of systemic concerns, a more central authority is needed.

One could then argue is it not logical to also keep the LoLR role for now local? That is, why not keep it close to the local supervisor? Considering, as I have highlighted, the pan-European nature of systemic concerns, a more central authority is needed. Local central banks could however still continue to play an important operational role in LoLR activities. Authority at the ECB level will however give a powerful boost to information sharing, and this could distinctly improve the efficiency and effectiveness of the LoLR operations.

6. Concluding thoughts

My recommendation is to grant the ECB explicitly responsibility over the LoLR function; national central banks would then get a more operational role. This recommendation is not new. Several authors have suggested this (see Lannoo, 2002, and Vives, 2001). However, as I have indicated, the lack of fiscal authority at the European level makes this difficult.

²³ Let me emphasize that trust and feelings of collective responsibility between national central banks and ECB even then remain important. Much of the information will come from the national level, and trust is needed to facilitate an optimal flow of information. This implies in the broader context of the 2003 and 2005 MoU's as well. Without trust and collective feelings of responsibility one cannot expect the good intentions with respect to information sharing in those MoU's to be of much value.

²⁴ This does not mean that there will not be a role for local supervisors in the future. Local supervisors will always play a role because of the proximity to local institutions which could offer information advantages.

Burden sharing arrangements are needed, and have to be arranged. As with the centralization of supervisory and regulatory responsibilities in Europe, the political feasibility of a centralized LoLR responsibility remains an issue to be dealt with. I alluded to this earlier.²⁵ The EU Treaty does allow for a heavier role of the ECB in LoLR operations,²⁶ so the true issue might be to get agreement within the decision making body at the ECB (the European System of Central Banks, ESCB).

An important question is whether there is a downside to a more centralized LoLR responsibility? Would this compromise the independence of the ECB? For example, political pressure (also via Ecofin) to provide liquidity support in the case of a bank crisis might become more intense. One could argue that this type of pressure has always been present in central banking, and is actually much more intense for national central banks. A related concern is that the heavier LoLR role could intensify the potential conflict between financial stability and monetary policy objectives within the ECB. It is hard to assess the importance of this argument. The current arrangement already has this potential conflict (and one could argue about the importance of this conflict between objectives, see Issing, 2003).

On the positive side – apart from the benefits related to a more central command structure (see section 5) – I see several other potential advantages:

- More prudent use of the LoLR facility (see Vives, 2001 and Lannoo, 2002).
- ii. Extra urgency on communication between the ECB on the one hand and national central banks and supervisory agencies on the other. National authorities could be more willing to share information with the ECB (only then support can be expected). Thus, self interest may facilitate the information exchange.
- iii. It might be a catalyst for further reforms in pan-European supervision. In particular, a stronger position of the ECB could induce the EU (and Ecofin) to strengthen the role of the EU in supervision to 'counter' the enhanced power of the ECB. This would probably be positive because it would reduce the fragmentation in supervision, speed up convergence and enhance coordination. In a sense it would add urgency to the Lamfalussy process.

In my view, the benefits of a more centralized LoLR responsibility outnumber the disadvantages.

National governments could find LoLR control at the national central banks convenient in the case of a crisis, particularly when financial difficulties threaten large domestic financial institution. This already suggests that national control could worsen TBTF incentives, and possibly also compromise the role of national central banks in crisis management (i.e. they would be 'forced' in providing LoLR support also in the case of solvency problems).

²⁶ Also the ECB statute allows for a more dominant role of the ECB with respect to the LoLR function.

We need a catalyst for further European regulatory and supervisory integration for the financial sector. Expanding the powers of the ECB could be such catalyst. The latter benefit might at first blush sound tangential, but actually be a very important one. We need a catalyst for further European regulatory and supervisory integration for the financial sector. Expanding the powers of the ECB could be such catalyst.

Whatever path will be chosen, the integration of financial supervision and regulation will be far from easy. Resolving the fundamental issues related to the scope of regulation, and, to a lesser extent, our understanding about the costs and benefits of different arrangements (see the previous section), would help. Being pragmatic is important in this debate; first-best-choices are not in sight.

References

- Allen, F., (2005), "Modelling Financial Instability", National Institute Economic Review, 192, 57-67.
- Allen, F. & Gale, D., 2000, "Financial Contagion", Journal of Political Economy, 108, 1–33.
- Bart, J. R., Nolle, D. E., Phumiwasana, T. & Yago, G., (2003), "A Cross-Country Analysis of the Bank Supervisory Framework and Bank Performance", Financial Markets, Institutions & Instruments, 12-2, 67-120.
- Barth, J. R., Caprio, G. & Levine, R., (2002), "Bank Regulation and Supervision: What works best?, working paper, World Bank.
- Bhattacharya, S., Boot, A.W.A. & Thakor, A.V., (1998), "The Economics of Bank Regulation", Journal of Money, Credit and Banking, 30-4, 745-770.
- Bhattacharya, S., Boot, A.W.A. & Thakor, A.V., (2004), (eds.), Credit Intermediation and the Macro Economy, Oxford University Press, Oxford, UK.
- Boot, A.W.A. & Marinc, M., (2006), "Competition and Entry in Banking: Implications for Stability and Capital Regulation", CEPR discussion paper, February.
- Boot, A.W.A., Milbourn, T.T. & Schmeits, A., (2006), "Credit Ratings as Coordination Mechanisms", Review of Financial Studies, 19-1, 81–118.
- Committee of Wise Men, (2001), "Final Report of the Committee of Wise Men on the Regulation of the European Securities Markets", (Lamfalussy Report), Brussels, February 15.
- De Bandt, O. & Hartmann, P., (2002), "Systemic Risk: A Survey", in C. Goodhart & Illing, G., (eds.), Financial Crises, Contagion and the Lender of Last Resort, Oxford University Press, Oxford, UK.
- De Nicoló, G. & Tieman, A., (2005), "Economic Integration and Financial Stability: A European Perspective", working paper, IMF.
- ECB, (2003), Memorandum of Understanding on High-level Principles of Cooperation, Press release, March 10.
- ECB, (2005), Memorandum of Understanding on Cooperation between the Banking Supervisors, Central Banks and Finance Ministries of the European Union in Financial Crises situations, Press release, May 18.
- EFC, (2001), "Report on Financial Crisis Management", (Brouwer report), document from the Economic and Financial Committee, EFC/ECFIN/251/01.

- EFC, (2002), "Financial Regulation, Supervision and Stability", document from the Economic and Financial Committee, EF76/ECOFIN 324, 10 October.
- Eisenbeis, R.A. & Kaufman, G., (2005), "Bank Crises Resolution and Foreign-Owned Banks", Economic Review, 90-4, Federal Reserve Bank of Atlanta, 1-18.
- Freixas, X, (2003), "Crises Management in Europe", in Financial Supervision in Europe, Kremer, J., Schoenmaker, D. & Wierts, P., (eds.), Edward Elgar.
- Goodfriend, M. & King, R., (1988), "Financial Deregulation, Monetary Policy and Central Banking", in Haraf, W. & Kushmeider, R.M. (eds.), AEI Studies, No. 481, UPA, Lanham, MD.
- Goodhart, C., (2000), (ed.), Which Lender of Last Resort for Europe?, Central Banking Publications.
- Goodhart, C., Hartmann, P., Llewellyn, D., Rojas-Suarez, L. & Weisbrod, S., (1998), Financial Regulation, Routledge, London.
- Hartman, P., Maddaloni, A. & Manganelli, S., (2003), The Euro Area Financial System: Structure, Integration and Policy Initiatives, ECB Working Paper, no. 230.
- Issing, O., (2003), "Monetary and Financial Stability: Is there a Tradeoff", presentation for the Conference on Monetary Stability, Financial Stability and the Business Cycle, Basle, March 28-29.
- Jacklin, C. J., (1987), "Demand Deposits, Trading Restrictions, and Risk Sharing", in Prescott, E. & Wallace, N., (eds.), Financial Intermediation and Intertemporal Trade, University of Minnesota Press, Minneapolis.
- Kane, E. J., (1988), "How Market Forces Influence the Structure of Financial Regulation", in Haraf, W. S. & Kushmeider, R. M., (eds.), Restructuring Banking and Financial Services in America, American Enterprise Institute, Washington D.C., 343-382.
- Lannoo, K., (2002), "Supervising the European Financial System", working paper.
- Lannoo, K. & Casey, J. P., (2005), "EU Financial Regulation and Supervision beyond 2005", CEPS Task Force Report No. 54.
- Lastra, R., (2002), "The Governance Structure for Financial Regulation in Europe", Special Paper 133, Financial Markets Group, LSE.
- La Porta, R., Lopes-de-Silanes, F., Shleifer, A. & Vishny, R.W., (1998), "Law and Finance", Journal of Political Economy, 106, 113–155.
- Pearson, P., (2002), "Comment", in Financial Supervision in Europe, Kremer, J., Schoenmaker, D. & Wierts, P. (eds.), Edward Elgar, Cheltenham, UK.

- Rochet, J. C., (2004), "Bank Runs and Financial Crises: A Discussion", in Bhattacharya, S., Boot, A.W.A. & Thakor, A.V., (eds.), Credit Intermediation and the Macro Economy, Oxford University Press, Oxford, UK.
- Rochet, J. C. & Vives, X., (2004), Coordination Failures and the Lender of Last Resort: Was Bagehot Right after all?, working paper.
- Schinasi, G. J. & Teixeira, P.G., (2005), "The Lender of Last Resort in the European Single Financial Market", working paper IMF and ECB, December 12.
- Schoenmaker, D. & Oosterloo, S., (2005), "Financial Supervision in an Integrating Europe: Measuring Cross-Border Externalities", International Finance, 8-1, 1-27
- Vives, X., (2001), "Restructuring Financial Regulation in the European Monetary Union", Journal of Financial Services Research, 19, 57-82.