Discussion Paper No. 03-03

How Do Banking Supervisors Deal with Europe-wide Systemic Risk?

Martin Schüler



Discussion Paper No. 03-03

How Do Banking Supervisors Deal with Europe-wide Systemic Risk?

Martin Schüler

Download this ZEW Discussion Paper from our ftp server:

ftp://ftp.zew.de/pub/zew-docs/dp/dp0303.pdf

Die Discussion Papers dienen einer möglichst schnellen Verbreitung von neueren Forschungsarbeiten des ZEW. Die Beiträge liegen in alleiniger Verantwortung der Autoren und stellen nicht notwendigerweise die Meinung des ZEW dar.

Discussion Papers are intended to make results of ZEW research promptly available to other economists in order to encourage discussion and suggestions for revisions. The authors are solely responsible for the contents which do not necessarily represent the opinion of the ZEW.

Non-Technical Summary

Systemic risk is one of the main reasons why banks are regulated and supervised. The integration of financial markets in the EU – not just since the introduction of the euro – has increased the systemic risk potential at the European level. The divergence between this increase in EU-wide systemic risk and the current national based supervisory structure calls for a reform of the European supervisory framework. In particular, the following questions emerge: Is there a need for a truly European supervisory framework? And, how should a potential European supervisor be organised?

A milestone in the political discussion has been a report by the Economic and Financial Committee (EFC) which will probably lay the basis for a future supervisory structure in the EU. According to this report the Lamfalussy framework is to be extended to the banking sector based on the existing international agreements. The new structure aims on speeding up EU legislation, strengthening cooperation between national supervisors, and promoting convergence of supervisory practice.

The aims of this paper are twofold: First, to describe the existing supervisory arrangements both at the national and at the European level as well as the proposed structure for a future supervisory arrangement. Second, the arrangements are evaluated with respect to an increased systemic risk potential at the European level.

We conclude the following: Monitoring, i.e. supervision of individual institutions is best carried out at the level closest to the financial intermediaries concerned, i.e. the national level. However, the increased EU-wide systemic risk calls for greater cooperation between national supervisors. This task may be fulfilled by the new framework.

With regard to crisis management: Although there is no explicit European lender of last resort (LOLR) the Eurosystem can be regarded as an implicit LOLR having the necessary capacity and willingness to act when really needed. Nevertheless, more transparency concerning the decision process seems to be preferable and would well be consistent with constructive ambiguity.

In addition, EU-wide systemic risk calls for a European observatory of systemic risk. Simple cooperation between national supervisors even in the new framework will not be sufficient for safeguarding financial stability. A revised and more powerful Banking Supervision Committee could fulfil this task. Such a committee would be essential with regard to crisis prevention and could also be valuable for optimising the use of the LOLR when it becomes unavoidable.

How Do Banking Supervisors Deal with Europe-wide Systemic Risk?

Martin Schüler*

Centre for European Economic Research (ZEW), Mannheim

January 2003

Abstract

The systemic risk potential in the European banking market has increased. Hence, the following questions emerge: Is there a need for a truly European supervisory framework? And, how should a potential European supervisor be organised? This paper evaluates the existing supervisory framework as well as the recent proposal by the Economic and Financial Committee of the EU with respect to the increased Europe-wide systemic risk. We argue that cooperation between national supervisors even in the new framework will not be sufficient for safeguarding financial stability. As a consequence, we argue in favour of a European observatory of systemic risk.

JEL-Classification: G28

Keywords: banking supervision and regulation, European Union

Acknowledgement: The author gratefully acknowledges financial support by the German Science Foundation (DFG) within the research program "Governance in the European Union". I am indebted to Friedrich Heinemann for helpful comments and to Sebastian Bayer for excellent research assistance.

^{*} Centre for European Economic Research (ZEW), P.O. Box 103443, D-68034 Mannheim, Germany, Phone: +49/621/1235-148, Fax: +49/621/1235-223, E-mail: schueler@zew.de. The author is also affiliated to Otto Beisheim Graduate School of Management WHU Koblenz.

1 Introduction

The arrangements for the supervision of financial markets in Europe are changing. At the national level countries like the UK, Germany and Austria recently installed integrated supervisory agencies replacing different former specialised authorities for banking, insurance and securities. At the European level there is one decisive question: Is there a need for a truly European supervisory framework? And, how should a potential European supervisor be organised? Just recently the Economic and Financial Committee (EFC) of the European Union (EU) submitted a report on Financial Regulation, Supervision and Stability (EFC, 2002), which was endorsed by the Council of Economic and Finance Ministers (Ecofin), and which will probably lay the basis for future supervisory and regulatory arrangements in the EU. According to this report the arrangements that are already in place for securities regulation (Lamfalussy model) are to be extended to the other financial sectors based on existing interinstitutional agreements. However, the question remains whether these arrangements are sufficient for safeguarding the stability of financial markets. Apart from this there is still controversy on the involvement of central banks in supervisory structure.

In the discussion it has to be distinguished between the cross-sector and the cross-border dimension. In this paper we focus primarily on the cross-border dimension in banking. Since financial stability is still and primarily a question of the stability of credit institutions (Meister, 2002: 3), it seems to be appropriate to focus on the supervision and regulation of banks.¹

There are two main arguments for the regulation and supervision of banks:² consumer protection and the existence of systemic risk in the banking market. Due to information asymmetries consumers are not in the position to judge the safety and soundness of financial institutions. Thus, protection is necessary since the institution where consumers hold their funds may fail which would cause losses to the individual depositor. Furthermore, agency problems may result in

¹ For a good discussion on the pros and cons of an integrated financial services supervision see, e.g., Abrams and Taylor (2002).

² For a detailed argumentation of the rationale for the regulation and supervision of banks see, e.g., Spong (1994), Goodhart et al. (1998) and Llewellyn (1999). For a discussion on whether the financial system should be regulated at all see, e.g., Dowd (1996), Benston and Kaufman (1996) and Dow (1996).

adverse behaviour, i.e. unsatisfactory conduct of business of a firm with its clients.³

Systemic risk is the other reason why banks are regulated and supervised. Systemic risk means an externality whereby the failure of a single institution may lead to the failure of other institutions and to the breakdown of the entire system.⁴ The banking sector is viewed as more vulnerable to contagion than other industries since banks are viewed as more susceptible to failures (Kaufman 1995, 1996, Goodhart et al., 1998, de Bandt and Hartmann, 2000).

According to the goals of supervision one can differentiate between *prudential* and *conduct of business* supervision (Llewwellyn, 1999). Prudential supervision focuses on the solvency and safety and soundness of financial institutions whereas the focus of conduct of business supervision lies on how financial firms conduct business with their customers. In this study we concentrate on prudential supervision and neglect conduct of business issues. Thus, whenever supervision is mentioned, more precisely prudential supervision is meant.

Measures to facilitate the objectives of consumer protection and stability in the financial system can be viewed as a three-part structure. The first part of the structure is *regulation*. The regulatory framework lays down the rules governing the behaviour of banks and other financial institutions. The second part is *monitoring*. Monitoring ensures the banks' compliance with the regulations. The third part is the *safety net*. If banks are in financial difficulties, the safety net limits the effects upon third parties. The safety net comprises deposit insurance and the lender of last resort (LOLR) function, usually provided by the central bank. *Supervision* is the more general observation of the behaviour of financial firms ⁵

The aims of this study are the following: First, to describe the existing supervisory arrangements both at the national and at the European level as well as the proposed structure for a future supervisory arrangement. Second, the arrangements are evaluated with respect to an increased systemic risk potential at the European level. We argue that cooperation between national supervisors even in the new framework will not be sufficient for safeguarding financial

³ Note that there is, therefore, a case for regulation and supervision even in the absence of systemic risk, e.g. in the case of insurance companies.

⁴ For a more profound definition and a good survey of systemic risk see, e.g., de Bandt and Hartmann (2000).

⁵ Our notional distinction between regulation and supervision is in line with, e.g., Goodhart et al. (1998) and Llewellyn (1999). There is a widely used practice of referring to the authorities responsible for bank supervision interchangeably as supervisors and regulators.

stability. As a consequence, we argue in favour of a European observatory of systemic risk.

The paper is organised as follows: The next section gives an overview of systemic risk in European banking and how to deal with it. Section 3 describes the supervisory framework in the EU and section 4 tries to assess whether this framework is appropriate in safeguarding stability in the EU banking market. Section 5 concludes.

2 Systemic Risk and Banking Supervision

2.1 Systemic Risk in European Banking

Systemic risk is one of the main reasons why banks are regulated and supervised. It is often argued that the ongoing integration of financial markets in the EU – not just since the introduction of the euro – has increased interdependencies among financial institutions and, hence, the potential for systemic risk (e.g., Aglietta, 1999, Speyer, 2001, ECB, 2001, Padoa-Schioppa, 2002). The failure of a bank may have not just negative consequences for other banks in the same country, but may also result in breakdowns of banks in other countries. A national based supervisory structure may lack capability to assess negative cross-border externalities and thus provide an insufficient level of supervision. The empirical assessment of the systemic risk potential in Europe is therefore essential when shaping and evaluating the future supervisory framework.

There is a wide theoretical literature on systemic risk starting from the classical bank run models following Diamond and Dybvig (1983) and extensions of these models of single banks' fragility to models of multiple bank systems, leading to the modern bank contagion literature.⁶

However, so far there is little empirical evidence on the potential for systemic risk in Europe. Schüler (2002), and Schröder and Schüler (2003) try to assess the threat of systemic risk in European banking using correlations between stock returns of European banks and bank stock index returns, respectively. Correlations between bank stock returns are an indication for the

⁶ For a good survey on the theoretical as well as the empirical literature on systemic risk see de Bandt and Hartmann (2000).

⁷ One reason for this might be the lack of appropriate data on e.g. interbank lending for Europe. There are some studies (Michael, 1998, Angelini et al., 1996, Sheldon and Maurer, 1998) that try to assess the potential threat stemming form interbank lending at the national level.

interdependencies between banks. Such interdependencies are a prerequisite for externalities between banks and thus for systemic risk to exist. Schüler (2002) calculates rolling-window correlations between bank stock returns of the 60 largest European banks, after controlling for national influences in bank stock returns. Schröder and Schüler (2003) estimate bivariate GARCH models between excess returns of bank stock indexes of 13 European countries. They, first, test for structural breaks in 1994, as a consequence of the second banking directive, and in 1999, the introduction of the euro. Second, they test for significance of a trend variable in the covariance equation of the GARCH model. The empirical results of these studies give some evidence that the systemic risk potential at the European level has increased and that there exists a significant Europe-wide threat of systemic risk.

These findings pose the question whether the supervisory structure in the EU is able to cope with this increase in systemic risk. We try to answer this question in section 4.

2.2 Dealing with Systemic Risk

In addressing the threat of systemic risk in banking prudential supervision plays an important role. In general, there are a number of different ways to deal with systemic risk (Davis, 1992, Bartholomew and Whalen, 1995, Kaufman and Scott, 2000, Canoy et al., 2001, Summer, 2002). First, there are measures that try to reduce the likelihood of potential shocks, i.e. that try to avoid the trigger that may cause a systemic crisis. A second strategy is to limit contagion. And finally, there is crisis management and healing. In particular, the main measures are the following:

- Capital regulation: According to the Basel Committee on Banking Supervision banks are required to hold an adequate proportion of capital in relation to the riskiness of their asset portfolio. Setting minimum capital requirements is a regulatory mean of shifting the risks borne by the depositors or insured by the safety nets (LOLR and deposit insurance) back to the shareholders. Hence, moral hazard and the incentive of excessive risk taking is reduced.
- Disclosure requirements: Adequate disclosure of information helps to reduce information problems (adverse selection and moral hazard) between investors and banks. In this way it enables the market to discipline the bank, and hence should limit excessive risk taking.

⁸ This approach in assessing the systemic risk potential follows De Nicolo and Kwast (2002).

- Liquidity and reserve requirements: In order to meet the demand for cash banks may be required to hold a certain ratio of liquid assets like cash, short-term and marketable assets. Such liquidity requirements as well as the requirement to hold reserves in the form of cash or balance at the central bank reduce the likelihood of liquidity shortage following deposit withdrawals.
- Large exposure rules: Since a large exposure to a firm, sector or country can make a bank vulnerable if the firm, sector or country gets in trouble supervising and also regulating (in the form of limits in relation to the bank's capital) such large exposures can limit systemic risk.
- Deposit insurance: In the case of a bank failure the government implicitly or explicitly guarantees some or all bank liabilities. Thus, the incentives of depositors to run a bank are reduced. Usually, there are limits to coverage to avoid insuring all of the system including wholesale depositors who should not suffer from severe information asymmetries.
- Lender of last resort (LOLR): The central bank can operate as a LOLR either by giving liquidity assistance to an individual bank or by maintaining liquidity to the system as a whole, i.e. via a general monetary policy expansion. By doing so it prevents a liquidity problem to become a solvency problem.

Regulations such as disclosure or certain capital requirements are part of banking supervision. Both on- and off-site examinations are used to monitor the banking system and to enforce the banks' compliance with the regulations such as capital adequacy. Banking regulation and monitoring primarily attempt to decrease the likelihood that individual banks fail. In contrast, the LOLR function as well as deposit insurance schemes are government safety net measures that aim on investors/depositors protection and try to reduce the likelihood of damaging runs and contagion. Recapitulating, prudential banking supervision comprises regulations, monitoring and crisis management.⁹

Costs of Banking Supervision

Clearly, the above measures may help to reduce the threat of systemic risk. However, they only come with certain costs – direct ones such as salaries for supervisors and administrative costs at banks, and indirect ones, i.e. through distortions to the normal functioning of the financial markets (Goodhart, 1988,

⁹ Note that often the notions supervision and monitoring are used interchangeable so that regulation, supervision and crisis management stand in a way side by side. This is just a notional difference. One may think of monitoring as supervision in a narrower sense.

Franks et al., 1999, Canoy et al., 2001). Especially the LOLR function and the deposit insurance encourage banks to take excessive risks and thus create moral hazard. This moral hazard problem is inseparable from the existence of safety nets like the LOLR and deposit insurance and strengthens the need for supervision (Bartholomew and Whalen, 1995).

In general, government intervention is only justified when the presence of systemic risk constitutes a market failure. With systemic risk the key market failure is a breakdown of information (Mishkin, 1995). That is, that financial markets are unable to channel funds effectively to those who have the most productive investment opportunities because of an increase in information problems (adverse selection and moral hazard) that is due to a disruption in financial markets. The government should always be highly sensitive to whether its actions are undermining or reinforcing the private market incentives that limit systemic risk (Kaufman, 1996).

3 Banking Supervision in the EU

In the European Union the institutional arrangements for the supervision of financial markets are based on the principles of home country control and mutual recognition as well as cooperation among the national supervisory authorities (ECB, 2000, Lannoo, 2002). According to the home country principle every bank has the right to do business in the whole euro area using a single license, under the supervision of the authority that has issued the license. Cooperation takes place both at a bilateral and multilateral level.

3.1 The National Arrangements

Institutional banking supervision arrangements in the EU Member States can be distinguished by the degree of cross-sectoral integration and central bank involvement.

The recent establishment of integrated financial supervisory agencies in the UK (October 1997), Austria (April 2002) and Germany (May 2002) significantly changes the balance of supervisory arrangements: One third of the EU Member States have now combined their financial market supervision in a single agency.¹¹ Of the remaining ten countries, four have a combined banking and

¹⁰ For a more detailed discussion of the moral hazard problem associated with the LOLR and the deposit insurance as well as the "too-big-to-fail" problem see, e.g., Kaufman (1996), Kaufman and Scott (2000), Herring and Santomero (2000), and Canoy et al. (2001).

¹¹ Besides the UK, Austria and Germany, Denmark and Sweden have an integrated financial market supervisor.

securities sector supervision. Six countries have three separate authorities for the supervision of the banking, securities and insurance sectors.

Traditionally, the National Central Banks (NCB) have played a significant role in banking supervision and have often been the sole body responsible for banking supervision. All five Member States with integrated financial supervision have separated financial sector supervision from the NCB. Similarly, banking and securities markets supervisors in Belgium, Finland and Luxembourg are independent of the respective NCB. Seven Member States continue to delegate supervisory authority exclusively to the NCB (Greece, Italy, Ireland, the Netherlands, Portugal, Spain) or allow for significant central bank involvement (France). In countries without direct central bank responsibility for banking supervision, close cooperation between the supervisor and the central bank remains in place. This cooperation often takes the form of board participation and regular committee meetings of high-level representatives from both institutions. In addition, mostly central banks are closely involved in the operational conduct of supervisory duties. Table 1 summarises the institutional national supervisory arrangements. Table A1 gives a more detailed description of the national supervisory agencies.

Table 1 – Institutional arrangements for the supervision of financial market at the national level

Integrated supervisor	Securities & banking supervisor	Specialised banking supervisor
Austria	Belgium	France – NCB
Denmark	Finland	Greece – NCB
Germany	Ireland – NCB	Italy – NCB
Sweden	Luxembourg	The Netherlands – NCB
United Kingdom		Portugal – NCB
		Spain – NCB

NCB: National Central Bank fully or partially responsible for banking supervision.

3.2 The Internationalisation of Banking Supervision

As a consequence of the increase in the EU-wide systemic risk potential, addressing the threat of systemic risk by supervision at a national level alone seems to be no longer a viable approach. So far there exist some international banking regulations and also some form of co-ordination of national supervisors.

In particular, there is the Basel committee on banking supervision, cooperation at the bilateral level and multilateral bodies.¹²

3.2.1 The Basel Committee on Banking Supervision

The purpose of the Basel Committee on banking supervision is to set international standards and coordinate the work of national regulators. The Basel Committee does not possess any formal supranational supervisory authority. Rather, it formulates broad supervisory standards and guidelines and recommends statements of best practice in the expectation that individual authorities will take steps to implement them through detailed arrangements – statutory or otherwise – which are best suited to their own national systems. In this way, the Committee encourages convergence towards common approaches and common standards without attempting detailed harmonisation of member countries' supervisory techniques.

3.2.2 Cooperation at the Bilateral Level

Memoranda of Understanding (MoU) provide the underpinning for cooperation at the bilateral level. MoU are bilateral agreements between banking supervisory authorities to safeguard financial stability. MoU establish a practical framework for regular exchange of information and define procedures and reciprocal commitments. Nearly all EU Member States have signed MoU with each other. By the end of 1999, some 90 MoU were in place within the EU governing the exchange of information regarding the supervision of cross-border banking activities (Lannoo, 2002).

3.2.3 Exchange of Information in Multilateral Bodies

At the European level there exist several committees to promote cooperation between supervisory authorities (ECB, 2000, European Commission, 2000a, Lannoo, 2002). Namely there is the Groupe de Contact (GdC), the Banking Advisory Committee (BAC), and the Banking Supervision Committee (BSC).

The Groupe de Contact

The GdC, established in 1972, was the first European banking supervisors' committee. The GdC is composed of mid-management banking supervisors from all 18 EEA member states.¹³ It meets at least three times a year.

-

¹² For a more detailed description of the supervisory authorities at the European level see, e.g., Lannoo (2000), ECB (2000), Speyer (2001), Lannoo (2002).

¹³ The European Economic Area (EEA) includes, besides the 15 EU countries, Norway, Iceland and Liechtenstein.

The GdC was established as an informal group to promote practical cooperation and information exchange amongst national banking supervisors within the EEA. All members must be involved in the day-to-day supervision of banks. The GdC discusses developments in supervisory systems from the perspective of the hands-on supervisor.

The GdC is independent in setting its agenda. However, it may examine and prepare reports for the BAC and the BSC at its own initiative or upon request from those committees. The GdC prepares regular overviews of the solvency and profitability of the EU banking system for the BAC and is assisting the BAC in the review of the regulatory capital regime.

The Banking Advisory Committee

The BAC was established 'alongside the Commission' in 1978. Members include representatives from banking supervisory authorities, Finance Ministries of the Member States and the Commission (Internal Market DG). It meets four times a year.¹⁴

The BAC has to fulfil four specific tasks. First, it assists and advises the Commission on proposals regarding further co-ordination in the banking sector. This includes authorisation requirements for banks, bank supervision, cooperation of supervisory authorities, procedures of cross-border banking activities and deposit insurance schemes. Second, the BAC is responsible to establish ratios for the solvency, liquidity and profitability of credit institutions (cf. GdC). Third, it assists in the implementation of EU Banking Directives. Fourth, the BAC advises the Commission on possible follow-ups to the implementation of the directives.

The BAC considers broad prudential regulatory issues, it does not examine specific problems of individual credit institutions. Unless the Commission decides otherwise, all discussions and conclusions remain confidential.

The Banking Supervision Committee

States' NCBs and the banking supervisory authorities from states where the supervisory role is not fulfilled by the central bank. The ECB is represented. The Commission (Internal Market DG and Financial Institutions Directorate) and the Groupe de Contact participate as observers. The BSC meets five times a year.

The BSC of the ESCB comprises high-level representatives from Member

_

¹⁴ Clear indications regarding participants, meeting frequency and tasks are given in the EU directive setting up the BAC (77/78/EEC).

The BSC fulfils two roles. Firstly, it assists the ESCB in its statutory tasks in the area of banking supervision and stability of the financial system. Secondly, the BSC is a forum where high level EU banking supervisors exchange views and information regarding systemic issues and possible implications for the conduct of supervision. The BSC examines the banking sector from a macro-prudential perspective.

There is an intense discussion – not just in the literature but also in politics – as to how these existing international institutions are able to cope with the increasing globalisation in banking and finance (e.g., Goodhart et al., 1998, Aglietta, 1999, Speyer, 2001, Lannoo, 2002). Often there are claims for a single European supervisor or at least for more cooperation between national supervisors. Politics has responded to the discussion and made a proposal which will probably lay the basis for future supervisory arrangements in the EU.

3.3 Proposed Reform of the Supervisory Arrangements in the EU

In April 2002 the finance ministers of Germany and Britain, Hans Eichel and Gordon Brown, launched a joint initiative to reform banking supervision in the EU. They initially proposed the creation of a modern, effective supervisory structure at the European level, in which final responsibility would lie with the national governments. This initial proposal was intensively discussed and criticised, especially by central bankers who saw their influence on banking supervision to be cut back.

Based on this proposal the Council of Economic and Finance Ministers of the EU (Ecofin) mandated the Economic and Financial Committee (EFC)¹⁵ to assess and report on possible arrangements for financial regulation and supervision. A final report on financial regulation, supervision and stability was submitted in October 2002 (EFC, 2002).¹⁶ At the moment, there is still intense discussion with the European Parliament that is insisting on the right to "call-back" or to look again at implementing legislation not conforming to its wishes. Nevertheless, the final report by the EFC will most likely lay the basis for future supervisory and regulatory arrangements in the EU.

According to this report the arrangements that are already in place for securities regulation ("Lamfalussy model") are to be extended to the other financial

¹⁵ The Economic and Financial Committee (EFC) was established in 1999. It advises the Commission and the Council on issues concerning the economic and financial situation in the EU.

¹⁶ Note the proposal by the EFC refers to supervision and regulation of financial markets, comprising banking, insurance and securities.

sectors based on the existing inter-institutional agreements. Contrary to the initial Eichel/Brown-proposal, this proposal includes the central banks in banking supervision, at least to a certain extent.

According to the Lamfalussy model legislation is split into framework principles (level 1) and implementing measures (level 2). Besides, cooperation between supervisors is strengthened to improve implementation (level 3). At level 4, the Commission checks Member States compliance with EU legislation and may take legal action against Member State suspected a breach of community law. According to the proposal by the EFC the following supervisory structure would be implemented (see figure 1).

- insert figure 1 about here -

Sectoral specificities are recognised by three separate sectoral committees each at levels 2 and 3: for banking, insurance (including pensions), and securities (including UCITS). In addition, a fourth committee at level 2 would be established to deal with specific issues concerning financial conglomerates.

At *level 1*, the Commission adopts a formal proposals for a directive/regulation after a full consultation process with the European Parliament and the Council of Ministers. The key political choices to be taken by the Parliament and the Council on the basis of the Commission's proposal are reflected in the framework principles. They determine the political direction and orientation, the fundamentals of each decision.

At *level 2*, committees act as regulatory committees in line with the 1999 Council comitology decision.¹⁷ Level 2 committees also provide advise to the Commission, e.g. on draft legislative texts. Each committee is chaired by the commission and each Member State has one voting representative and one supporting technical expert, both nominated by the relevant Ministry. The chair of the respective level 3 committee has observer status without voting power. In the level 2 committees for banking and financial conglomerates, additionally, the ECB has observer status. Level 2 committees can occasionally meet in joint format at a high level to consider difficult technical and cross-sectoral cases and improve synergies and coherence of level 2 rules.

At *level 3*, the committees fulfil three tasks: First, advise the Commission, in particular on its preparation of draft level 2 measures. Second, promote

Comitology refers to the delegation of implementing powers by the Council to the Commission for the execution of EU legislation. Representatives of the Member States, acting through comitology committees (level 2 committees) assist the Commission in the execution of the implementing powers conferred on it.

consistent implementation of EU directives, supervisory convergence and best practice in Member States. And third, provide an effective operational network to enhance day-to-day supervision, including exchange of information. Voting members are the respective national supervisory authority of each Member State that also chair and provide the secretariat. Central Banks without direct supervisory responsibilities including the ECB also participate in the level 3 banking committee. However, the competent supervisory agency holds the vote. Representatives from the Banking Supervision Committee (BSC) and the Groupe the Contact have observer status in the level 3 banking committee. The Commission has observer status in all level 3 committees. The Groupe the Contact continues its activities and also acts as the main working group of the level 3 banking committee including for confidential exchange of information.

The Banking Advisory Committee (BAC) is reformed into the level 2 banking committee. Functions of the current BAC which are not transferred to the level 2 committee are allocated to the level 3 banking committee.

Besides the legislative process, a reconfigured *Financial Sector Policy Group (FSPG)* provides political oversight on financial market issues for the benefit of the Ecofin Council. It fills the gap between the political and technical regulatory levels and provides for cross-sectoral strategic reflection. This committee has a "policy-shaping" role which includes the following: First, defining the medium- and long-term strategy for financial services issues, e.g. for the post-FSAP¹⁹ period. Second, considering "hot" short-term issues, such as terrorist financing, reinsurance and issues related to the current FSAP phase. Third, assessing progress and implementation, e.g. of the current FSAP. Political advise and oversight are provided on both internal issues (e.g. single market) and external issues (e.g. enlargement issues). The committee reports to the EFC to assist its preparation of advise to the Council. Members of the committee are one high-level representative of the relevant Ministry per Member State, and one alternate. In addition, the Commission chair of the level 2 committees has full membership. The ECB and the level 3 committees chairs are observers.

Additionally, the reconfigured FSPG in a special format contributes to the EFC's work on issues related to financial stability and their economic consequences. To this end, the level 3 committee chairs, the ECB and the

¹⁸ The Financial Services Policy Group (FSPG) first met in January 1999. In the context of work to establish the single market for financial services, the Ecofin Council asked the FSPG to examine where new legal initiatives would be required, where existing provisions had to be adapted to new developments, where existing provisions needed to be simplified and where these should be more coherent.

¹⁹ The Financial Services Action Plan (FSAP), laid out in 1999, seeks to push financial market integration in over 40 different areas. It is scheduled to be fully implemented by 2005.

Directorate General for Economic and Financial Affairs (DG Ecfin) are granted full member status in this special section. The BSC chairman participates as observer and regularly reports on macro-prudential developments.

4 Are the Arrangements Adequate to Deal with Systemic Risk?

As mentioned above ensuring the safety and soundness of the financial system includes a variety of measures. In general, prudential supervision comprises regulations, such as capital regulation, monitoring, i.e. the enforcement of banks' compliance with the regulations, and crisis management, i.e. the safety nets deposit insurance and LOLR.

The Lamfalussy framework on which the EFC proposal is based, refers primarily to the legislative process, i.e. **regulatory issues**. Among other things, the goal is to speed up EU legislation so that financial regulation is able to adapt quickly to new market developments and practices. In addition, the proposed framework aims at promoting convergence of supervisory practices and consistent implementation of EU directives. Furthermore, with regard to regulations there are the Basel capital requirements that already constitute some form of international regulation.

In terms of **monitoring**, certainly, supervision of individual institutions is best carried out at the level closest to the financial intermediaries concerned, i.e. at the national level (Meister, 2002, Lejsek, 2002, EFC, 2002). National supervisors have sufficient experience of the regional markets as well as of the supervised entities. In a very practical sense they can get in contact with the persons and institutions more easily. Nevertheless, increased interdependencies of banks across countries requires enhanced co-ordination and cooperation between national supervisors. The proposed framework may help to share information between national supervisors and central banks which is needed to monitor the potential for systemic risk at the EU level. Furthermore, the new framework may help to align supervisory practices which is also crucial for supervising multinational banks.

However, there remain doubts as to whether the new framework based on the existing arrangements is adequate for the safeguarding of financial stability in the case of a crisis. **Crisis management** comprises deposit insurance and the lender of last resort (LOLR) function. In all EU countries explicit deposit insurance schemes are in place and administered either officially (by the

government or the central bank) or privately.²⁰ Deposit insurance schemes are compulsory for all banks in the EU and have a clear jurisdiction of who is refunding deposits in the case of a bank failure. There is no difference between domestic and foreign depositors. Thus, there is no need for a European deposit insurance scheme.

Lender of Last Resort and Central Bank Involvement

In contrast to deposit insurance the LOLR issue is not that clear cut. Who would give liquidity assistance in the case of a major bank failure causing systemic risk at the European level, i.e. threatening banks also in other countries? Does Europe need an explicit LOLR? Could the ECB possibly be such a LOLR – or is there already an implicit European LOLR?²¹ Before turning to the European situation, we sketch the pros and cons of the combination of central banking and banking supervision.²²

Arguments in Favour of Combining

One advantage of having banking supervision within the central bank is to exploit synergies between central banking and prudential supervision. Synergies may arise in two respects: First, central banks' knowledge of the overall economy and financial system, as well as their information from the payment and settlement systems and monetary policy operations, are valuable for the performance of the supervisory tasks. Second, supervisory information can play an important role in the oversight of payment and settlement systems and of market infrastructures, and in managing liquidity crisis.²³

Another argument is the central bank's concern for the systemic stability of the financial system. There is a close relationship between prudential controls of individual institutions and the assessment of risks for the financial system as a

²⁰ For a detailed description of deposit insurance schemes see Demirguc-Kunt and Sobaci (2000), Gropp and Vesala (2001), Huizinga and Nicodème (2002).

Note that so far we did not explicitly differentiate between Europe, the EU and the eurozone. Throughout the paper the notions Europe and EU are used interchangeable. Of course the ECB is only competent for the monetary policy of the eurozone.

²² For a more detailed discussion on the pros and cons for central bank involvement in banking supervision see, e.g., Goodhart and Schoenmaker (1993, 1995), Haubrich (1996), Goodhart (2000).

For the U.S., Peek et al. (1999) find that supervisory information does affect monetary policy, and does so in the correct direction. Their results support the idea that supervisory information allows more accurate estimates of economic activity and inflationary pressures to be achieved, thereby favouring the choice of a more appropriate stance for monetary policy.

whole. In this context another point emerges. In order to fulfil its LOLR function the central bank needs to have access to information on the solvency and liquidity of banks in a timely manner. This becomes particularly important in times of financial distress.²⁴ Furthermore, the protection of the payment system which is under the responsibility of the central bank, is a crucial task retarding systemic risk.

Finally, there is the independence argument. The often strong guarantee of independence of the central bank may enhance the bank supervisors ability to enforce actions.

Arguments in Favour of Separation

The main argument against central bank involvement in banking supervision is a conflict of interest between the two functions. In order to avoid adverse effects on the financial health of banks, and hence on financial stability, the central bank may pursue a more accommodating monetary policy than warranted for the pursuance of price stability.

Furthermore, the combination of functions bears a risk of loss of central bank reputation. Occurring bank failures may hurt the central bank's global credibility. The private sector might expect that the central bank might be influenced by financial system stability considerations when determining monetary policy. Reduced credibility could result in higher inflation expectations, which in turn might increase inflation itself.²⁵

Finally, it is argued that banking supervision within the central bank results in an excessive concentration of power in the central bank.

The European Situation – Do We Need a European LOLR?

In respect to the involvement of the central bank in banking supervision, Europe is unique in the sense that since the introduction of the euro the jurisdiction of monetary policy and of banking supervision do not coincide. According to the ECB (2001) this has changed the balance of the arguments considerably. Arguments against central bank involvement have lost most of their weight, while those in favour have become even more prominent. In particular, the increasing relevance of the systemic focus speaks in favour of an involvement of

²⁴ Goodhart and Schoenmaker (1995) find that in countries in which the central bank is the supervisory authority there were less bank failures.

__

²⁵ Di Noia and Di Giorgio (1999) find empirical evidence that the inflation rate is higher and more volatile in countries where the responsibility for banking supervision is entirely placed within the central bank.

the central banks. NCBs may benefit from their traditional concern for systemic stability and from their composite nature – they are components of the Eurosystem and, simultaneously, a national institution. Furthermore, conflicts of interests and concentration of power are not a real concern due to the institutional separation of monetary and supervisory jurisdiction.

In view of crisis management the LOLR function is of crucial importance. The ECB does not carry out banking supervision, nor does it have a mandate as a European LOLR. The contribution of the ECB to financial stability is mentioned under the article 105(5) of the Treaty, according to which "the ESCB shall contribute to the smooth conduct of policies pursued by the competent authorities relating to the prudential supervision of credit institutions and the stability of the financial system." Certainly, this draft is ambiguous. The responsibility is diffused and the "competent authorities" are not named.

The ambiguity regarding crisis management has also lead to the so-called Brouwer reports (European Commission, 2000b, 2001) that were prepared by the Economic and Financial Committee under the chairmanship of Henk Brouwer from De Nederlandsche Bank. The outcome of these reports was that the current system based on national responsibility is appropriate, but there is a need to strengthen cross-border and cross-sectoral cooperation between supervisors, to enhance convergence of supervisory practices and to reinforce collaboration and cooperation between supervisors and central banks. These tasks may be achieved by the proposed new framework.

There is criticism that the absence of a clear and transparent LOLR that would act in an emergency raises doubts in the markets about the ability of the Eurosystem to handle crisis situations (e.g., Aglietta, 1999). According to Padoa-Schioppa (1999) this criticism is not justified. His argumentation is threefold: Firstly, this criticism reflects a notion of LOLR operations that is largely outdated. Padoa-Schioppa argues that due to deposit insurance, large exposure rules and other supervisory measures, contagion from an insolvent to a solvent institution has become very unlikely. In addition, a rapid outflow of uninsured interbank liabilities would be absorbed by the width and depth of today's interbank market. Thus, it is extremely unlikely that a solvent bank becomes illiquid and at the same time lacks sufficient collateral to obtain regular central bank funding. Secondly he argues, that the criticism underestimates the Eurosystem's capacity to act. Not to declare explicitly beforehand the procedures of emergency actions may even be advisable since it may help to reduce the moral hazard associated with the safety net. This policy of "constructive ambiguity" was also stressed out by Duisenberg (1999). And thirdly, the criticism represents too mechanistic a view of how a crisis is, and should be, managed in practice. Deviation from normal times procedures and rules is allowed and even required in the case of an emergency.

Furthermore, Padoa-Schioppa (1999) stresses that besides the central bank money solution to a financial crisis there are also alternative arrangements to provide money. In particular these are private money solution and funds raised with taxes. Certainly there is no doubt that the LOLR must be confined to play a minor role. However, these alternative solutions "are costly and can in general be at least part of a solution in which the central bank is also involved." (Vives, 2001: 76)

There exists no explicit European LOLR and as argued by Padoa-Schioppa (1999) there may also be no requirement for it – at least not at present. Nevertheless, there may already exist an implicit European LOLR. The 1999 Annual Report of the ECB disclosed that in case of emergency a bank could rely on the so called emergency liquidity assistance (ELA) (Scacciavillani et al., 2002). The ELA comprises the support given by the NCB to temporarily illiquid institutions. ELA is only given "in exceptional circumstances and on a case-bycase basis". The competent NCB takes the decision concerning the provision of ELA to an institution operating in its jurisdiction. All the costs associated with the provision of the ELA must be borne by the NCB. Any provision of ELA that would endanger price stability could be sterilised by the ECB. In its Annual report the ECB stresses that "central bank support should not be seen as a primary means for ensuring financial stability, since it bears the risk of moral hazard." (p. 98) However, it is clearly stated that "if and when appropriate, the necessary mechanisms to tackle a financial crisis are in place." (p. 98) This is in line with a statement given by Wim Duisenberg (1999) and with the view of Padoa-Schioppa (1999) that the Eurosystem would have the necessary capacity to act when really needed and that a clear reassurance about the capacity to act should be sufficient for the markets. This view is also supported by the reactions to September 11, 2001 where the ECB acted to guarantee the availability of dollars to cover the needs arising in the financial system (Scacciavillani et al., 2002).

Vives (2001: 70) argues that ad hoc co-ordination in crisis situations will not be sufficient and may endanger the stability of the system. As a consequence, he urges for a centralised LOLR authority, namely the ECB.

The discussion on whether there should be more explicit and transparent arrangements for a European LOLR breaks down to the question: What extent of ambiguity in LOLR rules is still "constructive"? There may be no doubt about the Eurosystem having the necessary capacity and willingness to act when really needed. And, of course it must not be too easy to forecast the final decision on granting LOLR. However, the decision process itself has to be transparent (Bruni and de Boissieu, 2000). In this matter, transparency is compatible with constructive ambiguity.

A European observatory of systemic risk

Coming back to **monitoring in a broader sense**, there is a further issue that should be considered. A supervisor should observe systemic risk in general. Thus, with respect to the increased Europe-wide systemic risk potential there is a need for an observatory of systemic risk at the European level (ESFRC, 1998, Aglietta, 1999, Meister, 2000).

Simple cooperation between national supervisors even in the new framework will not be sufficient. This task could be fulfilled by the new Financial Sector Policy Group or a reformed Banking Supervision Committee (BSC). Such a committee should possess power in regard to a distressed institution that endangers the safety and soundness of the entire European financial system. This power may either be exerted directly or through the respective national supervisor. Furthermore, there certainly need to be close links and a proper two-way flow of information between such a committee, the national supervisors and also the ECB that would potentially act as a LOLR.

Besides monitoring the Europe-wide systemic risk potential, such a European observatory of systemic risk should also ensure common supervisory and transparency standards (Bruni and de Boissieu, 2000). Primarily, this committee would be essential for crisis prevention. In addition, it could be valuable for optimising the use of the LOLR when it becomes unavoidable. This task requires tight cooperation with the LOLR, i.e. with the ECB, which speaks in favour of the reformed BSC.

5 Conclusions

The integration of financial markets in the EU – not just since the introduction of the euro – has increased the systemic risk potential at the European level. The divergence between this increase in EU-wide systemic risk and the current national based supervisory structure calls for a reform of the European supervisory framework. A milestone in the political discussion has been a report by the Economic and Financial Committee (EFC) which will probably lay the basis for a future supervisory structure in the EU. According to this report the Lamfalussy framework is to be extended to the banking sector based on the existing international agreements. The new structure aims on speeding up EU legislation, strengthening cooperation between national supervisors, and promoting convergence of supervisory practice.

Supervision of individual institutions is best carried out at the level closest to the financial intermediaries concerned, i.e. the national level. However, the increased EU-wide systemic risk calls for greater cooperation between national supervisors. This task may be fulfilled by the new framework.

With regard to crisis management: Although there is no explicit European LOLR the Eurosystem can be regarded as an implicit LOLR having the necessary capacity and willingness to act when really needed. Nevertheless, more transparency concerning the decision process seems to be preferable and would well be consistent with constructive ambiguity.

In addition, EU-wide systemic risk calls for a European observatory of systemic risk. A revised and more powerful Banking Supervision Committee could fulfil this task. Such a committee would be essential with regard to crisis prevention and could also be valuable for optimising the use of the LOLR when it becomes unavoidable.

References

- Abrams, R.K. and M.W. Taylor (2002), Assessing the case for unified Financial Sector Supervision, London School of Economics Financial Market Group Special Paper 134.
- Aglietta, M. (1999), A Lender of Last Resort for Europe, CEPII Paper No 99, Paris.
- Angelini, P., Maresca, G., and Russo, D. (1996), Systemic risk in the netting system, *Journal of Banking & Finance* 20 (5), 853-868.
- Bartholomew, P.F. and G.W. Whalen (1995), Fundamentals of Systemic Risk, in Kaufman, G. (ed.), *Banking, Financial Markets, and Systemic Risk*, Greenwich, 3-18.
- Benston, G.J. and G.G. Kaufman (1996), The appropriate role of bank regulation, *The Economic Journal* 106 (May), 688-697.
- Bruni, B. and C. de Boissieu (2000), Lending of last resort and systemic stability in the eurozone, SUERF Study Strengthening financial infrastructure, Amsterdam.
- Canoy, M., M. van Dijk, J. Lemmen, R. de Mooij and J. Weigand (2001), *Competition and Stability in Banking*, CPB Document No 015, The Hague.
- Davis, E.P. (1992), Debt, Financial Fragility, and Systematic Risk, Oxford.
- De Bandt, O. and P. Hartmann (2000), Systematic Risk: A Survey, ECB Working Paper No. 35, Frankfurt.
- Demirguc-Kunt, A. and T. Sobaci (2000), Deposit Insurance Around the World: A Data Base, World Bank, mimeo.

- De Nicolo, G. and M.L. Kwast (2002), Systemic risk and financial consolidation: Are they related?, *Journal of Banking & Finance* 26 (5), 861-880.
- Diamond, D.W. and P.H. Dybvig (1983), Bank Runs, Deposit Insurance, and Liquidity, *The Journal of Political Economy* 91(3), 401-419.
- Di Noia, C. and G. Di Giorgio (1999), Should Banking Supervision and Monetary Policy Tasks be Given to Different Agencies?, *International Finance* 2 (3), 361-378.
- Dow, S.C. (1996), Why the banking system should be regulated, *The Economic Journal* 106 (May), 698-707.
- Dowd, K. (1996), The case for financial laissez-faire, *The Economic Journal* 106 (May), 679-687.
- Duisenberg, W. (1999), Introductory statement delivered on the occasion of the presentation of the ECB's Annual Report 1998 to the European Parliament, Strasbourg, 26 October.
- Economic and Financial Committee (2002), EFC report on financial regulation, supervision and stability, revised version, October.
- European Central Bank (2000), EMU and banking supervision, ECB Monthly Bulletin, April 2000, 49-64.
- European Central Bank (2001), The role of central banks in prudential supervision, April 2001.
- European Commission (2000a), Institutional Arrangements for the Regulation and Supervision of the Financial Sector, Brussels.
- European Commission (2000b), Report on Financial Stability, Economic Papers No. 143.
- European Commission (2001), Report on Financial Crisis Management, Economic Papers No. 156.
- European Shadow Financial Regulatory Committee (1998), EMU, the ECB and financial supervision, Statement No. 2, October.
- Franks, J.R., S.M. Schaefer, and M.D. Staunton (1999), The Direct and Compliance Costs of Financial Regulation, in Swan, E.J. (ed.), *Issues in Derivative Instruments*, Kluwer, The Hague, 159-185.
- Goodhart, C. (1988), The Costs of Regulation, in Sheldon, A. (ed.), *Financial Regulation or Over-Regulation?*, Institute of Economic Affairs, London, 17-31.
- Goodhart, C. (2000), The Organisational Structure of Banking Supervision, Financial Stability Institute Occasional Papers No. 1, Bank for International Settlements, Basel.

- Goodhart, C., P. Hartmann, D. Llewellyn, L. Rojas-Suárez and S. Weisbrod (1998), *Financial Regulation: Why, how and where now?*, London.
- Goodhart, C. and D. Schoenmaker (1993), Institutional Separation between Supervisory and Monetary Agencies, LSE Financial Market Group, Special Paper No. 52.
- Goodhart, C. and D. Schoenmaker (2000), Should the Functions of Monetary Policy and Banking Supervision be separated?, *Oxford Economic Papers* 47 (4), 539-560.
- Gropp, R. and J. Vesala (2001), Deposit insurance and moral hazard: does the counterfactual matter, ECB Working Paper No. 47.
- Haubrich, J.G. (1996), Combining Bank Supervision and Monetary Policy, Federal Reserve Bank of Cleveland, Economic Commentary Series, November 1996.
- Herring, R.J. and A.M. Santomero (2000), What Is Optimal Financial Regulation?, The Wharton Financial Institutions Center Working Paper No. 00-34.
- Huizinga, H. and G. Nicodème (2002), Deposit insurance and international bank deposits, European Commission Economic Papers No. 164.
- Kaufmann, G.G. (1995), Comments on Systemic Risk, in Kaufman, G. (ed.), *Banking, Financial Markets, and Systemic Risk*, Greenwich, 47-54.
- Kaufmann, G.G. (1996), Bank Failures, Systematic Risk, and Bank Regulation, *The Cato Journal* 16 (1).
- Kaufmann, G.G. and K.E. Scott, (2000), Does Bank Regulation Retard or Contribute to Systemic Risk?, Stanford Law School Working Paper No. 211, Stanford.
- Lannoo, K. (2000), Challenges to the Structure of Financial Supervision in the EU, Report of a CEPS Working Party, Brussels.
- Lannoo, K. (2002), Supervising the European Financial System, CEPS Policy Brief No. 23.
- Lejsek, A. (2002), Financial Services in the Era of the Euro and E-commerce: Does home country control work?, Austrian Report to the International Federation for European Law.
- Llewellyn, D. (1999), The Economic Rationale for Financial Regulation, FSA Occasional Paper Series No. 1.
- Meister, E. (2000), Challenges for regulators in Europe, Speech at the Joint Bundesbank/BIS conference on "Recent developments in financial systems and the challenges for economic policy", Frankfurt, 28-29 September 2000.

- Meister, E. (2002), European Parliament hearing "After Enron: financial supervision in Europe", Statement, 10 July 2002, Brussels.
- Michael, I. (1998), Financial Interlinkages and Systemic Risk, *Financial Stability Review* 4 (Spring), 26-33.
- Mishkin, F.S. (1995), Comment on Systemic Risk, in Kaufman, G. (ed.), *Banking, Financial Markets, and Systemic Risk*, Greenwich, 31-45.
- Padoa-Schioppa, T. (1999), EMU and Banking Supervision, *International Finance* 2 (2), 295-309.
- Padoa-Schioppa, T. (2001), Statement on "EU structures for financial regulation, supervision and stability", Public hearing on "After Enron: financial supervision in Europe" at the Committee on Economic and Monetary Affairs of the European Parliament, Brussels, 10 July 2002.
- Peek, J., E.S. Rosengren and G.M.B. Tootell (1999), Is Bank Supervision Central to Central Banking?, *The Quarterly Journal of Economics* 114 (2), 629-653.
- Scacciavillani, F., D. Schumacher and K. Daly (2002), Focus: Euroland, Meeting the Threat of Financial Instability, Goldman Sachs European Weekly Analyst, 11th October 2002.
- Schröder, M. and M. Schüler (2003), Systemic risk in European banking Evidence from bivariate GARCH models, forthcoming as ZEW Discussion Paper.
- Schüler, M. (2002), The Threat of Systemic Risk in Banking Evidence for Europe, ZEW Discussion Paper No. 02-21.
- Sheldon, G. and M. Maurer (1998), Interbank Lending and Systemic Risk: An Empirical Analysis for Switzerland, *Swiss Journal of Economics and Statistics* 134 (4.2), 685-704.
- Speyer, B. (2001), Internationalisation of banking and banking supervision, Deutsche Bank Research Notes in Economics & Statistics, No. 01-7, Frankfurt.
- Spong, K. (1994), Banking Regulation: Its Purposes, Implementation, and Effects, Fourth Edition, Kansas City.
- Summer, M. (2002), Banking Regulation and Systemic Risk, Österreichische Nationalbank Working Paper No. 57.
- Vives, X. (2001), Restructuring Financial Regulation in the European Monetary Union, Journal of Financial Services Research 19 (1), 57-82.

ECOFIN European Parliament Level 1: Framework principles Commission **ECB** Reformed European Reformed **New Financial** Level 2: Banking Securities Insurance Conglomerates Technical Advisory Committee Committee Committee implementing Banking Committee (ESC) (IC) (FCC) rules Supervision (BAC) Securities & Insurance & Financial Committee **UCITS** Conglomerates Pensions Banking (BSC) Reformed Level 3: Level 3 **CESR** Insurance Strengthening banking cooperation & Groupe de Conference Securities & committee improving **UCITS** Contact Insurance & implementation Banking Pensions (as working group)

Figure 1 – EFC proposal for a new supervisory framework at the EU level

Note: CESR: Committee of European Securities Regulators; Source: EFC (2002)

Table A1 –Banking supervisory agencies in the EU Member States

Country	Competent supervisory agency	Scope of supervision	Notes	Web address
Austria	Financial Market Authority (Finanzmarktaufsicht, FMA)	Banking, insurance & securities	The FMA is an independent institution under public law, its independence is secured by constitutional provision. The FMA is legally required to cooperate with the Central Bank (Oesterreichische Nationalbank) and reports to the parliament.	www.fma.gv.at
Belgium	Banking and Finance Commission (CBF)	Banking & securities	The board members of the BFC are appointed by royal decree.	www.cbf.be
Denmark	Danish Financial Supervisory Authority (Finanstilsynet)	Banking, insurance & securities		www.ftnet.dk
Finland	Financial Supervision Authority (FSA)	Banking & securities	The FSA operates in connection with the central bank, but is an independent decision making organisation.	www.rata.bof.fi
France	Commission Bancaire (Banque de France, NCB)	Banking	The members of the Commission Bancaire are appointed by the Minister For Economic Affairs, Finance, and Industry. It is chaired by the governor of the French central bank (Banque de France).	www.banque- france.fr
Germany	Federal Financial Supervisory Authority (Bundesanstalt für Finanzmarktaufsicht, BaFin)	Banking, insurance & securities	The Bundesbank is involved in banking supervision on behalf of the Federal Financial Supervisory Authority.	www.bafin.de
Greece	Bank of Greece (NCB)	Banking		www.bankofgreec e.gr
Ireland	Central Bank of Ireland (NCB)	Banking & securities		www.centralbank.i
Italy	Banca d'Italia (NCB)	Banking		www.bancaditalia.

Luxembourg	Commission de Surveillance du Secteur Financier (CSSF)	Banking & securities	www.cssf.lu
The Netherlands	Nederlandsche Bank (NCB)	Banking	www.dnb.nl
Portugal	Banco de Portugal (NCB)	Banking	www.bportugal.pt
Spain	Banco de España (NCB)	Banking	www.bde.es
Sweden	Financial Supervisory Authority (Finansinspektionen)	Banking, insurance & securities	www.fi.se
United Kingdom	Financial Services Authority (FSA)	Banking, insurance & securities	www.fsa.gov.uk

The information concerning the national banking supervisory agencies is taken from the respective homepages and annual reports.