

The Role of the European System of Central Banks in Financial Supervision

Nobuo Yamamura and Satoshi Mitamura***

Outline

Some commentators argue that “lender of last resort” services provided by the central bank are an important component in financial stability. The European System of Central Banks, however, is decentralized by nature and comprised of both the European Central Bank and national central banks. This results in a degree of ambiguity in “lender of last resort” services, which some have considered undesirable from the standpoint of financial stability.

However, Germany, for example, did not give the central bank “lender of last resort” duties even after the Herstatt crisis, relying instead on prudential policy by financial supervisors to maintain financial stability.

Japan has so far lacked any discussion of the ESCB and its emphasis on monetary and currency policy from the vantage point of prudential policy and banking supervision. This paper examines the roles that can be played by national-level financial supervisors in the European System of Central Banks in order to stimulate discussion on integrated prudential policy in the EU.

<Keywords>

European System of Central Banks, eurosystem, European Central Bank, financial supervision, prudential policy, centralized supervision, lender of last resort

* Assistant Professor, Faculty of Commerce, Takushoku University; Special Researcher, Financial Services Agency, Financial Research and Training Center

** Post Graduate Fellow, Graduate School of Business and Commerce, Keio University

The authors wish to thank Professor Hisahiko Saito of the Chiba University of Commerce for the valuable insights and advice that he provided. Obviously, the views presented in this paper are the personal opinions of the authors and do not represent the official views of the Financial Services Agency.

<Table of Contents>

The Role of the European System of Central Banks in Financial Supervision	1
Nobuo Yamamura and Satoshi Mitamura	1
<Table of Contents>	2
1. Preface	2
2. “Lender of last resort” services in the EU	3
2.1 Degree of integration within the ESCB	3
2.2 Positioning of “lender of last resort” services	5
2.3 Finance industry’s responsibility for crisis	6
3. The roles of the ESCB and ECB in financial oversight	8
3.1 Issues raised by national-level financial oversight	8
3.2 Authority of the ESCB and ECB in financial oversight	8
3.3 Coordinating functions of the ESCB and ECB	9
4. Role of the central bank in the EU member-country financial supervision	11
4.1 Case studies from leading EU countries	12
4.2 Overview of EU countries	14
4.3 Summary	16
5. Conclusion	17
References	18

1. Preface

The authors’ research has focused on financial crisis management and supervision, primarily in Germany. In analyzing Germany’s deposit protection and crisis response systems, they discovered a world in which the central bank does not function as the lender of last resort and the stability of financial functions is maintained entirely by regulatory prudential policies.¹ It also became clear that capital adequacy ratios, which are the linchpin in prudential policies, are a system that developed primarily in Germany.² It is therefore not overstating the case to consider Germany and Europe to be the birthplace of capital adequacy ratios and the origin of prudential regulations.

When Japanese academics discuss the stability of financial functions, their arguments tend to converge on the “lender of last resort” services provided by the central bank. Opinions are mixed, however, when it comes to the European System of Central Banks (ESCB), because it is decentralized between the European Central Bank and the national central banks (NCBs) so that the “lender of last resort” is ambiguous, which scholars deem undesirable from the perspective of stabilizing financial services.

Nonetheless, focusing only on the central bank’s function of supplying liquidity loses sight of the importance of financial institution prudential policies. One must therefore develop a new argument that seeks to ascertain how central banks have been positioned from the perspective of the prudential policy structure that is being put in place in the process of EU integration.

¹ See Yamamura [2003a].

² See Yamamura and Mitamura [2005].

This paper is based on findings from previous research on Germany, which we expand to analyze the role of the European System of Central Banks and the eurosystem in national financial supervision.

In Chapter 2 we discuss the fact that “lender of last resort” services have not been given a very meaningful role in the European System of Central Banks (ESCB) and clarify the reasons for that. Having done so and underscored the importance of financial supervision, we move to the next chapter where we discuss the role that the ESCB plays in supervision. In other words, Chapter 3 analyzes the role played by the entire ESCB and the ECB in financial supervision at the EU level, which is followed in Chapter 4 by a discussion of the relationship between the EU-level supervision and the domestic-level supervision provided by national central banks.

2. “Lender of last resort” services in the EU

In this chapter we consider the implications for discussions about Europe from the hypothesis that the “decentralized” nature of the European System of Central Banks would result in an under-developed “lender of last resort” service that destabilizes Europe’s response to a financial crisis.

2.1 Degree of integration within the ESCB

The name “European System of Central Banks” (ESCB) should not give the impression that there is a single European central bank. Under the ESCB, the European Central Bank (ECB) is not a single central bank for Europe formed by the merger of EU national central banks, and from the perspective of highly centralized central-banking models, the current level of integration makes the organization appear to be a work in progress. However, the emphasis should probably be on the word “system.” The ESCB is a Europe-level *system* formed by the linkage of the ECB and the national central banks (NCBs), an integration of the whole and the parts. In this, it is the same as the Federal Reserve System (FRS) in United States, which is a *system* to link the Federal Reserve Board (FRB) with local Federal Reserve Banks. Regimes such as this should be categorized as decentralized central-banking systems. Decentralized central-banking systems are still some extent fixed, though their mechanisms will differ from centralized central-banking.

A review of Germany’s central banking history will show that the ESCB is analogous to the old West German system of state-level central banks and *die Bank deutscher Länder* (which later became the Frankfurt head office of the Bundesbank), which itself is modeled on the US Federal Reserve system.³ There may be a possibility of the ESCB developing into a European central bank as European economies integrate, just as West Germany created a Bundesbank after its economies had sufficiently integrated, but there are also examples like the United States where there is no integration even within a single national economy. The point is that just because the ESCB is not a single central bank does not mean it is underdeveloped.

In terms of execution mechanisms, the ESCB has a “decentralized and centralized system.” Under the laws establishing the ECB and ESCB, NCBs are considered integral parts of the ESCB and required to act in accordance with the guidelines and directives of the ECB.⁴ Obviously, under the single currency policy, NCBs within the eurosystem incur an obligation to coordinate, but even NCBs outside of the eurosystem are required to maintain prices in their home currencies, collect statistical

³ See Hamori [2002], pp. 105-107 for a comparison between ECB and *die Bank deutscher Länder*. Hamori [2002] offers four reasons why the ESCB was strongly influenced by the German Bundesbank:

1. A high degree of independence for the central bank helps to facilitate price stability.
2. A decentralized organization like the Bundesbank facilitates a high degree of independence for the central bank.
3. The Bundesbank had a strong track record in price stability and monetary policy administration.
4. An organizational structure similar to the Bundesbank was considered advantageous so that the euro under the ECB could maintain the same level of trust as the deutsche mark under the EMS.

⁴ ESCB and ECB Act, Article 14 (3).

data and cooperate within the ERM-II framework.⁵ As integral parts of the ESCB, national central banks are both incorporated entities under their home country laws and also part of the EU organization.⁶ Monetary operations cannot be performed by the ECB on its own; the system must rely on the NCBs. Commercial banks do not have accounts at the ECB, only at the NCBs.⁷ That does not, however, mean that the NCBs (in this discussion, “NCBs” refers primarily to those within the eurosystem) act entirely independently. While it may be the NCBs who actually implement operations, it is the ECB that has the authority to determine monetary policy. The relationship between ECB in the NCBs is thus a relationship between the “head” and the “limbs.” Together they form a whole.

Turning to decision-making mechanisms, eurosystem NCBs are required to follow macroeconomic policies issued by the ECB.⁸ This point taken by itself would indicate that the system is centralized. However, the ECB has two decision-making organs: the Governing Council and the Executive Board.⁹ The Governing Council determines monetary policy and is the highest decision-making body; the Executive Board carries out its decisions.¹⁰ In terms of organization, the Governing Council has 19 members: the members of the Executive Board (Governor and Vice Governor plus 4 Directors, for a total of 6) together with the governors of euro-zone NCBs (13 with the addition of Slovenia in January 2007). There is also a third decision-making body called the General Council (Expanded Council), which includes the governors of all NCBs as well as the Governor and Vice Governor of the ECB.¹¹ It is therefore decentralized (or democratic).

The ECB functions as the central headquarters of the Governing Council that determines interest-rate policies. It nominates 5 Council members (excluding the governor who chairs the Council), but the majority of members (13) are national central bank governors, and their percentage will only rise as more countries adopt the euro. By contrast, the US Federal Reserve’s Open Markets Committee has a total of 12 members: the 7 board members together with the governor of the New York Federal Reserve Bank and 4 local Federal Reserve Bank governors. The majority are therefore board members, and if the board maintain solidarity, it can implement policy in spite of the objections of the individual reserve banks, making it a more centralized system. These differences can be considered an expression of the differences in centralization between the European Union, which is only a “union” of sovereign countries, and the United States, where states are more integrated into the whole. The size of the ECB Governing Council (and therefore the ESCB Governing Council as well) has been criticized by Germany for lacking efficiency.¹²

Taking these decision-making mechanisms as given, the Executive Board has little room for discretion. Even if a Europe-wide financial crisis were to be encountered, the Board would be unable to take exceptional actions unless it had the consent of a majority of national central bank governors,

⁵ The institutional framework is the General Council. cf. Scheller [2004], pp.44-45.

⁶ For discussion of the significance of this organization, see Section 3.3, which focuses on the ESCB supervisory role.

⁷ Even in Germany, the Bundesbank head office was not able to execute operations on its own, but did so through the Länder banks, which managed the accounts of commercial banks.

⁸ Within the ESCB, the NCBs of countries using the euro, together with the ECB, are referred to as the “eurosystem.” The eurosystem is responsible for a uniform monetary policy in the euro zone. The eurosystem also supplies a single, common currency, the euro, as the “bank of issue.” The base money is supplied and collected by the NCBs through their commercial bank deposits, but under guidelines established by the ECB. See Iwata [2003], p. 318.

⁹ ESCB and ECB Act, Article 9 (3).

¹⁰ ESCB and ECB Act, Article 12 (1).

¹¹ A decision of the EU Council on March 21, 2003 expanded this and introduced some new countries so that at the current point in time there are 27 (NCB governors) + 2 (ECB governor and vice governor) members. cf. Scharrer [2005], p. 94 and the ECB web site (as of February 2007).

¹² For example, see Scharrer [2005], p. 94. Scharrer argues that the governing Council is too large to be efficient and should therefore adopt a “minority joint representation scheme or a rotational scheme like in the United States” (Scharrer [2003], p. 26).

although any crisis for which consent could not be obtained would also probably not require exceptional action. Nonetheless, there is still the issue of being unable to take exceptional measures in the event of a swift and sudden crisis without first calling a meeting of a majority of council members.

2.2 Positioning of “lender of last resort” services

In addition to their macroeconomic and monetary functions, central banks are also considered to serve as lenders of last resort to provide a means for stabilizing financial systems. In this section we consider how the “lender of last resort” services are structured within the ESCB framework.¹³

In the eurosystem, “emergency liquidity assistance” (ELA) measures are considered to function as “lender of last resort” services. “Emergency liquidity assistance” is defined as “including assistance from the central bank for financial institutions and financial markets experiencing temporary liquidity shortages under exceptional circumstances.”¹⁴ Skepticism remains, however, about whether this “liquidity assistance” actually implies direct lending by the central bank.

Mayes uses the following example to discuss special lending by central banks in response to crisis. According to Mayes, when the financial system is destabilized (bank runs, etc.), the only response open to regulators in trying to avoid contagion is to supply additional liquidity to shore up foreign-exchange policies and the financial system as a whole. In such circumstances, the central bank does not want private-sector banks to take on the increased risks, but it also wants to avoid an unnecessary credit contraction. Even when the authorities have to respond to a “too many to fail” (in contrast to “too big to fail”) threat, they are expected to make the same response, to work at the level of foreign exchange policy,¹⁵ because there is a mutual relationship between foreign exchange policy and financial stability.¹⁶ We should note, therefore, that Mayes does not exclude the possibility of the central bank responding to crisis. Indeed, he only comments on it as a response to a threat faced by a particularly large number of smaller banks. In other words, when a large number of smaller banks are threatened, interest-rate policy must be used to increase overall money supply, but that is difficult under a single monetary policy. On the other hand, support for large financial institutions, which is normally what is envisioned in Japan, is not considered.

The ECB itself avoids the phrase “lender of last resort,” and is careful to distance itself from the idea that special lending by the central bank should be used to deal with financial and monetary crisis. A search of ECB literature reveals very few instances in which “lender of last resort” can be found. Even where it is found, the context is slightly different: “The marginal lending facility provides overnight loans from the central bank against collateral at a predetermined interest rate. The interest rate on these overnight loans is normally substantially higher than the corresponding market rate. As a result, credit institutions only use the marginal lending facility to obtain funds as a last resort. Since access to the marginal lending facility is only limited by the amount of collateral available, the interest rate on the facility normally provides a ceiling for the overnight rate in the money market.”¹⁷ In other words “lender of last resort” are only used in relation to high-interest lending reserves, and are divorced from the concept of special lending to respond to crisis.

This stems from the idea in Europe, and in Germany in particular, that the priority at the central bank should be more on serving as the guardian of the currency than as the implementer of macroeconomic policy and the lender of last resort. Researchers in Japan have likewise expressed concern that, when there is the potential for conflict of interest between monetary policy

¹³ Obviously, the eurosystem does not attempt to manage financial crisis and stabilize the financial system just by providing emergency liquidity assistance. If anything, the emphasis is on supervision during ordinary times, and that is the chief significance of the relationship between the central bank and financial supervisors. This point will be explored in more detail later in this paper.

¹⁴ Harui [2004], p. 69.

¹⁵ See Mayes [2003], p. 197-198.

¹⁶ Mayes [2003], p. 207.

¹⁷ Scheller [2004], p. 88.

implementation and maintenance of financial system stability, the financial crises which inevitably occur from time to time can damage the reputation of the central bank and ultimately injure the market's faith in central bank monetary policy.¹⁸ In this case, central banks that emphasize foreign-exchange policy and advocate independence take a step back from responsibility for financial system stability. The ECB's priority on currency stability does not end there, however. Otmar Issing, an ECB executive, warns of the dangers in allowing the public to believe that the central bank can use foreign exchange policy not only to guarantee price stability but also to expand employment and foster economic growth, because it will eventually expose the central bank's impotence and erode its trust.¹⁹ In other words, the ECB considers itself the guardian of the currency and its highest duty the stability of currency values and argues that the central bank cannot be relied on as a cure-all for either crisis management or macroeconomic policy.

Following along in the ECB's comments on financial stability, one can see an evolution in central bank policies regarding payment and settlement risks. The greatest progress has been the "TARGET System" ("Trans-European Automated Real-Time Gross Settlement Express Transfer System"). This system links the entire gamut of payment and settlement systems from the German-style transfer system in which all financial institutions have accounts with the central bank to the UK-style system in which only clearinghouses have central-bank accounts on which they settle their clearing balances. As a result, banks in member countries are able to process payments using accounts with central banks not only in their home country but also in foreign countries as well. The upshot is that it takes no more than 30 minutes to complete payment transactions between central banks.²⁰ The ECB apparently believes that the nature of systemic risk has been changed by integrating the infrastructure for large payment transactions and reorganizing interbank trading.²¹

2.3 Finance industry's responsibility for crisis

If the ESCB does not place high priority on "lender of last resort" services, how is crisis response positioned within the overall scheme? Understanding this merely requires one to recall the response to the Herstatt crisis. This was the first bankruptcy of an international financial institution to have occurred in the former West Germany, which had a central banking system that was decentralized and placed priority on currency stabilization, making it the closest possible example to the current ESCB.

Together with the Franklin National Bank in the United States, I.D. Herstatt KgaA is a leading example of an international financial institution going under after the transition to floating currency rates. Though the bankruptcies occurred at roughly the same point in time, the responses from their respective central banks were exactly opposite. In the US, the central bank served as lender of last resort, where in Germany it did not. When Franklin National experienced a liquidity crisis in 1974 that brought it to the verge of bankruptcy, the New York Federal Reserve Bank made enormous loans to supply liquidity and took over the bank's foreign-exchange trading account, which was the source of its problems.²² Contrasting this is the response of the Bundesbank when West Germany's authorities revoked Herstatt's license in June of the same year—it made no emergency loans and allowed the bank to go under.²³

Even after the Herstatt crisis, Germany did not change its system so that the central bank served as the lender of last resort and made special public credit available. The current Bundesbank Act has no

¹⁸ See Harui [2004], p. 69.

¹⁹ Vgl. <http://www.ecb.int/press/key/date/2004/html/sp040929.de.html>

²⁰ Friedereich [1997], S. 71-91.

²¹ cf. European Central Bank [2001], p. 9.

²² See Sawabe [2003], p. 177.

²³ See Sawabe [2003], p. 176-177. The liquidation of Herstatt was still in progress as of this writing at the end of June 2006 due to delays caused by court challenges regarding the competence of the foreign exchange managers. Vgl. Knüwer[2006].

provisions corresponding to Article 37 (“temporary loans to financial institutions”) or Article 38 (“business contributing to the maintenance of an orderly financial system”) of the Bank of Japan Law.

In place of a special lending system, which would represent large burdens for the central bank, Germany has established a “liquidity consortium bank” (“Liko-Bank: Liquiditäts Konsortialbank GmbH”) to supply specially liquidity to the markets while avoiding having the central bank shoulder credit risks.²⁴ Liko-Bank is a private-law, limited-liability company established in Frankfurt under the leadership of the Bundesbank and specifically charged with performing special duties. Its primary shareholders are the Bundesbank, the member institutions of the Association of German Bankers, member institutions of the German Savings Bank Association, DZ Bank and the *Bankenfachverband*. Its purpose is to supply liquidity assistance in the event of a liquidity crisis at a bank that is otherwise solvent so as to prevent a decline in the general faith and trust accorded to the German banking system as a whole.²⁵ This liquidity supply system links together all of the deposit protection funds and other private-sector systems established by the three sectoral bodies to enable response to liquidity crisis by eliminating institutions’ credit risk.²⁶

In other words, in Germany, the first step in “lender of last resort” services to respond to financial crisis is for the private-sector systems to supply liquidity and shoulder credit risk. The public-sector central bank is the ultimate supplier of the liquidity, but it does not bear ultimate responsibility, nor does it undermine its role as guardian of the currency. It merely provides support for the private sector as it organizes the orderly flow of liquidity. Public regulators should be using capital adequacy ratios and other metrics to supervise institutions so that there are no bankruptcies that would engender systemic risk.²⁷

This positioning of the central bank was intentional. One of the leaders of Germany’s central bank has criticized the “Anglo-Saxon tradition of emphasizing the central bank’s role as lender of last resort,”²⁸ saying that it threatens the safety and independence of the central bank, threatens the maintenance of stable currency values and the credibility of the currency and, more than anything else, can trigger moral hazards in commercial banks. Even in the leading debates in Europe, the German system is given favorable assessments for providing private-sector led deposit protection that does not burden the taxpayers and prevents moral hazards at financial institutions.²⁹ Within the EU, there is no EU-wide system for responding to crisis; this is something that is still taken care of at the national level, but there are some who argue that even in national-level responses to crisis a German-style system should be adopted in which the priority is on private-sector solutions so as to prevent moral hazards.³⁰

Therefore, to summarize the analysis in this chapter, the European System of Central Banks has not been slow to integrate. The reason that there are no special lending programs similar to “lender of last resort” services is that they have been intentionally excluded, not that the pace of monetary integration has fallen off. Were a financial crisis to occur in Europe, it would be an issue for regulators, and the lending risk for any funds required to deal with it would be borne by the financial services industry itself. Even if at some point in the future the EU develops into a more federal system with stronger central authority, this principle will probably remain in place and if anything will extend into the domestic systems of member countries.

²⁴ For a detailed discussion of Liko-Bank, see Yamamura [2003a].

²⁵ Vgl. Gabler Bank Lexikon [2000], Liquiditäts Konsortialbank.

²⁶ Vgl. Süchting und Paul [1998], S. 490ff.

²⁷ See Yamamura [2003a], beginning p. 38. In addition to capital adequacy ratios, Germany also employs its own liquidity regulations to prevent insolvency due to term mismatches (see Yamamura [2003a], p.3). These regulations are worth noting as the first regulations to address “lender of last resort” services after the banking depression.

²⁸ Vbl. Euromoney, Sept. 2000. Jürgen Stark, the vice governor of the Bundesbank, is reported to have articulated this opinion in the spring of 1999.

²⁹ See Beck [2004], pp. 131-134.

³⁰ See Brouwer, Hebbink and Wesseling [2004], pp. 206-208.

3. The roles of the ESCB and ECB in financial oversight

This chapter analyzes the involvement of the ECB, a part of the ESCB, in financial oversight. Our focus is on explaining the roles that the ECB is expected to play in coordinating financial oversight for the EU as a whole.

3.1 Issues raised by national-level financial oversight

The relationship between national central banks and the European Central Bank within the ESCB is similar to that between the central banks of the *länder* and *die Bank deutscher Länder* under the West German system in the immediate postwar period (*die Bank deutscher Länder* subsequently became the Frankfurt head office of the Bundesbank). Like the Bundesbank, the primary goal of the ESCB is price stabilization, and to achieve this it maintains its independence in formulating monetary policy and executing its operations.

However, there are some points of significant difference between the current Germany and the EU when it comes to financial supervision. Germany centralizes its supervision of financial institutions in BaFin, which has jurisdiction over all financial institutions in Germany, including securities companies and insurance as well as banking. Therefore, the Bundesbank operates under what is at least provisionally a decentralized system,³¹ but with centralized oversight. By contrast, the EU does not have a single authority that provides financial oversight and supervision across the union; this is delegated to national authorities who operate under national laws that are coordinated with EU directives.

Three issues have, however been acknowledged³² as a rising out of the system of nationally-based supervision but borderless financial transactions within the region. The first issue is sufficient access to the information required by regulators. The second is the judicial authority required by national regulators. And the third is the formation of agreements on how to handle differences of opinion between home countries and accepting countries when a troubled financial institution has to be shut down or bailed out with a merger.

To provide for better information exchange, regulatory bodies exchange memoranda of understanding (MoUs). This, however, is insufficient and requires reinforcement. Regulators must specify the accounting standards and data to be used and must audit for compliance. At the central bank level, there is a Banking Supervision Committee (BSC) within the ECB that collects macro-level soundness data. However, the “financial stability reviews” conducted by the ECB and NCBs are limited to directly accessible data or data they have collected on their own and therefore lack the more confidential data that can be collected by supervisors. It is for this reason that many have pointed to the need for a European-level financial regulatory body. The second and third issues can be addressed with prior agreements between home and accepting countries so as to avoid conflicts of interest and clarify the locus of authority.³³

There is some discussion of establishing a uniform regulatory agency because of these issues, but at the current point in time the emphasis is on enhancing regulatory systems throughout the EU by building friendlier, more cooperative relationships among national regulators rather than establishing a new, uniform regulator. One of the ECB’s roles is to act as an EU-level coordinating institution. The Committee of European Banking Supervisors (CEBS) also serves as a mediator between national regulators.

3.2 Authority of the ESCB and ECB in financial oversight

³¹ For a brief time after the introduction of the euro, the governors of the *länder* central banks played an important role, but the authority of the federal government has been strengthened in order to give him a freer hand in the ECB Governing Council.

³² See Mayes [2003], p. 200.

³³ See Mayes [2003], p. 201-203.

In its report *The Role of Central Banks in Prudential Supervision*, the ECB includes a chapter entitled “Central banking and prudential supervision: a survey of the issues” that identifies three classes of tasks³⁴ to be included in the oversight functions of EU members: a) investor protection activities, b) micro-prudential supervision, and c) macro-prudential analysis.

- a) Investor protection: Focused mainly on the issuance and enforcement of rules on the conduct of business and the disclosure of information.
- b) Micro-prudential supervision: All on and off-site surveillance of the safety and soundness of individual institutions, aiming in particular at the protection of depositors and other retail creditors.
- c) Macro-prudential analysis: All activities aimed at monitoring the exposure to systemic risk and at identifying potential threats to stability arising from macroeconomic or financial market developments, and from market infrastructures.³⁵

To briefly summarize, financial supervision in financial administration includes the issuance of regulations, auditing and oversight functions, and early identification of systemic risk.

Under the laws establishing the ESCB and ECB, the ESCB has three roles to play in financial administration: 1) elimination of impediments to the implementation of policy by the competent authorities, 2) consultative services on proposed laws and ordinances, and 3) implementation of specific tasks. Of these, the first is the essential mission of the ESCB; the other two are under the authority of the ECB.

In other words, the ESCB is expected to help facilitate the implementation of policies enacted by competent authorities related to “prudential supervision of credit institutions” and “stabilization of the financial system.”³⁶

The ECB may provide advice to the Council of the European Union (Legislature), European Commission (administration) and national regulators (implementation agencies are in some cases involved in the formulation of domestic regulations) on the drafting and implementation of the EU laws related to “prudential supervision of credit institutions” and “stabilization of the financial system” and respond to requests for consultations.³⁷

The ECB may also undertake specific tasks related to policy in the area of “prudential supervision of credit institutions and other financial institutions (excluding the insurance industry).”³⁸

In the next section we consider how the mission etc. of the ESCB in its establishment law covers the three functions of financial oversight administration.

3.3 Coordinating functions of the ESCB and ECB

Support for statutory consultative functions

The function of drafting and implementing regulations for “investor protection” (a) is covered under “consultation on proposed laws and ordinances” (2). In other words, when the ECB drafts financial regulations, its involvement is as the “brain” of the authorities, and through this it can ensure that there are no discrepancies between the EU law and domestic

³⁴ European Central Bank [2001], p. 3.

³⁵ While the third type of task is performed, in some way, by all central banks, the activities relating to investor protection, especially in the securities markets, are very rarely included in their mandate. For separate supervisory agencies, the opposite is generally true, i.e. a strong emphasis on investor protection is usually coupled with a minor role in the monitoring of systemic risk. cf. European Central Bank [2001], p.3.

³⁶ ESCB and ECB Act, Article 3 (3).

³⁷ ESCB and ECB Act, Article 25 (1).

³⁸ ESCB and ECB Act, Article 25 (2).

laws and ordinances. This role is reminiscent of the roles played by the Cabinet Legislation Bureau and the legislative affairs offices of individual ministries and agencies in Japan.³⁹

Generally, EU laws and ordinances are formulated by EU legislative bodies (the EU Council and European Commission). Finance-related laws and ordinances are formulated as directives (fundamental legislation) of the EU legislature, with the subsidiary organizations of the European Commission formulating the enforcement orders and the details of national implementation legislation. Similar to what takes place at the global level where the Basel Committee on Banking Supervision establishes expert committees, the EU also has a number of committees passed with formulating the details (known as the comitology procedure).

Among these committees is the Banking Supervision Committee (BSC) established by the ECB Governing Council within the ESCB. This committee is an institutionalization of what was previously known as the “Groupe de Contact,” a meeting of senior representatives of the ECB and national central banks and regulators. The ECB serves as its host (Secretariat).⁴⁰

Applying to the banking sector the Lamfalussy procedures⁴¹ initially introduced for the securities trading sector paved the way for the establishment of the Committee of European Banking Supervisors (CEBS) as a level-three consultative organ to serve as the successor to the BSC in January 2004. CEBS membership includes national oversight agencies, central banks and also the ECB.⁴² Representatives of the “Group de Contact” and the BSC also participate as observers. The CEBS plays a role similar to that of the Financial Services Council (or one of its working committees) in Japan, and the ECB is involved with it as a consultative organ on the formulation of EU and national laws.

In addition to its linkage with the Basel Committee, the ECB also, with the assistance of the BSC and CEBS, participates in the European Securities Committee (ESC) and European Banking Committee (EBC), contributing to the regulation, supervision, and stabilization of finance in the EU.

Among the ECB’s rules are the promotion of coordination among NCBs and national regulators on policy issues in which there are common interests in the domain of prudential oversight and financial stability, drafting of bills as provided for in Article 4 of the establishment law and consultative services as provided for in Article 25 (1). All of these functions are positioned as contributions related to “(1) elimination of impediments to the implementation of policy by the competent authorities.”⁴³ From that perspective, “(2) consultative services on proposed laws and ordinances” can be seen as an extension of “(1) elimination of impediments to the implementation of policy by the competent authorities” and therefore a role to be performed by the ECB within the ESCB.

Mechanisms that contribute to the supervision and monitoring of individual institutions

The inspection, monitoring and supervision of individual institutions is a service that falls under “a) Micro-prudential supervision” and the ECB may provide cooperation for it through the NCBs. As will be discussed below, the supervision system in Germany and

³⁹ Which is clearer in European Constitution Draft No. 3 Article 77 (4).

⁴⁰ This is similar to the Bank for International Settlement (BIS) serving as the Secretariat for the Basel Committee.

⁴¹ Lamfalussy procedures are a work process for the drafting of the EU directives. For details, see Yamamura and Mitamura [2006], pp. 262-264.

⁴² As we will note in Section 4.2, some EU countries have legal restrictions on central bank involvement in oversight and regulation, while others do not. Nonetheless, central banks of all members are part of CEBS regardless of their legal frameworks. This is an institutional expression of the integral relationship between banking supervision and central banks.

⁴³ cf. Scheller [2004], p. 113.

other countries allows the inspection information in the possession of the Bundesbank (central bank) to be used in supervision. In France, the central bank provides secretariat services for the banking supervision committee, and also furnishes human resources. However, while supervisory authority for EU financial institutions rests with the home country, transactions within the EU can take place freely across borders, so the ECB conceivably functions as an umbrella organization for the NCBs that are the inspection authorities, bringing them together and providing information to supervisory authorities.

Turning to “(3) implementation of specific tasks,” there is nothing concrete that has been laid out. This merely functions as a category of “other business” to allow the organization to take on additional work as required. The establishment law allows the ECB to formulate regulations and charge fees as necessary for the implementation of its operations and prudential supervision duties (capital adequacy, liquidity),⁴⁴ and the draft European Constitution envisions the ECB setting fees and other terms and regulations as directed by the Council of the European Union,⁴⁵ which is perhaps why this was included.

Elimination of supervisory impediments

“(1) Elimination of impediments to the implementation of policy by the competent authorities” is a duty to be performed by the ESCB. The functions that can be covered within this framework are, first and foremost, “(c) Macro-prudential analysis.” It is essential that the ESCB have the cooperation of the NCBs under it in order to create its monthly statistical report. This must then be used to identify the potential for systemic risk early-on.

The ESCB can also make more concrete contributions to supervision. We noted in Section 2.1 that the NCBs were both domestic institutions and also institutions of the EU within the ESCB framework. Members’ regulatory authorities are expected to act in ways that take account of the EU’s interest, not just their own domestic circumstances.

For example, there are some countries within the EU that separate the central bank from the financial supervision organization and provide no forum for official dialogue between the two (Luxembourg and others). Regulators who are cut off from the central bank are responsible only for domestic duties and work closely with the Ministry of Finance, which means they tend to place priority on cooperation with the central government and to have little interest in impediments, etc. to cross-border transactions. Even in cases such as this, the country’s central bank, as an organization representing EU interests, can provide the necessary cooperation to domestic authorities and maintain the contacts required with eurosystem partners. In short, it can serve as the coordinator on systemic impediments created by cross-border transactions.⁴⁶

4. Role of the central bank in the EU member-country financial supervision

We have so far observed that there is no particular emphasis in the EU on the function of the central bank as the “lender of last resort” in a liquidity crisis. Rather, the emphasis is on the role of prudential supervision in dealing with and avoiding crisis. Nonetheless, in the preceding chapter we also noted that the ESCB framework played the role of coordinator for prudential supervision in the EU, which is divided up at the national level.

This raises the question of what kind of coordination there is at the national level between the central bank and the supervision and regulatory agencies. In this chapter, we examine the United Kingdom, Germany, France to observe the roles that can be played by central banks in prudential supervision at the EU national level.

⁴⁴ ESCB and ECB Act, Article 34 (1).

⁴⁵ European Constitution Draft No. 3 Article 82.

⁴⁶ cf. European Central Bank [2001], p. 8.

4.1 Case studies from leading EU countries

United Kingdom

The UK did not traditionally have written law regarding financial institution regulation and supervision. Discipline instead took the form of self-regulation and gentlemen's agreements. It only formulated its banking law in response to the EC's first banking directive (licensing system) of 1977. Having learned its lesson from the secondary bank crisis of the 1970s, in 1979 the UK granted bank supervisory powers to its central bank, the Bank of England. When the Johnson Matthey Bank went bankrupt in 1984, it prompted a revision of the Banking Act that was completed in 1987 and strengthened the Bank of England's supervisory powers.

The formulation of the Financial Services Act in the early 1980s provided a legal framework for regulatory and supervisory institutions in the securities trading sector as well, resulting in a plethora of sectoral regulators, each covering its own narrow portion of the market (for example, insurance and mortgage unions, etc. each had their own regulators too).

In the 90s, there was a vigorous debate on the establishment of a centralized regulatory agency, leading to the creation of the Financial Services Authority (FSA) in October 1997; when amendments to the Bank of England Act entered into force in 1998, supervisory authority was transferred from the Bank of England to the FSA. Then, in 2000, the enactment of the Financial Services and Markets Act centralized regulatory and supervisory power over all financial services sectors, including banking, securities and insurance, in the FSA.

Behind the centralization of financial supervision was the perceived need to "improve the efficiency and fairness of financial regulatory functions"⁴⁷ by bringing all of the regulation and supervision of financial institutions active across sectors and borders under a single roof in order to deal with the global trends towards liberalization and internationalization. In other words, in the UK, the impact of the EU's introduction of universal banking and the emergence of financial conglomerates combined to create financial institutions that offered a wide range of services as a single organization. Having multiple, sector-based supervisors supervising financial institutions such as this imposed heavy burdens and also underscored the "dysfunction in a complex and hierarchical regulatory system."⁴⁸ Meanwhile, globalization resulted in financial institutions being increasingly active on foreign markets. The staffing and resource constraints on supervisors in dealing with such financial institutions made it necessary for the UK to seek greater efficiency.

Prior to 2000, the only countries in the EU to have centralized supervisory agencies were the Scandinavian countries of Denmark and Sweden, but the UK's transition to centralized regulation had an impact on other EU countries. Obviously, within the integrated financial markets of the EU, the spread of universal banking and the rise of complex cross-sector and

⁴⁷ See Harui [1999a], p. 70. Saito [2004] lists three factors behind the reforms. The first was mounting criticism of the Bank of England's supervisory system. Supervision became an issue in the BCCI window dressing case in 1991 and again in the Barings bankruptcy of 1995. The next factor was growing support for the idea that there should be a separation between the central bank's monetary policy, which emphasizes stable currency values, and financial services regulation. In 1993, a committee of the lower house of parliament resolved that the stability of currency values should be the primary objective of the Bank of England's monetary policy and granted the Bank the authority necessary to pursue that goal. In 1997, authority to determine monetary policy was ceded to the Bank of England. The Bank of England's central task now being the implementation of monetary policy so as to stabilize currency values, there was room to discuss moving supervisory functions to a different organization. Finally, skepticism about the need for a publicly-authorized, self-regulatory agency among the securities investment sector and consumers was also a factor in the reform of the supervisory system. See Saito [2004], pp. 73-74.

⁴⁸ Harui [2004a], p. 71.

cross-border transactions made it necessary for other countries to seek the same sorts of efficiencies from their financial regulators. They required organizational structures that were flexible enough for staff to be reassigned as needed during inspections and monitoring, and centralized regulatory agencies were seen as fitting the bill because staff assignments could cross sectoral walls.

Thus, in the UK, there was centralization of financial supervision, but at the same time, the central bank did not necessarily lose all roles in supervision in actual practice. Obviously, in the process of centralization, the UK transferred the authority that had rested with the Bank of England to the FSA, and the FSA was given legal responsibility for financial supervision. Nonetheless, there is also a memorandum of understanding between the Bank of England and the FSA that stipulates a very close, cooperative relationship.⁴⁹ Efficient supervision was thus sought by establishing a centralized supervisory agency while at the same time developing cooperative relationships with the central bank and other outside organizations.⁵⁰

Germany

Like the UK, Germany also turned to centralized supervision in order to achieve comprehensive, efficient oversight of its banking, securities, and insurance industries. In May 2002 it integrated its supervisory agencies for the credit system, insurance, and securities trading into a federal public corporation called BaFin (Bundesanstalt für Finanzdienstleistungsaufsicht).

As we already saw, the UK moved supervisory authority from the central bank to a new, independent agency called the FSA. By contrast, in Germany there was no essential transfer of authority from the central bank; the law maintained the cooperative relationship that had always existed between the central bank and the supervisors. The reason for this can be seen in the history of the postwar Federal Republic of Germany, which concentrated supervisory authority over financial institutions in BaKred (Bundesaufsichtsamt für das Kreditwesen), the regulatory agency for the credit system, rather than the central bank (Bundesbank).

Under the Banking Act (Kreditwesengesetz or KWG), BaFin and the Bundesbank are required to communicate observed and finalized matters to each other. In particular, the Bundesbank is required to seek the opinion of BaFin when collecting statistics and to allow BaFin to use the statistical information it holds.⁵¹ Most of the reports and accounting reports from financial institutions are sent to the Bundesbank as well as BaFin; for the accounting reports in particular, the Bundesbank communicates its analytical findings and opinions to BaFin. BaFin prosecutions also make use of the Bundesbank's examination reports. The relationship between BaFin in the Bundesbank is thus akin to that between a supervisory department and an inspections department.⁵²

France

⁴⁹ According to Saito [2004], the cooperative relationship under the memorandum between the Bank of England and the FSA was maintained because of the "fear of adverse impact on the central bank's monetary policy functions and the financial system stabilization functions because the transfer of supervisory authority away from the Bank of England made it more difficult for the Bank to acquire information on financial institutions." Regardless, the cooperation between the FSA in Bank of England helps to minimize the burdens on the financial institutions being supervised because it avoids having the two institutions collect their data separately. See Saito [2004], pp. 91-92.

⁵⁰ Other external cooperating organizations in addition to the central bank would include, for example, auditing firms. In Germany, inspections of accounts are performed with the cooperation of auditing firms (certified public accountants) and auditing federations.

⁵¹ Kreditwesengesetz Article 7.

⁵² BaFin has its own inspectors, and it may be easier to understand the relationship as similar to the cooperation between the Financial Services Agency and the Finance Bureau in Japan.

Until France passed its new banking law in 1984, it was difficult to coordinate the implementation of banking policy, government ordinances, and banking supervision among the authorities because of the boundaries drawn up by sectoral walls. However, in the process of transplanting EU directives into domestic law, and in parallel with the introduction of universal banking, the French authorities were able to strengthen their banking supervision.⁵³

Within this, the Commission Bancaire (CB) is an independent administrative commission charged with banking inspections and supervision. The CB does not have corporate status, but it receives its human and material resources from the Banque de France, so it is independent of state finances. Commission membership comprises relevant authorities, administrators, judges, and experts, who are either appointed independently or from their home organizations, according to stipulations in the law.

From a legal standpoint, the CB is similar to the structure seen in the UK, in that it is an independent organization from the Banque de France, which is the central bank. However, the actual relationship between the two is very close because of the provision of human and material resources. For example, the Banque de France furnishes the CB secretariat with the staffing and resources required for on-site inspections. The secretariat is also able to request assistance for inspections from all parties who have appropriate capabilities within the scope of the agreement.

In France, this cooperative relationship between the CB and the Banque de France maintains efficiency. In securities, supervisory organizations, which to that point in time had been divided along functional lines, were integrated into a new *Autorité des marchés financiers* (AMF) in 2003. Even still, the overall organization differs from the UK or Germany in that it is not centralized but continues to rely on sectoral and functional supervisory agencies. The emergence of financial conglomerates in recent years has, however, raised the need to improve the efficiency of supervision in the three areas of banking, insurance, and securities, and systems are being put in place for information exchange and meetings among relevant authorities so that the separate organizations are better able to coordinate.⁵⁴

4.2 Overview of EU countries

Within the EU are several countries that have created systems for close corporation between the central bank and the supervisors even if it is not exactly the same organizations that are responsible for monetary policy and banking supervision. The structures are similar to that adopted by the US Federal Reserve System,⁵⁵ which is also responsible for the supervision and regulation of commercial banks. A system like that in the UK that completely separates central banking and banking supervision is not necessarily the best choice in all cases. Some countries find that the cooperation of the central bank is essential to ensure the quality of the staff involved in supervision.⁵⁶

Table 1 summarizes the form of supervision system used in the 25 EU countries. Factors like the emergence of financial conglomerates and the globalization of finance have resulted in 13 countries moving away from a sectoral-based model since 2000, of which 12 have established centralized supervisory agencies, whereas prior to 2000 only 2 had done so. This includes the UK, which centralized supervisory power in the FSA in 2000. Most of the centralized supervisory agencies

⁵³ For more on the series of institutional reforms involved, see Yamamura and Mitamura [2006], pp. 268-270.

⁵⁴ Code monétaire et financier, L 631.

⁵⁵ In the United States, under the Federal Reserve System (the central bank) are regional Federal Reserve Banks that supervise and regulate commercial banks. In other words, it is a single organization that implements both monetary policy and banking supervision. Meanwhile, supervision and regulation of securities trading is performed by the Securities and Exchange Commission (SEC), which maintains a degree of independence from the federal government.

⁵⁶ cf. Goodhart [2002].

maintain their independence from the central bank, but some countries like Germany stipulate by law that the central bank must provide cooperation for inspections.

Table 1: Supervisory Systems and Central Bank Involvement

Country	Sector-based model	Objective-based model	Central agency model	Number of agencies with supervisory responsibilities	Central bank responsibility for supervision
Belgium			⊙	1	
Czech Republic			⊙	1	○
Denmark			○	1	
Germany			⊙	1	○
Estonia			⊙	1	
Greece	○			3	○
Spain	○			3	○
France	○	○		4	
Ireland			⊙	1	
Italy	○	○		4	○
Cyprus	○			4	○
Latvia			⊙	1	
Lithuania	○			3	○
Luxembourg	○			2	
Hungary			⊙	1	
Malta			⊙	1	
Netherlands		⊙		2	○
Austria			⊙	1	○
Poland			⊙	1	
Portugal	○	○		3	○
Slovenia	○			3	○
Slovakia			⊙	1	○
Finland	○			2	
Sweden			○	1	
United Kingdom			⊙	1	
Total	10	4	14		12

Source: European Central Bank [2006] p. 5.

Notes: A “sector-based model” refers to multiple supervisory agencies, each with responsibility for one sector: banking, securities, insurance. An “objective-based model” refers to multiple agencies that perform supervision for specific purposes: prudential supervision and operating regulations, for example. The “central agency model” refers to a single agency performing supervision regardless of sector or objective.

The double-circle marks in the objective-based model and central agency model columns denote transitions from the sector-based model during or after 2000.

Among countries in which the central bank is responsible for supervision we have included cases like Germany where the law delegates the actual supervisory operations.

Table 2 illustrates the cooperative relationship between the supervisory agency and the central bank in countries where the central bank is not responsible for supervision. Even in these countries, it is not uncommon for there to be some sort of official cooperative framework, for example a memorandum of understanding between the supervisors and the central bank on cooperation and information sharing, or the establishment of a joint committee. Like France, Belgium, and other countries also share staff and funding between the two organizations.

Table 2: Cooperative Relationship between Central Banks and Supervisory Agencies in 13 EU Countries Where the Central Bank Does Not Have Supervisory Responsibilities

Country	Official system for cooperation and information sharing (if any) and form of system	Involvement of central bank in operations of supervisory agency	Sharing of staff	Sharing of funding	Other sharing	Central bank inspections
Belgium	MoU, C	○	○	○	○	
Denmark	MoU, C					
Estonia	X	○			○	
France	X	○	○	○	○	
Ireland	X		○		○	○
Latvia	A	○	○	○	○	○
Luxembourg						
Hungary	MoU, C, A					○
Malta	MoU, C					
Poland		○	○	○		
Finland	MoU, A	○			○	
Sweden	MoU, A	○				
United Kingdom	MoU	○			○	

Source: European Central Bank [2006] p. 6.

Notes: In the “Official system for cooperation and information sharing (if any) and form of system” column, “MoU” refers to the issue of a “memorandum of understanding;” “C” to the establishment of a committee; “A” to a cooperation agreement; and “X” to some other form of official cooperative relationship.

4.3 Summary

Jurisdiction over the regulation and supervision of financial institutions, once special factors arising out of the history and experiences of national financial systems are excluded, “boil down to the ‘real-life question’ of who ultimately bears the cost of relief.”⁵⁷ The EU attempts to prevent moral hazards by not making “lender of last resort” services one of the central bank’s primary duties, which is why the evolution seen in the UK and elsewhere from the central bank to an independent, specialist regulatory and supervisory organization is completely natural. In addition, the spread of universal banking and the emergence of financial conglomerates has resulted in a greater number of financial institutions engaged in activities that go beyond sectoral boundaries, which is why there has been a

⁵⁷ Harui [1999b], p. 188.

number of centralized supervisory agencies established in the EU since 2000. Most of these institutions have simultaneously achieved independence from the central bank.

However, relationships between supervisory agencies and monetary policy agencies vary widely; there is no universal framework for banking supervision from either a theoretical or an institutional standpoint.⁵⁸ From the perspective of centralization, the UK, Germany, and France provide examples of different forms of organization for financial supervision and different relationships with central banks. The UK and Germany have centralized supervisory agencies whereas France has a number of different agencies depending upon the sector and function. From the perspective of relationships with central banks, in the UK financial supervisors are completely independent of the central bank, whereas German law has traditionally required them to cooperate and in France they are legally independent but from an operational standpoint the banking supervisory agency depends upon the central bank for staffing and resources. Like Germany, Austria and the Czech Republic have centralized supervisory agencies but maintain the legal mandate for cooperation with the central bank. Even in the UK, a memorandum of understanding confirms the cooperative relationship with the central bank.

For banking supervision to function effectively, it needs “independence from political pressure, coordination with monetary policy, appropriate budget, and capable staff.”⁵⁹ All countries have designed their system so as to maintain independence from political pressure, coordinate with monetary policy, and secure appropriate budget and capable staff, and one point that they all have in common is they are continuing search for ways to maximize the effectiveness of supervisory functions.

5. Conclusion

Japan points to the ambiguity of “lender of last resort” services in the decentralized European System of Central Banks and questions whether it can really contribute to the stability of financial services. However, Europe cannot be called “insufficiently integrated” on “lender of last resort” functions. Rather, it has intentionally eliminated “lender of last resort” services from the roles of the central bank, making it in principle the responsibility of the financial services industry itself to deal with any crisis that may occur. The model for the current European System of Central Banks is the central-banking system in the former West Germany, which did not make the central bank responsible for special lending even after the Herstatt crisis, considering it to be the responsibility of the financial services industry and the role of prudential policy by regulators to maintain stability.

This makes prudential supervision extremely important as a public mechanism. One cannot ignore the role played by the European System of Central Banks in coordinating the prudential supervision agencies in individual countries. This paper has also demonstrated the European Central Bank’s potential role as a coordinator among supervisors.

Likewise, national central banks maintain close, cooperative relationships with financial supervisory agencies. There is some debate on the merits of separating the central bank and the supervisors, often as theoretical observations in relation to “lender of last resort” services. However, EU financial services markets have undergone significant evolution since the 1990s with the elimination of sector walls (spread of universal banking) and the increase in cross-border transactions (integration of EU markets). Organizations have been structured in line with this to provide effective and efficient supervision in ways that are suited to the individual histories and institutions of EU countries.

The important point here is the progress that has been made in efficient supervision. Since 2000 there has been an active movement to establish centralized supervisory agencies in the EU, partially as a means to more efficiently utilize limited numbers of highly professional staff and expert functions. The reason that central banks in EU countries provide cooperation to the supervisory functions within their systems is to contribute to more efficient supervision by providing opportunities to use central bank staff and functions, a phenomenon that is on the surface completely different but shares the same basic philosophy.

⁵⁸ See Komura [1999], pp. 184-185. This paper describes the banking supervision systems of major countries in the latter half of the 1990s.

⁵⁹ Komura [1999], p. 185. The same argument is made by the ECB. cf. ECB [2001], p. 5.

These discussions contain many useful ideas for financial supervision in other developed countries besides the EU. Deposit-taking financial institutions will probably continue to be important in Japan, but the country has reached a stage where non-performing loan issues have been brought under control. The future is likely to see more active utilization of finance-related sectors and financial products, and the overall system will become more varied and complex. In these circumstances, supervision will require the investment of greater human resources to monitor financial instrument transactions and financial product sales and money lending services, for example. Given the limitations on government budget, the orientation will probably be more towards reassigning rather than increasing staff. It is therefore easy to envision a strategy in which the FSA seeks the cooperation of outside organizations, including the central bank in the monitoring of deposit-taking financial institutions.⁶⁰

There is therefore scope for further research on the detailed functions and future evolution of the European system of financial supervision, particularly on how it makes use of its organization, involving the European Central Bank and national central banks with excellent human resources and strong points of contact with commercial financial institutions, to increase the efficiency of inspections and supervision of deposit-taking institutions.

References

- Iwata, Kenji [2003], "EU Monetary Integration," in Kamikawa, Takao, Seiichi Fujita and Juichi Mukai eds., *Modern International Financial Theory New Edition*, Yuhikaku, pp. 307-326.
- Komura, Shuichi [1999], "Banking Supervisors and Monetary Policymakers," in Hiroshima Shudo University ed., *Journal of Economic Sciences*, Vol. 2 No. 2, pp. 173-186.
- Saito, Hisahiko [2004], "The Establishment of Centralized Financial Supervision in the UK and Its Impact on Financial Inspection and Monitoring," in *Chiba University of Commerce Research*, Vol. 42 No. 3, pp. 65-110.
- Saito, Hisahiko and Hirotaka Yamane [2004], "The Pros and Cons of Separating Financial Supervision from the Central Bank and National Supervisory Agencies," in Chiba University of Commerce ed., CUC Discussion Paper No. 4.
- Scharrer, Hans-Eckart [2003], "European Monetary Alliance: An Interim Evaluation 3 Years after the Introduction of the Euro," in Iwata, Kenji ed., *The Euro and the EU Monetary System*, Nippon Hyoronsha, pp. 3-29.
- Sawabe, Norio [2003], "International Management of Financial Risk," in Kamikawa, Takao, Seiichi Fujita and Juichi Mukai eds., *Modern International Financial Theory New Edition*, Yuhikaku, pp. 167-187.
- Hamori, Naoko [2002], *The Monetary Policy of the European Central Bank*, Chuo Keizai.
- Harui Hisashi [1999a], "Reforms in the UK Financial Supervisory System: The Financial Services Authority," in Kwansai Gakuin University ed., *Economic Studies*, Vol. 52 No. 4, pp. 69-102.
- Harui Hisashi [1999b], "Central Bank Lender of Last Resort Services and Financial Supervision Functions," in Kwansai Gakuin University ed., *Economic Studies*, Vol. 53 No. 3, pp. 161-202.
- Harui, Hisashi [2004], "The Lender of Last Resort Services of the European Central Bank," in Tanaka, Soko, Hisashi Harui, and Seiichi Fujita eds., *The Monetary Policy at the European Central Bank and the Euro*, Yuhikaku, pp. 68-85.
- Mayes, David G. [2003], "New Developments in Banking Supervision in the EU," in Iwata, Kenji ed., *The Euro and the EU Financial System*, Nippon Keizai Hyoronsha, pp. 179-212.

⁶⁰ There are commentators who advocate use of the Bank of Japan not merely from the perspective of efficiency, but also from the perspective of preventing excessive government interference in the financial system. For example, see Saito and Yamane [2004], p. 26.

- Yamamura, Nobuo [2003a], "Germany's Deposit Protection and Crisis Response Systems: Maintaining a Market-based Financial System," in Financial Services Agency, Financial Research and Training Center ed., *DP* Vol. 4.
- Yamamura, Nobuo [2003b], "Local Financial Systems in France and the Netherlands: 'Relationship Banking' in Europe and Lessons for Japan," in Financial Services Agency, Financial Research and Training Center ed., *DP* Vol. 12.
- Yamamura, Nobuo and Satoshi Mitamura [2005], "Capital Adequacy Ratios and the Implications for Relationship Banking in Germany's Retail Financial Services Industry," in *FSA Research Review 2005*, Financial Services Agency, Financial Research and Training Center, pp. 29-58.
- Yamamura, Nobuo and Satoshi Mitamura [2005], "Neutral Relationships between the EU and Member Countries: Examples from Regulation, Supervision and Competition Policy in the German and French Financial Services Markets," in *EU and Governance*, European Union Studies Association-Japan Annual Report No. 26, pp. 260-284.
- Beck, T. [2004] "The Incentive-Compatible Design of Deposit Insurance and Bank Failure Resolution: Concepts and Country Studies", in: Mayes, D. G. and Liuksila A. (ed.), *Who Pays for Bank Insolvency*, Palgrave Macmillan, pp.118-141.
- Brouwer, H., Hebbink, G. and Wesseling, S. [2004] "A European Approach to Banking Crises", in: Mayes, D. G. and Liuksila A. (ed.), *Who Pays for Bank Insolvency*, Palgrave Macmillan, pp.205-221.
- European Central Bank [2001] *The Role of Central Banks in Prudential Supervision*, European Central Bank; http://www.ecb.int/pub/pdf/other/prudentialsupcbrole_en.pdf
- European Central Bank [2006] *Recent Developments in Supervisory Structures in EU and Acceding Countries*, European Central Bank; http://www.ecb.int/pub/pdf/other/report_on_supervisory_structuresen.pdf
- Freixas, X., Giannini, C., Hoggarth, G. and Soussa, F. [2002] "Lender of Last Resort: A Review of the Literature", in: Goodhart, C. and Illing, G. (ed.), *Financial Crises, Contagion, and the lender of Last Resort*, Oxford University Press.
- Friedereich, H.-J. [1997] „Organisatorische Vorbereitungen der Zentralbanken auf den Euro-Zahlungsverkehr“, in: von Stein, J. H. (hrsg.) *Handbuch EURO*, Verlag C.H. Beck, München, S.71-92.
- Goodhart, C. [2002] "The Organizational Structure of Banking Supervision", in: *Review of Banking, Finance and Monetary Economics*, Vol.31, No.1, Blackwell Publishing, pp.1-32.
- Goodhart, C. and Illing, G. (ed.) [2002] *Financial Crises, Contagion, and the lender of Last Resort*, Oxford University Press.
- Knüwer, Thomas[2006] „Als die Raumstation Orion brennt.“, Nachricht aus Köln, in: *Handelsblatt*, Verlagsgruppe Handelsblatt GmbH, Düsseldorf, 30.Juni 2006
- Mayes, D. G., Halme, L. and Liuksila, A. [2001] *Improving Banking Supervision*, Palgrave.
- Padoa-Schioppa, T. [1999] "EMU and Banking Supervision", in: *International Finance* 2:2, Blackwell Publishing, pp.295-308.
- Scharrer, H. -E. [2005] "The European Economy after the EU Enlargement", in *European Constitutional Provisions and IGC*, Japan Society of Monetary Economics Annual Report No. 25, pp. 85-95.
- Scheller, H. K. [2004] *the European Central Bank, history, role and functions*, European Central Bank (Official History of ECB)