

## THE SUPERVISORY FUNCTION OF THE EUROPEAN SYSTEM OF CENTRAL BANKS

### 1. THE STATUTES OF THE ESCB IN THE MAASTRICHT TREATY, PRUDENTIAL SUPERVISION AND REGULATION IN THE EC

The monetary authority in the Maastricht Treaty is the European System of Central Banks (ESCB) consisting of the European Central Bank (ECB) and the national central banks. The statutes of the ESCB establish as its primary objective «to maintain price stability» and that without prejudice to that objective, «the ESCB shall support the general economic policies in the Community» (Art. 105 (1)). The instruments available to the ECB include open market operations and the discount window (Art. 18 of the Protocol on the ECB).

This clear cut objective contrasts with the ambiguity with which the support for the stability of the financial system and prudential supervisory measures are envisioned. In fact the lender of last resort function of the ECB is not mentioned explicitly. This is similar to the Bundesbank Act, which does not include the preservation of the stability of the financial system as a task for the central bank, but is in sharp contrast with objectives of other central banks (as the USA Federal Reserve or other European banks like the Bank of England) which were established to provide stability to the financial system. Indeed, in most countries the lender of last resort function is provided by the central bank. An often mentioned reason for leaving aside the lender of last resort function for the ESCB is the fear of overuse of the facility leading to inflationary pressures and conflict with the price stability objective.

A basic task of the ESCB will be also «to promote the smooth operations of payment systems» (Art. 105 (2)). Although the management of the payment systems is not mentioned explicitly, given that the national central banks, which will be integrated in the ESCB, tend to run them, presumably, the ECB will have to play a major role in an European-wide payment system.

The ESCB will have to «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» (Art. 105 (5)). Further, «The Council may, acting unanimously on a proposal from the Commission and after consulting the ECB and after receiving the assent of the European Parliament, confer upon the ECB specific tasks concerning policies relating to the prudential supervision of credit institutions and other financial institutions with the exception of insurance undertakings» (Art. 105 (6)).

In summary, the ECB is subordinate in supervisory matters and towards the stability of the financial system to the EC national governments and other European institutions.

### 1.1. *Regulation and Supervision in the EC*

There is variation across Europe in terms of banking regulations and prudential measures (entry requirements, direct restrictions, solvency requirements, liquidity requirements, deposit insurance,...) and of authorities formally in charge of banking supervision. This ranges from responsibility of the Bank of England in the United Kingdom and of the Federal Supervisory Office (Finance Ministry) in Germany to forms of joint responsibility in France (and in the USA); Italy and Spain being cases of extensive central bank involvement<sup>1</sup>. In any case, even when responsibilities are formally exclusive of a national supervisory agency or of the central bank these institutions usually work closely together in case of crisis<sup>2</sup>.

The EC banking directives will tend to harmonize some of the regulations. In order to facilitate market access, the European Commission has established the «single banking license» and the «home country and mutual recognition principles» in its Second Banking Directive. Authorization for a financial institution to operate in one European country would be enough for it to supply or establish financial services elsewhere. The EC Second Directive calls for home country control on prudential supervision: solvency and large exposures, (and for a minimum harmonization across countries on several other issues: setting a floor on equity levels, putting limitations on risk concentration, setting standards on investor protection and other accounting and ownership measures). With respect to monetary policy issues (reserve coefficients, for example) the «national or host country principle» is called for. Similarly, at the present moment depositors are protected (insured) by

<sup>1</sup> See Table D in T. PADOA-SCHIOPPA - F. SACCOMANNI (1991).

<sup>2</sup> See C. GOODHART (1991).

of policies supervision

the scheme in place in the host country (the country in which the branch of the bank is operating). In the proposed EC Directive on deposit insurance a minimum EC-wide coverage is called for (reflecting an interest in protecting small investors more than preserving the stability of the financial system) and the home-country principle is applied: banks licensed in a EC country will be covered by the home country deposit insurance scheme also when operating in another EC country.

## 2. THE CASE TO STABILIZE FINANCIAL MARKETS<sup>3</sup>

A central concern of regulating financial markets is to preserve their stability and avoid systemic crisis which could have devastating effects in the economy. A second important concern is to protect investors.

Financial intermediaries, understood in a broad sense including banks (deposit taking institutions) and other intermediaries like dealers and brokers, reduce market imperfections and improve the allocation of resources by performing an array of functions. Chiefly among them: the transfer of wealth and payment mechanism; liquidity provision and transformation; and the minimization of (incentive) transaction costs.

These functions contribute in an important way to the functioning of any developed economy providing liquidity. Nevertheless, they are subject "to market failure" due to externality problems which can be traced back to the presence of asymmetric information. Indeed, moral hazard and adverse selection problems, coupled with transactions costs, prevent the existence of a complete set of financial markets and make financial intermediaries necessary. These very asymmetric information problems induce the possibility of financial instability and crisis in both financial institutions and markets.

The standard deposit contract between banks and depositors, which involves a fixed payment for withdrawals at any time, leaves banks vulnerable to "runs". Runs can be provoked by panics, where depositors withdraw their funds for some unknown reason (rumor, sudden loss of confidence) and the bank collapses. This may happen to an otherwise sound bank since the run forces the premature liquidation of assets. A bank run is costly in terms of real resources since the production process is interrupted and assets are liquidated too early. Runs can also be provoked by unfavorable information which reaches depositors relating the quality of the bank investments. Indeed, banks may become insolvent and information on its financial position may filtrate to the public inducing a run. Further, and most importantly, there

<sup>3</sup> See X. VIVES (1991) for more developed arguments.

is the danger of a systemic failure due to contagious bank runs, creating a strong negative externality for the real sector of the economy<sup>4</sup>.

Similarly, intermediaries in money and capital markets, like dealers and market makers, provide essential liquidity services which need to be supported by bank credit lines and a guaranteed "settlement" system. Unexpected demands of settlement, due to large price variations like in a "stock market crash" or the failure of a major player (or intermediary), may trigger a systemic crisis. Again, the crisis will induce the early liquidation of positions and welfare losses even if it is purely liquidity based. The October 1987 crash did not evolve into a systemic crisis due to the intervention of the Federal Reserve which, contrary to the crisis in the 1930s, provided liquidity to the banking system and, ultimately, to liquidity providers in financial markets.

"Investor protection" involves essentially the concern for small depositors, and their supposed limited capacity to monitor the position of banks, and the prevention of abuses and fraud given the asymmetric information position in which the investor is in relation to the provider of the financial service.

The concern for stability has been addressed typically with lender of last resort facilities and deposit insurance. Indeed, provision of liquidity by the "lender of last resort" will prevent crisis based on illiquidity, either of banking institutions or in capital markets, by avoiding the collapse of the payments system and restoring the confidence of investors. Nevertheless, it may suffer from a credibility problem given its discretionary nature. In fact, it is widely agreed that the Federal Reserve in the United States misused its discretion when facing the 1929 crisis and its aftermath. Hence the need to complement LLR facilities with non discretionary methods like "deposit insurance".

Deposit insurance has played a major role in providing stability to the USA financial system. Its role in Europe has been much more limited, being introduced in most countries in the late 1970s having more in mind small depositor's protection than financial stability. Indeed, the amounts insured in European countries are quite low (as well as in the proposed deposit insurance EC Directive). A striking feature of deposit insurance in Europe is that it remains largely unknown to the public, at least up to now. This is probably because it is expected, consistently with experience on banks failures in several European countries, that banks in trouble will be bailed out by the government.

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<sup>4</sup> According to a widely held view major causes of the recession in the 1930s were the bank runs and the management of the crisis by the Federal Reserve (which contracted the money supply).

Both LLR facilities and deposit insurance present a the "moral hazard problem", perhaps less so in the former since help is not given with absolute certainty. In any case, LLR is needed to stabilize crisis arising from market crashes and or problems in the settlement system. The need for a LLR facility in Europe is reinforced due to the limited scope of deposit insurance.

### 3. CENTRAL BANKING, THE LENDER OF LAST RESORT AND SUPERVISION

Imagine for a moment that the ESCB is already a reality (true, after the recent turmoil in the EMS this may take some imagination): should it have a LLR function? Should it have supervisory powers indeed, these questions apply to any central bank of any country.

Given that central banks have the monopoly of printing money, and therefore seem *prima facie* well-placed to provide LLR facilities, a leading argument against acting as LLR is the potential inflationary tendency that might be generated. Nevertheless, the inflationary concern need not materialize. An independent central bank, committed to price stability, will sterilize liquidity interventions so as not to affect monetary targets. Indeed, this is what the Federal Reserve did after the liquidity injections that followed the October 1987 stock market crash.

Once agreed that the LLR function is naturally performed by the central bank several arguments point at incorporating supervisory activities. Indeed, the central bank will need to distinguish between liquidity and solvency problems to minimize losses associated to credit risk and in order not to misuse the LLR facility. Supervisory powers may also be needed to determine the modality of intervention (open market versus discount window)<sup>5</sup>.

Further, there will presumably exist economies of scope in information gathering between the liquidity support role and the supervisory role of the central bank. Indeed, the former involves a detailed knowledge of the cash needs of banks, for example.

A problem remains nevertheless<sup>6</sup>. Suppose that supervision and LLR facilities are combined in the central bank. Then, when a lot of banks are in trouble the supervisor would like to ease money supply (lower interest rates, for example) not to look bad (since he is worried about his career and major failures in the banking system may impair his reputation). The objective of price stability may be in danger since banks will fail now and inflation due to increased money supply will only show up later. Indeed, it may be the case that suboptimal levels of monitoring are undertaken together with an exces-

<sup>5</sup> See, for example, D. FOLKERTS-LANDAU - P. GARBER (1992).

<sup>6</sup> As pointed out in *The Economist*, editorial October 10, 1992.

sive use of the LLR facility.

This is a problem of the political economy of regulation. It can not be forgotten that civil servants and bureaucrats have their own career concerns and can not be expected to fulfill their obligations if appropriate incentives are not provided. Indeed, regulators and regulatory agencies must be provided incentives to do their job. Otherwise regulators (the agents) will tend to follow their own interest, focusing in obtaining short run results given present career evaluation methods, instead of the interest of the public (the principal). Further, there is the possibility of regulatory capture or collusion between regulated institutions and regulators. Indeed, banks can "collude" with the regulatory agency to hide information about the quality of their assets or their net worth position, for example. This state of affairs need not arise out of bribes, it may simply be the consequence of the revolving door and poor incentives given to the agency bureaucrats. A case in point is the USA S&L crisis, where regulators and elected politicians used a "capital forbearance" strategy, allowing insolvent institutions to continue operations in the hope of (an unlikely) recovery and where supervision was inadequate<sup>7</sup>.

Complete centralization of LLR functions and supervisory powers may lead therefore to cover-up and misuse of the LLR facility. Another consideration is that charter licensing and closure decisions should not be probably in the same hands. Otherwise officials responsible for authorizing an institution which has gotten into trouble may be reluctant to acknowledge the situation and take action. In general we may expect that career motivated civil servants will not tend to take actions which, although necessary, may lead to question their past behavior.

The political economy of regulatory design may call then for a "separation of authority between liquidity and solvency". A possible institutional design could be the following<sup>8</sup>. The LLR (central bank) charters banks and provides liquidity to financial institutions and markets when needed, and a regulatory agency, also responsible for deposit insurance, takes care of solvency problems and closure decisions. Both institutions should have supervisory and monitoring powers. A liquidity crisis is handled by the central bank, the institutions helped pledging their assets as collateral in exchange for help. A solvency crisis is handled by the regulatory agency financed via taxes. A hierarchical structure may be optimal then. The liquidity authority, the central bank, internalizing the preferences of the public (the government)

<sup>7</sup> See, for example, X. VIVES (1991).

<sup>8</sup> The ideas that follow are highly speculative and should be put to the test of logical consistency in a formal model and contrasted with empirical data and experiences in central banking and regulation.

and deciding whether to provide help based on its own information as well as the information generated by the solvency authority. The primacy of the central bank is important in avoiding conflicts of interpretation of available data delaying necessary intervention. In case of conflict final responsibility for the stability of the financial and payments systems should be with the central bank. A decision not to help by the central bank means that the problem has been considered to be insolvency and then the solvency agency has to deal with it using its own resources and possible help from the Treasury. In summary, coordination between the central bank and the solvency authority is resolved in a vertical way with the primacy of the former.

The central bank needs to retain supervisory capacity in order to be able to intervene quickly, to profit from economies of scope in information gathering, and to protect itself against possible misrepresentations of the solvency authority.

The separation of authority between liquidity and solvency is not without problems: information gathering costs may be duplicated and well-known problems associated to moral hazard in teams may develop. Indeed, the outcome, the collapse of an institution, may be blamed on inaccurate effort (to gather information or inappropriate intervention) put forward by the liquidity or the solvency authority. Nevertheless, the hierarchical structure proposed may help to alleviate the latter problem<sup>9</sup>.

### 3.1 *Coordination or Centralization?*

I have argued up to now that the central bank has to perform a LLR function and has to have supervisory powers, perhaps shared with a solvency authority but in any case with the primacy of the central bank. In a multi-country context like the EC the question arises whether "centralization" of these functions at the European level is necessary or if "coordination" of national authorities is sufficient.

Two general arguments favor centralization (be it at the ECB or at an European regulatory agency level) over coordination in an integrated EC. First, the need of quick intervention in crisis increases the value of centralized authority. Indeed, let us imagine for a moment what would have happened if when facing the October 1987 stock market crash the banks of the Federal Reserve had to negotiate a response to the crisis. Centralization saves on communication and negotiation costs, and may favor the exchange of necessary information. Second, the coordination of national regulatory and

<sup>9</sup> See M. DEWATRIPONT - I. TIROLE (1993) and the CEPR report «The making of a Monetary Union» for a discussion of related issues.

supervisory authorities is not enough in a context of increasingly integrated financial markets, as the case of the BCCI demonstrates. Indeed, given the externalities present in an integrated financial market, competition among national regulatory authorities need not produce efficient results.

Further, if the ECB does not have supervisory power a national government could pressure the ECB to provide help based on private information of the national authority. The national authority will be subject to local intense pressure to ask for ECB help to ailing national institutions (or to provide it, if this is possible, leaving to the ECB the task of draining the liquidity injected). This again could yield a tendency to misuse the LLR facility<sup>10</sup>.

#### 4. THE TRANSITION TO EUROPEAN MONETARY UNION AND THE ROLE OF THE EUROPEAN MONETARY INSTITUTE

According to the Maastricht Treaty before the beginning of stage II of the European Monetary Union (EMU) process (January 1994) EC countries have to adapt their legislation concerning central banking to the requirements of the Treaty<sup>11</sup>. The European Monetary Institute (EMI) will be the institution in charge of coordinating monetary policy and making technical preparations for EMU. No mention is made of the potential role of the EMI as coordinator of national supervisory bodies and of intervention in cases of crisis which may menace the stability of the European financial and banking systems.

As European financial markets become more integrated and competition increases, both externalities among countries and the potential instability of the system will increase. In fact, it is possible that the potential risk to the European financial system has been downplayed by extrapolating from the long period of tightly controlled and regulated financial systems in Europe which delivered stability. Increased cross-country external effects mean that the role for coordinating and centralizing regulation and supervision will increase correspondingly. The EMI could be a natural candidate to perform this function. Indeed, as it has been pointed out<sup>12</sup>, national regulators will tend to pay insufficient attention to overseas customers of domestic banks; systemic risks in overseas countries in which domestic banks trade (both instances present in the BCCI case); systemic risks in the EC as links in inter-bank markets grow; and finally, risks to the EC payments system with a single currency. The solution proposed involves a European regulatory process

<sup>10</sup> See, for instance, A. GIOVANNINI (1992).

<sup>11</sup> Spain, for example, has already projected to grant an independence status to the Bank of Spain which forbids overdrafts of the Treasury with the central bank.

<sup>12</sup> See the CEPR Report (1991).



with increasing degrees of coordination and centralization and with a European wide deposit insurance system.

#### CONCLUSION

In summary, it has been argued that:

1) the ESCB should perform a LLR function if the stability of the European financial and payment system is to be preserved.

2) The LLR function of the ESCB needs to have associated supervisory powers, although, perhaps, the ESCB need not have them in the exclusive.

3) The concern for a potential misuse of the LLR facility by a ESCB with supervisory powers is legitimate but not overwhelming. Indeed,

4) a potentially optimal structure could be for the ECB to have authority in liquidity matters while another European agency has authority over solvency matters (and perhaps deposit insurance). In this arrangement both agencies would have supervisory powers but the ECB would have the primacy.

5) The EMI should play an important role in the coordination of supervisory and regulatory activities in the transition to EMU.

Universitat Autònoma de Barcelona

XAVIER VIVES

#### REFERENCES

- CENTRE FOR ECONOMIC POLICY RESEARCH. CEPR (1991) «The making of Monetary Union. Monitoring European integration», Annual Report, London.
- DEWATRIPONT M. - TIROLE I. (1993), «Efficient governance structure: implications for banking regulation» (forthcoming in *Capital Markets and Financial Intermediation*, ed. by C. Mayer - X. Vives) Cambridge, Cambridge University Press.
- FOLKERTS-LANDAU D. - GARBER P. (1992), «The ECB: a bank or a monetary policy rule?», in *Establishing a Central Bank: Issues in Europe and Lessons from the US*, ed. by M.B. Canzoneri - V. Grilland - P.R. Masson, Cambridge, Cambridge University, pp. 86-116.
- GIOVANNINI A. (1992), «Central banking in a monetary union: reflections on the proposed statute of the European central bank», CEPR Occasional Paper n° 9, London.
- GOODHART C. (1991), «The draft statute of European system of central banks: a commentary», LSE Financial Market Group, Special Paper n° 37.

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- PADOA-SCHIOPPA T. - SACCOMANNI F. (1991), «Agenda for stage two: preparing the monetary platform», CEPR Occasional Paper n° 7, London.
- VIVES X. (1991), «Regulatory reform in European banking», *European Economic Review, Papers and Proceedings*, vol. 35, pp. 505-515.