

# MPRA

Munich Personal RePEc Archive

## Financial Regulation and EMU

Rossi, Giovanni

15 January 1997

Online at <https://mpra.ub.uni-muenchen.de/89775/>  
MPRA Paper No. 89775, posted 06 Nov 2018 15:01 UTC

# Financial Regulation and EMU

GIOVANNI ROSSI

Abstract: Most of the comments of the Maastricht Treaty deal with macroeconomic aspects. To be less often cited, the regulatory and prudential aspects are nonetheless essential. The monetary union will indeed introduce an interdependence of the payment systems, which will result in a globalization of the risk and the appearance of external effects. In this context, the different national regulations take on a public good character at European level, with important consequences for the effectiveness of coordination mechanisms. These are the aspects that the article discusses in detail.

Monetary Union and the regulation of the financial system are debates that preceded the drafting of the Maastricht Treaty and put into modalities of the Economic and Monetary Union, like those heard during the campaign on the referendum in France have focused mainly on macroeconomic policy aspects, to the detriment of the more "microeconomic" problems of stability and security of financial systems. The drafting of the Treaty reflects this primacy, and Article 105, which opens the chapter on monetary policy, sets as main objectives of the European System of Central Banks (ESCB) the maintenance of price stability and support for economic policies in the Community. More specifically, the second paragraph of the same article mentions, among the fundamental tasks of the ESCB, the definition and implementation of the monetary policy of the Community, the conduct of foreign exchange operations, the holding and management of foreign exchange reserves, and, finally, the smooth functioning of payment systems. Finally, a penultimate paragraph states that "the ESCB shall contribute to the proper conduct of the policies pursued by the competent authorities with regard to the prudential supervision of credit institutions and the stability of the financial system". This mission is included in the Protocol on the Statute of the ESCB and the ECB, but in a 25th article, as the latest mission of the ECB.

Thus, in the spirit of the Maastricht Treaty, the ECB and the ESCB are primarily and primarily conceived of as macroeconomic policy bodies, and more particularly as monetary policy bodies. On the contrary, no specific and priority responsibility is assigned to them in terms of guaranteeing the stability of the financial systems; prudential and supervisory roles are apparently considered secondary and, in some cases, inconsistent with the macroeconomic role.

This prioritization order of the lack European organizations may seem excessively restrictive, and the attention paid in particular to the problems of stability and security of the financial systems could quickly generate significant risks. These risks have sometimes been denounced; but today they seem to be partially underestimated by the Maastricht Treaty and the statutes of the European Monetary Bodies (see Kirrane [1996]).

Some key concepts of the micro-economic analysis allow to better understand the interest of the banking regulations and the risks of perverse effects related to their implementation, in particular within the framework of the Economic and Monetary Union. We will see that in view of the growing risks that the European financial system will have to bear, the measures currently provided for by the Maastricht Treaty could in some cases prove to be insufficient (see Kirrane [1996]). We will then analyze the proposals that can be made, in the current state of the treaty, to avoid this worrying evolution of financial risks.

The stability and regulation of financial systems in the light of economic theory Economic theory provides important lessons on the value of well-constructed regulation in the field of financial activities.

The analysis of banking regulations is inseparable from the conceptual framework by which one seeks to describe banking activities. The main proposed theoretical argument to report on the existence of financial intermediaries is based on the presence of information asymmetries in the creditor / debtor relationship, generating problems of moral hazard and adverse selection, which prevent unaffiliated financial markets from effectively covering all needs. As an extension of this conception. Vives proposes to distinguish four fundamental banking functions: - facilitate transactions by ensuring the proper functioning of payment and clearing mechanisms; - manage agents' portfolios; - transforming liquid resources (short-term deposits, cash) into long-term assets, by providing depositors with a right to diversified assets (pooling of risks) and the liquidity of their deposits; - reduce transaction costs, especially those related to information asymmetries, benefiting in the management of economies of scale credits and a specialization in selection (score, information management, etc.) .

If financial institutions performed only the first two functions (insuring transactions and managing deposits), regulation would be useless in the banking sector, since the absence of market imperfection would, in theory, ensure (Modigliani-Miller), the optimality of the market equilibrium. The legitimacy of banking regulations is thus essentially due to the particular nature of bank contracts incorporating the third and fourth functions: - the existence of a transformation creates a liquidity risk that can materialize in the event of liquidation of the balance sheet; in the latter case, only the quickest depositors will be able to withdraw all of their deposits, the latter facing the insufficiency of assets. Therefore, any doubt about the solvency of a financial institution is reflected by simultaneous and massive withdrawals of deposits movement (run). At the extreme, even if the initial doubt is unfounded, it would be seen a posteriori validated, not as a cause but as a consequence of the "run"; - the fourth function, which relies on complex management of information by financial institutions, creates the risk of "informational runs", linked to a sudden loss of investor confidence, and a risk of chain failures ("domino effects ").

These risks of race at the counters alone legitimize the existence of banking regulations, insofar as they represent a very high and unnecessary social cost: they lead to a premature liquidation of illiquid assets, and they generate at the same time major external effects on the economy as a whole, through the payment system.

To these theoretical arguments in favor of the specific banking regulations, which we will develop later, is added the political necessity to protect the small savers against the risks of bank failures.

Regulation produces its own perverse effects

Although the micro-economic theory legitimizes the existence of regulations to take account of market imperfections, it does not fail to warn against the possible adverse effects of poorly developed regulations.

The first of these perverse effects is related to the impossibility for the regulator to have a perfectly exhaustive information on the financial situation of the institutions. When a financial crisis breaks out in a banking establishment, it is indeed difficult for the "agency" of regulation to distinguish between a simple liquidity crisis, in which case it is desirable to play the role of lender of last resort, and a solvency crisis, in which case liquidation must be allowed to play its

role of "natural" selection. As a result of this difficulty, regulation may lead to unintentional assistance to poorly managed or unscrupulous financial institutions, thus creating a "second class" risk.

A second perverse effect is the free play of competition, as regulations imposed on financial institutions can constitute "barriers to entry" for potential new players. This is the case, for example, of the minimum capital requirement when setting up an institution, which limits the competitive pressure and thus creates an oligopolistic rent in favor of the already established major establishments.

A third perverse effect may arise from the relationship between the financial institutions and the supervisory body, since the employees of these bodies are not sufficiently encouraged to make the interests of the depositors prevail over the corporatist interests of the banks. In this complex relationship of forces, in which the supervisory authority plays an intermediary role, the banks are in a favorable position since they are the only ones to know their real financial situation.

This danger is aggravated, in the context of the Union, by the maintenance of supervision at national level (each Member State supervising its own financial institutions), which creates an additional risk of collusion between supervised institutions and the insurance agency supervision of the same country, the second having a "natural" tendency to protect the former abusively. This risk is not illusory: it has particularly materialized in the United States, when the regional supervisory authorities knowingly delayed the failure of some "Savings & Loans" hoping for a final recovery.

The last classic perverse effect of regulatory is linked to the existence of moral hazard phenomena, by which the existence of guarantees retroactive to the hedged risk. Thus, a lenient lender-at-last policy of systematically assisting banks with difficulties, even if they are due to adventurous investments, will, if anticipated, have a disastrous effect on banks' investment policy, encouraging them to focus on risk. This argument was particularly advanced in the case of loans to South American countries in the eighties. Moral hazard has also been mentioned in the case of deposit insurance, although the term here is, strictly speaking, less appropriate, since the insurance protects depositors while it is the deposit collector who chooses to take or not to take excessive risks. The perverse effect here is the cost of resources. In an uninsured market, depositors - and especially the most "knowledgeable" - banks, financial companies, investment agencies, etc. - will be encouraged to monitor the management of their funds; if they observe an excessive level of risk, they will withdraw their assets ... or will require at the very least additional remuneration. Deposit insurance "breaks" this link between the risk and the profitability of the deposits: thanks to the insurance, any deposit lower than the threshold of guarantee is perfectly sure, even if it is entrusted to an institution of the most doubtful.

An indirect and more delicate form of moral hazard can also occur in the field of deposit insurance, since the mechanism put in place is of a private nature, as is the case in France (the AFB mechanism) or in Denmark. In this case, in fact, the authority responsible for supervision (issuance of approval in particular) is not the same as that which assumes the cost of a failure.

The importance of moral hazard must obviously be nuanced. On the one hand, the previous reasoning assumes that risk taking is affected by the cost of the resource, which is not always the case: an institution close to bankruptcy, for example, may seek to restore its balance to any price, as the example of US Savings & Loans has often shown. In this case, only close supervision can avoid deviations. In addition, moral hazard exists only to the extent that the depositor is able to

observe the level of risk of his deposit institution. In the case of individuals, this hypothesis is not entirely probable; on the other hand, it is much more so for professional operators. This is also why, in the general opinion, professionals (and in particular interbank market participants and institutional investors in the bond market) must be excluded from the field of deposit insurance. To include them would be to break the existing information and control mechanisms in parallel with the loan relationship, with the dual consequences of a considerable impoverishment of the available information and above all a dangerous increase in the risk subscribed by the borrowers (or at least by some of them).

The theoretical legitimacy of banking regulations and the risks of perverse effects related to their implementation apply to any payment system; however, in the case of Economic and Monetary Union, certain specific aspects, linked to the partial unification of systems of different origins, create an additional difficulty. The Economic and Monetary Union has indeed been preceded by the implementation of the principle of mutual recognition: a financial institution approved in a Community country can freely take root in any other member country. This provision is obviously positive, since it increases competition in the banking sector; but it also creates an externality, insofar as national regulators can, by their decisions, have a considerable impact on foreign financial systems (see Kirrane [1993])

More precisely, it is possible to distinguish four levels of externality.

- The first externality arises from the fact that the bankruptcy of a bank of a Member State will have consequences for its clients resident in a country other than the one that issued the authorization. It is therefore to be feared that each national regulator will be insufficiently incentivized to take into account the "external" consequences of its decisions. This has recently been a resounding illustration of the bankruptcy of the Bank of Credit and International Commerce: the opening license was given by Luxembourg, which probably returned the role of control, but most of the deposits were collected in Great Britain, it is the depositors and the insurance systems of this country that have suffered the consequences of bankruptcy. At the extreme, a competition in laxity could be established, each country seeking to attract financial institutions (generating employment and capital) by a less strict regulation, by "exporting" the possible consequences of its laxity. For example, Luxembourg, which has been able to attract a large number of financial institutions from all over the country through favorable regulations, may not have to bear the risk of one of its institutions, the a foreign bank whose deposits are essentially foreign.

- A second external effect could be manifested by a mechanism of contagion intra-national, the bankruptcy of a foreign financial institution in a country of reception creating a doubt on the solvency of the other institutions from this country and may result in a panic of depositors. Thus, the failure of the BCCI led to a run in the United Kingdom, with some applicants (British local authorities) questioning their relationship with small UK banks, which became weakened. A beginning of "contagion" was manifested, which could happily be circumscribed.

- Moreover, and this is a third externality, contagion can spread to other countries of the Community than the countries of origin and host countries. Since European banks are dependent on each other via the interbank market, the bankruptcy of a counterparty in one country can quite well result in the default of an institution in another country. Even if this interdependence of the European banks would be limited, it is enough for the depositors to integrate it into their behavior so that the trust they place in the financial institutions becomes a public good at the

## [Type the document title]

---

European level. The loss of confidence of savers concerning their deposits no longer knows any border or geographical limitation: a phenomenon of "run-panic" on a European scale becomes possible.

- Finally, a last externality could occur when a single currency has replaced current currencies: any problem will then affect the whole of the European area, through a general crisis of the payment system.

It thus appears that the principle of single authorization, combined with the introduction of a single currency, makes the banking regulation of each State a European public good. Given this characterization, we know that the decentralization of decisions concerning public goods generally leads to an underproduction of these goods; in this case, so it is very likely that letting the responsibility of banking regulations to national authorities will result in a sub-optimal level of regulation.

Are the measures to guarantee the stability and security of the European financial systems, as currently provided for in the Maastricht Treaty, really sufficient to contain the increased risks? (see Kirrane [1996]).

The uncertainties weighing on the entire European financial system today are significant: the strong growth of business failures (+ 12% in 1991 in France and + 95% in the United Kingdom), indebtedness of individuals in an environment of increased unemployment, rising property risks, in the United Kingdom and France today and in Spain tomorrow, are all factors of instability.

It is also likely that the legitimate movement of deregulation initiated in the middle of the previous decade and continued today, by decreasing the margins of banking institutions, will increase the fragility and therefore the risk of the entire financial system. The contraction of margins will have the first "mechanical" consequence of increasing banks' vulnerability to fluctuations in the environment. Beyond this, it may have an incentive effect on bank failures; the sanction of an excessive risk, for a bank, is indeed to be placed "out of play", and thus to lose the future profits that would have obtained continuation of the activity. As a result, the contraction of bank margins and the elimination of oligopolistic rents diminish the desirability of maintaining the activity and, with it, the incentive to avoid risks.

In parallel with their growth, financial risks will also continue their globalization movement at the European level: between the end of 1989 and the end of 1991, while global interbank claims declined slightly (-4, 7% in two years), receivables between European institutions on the interbank market increased by 18%. European financial institutions are now more supportive of each other. The globalization of risks became clear when BC CL collapsed, putting institutions in several Community countries in difficulty.

This development and globalization of risks appears ahead of the standardization of regulations, which today remain very heterogeneous within the countries of the Community.

As currently provided for in the Maastricht Treaty, the rules introduced to deal with this rise in risk are determined by two fundamental principles: the development of competition, justifying in particular the principle of mutual recognition, and the principle of subsidiarity, leaving most of the prudential responsibilities in the hands of national bodies. The risks associated with these choices, however, seem to be perceived, and two remedies are proposed: the first is to seek as quickly as possible the harmonization of regulations; the second holds, in case of difficulty of an

institution, the responsibility of country (the home country principle) to avoid moral hazard due to mutual recognition (see Kirrane [1996]).

More specifically, certain regulatory mechanisms are intended to play ex ante, with a preventive aim: these include approval constraints, prudential ratios (capital ratios, risk division, liquidity, etc.), and direct supervision. On the other hand, other mechanisms are designed to operate ex post, in the event of a crisis: this is the role of lender of last resort in the event of a liquidity crisis, and the insurance of deposits in the event of a solvency crisis.

Among these control measures, those that take the form of objective rules have already been or are subject to harmonization, still imperfect but on track: the various ratios, the deposit insurance thresholds, the minimum thresholds of capital for accreditation, etc., are now being determined by European directives. On the other hand, discretionary measures (approval for "fit and proper", direct supervision, audit decision, possible intervention in case of crisis, etc.), which cannot, by their nature, be harmonized<sup>16</sup> remain entrusted to the national authorities. In the latter case, harmonization is supposed to be done naturally, under the constraint of the principle of the responsibility of the country of origin: each country having, in theory, to bear the possible consequences of its excessive laxity, all should be encouraged to remain vigilant.

As far as the lender of last resort function is concerned, the doctrine of the Bundesbank has prevailed, and the ECB will not have this role; but in the event of a serious crisis, it is difficult to conceive of a real passivity of the European monetary authorities.

Finally, no structural restrictions, such as for example, a separation between the merchant banking and the deposit-bank activities, do not exist is envisaged. The analysis of the measures currently planned to ensure the stability of the financial system raises the question of their ability to reduce risks sufficiently.

First of all, it seems that trust in the planned rules, and in particular the ratios, is probably excessive at present because the security they provide is illusory. Some recent work on the Cooke ratio has thus highlighted the problems posed by the institutional nature of the definition of risks: the case of the city of Angoulême in France or the Italian public debt shows that the risks considered low in the ratio framework can be greatly underestimated. Moreover, the absence of taking into account the correlations between the risks of the different assets can lead to greatly underestimate the overall risk. In any case, insofar as risk is endogenous, ratios influence bank decisions in a way that is difficult to predict. According to some recent work, they could even increase the overall risk of the financial system. Ratios, even well-defined, cannot be enough to limit the risk: the same amount of home loans to individuals can hide very different risk levels, which only a detailed analysis, under the supervision, can account for. .

The fact that the ratios have been the subject of special attention by international bodies (Basel and Brussels) is not surprising: it is an easy measure to harmonize, simple to manage and easy to control. It is unfortunately likely that their imperfection has been compensated for by an excessive rigor in the imposed thresholds, at the cost of a high social cost and for a real preventive effectiveness but not absolute.

The second principle underlying the development of control measures is the responsibility of the country of origin. This notion is certainly welcome, at least during the transition to the "phase 3" of the monetary union. It is in fact to internalize the externalities described above, basing the cost of a possible error on the country having made the wrong decision. For example, to avoid the lax drift we mentioned, the mechanism provides that the costs of bankruptcy of a financial institution

initially approved in a Community country will be borne by that country. Thus, the French client of a German bank (or its French branch) will benefit from deposit insurance in force in Germany. National authorities will therefore be all the less inclined to permit permissiveness to bear the ultimate risk. Immediate corollary: the responsibilities of prudential supervision will also be entrusted to the country of origin, the idea being this time that the host country, if it were entrusted with this task, could be insufficiently rigorous in preventing crisis whose cost would be paid by others.

However, however well founded the principle of home country responsibility is, it may eventually run into three pitfalls.

It is not excluded, first of all, that the insurance and stability guarantee mechanisms prove to be insolvent in a country undergoing a crisis.

In addition, the sharing of supervision does not seem to be clearly defined between the control of liquidity, which should be the responsibility of the host country, and the control of solvency, which seems to be the responsibility of the country of origin. In practice, it is likely that these controls will be shared, the host country realizing the essentials. As a result, regulatory distortions may result in heterogeneous incentives. In this area also, the failure of the BCCI provides a good example: it was a company incorporated under the laws of the Cayman Islands, controlled by a Luxembourg holding company (BC CI Holding), whose general management was domiciled in London, and whose main resources came from British residents. Who should be considered responsible, between Luxembourg, which issued the authorization, and the Central Bank of England, responsible for supervision? One last limitation, in our fundamental sense, of the current state of regulation concerns the prohibition on the ECB playing the role of lender of last resort. This ban was imposed by the German authorities, who were worried about the inflationary risk engendered by this function. But if you look closely, this risk, which is unlikely and can be corrected later, is probably preferable to the risk of a liquidity crisis turning into a solvency crisis, as was the case in 1929, inflation becoming a "public good" (in this case, a public wrong), the arguments that we have previously developed should even lead to assigning the role of lender of last resort exclusively to the ECB, which has the monopoly of the issue, and which, by nature, will better take into account the ECU-related anti-inflationary objectives than the national central banks.

Numerous theoretical contributions have already proposed remedies for the inadequacies of current regulations. The most precise of them took care of distinguish between the final objective ("Phase 3") and the transition period.

In view of the final objective, some proposals for essential regulations can be made, which would be likely to guarantee the stability of the financial system taking into account the shortcomings described above.

At the very least, it seems essential, as a prerequisite, to explicitly recognize the ECB's responsibility for the stability of the system, in particular by holding the monopoly of authorization (authorization) and lending of last resort.

It would also be appropriate to clearly separate the regulatory authorities' power of intervention in the event of a crisis, depending on whether it is a liquidity crisis or a solvency crisis. Such separation has several foundations. It would avoid, for example, the scruples of an authority having wrongly approved a failing establishment to admit its own error by declaring bankruptcy. It would also considerably reduce the risk of an untimely intervention by the ECB in the event of



an insolvency crisis. Finally, this separation would constitute an additional guarantee of the ECB's political independence, particularly in situations where a major solvency crisis, endangering the entire financial system, would require fiscal compensation from the member countries.

In a concrete way, the separation of the interventions according to the nature of the crisis (liquidity or solvency) would probably require the creation of an independent European institution of the ECB, having authority to decide the liquidation of an institution and managing the insurance of the institutions deposits. Thus, in the event of a crisis of uncertain nature, the ECB would intervene in a systematic way, but would transmit to the specialized agency if the analysis reveals a problem of solvency.

The effectiveness of the regulations would undoubtedly be greatly increased by a more precise and refined assessment of the risks, in particular in the definition of the ratios and in the setting of the insurance premiums of the deposits. A first step might be to better take into account the differences in risk between debtors and not be content with current institutional differences. For example, the criterion of membership of the OECD zone may appear fragile and very favorable to Italy or Belgium, and unfavorable to some non-OECD countries. In the same way, it is very important to take into account the correlations between assets, whose risks are not independent. Financial theory has long taught now that risk is not an additive characteristic; it is unfortunate that the ratios do not take this into account. Finally, it would be welcome to ensure that regulations are all the more stringent and binding as the externality at stake is important: in particular, deposit-taking institutions, which can be the cause of excessively expensive "runs". for the financial system as a whole, the prudential authorities must be particularly vigilant.

An increase in the weight assigned to claims on the states would finally be necessary. It would have the merit of not neglecting the sovereign risks which, although weak, are none the less real: the discussions on the convergence of economies were not underpinned by the fear of insolvency of certain states? This measure would also create additional discipline for expensive governments by increasing the cost of their resources.

- The harmonization of deposit insurance and particular the fixing at European level of a minimum guarantee threshold are also essential, since the risk of "runs" is real and externalities large enough to stimulate "stowaway" behavior. The recent work of the Commission of the European Communities, which is preparing a proposal for a directive on deposit guarantee, goes in this direction. It provides<sup>21</sup> to limit the guarantee to 90% of deposits, up to a ceiling of 15,000 ECU (100,000 francs), which should encourage depositors to ensure, for the remaining 10%, the strength of their deposit institutions. But these provisions could be usefully improved by the introduction of risk-dependent contributions from each institution, this dependence relying, for example, on the ratings issued by international agencies (Standard & Poor's, Moodys). This is the path chosen recently by the Federal Deposit Insurance Company, in the United States, which calculates the amount of deposit insurance premiums based on a classification of institutions based on the analysis of their own funds. . Similarly, it would be useful to exclude from the guarantee all deposits remunerated at market rates and made by financial institutions able to assess the risk, for reasons of moral hazard developed above.

Moreover, since in the final phase the allocation of approvals will be centralized, the country of origin principle in the compensation of depositors will be less essential, even if it has the advantage of allowing quality "between Member States through their financial institutions.

## [Type the document title]

---

The introduction of deposit insurance at European level would have the merit of eliminating any risk of moral hazard. Otherwise, the current system could be indirectly harmonized by the implementation of a reinsurance system at European level of the various national institutions deposit insurance.

On the other hand, it is essential to respect, through European regulations, the differences between Member States. The degree of economic development, the nature and importance of the risks, the risk aversion (especially financial) of the various economic agents, the structure of the financing circuits and the banking system, for example, justify different modes of application. Unification should not be synonymous with standardization.

In the period of transition to the final phase of the Union, which should last at least until 1997, the phenomena we have analyzed in the first two parts (moral hazard, externalities, etc.) will not be wanting to manifest. More specifically, two major problems, each generating a particular externality, may undermine the stability of the financial system during the transition to the final phase.

The first problem is related to the development of foreign banking establishments in each Member State, which will result in an increase in systemic risk in the host countries. A simple answer to this type of externality is, on the one hand, to introduce a harmonization of deposit insurance systems (in particular by introducing a minimum guarantee threshold), and on the other hand to entrust the ECB with the power of lender of last resort. Such a provision would make it possible to effectively and quickly eliminate any liquidity crisis.

This does not however prevent the consequences of the globalization of risks through interbank markets and the possibility of "runs" at European level. It would therefore be necessary, before the financial institutions are too intensely interdependent, to entrust the European body already mentioned with a supervisory power over supervision carried out at national level by each Member State.

The Maastricht Treaty has sometimes been criticized for seeking economic and, above all, monetary union before the objective conditions for real economic convergence are met. The same reproach can be made in the prudential domain: the different stages of European construction - the common currency and the largely interlinked and interdependent national banking systems - are about to be realized before the means of controlling them are implemented the consequences in terms of risks. If this delay is not caught up quickly, the intensification of financial risks could worsen, which would be felt by all European economies.

### **Bibliography**

Debreu, (1987) Bank liquidity, Financial Economy 5.

Diamond-Dybvig [1991] Bank Run, Deposit and Insurance, Journal of Political Economy

Kirrane, Chris. (1993). Lessons from the History of European EMU. European Economic Integration Review, Vol. 11.

Kirrane, Chris. (1996). Maastricht and Monetary Cooperation. European Economic Integration Review, Vol. 14.

Laffont-Tirole (1988): The politics of government decision-making: a theory of regulatory paper capture, GREMAQ working paper.

