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Comments on Eva Srejber, "The Divorce between Macro-Financial Stability and Micro-Supervisory Responsibility: Are We Now in for a More Stable Life?"

1 Motivation

Eva Srejber's talk sets out from an interesting and important observation: Financial systems in Europe have become increasingly integrated, giving rise to an increase in systemic risk at the European level; however, the institutions for supervision and crisis management that are supposed to deal with systemic risk are typically located at the national level. Srejber places a lot of emphasis on one particular aspect of financial integration, namely the increasing significance of cross-border banking, defined as the establishment of branches or subsidiaries in countries other than the home country. This emphasis is natural, given that the Nordic countries have already experienced a significant amount of cross-border banking activity, in contrast to many other European countries. But as Srejber rightly points out, one should also expect an increase in cross-border banking in other European countries. As a policy recommendation, Srejber

argues forcefully for the creation of a European financial supervisor to solve the externality problems arising from cross-border banking.

2 Historical Perspective

Let me start by giving a historical perspective on the issues raised in Srejber's speech. One first important observation is that financial integration is, of course, not new. Even before World War II, financial markets were highly integrated not only across



Europe, but even globally. However, financial integration was mainly restricted to wholesale markets and

it took the form of capital flows rather than cross-border banking. At the same time, financial systems were largely unregulated, and there were no international coordination mechanisms for crisis management. When the crises arrived in the form of severe recessions, stock market crashes, the drying-up of capital flows, and finally the collapse of banking systems, the national authorities proved to be unable to cooperate with each other. Barry Eichengreen (1992) has claimed that this lack of cooperation was one of the reasons for the occurrence and severity of the Great Depression. This is suggestive of the importance of the international coordination of national authorities in a financially integrated world, especially in crisis situations.

Another, completely different example stems from a time when markets were arguably less integrated than today, namely the breakdown of Bankhaus Herstatt in 1974. The bank's failure was related to losses from the foreign exchange market, which — after the breakdown of Bretton Woods — had become much more volatile than before. In spite of the bank's relatively small size and less integrated financial markets, the crisis led to severe disturbances in the international banking system through interbank markets and payment systems.

These two examples illustrate two important points. First, they point towards one of the major stylized facts of financial crises, namely that they are related to macroeconomic shocks. Second, cross-border banking is by no means a prerequisite for international spillovers. Systemic risk at the international level can be important even in the absence of significant cross-border banking.

3 Systemic Risk at the International Level and Financial Integration

One usually distinguishes between two types of systemic risk: The first works through balance sheet interlinkages, such as interbank liabilities or other kinds of exposures between banks. The second is due to banks' exposure to common macroeconomic shocks. These shocks may be exogenous to the banking sector. However, they may also arise endogenously from the banks' behavior. If banks hold similar portfolios, their reaction to some shock may induce price movements, reinforcing the initial shock. One example is fire sales in times of crises, which lead to a further depression of prices.

Both types of systemic risk seem to have risen in Europe in recent years due to increasing financial integration. First, the European interbank market has grown rapidly over recent years, creating more direct linkages among European banks. Second, the synchro-

166 ONB

nization of business cycles in Europe implies that banks all over Europe are now exposed to similar macroeconomic shocks. Financial integration may also have led to an assimilation of strategies across European banks.

The measurement of such risks is inherently difficult. In any case, they can only be judged from a macroeconomic perspective. One important difference between the two types of systemic risk is that the one working through balance sheet interlinkages requires the build-up of contractual relationships. Such relationships can, in principle, be observed relatively easily. Common exposures to macroeconomic shocks do not require any contractual relationships across banks or across borders. Therefore, they are much harder to assess. At the same time, they are potentially much more important.

Given that there has already been an important increase in systemic risk from financial integration, how does cross-border banking contribute to systemic risk? First of all, it creates direct linkages across countries. This may induce higher diversification and hence decrease systemic risk because it may reduce the probability of a crisis. At the same time, it may increase the spillovers across borders if a crisis occurs. But even this is not necessarily the case: Cross-border banking may simply replace other contractual relationships, such as interbank liabilities, and it is not clear what creates higher systemic risk.

Another effect of cross-border banking is that it leads to the emergence of larger banks. This may again decrease the probability of a crisis, while increasing the damage if there is a crisis. However, this issue is not special to cross-border banking, but arises similarly, and potentially more severely, with national bank mergers.

Finally, cross-border banking may affect financial stability through banking competition. If cross-border banking increases competition, the ensuing decrease in banks' profit margins may induce higher risk-taking, and hence lower stability. However, it is far from clear that we should expect an increase in competition. If the entering foreign banks increase the number of competitors in the market, competition



is likely to increase. If foreign banks enter through mergers or acquisitions, competition may actually remain constant at the local level (the relevant market for retail business), or even decrease in the international market (the relevant market for wholesale business).

The conclusion is that the expected increase in cross-border banking does not necessarily lead to an increase in systemic risk. In contrast, systemic risks arising from other aspects of financial integration, such as interbank exposures and common macroeconomic shocks, are already there and may pose a severe threat to systemic stability. I do not want to say that the problems arising from cross-border banking are unimportant, especially in the Nordic countries where crossborder banking is already a reality. However, there seems to be an imbalance between the intensity of the discussion of cross-border banking and the systemic risks arising from other

factors, which in my view does not do justice to the relative significance of these factors for systemic stability.

4 Management of Systemic Risks

The presence of systemic risks at the international level raises the question how such risks can be dealt with in a world where many of the involved authorities are located at the national level. I would like to distinguish between three different types of risk management: regulation, prudential supervision, and crisis management. I will focus on the potential benefits and drawbacks of centralized versus decentralized solutions. Note that my view is purely academic, in that I do not take into account political sensitivities and obstacles to political implementation.

4.1 Regulation

It is well-known that banking regulation still focuses mainly on individual institutions (the "microprudential" approach). If we take the view that banks are not worth being saved for their own sake and that the ultimate goal is the protection of systemic stability, a "macroprudential" approach seems preferable to the existing one. Under such an approach, a regulation that treats banks according to their contribution to overall systemic risk seems desirable. This implies that different banks may, in fact, be subject to different regulatory standards.

However, so far, there exist very few instruments for the assessment, and hence regulation, of systemic risks, even at the national level. Therefore, it seems to me that we are trying to take the second step before having taken the first one: How can we expect to deal with systemic risks at the international level if we do not even know how to deal with them at the national level? Admittedly, there has been some progress in the assessment of bank risk at the system level (see, in particular, Elsinger et al., 2002). Also, the publication of financial stability reports is a step in the right direction. However, we are still far away from a situation in which regulators have a well-defined toolkit that they can use for the assessment of systemic risk. Especially, there is to my knowledge no proposal on how to deal with the endogeneity of macroeconomic risks. Given that we do not know how to measure bank risk at the system level, regulators have no choice but to follow the microprudential approach.

Another issue concerns the limited convergence of regulation in Europe. The EU directives often define no more than minimum standards, and apart from that there are substantial differences in the implementation across countries (cf. the speech by Danièle Nouy in the same volume). The academic literature suggests that, in the absence of regulatory harmonization, regulators may try to provide their domestic banks with competitive advantages, starting a race to the bottom, with potentially undesired consequences for financial stability (see Dell'Ariccia and Marquez, 2001; and Acharya, 2003). It may also distort banks' investment decisions due to regulatory arbitrage.

Further advances in financial integration will increase competition among banks from different countries. At the same time, differences between national systems are likely to be eroded, at least partially. Therefore, with increasing integration, the trade-off between the level playing field and the costs of inadequate regulation, mentioned by Srejber, is likely to shift

168 *ONB*

in favor of the former. A level playing field requires convergence in *all* regulatory aspects, which also includes competition policy. This leads me, similarly to Srejber, to the conclusion that a further centralization of regulation seems to be desirable.

4.2 Prudential Supervision

In prudential supervision, centralization again seems to be superior, as has also been argued by Srejber. First, it helps to solve the externality problem pointed out by Srejber. This would not be possible by cooperation among supervisors alone. No cooperative arrangement could induce the supervisors to act against their national interests. This is also the result of a recent paper by Holthausen and Roende (2004), who argue that national supervisors may not fully transmit "soft" supervisory information; as a result, supervisory decisions are inefficient in their model. Second, centralization could help to exploit economies of scale, which clearly exist in supervision and are likely to increase if regulation is further harmonized. Finally, it facilitates the assessment of systemic risks at the international level. If we believe that such risks also arise in the absence of cross-border banking, the centralized authority should be responsible for all banks, and not just for cross-border banks, as suggested by Srejber.

Realistically, the supervisory information still has to be gathered at the national level. This raises the question whether the externality problem has not simply been shifted to another level. In fact, the problem of information transmission described by Holthausen and Roende may also exist if supervision is centralized and the data collection is still carried out at the national level.

4.3 Crisis Management

With regard to crisis management, it is no longer clear that centralization is the dominant solution. The major advantage of centralization still consists in its ability to take the externalities of bank failures into account. However, such a solution is again subject to incentive problems regarding the information transmission. In fact, the problems may be more severe because they exist not only in the vertical dimension (national vs. international), but also in



the horizontal dimension (supervisor vs. central bank vs. fiscal authority). Another advantage is that a central authority may be less inclined to support "national champions." This is particularly important in the light of the importance of national champions in many European countries. Therefore, a central solution may reduce moral hazard.

However, there is also a downside to centralization in crisis management. In contrast to regulation and supervision, the costs from crisis management may be enormous, which raises difficult cost-sharing issues. A centralized provision of liquidity or bank bail-outs imposes externalities — be they in the form of higher inflation or a higher tax burden — on other countries that do not benefit from the intervention. This gives rise to moral hazard problems on the side of national regulators and supervisors.

Whatever view one takes on the relative weight of these considerations,

it seems to me that in reality there is no free choice regarding the degree of centralization in crisis management unless one wants to undertake major institutional reforms, affecting many areas outside of the realm of financial stability. In the following, I will distinguish between two types of crisis management: liquidity assistance and bank bail-outs.¹

4.3.1 Liquidity Assistance

The provision of liquidity assistance requires the ability to "produce" liquidity. In the Economic and Monetary Union (EMU), this ability has been shifted to the European Central Bank (ECB); the capacities of national central banks to produce liquidity are limited. Hence, the decision for a common monetary policy implicitly includes the decision for a centralized provision of liquidity in crisis situations. As long as the ECB acknowledges this responsibility, it should be able to efficiently deal with crises, even if there are spillovers across national borders. If interbank markets are working smoothly, there may not even be a need to transmit information from supervisors to the central bank. Liquidity could simply be provided to the market, and there would be no need to obtain supervisory information to distinguish between illiquidity and insolvency. If interbank markets do not work smoothly, as is typically the case in times of crisis, it may be necessary to provide liquidity to individual institutions and hence to obtain access to supervisory information.

The provision of liquidity assistance may stand in conflict with the maintenance of price stability. In a centralized solution, the costs associ-

ated with higher inflation are borne by all member countries of the EMU and not just by the countries benefiting from the liquidity provision, which may give rise to moral hazard problems. Furthermore, as Srejber also mentioned, it is unclear how costs would be shared if some of the supported banks turned out to be insolvent, and not just illiquid.

Regarding non-EMU countries, liquidity assistance has to be carried out in a decentralized fashion. The ECB does not have the mandate to serve as a lender of last resort for non-EMU countries unless there is a systemic threat for EMU countries. Also, the ECB cannot produce liquidity in other currencies.

4.3.2 Bank Bail-Outs

The financing of bank bail-outs requires the ability to raise taxes, which can only be done by national governments in the EU. This naturally gives rise to a decentralized approach to bank bail-outs. If the externalities of bail-outs are not taken into account by national governments, the inclination for bail-outs is reduced relative to the centralized solution. However, it is far from clear that this is welfare-decreasing. Due to well-known problems of commitment, there may be - from an ex-ante perspective - too many bail-outs in the case of centralization. My impression is that there have been very few incidences where an efficient bail-out was not carried out, whereas the opposite case of (ex ante) inefficient bail-outs is much more frequent. Therefore, a decentralized solution may actually help to reduce moral hazard. However, the opposite may also be true: In a decentralized

170 ONB

Bail-outs are defined so as to involve the transfer of capital, whereas liquidity assistance involves no transfer of capital if it is given only to solvent, but illiquid banks at non-subsidized rates.

system, it is easier to support national champions than in a centralized system. Therefore, the EU competition authorities must assume the role of preventing the undue subsidization of national champions.

The creation of a common pool for the funding of bank bail-outs, suggested by Srejber, may help to provide for efficient bail-outs when there are significant externalities. But it imposes the costs from such bail-outs on all contributing parties. The resulting moral hazard problem of national supervisors could be solved through the centralization of supervision. However, there may still be scope for excessive bank bail-outs if the use of common funds is subject to national political pressure. Such considerations may, in fact, make the creation of a common pool even more difficult than the financing of joint bail-outs.

5 Conclusion

It is true that financial integration has led to an increase in systemic risk at the EU level. This is due not so much to an increase in cross-border banking as to a stronger synchronization of business cycles and the growing importance of European interbank markets. The expected increase in cross-border banking gives rise to a number of practical problems for microprudential regulation and supervision, but not necessarily to an increase in systemic risk. Therefore, the strong focus in public discussions on the issue of cross-border banking may not be commensurate to its systemic importance. In contrast, the development of tools to assess systemic risk at the national and international level should be a high priority on the political and research agenda.

Regarding the management of systemic risk, a higher degree of central-

ization seems to be desirable to detect and deal with systemic risks. This is particularly true in regulation and supervision. Given the reluctance of national authorities to give up competences, there is however the danger of a duplication of effort, which would clearly not be desirable. If centralized institutions are developed, national institutions have to be downsized. Similarly, there should be clear divisions of responsibilities among regulators, supervisors, and crisis

managers. A prerequisite for this is a smooth flow of information in both the vertical and the horizontal direc-



tion, which means that the incentive problems for information transmission have to be solved. This seems to be one of the big challenges for the future.

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