

## **Eva Srejber: Are we ready to deal with a cross-border banking crisis in Europe?**

Speech by Ms Eva Srejber, First Deputy Governor of the Sveriges Riksbank, at the seminar on Financial Institutions' Value Management in the Integrated Market in Light of the Lisbon Strategy, Gdansk, 12 May 2006.

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### **Introduction**

Thank you very much for inviting me to Gdansk and this seminar on Financial Institutions' Value Management in the Integrated Market in Light of the Lisbon Strategy.

The financial system plays a crucial role in the economy. It provides households and companies with a number of important tools as well as the infrastructure for channelling savings into funding of productive projects, managing and allocating various kinds of risk, and facilitating efficient transfer of payments. The more efficiently the financial system works, the better the rest of the economy will work. One could say that the financial system is the oil that makes the machinery run more smoothly.

The European financial markets have long been very fragmented. As Europe's economies have become more integrated, however, the drawbacks of this financial market fragmentation have become increasingly evident. A more integrated market for financial services could, for instance, lead to enhanced cross-border competition and better opportunities to make use of economies of scale and synergies. Greater competition in turn should result in a wider range of investment and financing services and more efficient pricing of these services. With that, expanding SMEs, for example, could gain easier access to risk capital and incur lower financing costs, in the same way that a more evolved and integrated market for corporate bonds has led to a lower cost of capital for large companies. Consumers, too, would benefit from lower borrowing costs and access to a broader range of financial services. Moreover, both companies and households would have better opportunities to diversify risk. Better use of scale economies should also mean less expensive and more secure ways to pay for goods and services. So, with all these potential efficiency gains, it is clear that further integration of the markets for financial services is vitally important, if we are to succeed with the Lisbon agenda and improve growth in Europe. And this is also the prime reason for the Financial Services Action Plan, which was launched a few years ago.

However, at the same time as the financial system is important for growth in the real economy, it is also inherently unstable. In particular, banks could be prone to bank runs due to the liquidity imbalance between their assets and their liabilities. This inherent instability is an important reason for the existence of financial regulation, supervision and macro-prudential oversight of financial firms in the first place. The costs to society from a bank failure could be enormous due to potential contagion to other financial companies, thus posing a threat to the financial system as a whole. When cross-border financial institutions are involved, the systemic risks become even more complicated to manage. This, of course, entails some new challenges for authorities with tasks pertaining to financial stability, i.e. financial supervisors, central banks and ministries of finance.

Some of the challenges that I will discuss here today are inspired by discussions that occurred at a workshop that was hosted by the Riksbank in Stockholm in February on the topic of the future regulatory framework for banks in the EU. At the Stockholm workshop some interesting papers were presented by Arnoud Boot, David Mayes, and Charles Goodhart and Dirk Schoenmaker. These papers will shortly be published in the Riksbank's Economic Review and I can warmly recommend them as inspirational reading.

### **A changing banking landscape**

All in all, there are roughly around 8 300 credit institutions in the EU today. Among these, of course, the vast majority of banks are small, purely national institutions, with no or almost no cross-border activity.

But cross-border banking activities are picking up. There is an increasing number of banks conducting at least some cross-border activities. So far, cross-border retail activities of most banks have been

fairly limited and typically conducted in subsidiaries. Also these subsidiaries have often been independent and not fully integrated into the operations of the parent bank. This is the type of bank the current system with a home-country control was mainly designed for and is best suited to handle. The current system has worked reasonably well so far for these banks, and is expected to do so in the future. At least as long as their cross-border activities are relatively limited in relation to their overall size.

However, on top of this, there is also a category of banking group in Europe with significant cross-border activities for which the current system may not be so well adapted. Some banking groups, for example, have extensive activities in several countries. The Italian Unicredit Group will, following the merger with the German HypoVereinsbank (HVB), be a significant banking group – not least – here in Poland, but also in, for example, Austria, the Czech Republic, Germany, Hungary, and Italy. Moreover, the British group Barclays has extensive operations in Spain, while the Spanish Grupo Santander has substantial activities in the United Kingdom. Fortis and Dexia are similarly important in the Benelux region.

And then there are banking groups that have a systemic significance in their host countries. For example in countries such as the Czech Republic, Finland, Hungary, Lithuania, Poland and Slovakia foreign banking groups have a dominant position in the domestic bank markets. Generally speaking, foreign penetration of the banking market is substantial in the New Member States (NMS). According to an ECB report, about 70% of the NMS banking sector is foreign-controlled, mostly by other EEA-countries. Speaking from a Nordic-Baltic perspective, more than 90 percent of lending in Estonia is granted by Swedish and Finnish banking groups.

To bring you another example that is close to my home, the Danish bank Danske bank has significant operations in many parts of Northern Europe. With its network of branches, it is now the fifth largest bank in Sweden and is on the verge of becoming systemically significant, at least by some standards. There are also some banking groups that have a significant share of their operations outside of their home country. Interestingly, banks from some small countries such as Belgium and Austria are responsible for a large part of cross-border banking investments.

It is banks that may have systemic relevance in several countries, or are perhaps systemic in one country but not in another, or which are simply very large, and complex, with geographically widespread operations, that pose the greatest challenges to authorities. Fortunately, there are not too many of these critical banking groups in Europe at this point in time. According to an ECB study, there are 43 banks with operations in three or more countries. Of these only nine are truly pan-European banks. Nevertheless, a crisis scenario in any of these may pose serious difficulties to resolve.

In the current system, the organisational structure of a cross-border bank – specifically, whether the bank is organised according to a subsidiary structure or a branch structure – affects the distribution of responsibilities between the home country authorities and host country authorities. Moreover, the relationship between home and host authorities may be affected differently depending on which function of authority, for example, supervision, emergency liquidity assistance or deposit guarantees, that is being employed. An interesting development is, however, that the distinction between subsidiaries and branches is becoming more and more blurred. Banks increasingly concentrate different functions, such as funding, liquidity management, risk management and credit decision-making to specific centres of competence in order to reap the benefits of specialisation and economies of scale. With the financial integration in the EU, this specialisation also occurs cross-border. As a consequence, foreign subsidiaries (and branches) become less self-contained. It can no longer be taken for granted that even a large subsidiary will be able to continue its business, if the parent bank defaults – at least not in the short run. And I believe that the idea that a subsidiary could be successfully ring-fenced in its host country is merely history today, as accounts could easily be transferred from one country to another at the push of a button. Even if many of the examples I will use today formally will have bearing mostly on cross-border banks with a branch structure, economically and practically, they can often just as well apply to cross-border banks with a subsidiary structure.

## **Challenges ahead**

Although increasing cross-border integration of the financial industry is essentially a positive – and even necessary – development to enhance the economic potential for the EU area, it also means new challenges for the authorities involved. The first dimension of these challenges concerns efficiency. So

far, much has been done in order to create a harmonised regulatory framework that provides a more level playing field and reducing the regulatory burden on financial institutions by creating European passports for financial services, improving supervisory cooperation and convergence, etc. The second dimension, which I will concentrate on today, concerns financial stability. More specifically, I will focus on the challenges pertaining to our ability to manage financial crises in Europe. The increased risk of cross-border contagion means that it seems less likely that the next financial crisis in Europe will be contained within national borders, and much more likely that it will have far-reaching consequences in a number of countries. This basically means a greater need for coordination of information and decision-making between authorities in different countries. In a crisis situation it is important to know who will do what and when. Things can be seriously complicated by the existence of a number of potential conflicts of interest between the different countries involved. Moreover, as the actions of one authority could have effects on other countries' financial systems, there are some obvious accountability concerns. The national authorities are only accountable to their respective national governments and ultimately their constituencies.

The fact that integration of the banking sector started relatively early in the Nordic and Baltic countries means that we have encountered some of these challenges perhaps a little earlier than many other European countries. And because we share similar experiences – still fresh in our memories – of major banking crises in the Nordic countries, we have perhaps a head start when it comes to recognizing and trying to deal with these challenges on a Nordic level, even if much work still remains. Here, I might add that integration on a pan-Nordic level has also come a long way in the area of securities exchanges and clearing and settlement facilities. Of course, the integration of the financial infrastructure poses similar challenges for authorities to cross-border banking and some additional complications as well. However, today I will focus on the challenges posed by cross-border banks. And I must stress that these challenges are not merely a regional problem. Due to the dynamic changes in the banking landscape, they will indeed require solutions on a European level.

My main message today is that increased coordination is imperative, and, in this, it is vitally important that future arrangements for supervision, crisis management and crisis resolution of cross-border banks must be dealt with jointly as a package, and not in isolation from each other. It is apparent that the solutions in any one of these areas will depend on the solutions in the other areas. In particular, it will be necessary to address the issue of burden-sharing arrangements for the eventuality that a border-crossing bank becomes insolvent. If we don't, there is a great danger that crisis management fails and valuable time will be lost. It will not be easy to achieve the necessary coordination and not least to deal with some potentially complicating conflicts of interests, and much more analysis is needed. However, I will at the end of my speech try to sketch some possible routes ahead.

### **Coordination issues**

To make my points clear, I think a crisis scenario could be a useful starting point. Consider a large cross-border bank encountering some financial troubles, and suppose the bank is systemically important in at least one of the countries in which it operates. The number one concern for authorities would be to limit the social costs of a potential banking failure and to stop contagion to other parts of the financial system. For this, efficient crisis management is key. The successfulness of the crisis management, in turn, critically depends on a number of factors, such as coordination of information and decision-making, which in turn depend on how well conflicts of interests can be managed.

### **Information**

First of all, you need access to relevant information on which to base your decisions. Ongoing supervision is instrumental in detecting weaknesses, vulnerabilities and risks that may trigger or enhance systemic crises in the first place. But it is also a key source of information in a crisis situation. Given the very complex nature of some cross-border banks, these institutions are also becoming increasingly opaque, and thus difficult to analyse. Despite EU regulations on consolidated supervision, there is always the risk that no supervisory authority will gain sufficient oversight of and insight into all parts of a banking group. The supervision is also complicated by the functional specialisation within the banks, which does not always follow the national and legal divisions. If, for instance, a banking group with operations in two countries has concentrated all of its credit risk management in its home country, it will probably be difficult for the host country's supervisory authority to assess the total risk in the subsidiary. On top of problems of getting a fair overall picture, there is the problem of coordinating information. When several authorities in different countries are involved, the information flow may be

slowed down. The MoU on Cooperation between Banking Supervisors, Central Banks, and Finance Ministries in the European Union in Financial Crisis Situations that was recently agreed among the 25 member states provides a useful framework for sharing information in a crisis.

### ***Decision making***

In a crisis you need the ability to make rapid decisions. For example, central banks might consider providing emergency liquidity assistance. In some cases, there might also be reasons to consider a swift take-over of the bank and temporarily placing it under public administration. For decisions like these, you would ideally need a clear line of command. It is difficult enough to organise efficient management of a national crisis. I think you can all imagine how complicated it could be to achieve anything like “a clear line of command” when there is a multitude of countries – and perhaps several authorities in each of these countries – involved in the decision-making. Then there is no longer merely the financial supervisory authority, the finance ministry and the central bank in one country that have to be involved, but all of these authorities in several countries. If there are no prior agreements on the division of responsibilities between the national central banks and the other relevant crisis management authorities, and on how to coordinate decisions in the case of a crisis, there is great risk that any attempt to manage the crisis will fail miserably.

Language differences and different legal structures can often reinforce the problems. On top of this, there is a clear cross-border mutual dependence, which means that no single country’s authorities are entirely sovereign in implementing a solution to the crisis without the risk of significant repercussions in other countries.

Recently, there have been a number of initiatives, regionally as well as on a European level, to enhance coordination. For example, a number of memoranda of understanding (MoUs) have been worked out and agreed, either bilaterally or multilaterally, and more MoUs are underway. These MoUs detail a number of principles and practical issues regarding the cooperation, the exchange of information and assessments between authorities and certain issues concerning the delineation of responsibilities. Some MoUs focus primarily on supervision, whereas others involve crisis management as well. Notably, they are not legally binding and give the national authorities considerable scope for discretion. Although the emergence of these MoUs is very positive, they are no guarantee for efficient crisis management. Probably, these MoUs will work well under normal conditions. And they will also be most helpful in facilitating coordination in some financial crises. However, in a more wide-spread crisis involving a large cross-border bank, MoUs alone will probably be insufficient. Take, for example, the issue of assessments. We have in Europe in principle agreed to share each other’s views and assessments in the event of a distress scenario. However, to be able to act decisively in a crisis situation involving a large cross-border bank, you would preferably need a joint assessment between the countries involved. I don’t think it would be too speculative to think that each country in an acute situation would be prone to present an assessment that supports its national interests as part of a negotiation strategy. Arriving at a joint assessment may therefore prove difficult, and above all take valuable time away from crisis management. To be able to act efficiently in a crisis situation, it is instrumental that conflicts of interests, as far as possible, are taken care of in advance. For that you need something more than the MoUs we have seen so far.

Personally, I believe that crisis management simulation exercises involving supervisors, central banks and finance ministries in all EU countries would provide valuable ideas on how to develop and improve cooperation and coordination of financial crises. On top of the obvious need for coordination of information and decision-making, there is as I just mentioned – and I will elaborate more on this shortly – also the additional element of conflicting interests that may be an even more serious impediment to efficient crisis management. In order not to waste valuable time in an emergency, you need to have ways to settle them as efficiently as possible already in place. In my opinion, specifically *ex ante* arrangements for burden sharing between countries are needed.

### ***Managing conflicts of interests***

Conflicts of interests can become apparent in many ways, for example, if a cross-border bank becomes insolvent and incurs social costs that somehow need to be shared between the countries involved. The problem of burden sharing becomes particularly precarious when, for example, the bank is significant to the banking system in some country but not in some other countries, or if there are great discrepancies between the ratio of the bank’s size to the GDP of the different countries involved.

The social costs that may call for some burden sharing can take many forms. For example, there may arise situations in which the taxpayers in one country may be faced with the prospect of essentially bailing out the depositors of a branch in another country through their national deposit guarantee scheme. Incidentally, there is a recent example from my own country (although, technically, it concerns a bail-out under the investor compensation scheme rather than the deposit guarantee scheme). After a long and complicated investigation the Swedish Deposit Guarantee Board decided around two weeks ago to commence payments to a group of mostly Italian investors that were the unfortunate clients of the hair-raisingly ill-managed securities company CTA, which went bankrupt in 2004. Fortunately, CTA was not one of the bigger players – in fact I had never heard of it before it became an item for the Deposit Guarantee Board – and the fund will be able to cover the payments to the approximately 1 200 clients, amounting to around €10 million in total. However, if a larger institution had gone bust, the fund alone would not necessarily have been able to bail out the investors. All deposit guarantee schemes – as well as investor compensation schemes – are typically underfunded and are not able to cope with failures in large cross-border financial institutions. In such events, additional government funding will be needed.

Or, if emergency liquidity assistance was provided at some point during the course of the crisis (on the erroneous assumption that the bank was basically solvent), a loan loss may be incurred on the national central bank that acted as a lender of last resort. And, of course, when giving liquidity support to a bank with cross-border operations in many countries, you can never be entirely sure in what jurisdiction your money ends up. In the case of a branch structure, it may end up in any country in which the bank operates, and ring-fencing a subsidiary may prove equally difficult in practice.

Furthermore, in some situations it may be socially optimal to spend public money in order to reconstruct a failed bank. If the reconstruction is successful, the money spent may eventually be recovered by the public. But it could take a considerable amount of time before this happens, and a precondition is that you are not betting on the wrong horse. The taxpayers in one country may not be so keen to take on such risks in another country.

In addition to fiscal costs, there may of course be substantial indirect social costs in the form of a dipping GDP that may occur when the financial system is suffering efficiency losses or is being temporarily disabled as a result of a financial crisis. These indirect costs are basically a function of the systemic relevance of the financial institution(s) in question. According to a study by Hoggarth et al, the average drop in GDP following a financial crisis is 15-20 percent.

The social costs from a banking failure can thus be substantial and involve many countries in various degrees. This, in turn, will most certainly have the effect of giving rise to difficult negotiations on how burdens should be shared between the countries involved. The larger the banking group, the more countries that are involved in its cross-border activities, and the more important the bank is to the functioning of the financial system in a country, the higher the stakes will be for individual countries and the trickier and tougher the negotiations will be. But why is this relevant in a crisis management perspective? Couldn't we just go about and deal with the most urgent phase of a crisis first, and take care of burden sharing later, when we all know the facts?

In my opinion, we cannot afford to wait that long. Uncertainty about the distribution of social costs in the event of a cross-border banking bankruptcy can seriously hamper the ability to act in an emergency situation. In particular, there is a risk that crisis management will be held up by a negotiation game between nations unless there are some previously made arrangements for burden sharing. When the stakes are high, the incentives of the involved nations to keep their cards close to their chests until the last minute will also be strong, and the decisive actions that would be desperately needed in a crisis situation may be taken too late or not be taken at all. In the worst case, this may result in a failure to prevent a crisis from developing further with the effect of greater overall social costs to share. On top of this "prisoners' dilemma", things can get even more complicated by the fact that banks will shop around for the most favourable support among the countries involved.

Let me be a little bit more specific. Take emergency liquidity assistance, for example. A central bank could decide to act as a lender of last resort and provide emergency support to an illiquid but basically solvent institution. The problem is that, in the heat of a crisis, it may be almost impossible to be certain as to whether the bank has merely liquidity problems or has serious solvency problems as well. Information will almost certainly be incomplete. Therefore, providing emergency liquidity assistance could in principle result in losses to the central bank, so the ultimate cost of the assistance is therefore uncertain at the outset. (If the bank could pay back with certainty, there would typically not be any need for emergency liquidity assistance and the market would be able to handle the liquidity

shortage.) Thus, a central bank providing emergency liquidity assistance must base its decision on the possibility of a loss.

Given the uncertainty about the ultimate cost of emergency liquidity assistance and the central banks' national mandates, conflicts of interest are likely to emerge in a decision to grant emergency liquidity assistance to a bank with major cross-border activities. It is not difficult to see how these conflicts could complicate crisis management, in particular if the bank is systemically important in any of the host countries. In the present situation, the home country's authorities are likely to have the principal responsibility, at least if it is organised according to a branch structure. If the bank is systemic in the home country, the decision to provide emergency liquidity assistance may not be so difficult; the risk of incurring a loss may be worth it to avoid a systemic crisis in the home country. But if the bank is not systemic in the home country, but systemic in the host country, there may be some hesitation on behalf of the home country's authorities to provide liquidity assistance. If the bank has a branch structure, the demise of the bank means that the foreign branch goes down with it, and, because it's systemic in the host country, financial stability may be at risk and greater social costs are incurred at the host than in the home country. If it is a subsidiary that is systemic in the host country, one solution might be for the central bank of the host country to grant emergency liquidity assistance to the subsidiary. However, it may not be possible to successfully ring-fence it, and the money is lost and the rescue mission fails.

Similarly, the decisions in an emergency situation may also be distorted by conflicts of interests regarding deposit guarantee schemes and other crisis resolution measures. Through deposit guarantee schemes, bank deposits are partly insured in the event of a bank default, thereby protecting depositors from losses (up to some maximum amount), which in turn reduces the risk of bank runs that may jeopardise financial stability. Deposit guarantee schemes are thus a vital part of the safety-net for banks, apart from the central banks' ability to grant emergency liquidity assistance.

All EU-countries are required to have deposit guarantee schemes that are supposed to be financed by the financial industry, for example through fees to a fund. Typically such funds would be designed so that any deficits in the fund are financed by the banks from future fees. However, it seems doubtful that such financing would be sufficient in all cases. In the case of default of a very large bank, it seems more likely that the government would then have to intervene somehow. Either the deposit guarantee fund would have to borrow from the government, or the government would step in directly and provide some retribution to depositors on behalf of the deposit guarantee fund. In both cases, government debt increases. The ultimate cost of a major banking crisis is therefore likely to hit the taxpayers in one way or the other. So, any deposit guarantee scheme will in practice contain an element of a government guarantee, which could be either implicit or explicit. In the case of a cross-border bank with branches in other countries, the important question is, of course, how far the taxpayers in the home country would be willing to go in order to bail out the depositors in the host countries. This could entail substantial cross-border transfers, which is something that most politicians tend to view with considerable scepticism.

There are also challenges in the potential reconstruction of a failing cross-border bank. A reconstruction of a cross-border bank will increasingly impact the financial system in the other countries where the bank has major activities. To achieve a successful reconstruction, coordination of the activities of the authorities in the different countries would therefore be essential. In addition, as banks merge cross-border, some banks tend to grow in size to the extent that it will be very difficult for a small country to save the entire group. Traditionally there has been a fear that banks are becoming "too big to fail" because of their critical importance for the stability of the financial system. For a small country, which is home to a large bank with an extensive network of foreign branches, there is a real risk that the bank will rather be "too big to save". This suggests that burden sharing may be an issue in reconstruction as well.

Scenarios like the ones I've sketched suggest that negotiation could be extremely complicated and may hold up the entire crisis management process – I know how extremely complicated things can get even when a crisis is contained within national borders. It is obvious that the organisation of supervision, crisis management and crisis resolution for cross-border banks are strongly linked to each other. The avenues we choose in any one of these functions will have an impact on the effectiveness of the other. Therefore, we cannot deal with supervision, crisis management and crisis resolution as separate issues.

The success of crisis management and crisis resolution depends on coordinated arrangements for burden sharing with respect to deposit guarantee schemes, emergency liquidity assistance and public

money being spent in the aftermath of a banking crisis. If the uncertainty about this burden sharing cannot be reduced, there is a great danger of failure in the attempts to manage a bank in distress and that the overall burden of a crisis will be greater for all of us to bear. To me, it seems clear that some prior agreements outlining responsibilities for decisions and potential loss distributions are necessary. There is, of course, also the accountability issue. For the host country's authorities, there is a risk that domestic opinion would not consider that the home country's authorities were doing enough to save a cross-border bank or group, and vice versa.

A basic challenge for the authorities dealing with cross-border banks is how to find an acceptable formula for sharing the burden and the costs of a crisis. Goodhart and Schoenmaker have in their paper suggested a number of keys that could be explored to create such a formula, for example the relative size of GDP, the ECB capital ratio, and the relative amount of bank assets in the country. As pointed out by Goodhart and Schoenmaker, the first question to be asked is whether one would want a general solution where all countries contribute according to some fixed key, or more specific burden sharing arrangements, where only the directly involved countries participate according to a more flexible key, presumably taking into account the geographic spread of the bank's business. To achieve the latter, it would be necessary to find some commonly agreed criteria for assessing a bank's systemic relevance to the financial system of a country. Merely using market shares as a criterion will probably not be adequate as other aspects, such as the bank's relevance to the payment system, clearing and settlement, involvement in inter-bank securities markets and so on would also be important in this respect. At the same time, in a constantly changing banking landscape, it would be difficult to find criteria that are so clear-cut that assessments will not be "up for negotiation" in a sharp crisis scenario. In order to avoid having crisis management being held up by conflicts of interests more than necessary, I am personally inclined to believe that a general key that is fixed once and for all is the preferred choice.

### **Possible ways forward**

The title of this speech is a question: "Are we ready to deal with a cross-border banking crisis in Europe?" Regrettably, the answer is no! Before we can say we are anywhere near "ready", we must deal with some serious challenges. In particular, we need to solve the problem of how to organise supervision, crisis management and crisis resolution for cross-border banks. Given the great complexity of the issue, achieving a practical solution will not be an easy task, and there is no altogether ideal solution. The amount of work that has already been set up for us on the European regulatory agenda is already quite staggering, which suggests that everything may not be achieved in the next few years. But we must not use this as an excuse for not starting to deal with these important issues. We can at least start the analytical process, take stock of the problems and examine the pros and cons of different solutions. The longer we wait to get this process started, the greater the risk that we'll end up in a very serious mess. I, for one, certainly hope that we manage to have some solution in place before the next major financial disaster in Europe occurs. I wouldn't want to meet the eyes of the European citizens and tell them that we knew this could happen, but we were too busy to do anything about it.

Some different avenues have been outlined in the ongoing international discussion. So far, the focus for discussions in the EU has primarily been on crisis prevention in the form of regulatory reform and different organisational structures of supervision. However, similar options do exist both in the context of crisis management and in the subsequent resolution of the crisis.

One of the solutions suggested is to let the home country take a leading position more firmly. In this case, the home country supervisor is responsible for the supervision of the overall group and in a crisis the home country authorities has the responsibility for managing and solving the crisis for the bank as a whole. With increasing emphasis on consolidated supervision, this seems to be where Europe is heading presently. It addresses the problem primarily from the cross-border bank's perspective of minimising the regulatory burden. This is, of course, valuable but does not solve all problems. With the new Capital Requirements Directive, the consolidating supervisor of a banking group will have, for example, the principal responsibility for validating and approving the credit risk models in the entire bank, including its subsidiaries. But in most cases, the rules to be used are expected to be settled in negotiations between the supervisors. So, for example, an Austrian subsidiary to a German bank could be subject to a mixture of some Austrian and some German rules. If the Austrian subsidiary has a branch in, say, Poland, the Austrian supervisors will have the main responsibility for the supervision of the Polish branch, while the Polish authorities remain responsible for financial stability. So, the

Polish branch could be subject to a mix of some German, Austrian and Polish rules and the German supervisor will be the consolidating supervisor of the group, but the Austrian supervisor will be the home supervisor of the Polish branch. A foreign branch will be part of the home country's deposit guarantee schemes but could also opt to top it up by connecting it to the deposit guarantee scheme in the host country, if that is considered favourable. At the same time, basically the national jurisdictions of the host countries will be applicable for other consumer protection aspects of the bank's operations regardless of whether it is a branch or a subsidiary. And if, for example, the German bank is bought by, say, an Italian bank, jurisdictions and supervisory responsibilities will change all over again... Are you still with me? If it sounds confusing, that is because it is confusing, even in this relatively simple case, involving just supervision in sunny weather.

Now consider what would happen if we add to this scenario a financial crisis involving several large banking groups. Now, complications could add up really rapidly. For example, some additional confusion may arise from the fact that more than one consolidating supervisor will be involved. On top of this there would be several consolidating central banks and several consolidating ministries of finance. Therefore, I think that the lead authority model will not be sufficient for handling crises in large cross-border banks. In particular, it does not solve the basic dilemma of giving one country the mandate and opportunity to act, while letting the host country retain its responsibility for financial stability. The accountability problem also remains. To my mind, the lead authority model is a model that will work best for banks with limited cross-border activities that are insignificant in the host countries. But for large cross-border banks, I'm afraid that it will work only as long as the going is easy and the weather is fair.

Another route that has been suggested is to give the home country authorities a formal mandate to act in the interest of all relevant countries, either through a European mandate or some kind of binding contract between relevant countries. A lead supervisor with a European mandate seems nice in theory and aims at solving the conflicts of interest by creating a central decision-making body. In practice, however, it could easily become very bureaucratic and inefficient. If we are establishing a central decision-making body anyway, why act through authorities from 25 different countries? Possibly, the number of authorities involved could be reduced somewhat if the mandate is based on an agreement between only the directly involved countries. At this point, it is however not very clear how such a contract could be made legally binding. Although solutions that are adapted to a specific situation are better than no solution at all, I am sceptical as to their practicability in a dynamic world. They have the same basic flaws as the model of home country lead supervision. In a constantly transforming banking landscape, relevant jurisdictions will change when principal ownership is transferred from one nationality to another. That's why I also don't believe in so called regional solutions.

A third way, and in my opinion the most logical step in the long run, would be to focus some authority on a European level to deal with the relatively limited number of most important cross-border banks. Supervision of these banks would in my opinion benefit from the establishment of a European financial supervisor. Some opponents of this idea have claimed that proximity might then be lost, and a European supervisor wouldn't receive enough knowledge about the markets where the institution operates. To my mind, this is not a very convincing argument. First, this problem is no less in the home-host model. Second, it is an organisational problem that can be solved. An EU supervisor would certainly employ staff from all EU countries and have local offices in the national financial centres. For instance, for a regional cross-border banking group, I imagine the supervisory team to be based in the relevant region, perhaps in the same premises as the national supervisor, and to consist of staff from that region.

As for crisis resolution, one could think of the EU building up a deposit insurance fund for the largest cross-border banks, possibly within the framework of the new European supervisory agency, akin to the Federal Deposit Insurance Corporation in the USA. This would considerably reduce the risk of destructive negotiation games. Such a deposit insurance fund would certainly be better diversified than the national funds are today, which would, all else being equal, enable it to charge lower fees or hold a larger risk-adjusted buffer. However, the fund itself would lack the ability to handle the largest banking failures. In order to cope in the event of a really large bank or several large banks failing, the fund should be able to borrow in the capital market. To be able to do this in a cost-efficient manner, it would need backing by a government guarantee from the 25 member states. In the event that the European deposit insurance fund is not able to recover enough money from a troubled bank to repay its creditors in the capital markets, a key for burden sharing would need to be in place. One could establish a system of committed payment obligations, where the fund has the right to receive contributions according to the agreed key to pay back its capital market loans. The governments, in



turn, rely on their ability to raise tax. Such a system would of course demand very strict and well thought-out rules governing what actions the fund should be allowed to take in the case of a bank failure. These rules could be inspired, for example, by the US FDIC's very strict mandate to always choose the least cost solution. Among other things, this would in some cases mean allowing shareholders as well as uninsured depositors and debt holders to lose their money.

One would of course also have to think hard about what formula to use for burden sharing. In my opinion, I think a fixed key would probably be the most practical choice. I might mention that there does, in fact, already exist one type of burden sharing arrangement in the EU today, and that is for topping up the national deposit guarantee schemes for foreign branches. Although the potential sums involved in these topping-up schemes are insignificant in comparison to the potential costs of a large cross-border bank failure, one could perhaps draw some inspiration and build on such an existing arrangement. Another source of inspiration, where an ex ante determined key for obligations to provide liquidity is used, are the IMF financing system and its second line defence in the form of General Agreements to Borrow and New Agreements to Borrow. These burden sharing arrangements have been successfully in use for half a century.

On top of this, the agency that would be operating the fund – presumably the European supervisory agency – would also have the power to reconstruct banks. Efficient supervision and crisis management may also warrant arrangements for prompt corrective action and structured early interventions. As far as I know, most EU countries lack the rules on how to handle large bank failures, which means it would also be very positive from a point of view of contingency planning and reducing moral hazard. With a strong legal framework, the EU would be able to let investors in even the largest banks take full financial responsibility.

When it comes to crisis management, coordination of emergency liquidity assistance is also imperative. Today, there are some legal uncertainties remaining for national central banks considering providing cross-border liquidity support. One example of the effects of this is that differences in national lists of eligible collateral will probably lead to gaming situations. A more centralised lender-of-last-resort function is probably necessary. Here it can be noted that the Treaty does allow for a more prominent role for the ECB in this respect than it presently has. However, a number of problems remain to be solved first. Even in the presence of burden sharing arrangements for crisis resolution, one would have to come up with ways to avoid gaming of collateral. Merely extending the list of eligible collateral for emergency liquidity assistance will not do the trick. It will probably only create a host of new problems, while a number of ways of fencing in collateral still remain. For example, one would probably want to avoid that a bank in distress places all of its US treasuries in a country outside of the jurisdiction of the ECB, while only letting its bad loans and other lower-quality collateral be within reach of Frankfurt... Moreover, one must realize that, within a cross-border bank, liquidity shortages can occur in other currencies than the euro, and one will have to find ways to handle this, for example through prearranged swap agreements.

I realise, of course, that achieving such a supranational system is a long-term process and it will inevitably going to be politically difficult, and I'm sometimes confronted with the view that it will take a major banking crisis before we'll be able to muster the resolve to achieve it. However, as a European policymaker, I cannot accept this view. We have a definitive responsibility, and just because things are difficult we cannot let that stop us from trying. And, if a supranational solution is limited to the forty or so of the most important cross-border banks, it may not be so inconceivable, after all.

Financial integration is inevitable and necessary if we are to achieve an efficient financial system and to foster growth in Europe. And when integration takes off it tends to follow the logic of business, and not the "logic" of country borders or national laws. It also means that national authorities must be willing to adjust and adapt to this new financial landscape.