■ Financial integration and responsibility for financial system stability in the EU

Work is under way in the EU to create a single market for financial services. An integrated financial market has significant positive economic effects but also entails challenges for the authorities responsible for financial system stability. This article discusses the problems that arise for oversight and crisis management when the risks to financial system stability are shifted from national to international level. The problems are complex and difficult to manage, and it is currently not possible to provide unambiguous answers about possible solutions. However, it is important that a discussion is begun within the EU before integration has progressed to the stage where the need for solutions becomes acute.

Introduction

The banks are the core of the financial system. Within a national banking system, there is a relatively high risk that financial problems in one bank coincide with or will lead to difficulties in other banks as well. This is usually referred to as systemic risk and is one of the main reasons for oversight and regulation of banks and the banking system.

The banking systems of different countries are becoming increasingly integrated, however. Consequently, the risk of problems in one bank or one national banking system spreading to banks in other countries has increased. Nevertheless, regulations, prudential supervision, system oversight and crisis management have been primarily designed to manage systemic risk at the national level and only partly take account of cross-border systemic risk.[59]

As part of its work to create a single market, the EU is striving to introduce a regulatory framework that will be common to all financial companies in the Union. This also includes the EEA countries and thus not only countries of the EU. The reasoning here is that common regulations would enable financial companies to compete on equal terms, thus creating a single market in which only the most competitive companies survive.

However, these common regulations are not sufficient in themselves to allow systemic risks to be managed satisfactorily. One example is prudential supervision. Within the EU, prudential supervision is carried out according to the home country principle in cases where banks conduct their foreign operations through branches. In cases where activities are carried on in subsidiary form, the host country serves as home country for the subsidiary and thus has responsibility for prudential supervision. Responsibility for consolidated supervision, however, still rests on the country where the parent company is legally domiciled. The home country principle works well as long as a bank's operations outside its home country are comparatively small, which so far has been the case in the EU. However, increased integration raises the question of how much

59 Furthermore, the organisation of the financial infrastructure has implications for the size and manifestation of cross-border systemic risk. This is outside the scope of the article, however.

responsibility home countries are willing to take for financial stability in other countries where a bank operates. For example, the Nordea Group is a Swedish bank that has its largest market share in Finland. Would the Swedish authorities be willing and able to judge Nordea's impact on stability in Finland? And would the Finnish authorities be prepared to transfer responsibility for a considerable part of its financial system to Sweden? Similar problems exist in other countries.

Adapting the home country principle to the new conditions, where bank branches can be systemically important, is just one of several challenges faced by the EU countries as a result of increased financial integration. The aim of this article is to illustrate these challenges and initiate a discussion of conceivable solutions.

At what level are systemic risks relevant – national, regional or EU?

The financial system is important for ensuring that the economy in general can function. The system's tasks are to convert savings to financing, to contribute services for risk management and to provide efficient instruments of payment. Given the considerable economic significance of the financial system, it is important that it functions both safely and efficiently. The government has therefore a particular interest in overseeing the functioning of the system. The objective of this oversight is to promote system stability, in other words to ensure that the financial system is not hit by such serious disturbances that it is unable to continue its functions, but at the same time to avoid the system becoming unnecessarily inefficient.

The need for oversight is made more urgent by the fact that both individual banks and the entire banking system have inherent characteristics that render them unstable. Put simply, banks have short-term financing that can quickly disappear, while their assets have long maturities and cannot be realised as quickly.

There are several causes of systemic risk. Banks have exposures to each other, for example credit exposures through the interbank market and through securities trading, as well as liquidity exposures due to their role in the payment system. Furthermore, banks have similar exposures and operations and thus risk encountering the same problems at the same time if these are brought about by macroeconomic events or other external factors. A further cause of systemic risk is that when problems arise in one institution, economic players tend to behave as though other institutions were also affected, whether or not this is the case. This behaviour reinforces systemic risk and can prove self-fulfilling.

SYSTEMIC RISK AT NATIONAL AND REGIONAL LEVEL

Systemic risk in the EU countries is so far most evident at national level since the banking systems are mainly national in nature. Few countries have a high proportion of either foreign banks or foreign-owned banks in their system. Consequently, few European banks have a large presence in other EU countries besides their own. This will change somewhat, however, when the accession countries become EU members in May 2004, as several of them have a large share of foreign-owned banks.

A typical European bank has the principal share of its interbank exposures with banks in the same country, the majority of all payments are made between accounts in the same country and the bank's assets are located in its home country. Thus, all the important factors behind systemic risk are present in the national system. The bank's customers, including its depositors, are also mainly found in the bank's home country. Given that banks' borrowers are principally based in the home country, a national banking system has a relatively homogenous group of borrowers, at least in terms of legal domicile, but also to a certain extent in terms of sector in cases where certain sectors are dominant in a country. Consequently, credit loss patterns can be assumed to be more similar between banks in the same country than between banks in different countries. Cyclical fluctuations in the EU are relatively synchronised, however, even if there is less certainty over how these would behave under more extreme conditions when a bank crisis could conceivably occur. Also, the fact that bank customers do not use the financial services of banks in other countries to any great extent means that they are primarily dependent on the function of the domestic banking system for services such as credit and payments.

There are several reasons for why banks and their customers choose not to become more international. The infrastructure for financial transactions is mainly national, for example regarding depository and clearing organisations, and retail payment systems. Moreover, some structural factors such as mortgage legislation are different in various countries. In cases where countries have different currencies, integration of the financial infrastructure becomes somewhat more difficult.

Certain regions, however, are beginning to witness the emergence of clearly integrated banking systems. This has perhaps been most evident in the Nordic-Baltic area. Cross-border banks are also a reality for those countries that are due to join the EU in 2004. This trend is highly likely to continue in other parts of the EU as well.

The integration seen in the Nordic and Baltic region differs from the typical kind of foreign establishment whereby the foreign entity in the new country is small and often relatively small in comparison to the parent bank. The following kinds of integration give rise to particular problems for oversight:

- *Banks with dominant positions in several countries.*

The Nordea Group, whose parent company is located in Sweden, has subsidiaries in all the Nordic countries following mergers with different Nordic banks. In terms of lending, Nordea is the largest bank in Finland, the second-largest in Denmark, the third-largest in Norway and the fourth-largest in Sweden. There are few examples of other banks that enjoy such a dominant position in several industrialised countries. One is Bank Austria Creditanstalt, which is the biggest bank in Austria in terms of assets and which is a part of the German HVB Group, the second-biggest private bank in Germany. This banking group also has a considerable presence in several other central European countries.

- *Countries whose financial system is composed of foreign subsidiaries.*

Estonia, which will join the EU in 2004, has a banking system that is 98 per cent owned by foreign-owned banks in terms of assets. Two subsidiaries of the Swedish banks, FöreningsSparbanken and SEB, account for 91 per cent of the system, while the Finnish bank Sampo comprises 7 per cent. Foreign ownership of Finland's banking system is also substantial in that Nordea is the largest bank there and the Swedish bank Handelsbanken is fourth-largest. In addition, several future EU members have banking systems that are dominated by foreign banks.

- *Banks that are large in their home country and have considerable foreign representation, but that are small in the host country.*

SEB, which is Sweden's second-biggest bank, has 25 per cent of its lending through a subsidiary in Germany. However, this corresponds to only a marginal share of lending in the German banking system. So from a Swedish perspective, SEB has significant operations in Germany, but in German eyes it is a comparatively small business. The situation is the same for Iceland's largest bank, Kaupthing, which generates around half of its income from its Swedish business. The subsidiary is only a small player in the Swedish market, however.

The subsidiaries and branches of cross-border banks enable them to participate in the interbank markets of other countries and become active payment intermediaries and lenders there. Thus, the cross-border banks become part of the new country's systemic risk by creating and being exposed to systemic risk. They also become a channel for the systemic risk between the home country and host country, and vice versa. In the regional systems, however, it is still unusual for customers to use banks in other countries. Apart from the contagion risk, domestic companies and consumers in the bank's home country are therefore neither dependent on the functioning of the other country's financial system nor do they run the risk of losing their deposits due to foreign-bank failures. On the other hand, the country in which the branch or subsidiary bank is established, if this is large, is dependent on the cross-border bank.

SYSTEMIC RISK AT EU LEVEL

Although banks in the EU are not established in each other's markets to any great extent, many are active in the single interbank market in euro. The domestic interbank markets are still the most important for the vast majority of European banks. The interbank market for collateralised loans (mainly repos) is still mostly national, owing to the organisation of countries' depository and clearing institutions and the laws that govern collateral, although the proportion of cross-border loans in the deposit market (i.e. loans without collateral) has risen lately. There are indications that a group of large banks are gradually becoming liquidity redistributors by borrowing in the integrated euro interbank market and then lending domestically, i.e. European equivalents to US money-centre banks. For the large euro area banks, the single interbank market is at least as important, if not more important, than the national one. Consequently, there are significant credit exposures between banks in different euro area countries, which points to possible systemic risk at euro area level.

Furthermore, in a not too distant future, the euro area may become an increasingly important financial system. The single currency in combination with the EU's Financial Services Action Plan (FSAP) has created conditions for more far-reaching, deeper integration of the financial system than seen so far. As discussed earlier, the financial infrastructure would probably have to become considerably more international than it is today for this to happen, especially regarding retail payment systems. The legal foundations for establishing a European retail payment system have been laid and initiatives taken in the market to this end, but there is none in operation as yet. A common financial infrastructure could bring about a more far-reaching internationalisation, with lower barriers to entry into new national markets for banks, and opportunities for customers to use foreign banks that do not have any form of legal presence in the customer's country. As regards stock exchanges and clearing institutions, a large number of cross-border consolidations have also taken place.[60] Besides the infrastructure, other changes are also likely to be required to produce such far-reaching integration, for example a harmonisation of civil legislation such as that for real-estate mortgages.

Developments in the euro interbank market and an integration of the financial infrastructure in the euro area could give rise to more palpable cross-border systemic risk. In turn, this would make national systemic risk less important. However, it is hard to say how quickly this could occur.

From certain aspects, the global perspective is significant when discussing the risks of cross-border contagion. There are a number of major international banks that are vital to the functioning of certain markets. The failure of one of these banks would affect a large number of countries whose banking systems are exposed to them directly or indirectly. Today the IMF and World Bank jointly evaluate the financial systems of different countries in the Financial Sector Assessment Program (FSAP). Countries that are also international financial centres are assessed in terms of their stability and functioning, with a particular focus on the risk of contagion to other countries. Even if some overall issues can be discussed and possibly managed at this level, the prospect of day-to-day prudential supervision and oversight that takes global stability issues into account appears very distant for the time being.

In all, international integration has had the following effects:

- Some banking groups comprise such a large share of other countries' banking systems that they could be systemically important there. This is likely to become more common.

60 See Financial Stability 2003:1 for a detailed discussion of this consolidation trend and the forces driving it.

- An even larger number of banks have such extensive operations in other countries that developments there could cause a whole banking group to encounter difficulties, which then risk spreading to their home countries.
- A large number of banks risk encountering problems in other countries via the interbank market.

Thus, contagion channels exist between the different national systems, especially at regional level, and it is relevant to examine the systemic risks from this perspective as well.

How well prepared are authorities to manage systemic risk at EU level?

Authorities attempt to safeguard the functioning of the financial system in three main ways. The first is through a regulatory framework, consisting of laws and regulations, which establishes the bounds within which financial companies must operate. The second is through day-to-day prudential supervision and oversight of financial companies in the system. The third is crisis management, which concerns government measures designed to deal with crises in the financial system.

Given that the authorities' efforts in these areas aim to reduce the risk of uncontrolled bank failures that cause the functions of the banking system to collapse, the question is how well current legislation, oversight and crisis management are adapted to the increasing interdependence that exists between banks and banking systems in different countries.

DEVELOPMENT OF THE REGULATORY FRAMEWORK

The regulatory framework that forms the basis for the EU countries' national laws and regulations has largely been developed internationally for a number of years, both within the scope of the EU cooperation and in other international forums.[61] The EU regulations are general in scope, however. There is still room for considerable national differences in the implementation and interpretation of the common rules. Furthermore, there are areas that are not yet covered by common legislation. Consequently, obstacles remain to both integration and efficiency.

Similar rules for all financial companies in Europe are a precondition for one of the EU's main objectives – the single market, in this case a single market for financial services. Given that the framework constitutes a restriction for companies, the existence of different rules could create

61 As regards banking regulations, the Basel Committee is a driving force. The Basel Committee consists of central banks and supervisory authorities from the world's leading industrial nations, principally the G10. Rules that are proposed by the Committee and adopted by the central bank governors of the participating countries are primarily intended to apply to international banks. As the Basel Committee cannot decide on matters of legislation, the proposals must proceed through national legislative processes. In EU countries, this is preceded by the adoption of EU Directives. The Basel Committee's rules have previously been more general in scope than EU Directives, however, although Basel II proposes more comprehensive, detailed regulations for banks, which the EU intends to implement, but which are fairly flexible on many points. For instance, the EU intends for the Basel II rules to apply to all banks and other credit institutions and not only those with international operations. This in turn increases the need for coordination and the sharing of information between supervisory authorities and central banks in the EU.

barriers to competition between companies from different countries. In other words, the common regulatory framework aims to increase financial integration by facilitating cross-border establishments and by creating competition neutrality for banks and other financial institutions in different countries. The fact that an increasing number of banks have expanded into foreign markets could be a part result of this.

In the development of the common regulatory framework and the integration of the banking systems, the work on cross-border systemic risk has not kept pace. The common rules have only to a small extent taken into consideration the changed conditions for stability efforts that have resulted from integration.

As EU-wide regulations are adopted through negotiation between all Member States, the process of producing new rules can sometimes be lengthy, not least given the relatively large number of rules that have required reform in the EU. With a view to accelerating the process, the EU drew up a plan in 1999 (Financial Services Action Plan) containing 42 points that will be implemented by 2005 so that the single market for financial services can then be considered a reality. Three-quarters of the points have already been put into effect. A large proportion of these relates to the securities markets. In order to enable all the measures to be implemented within the appointed time, it was also necessary to make the process for producing the new rules more efficient. This has been achieved with the introduction of the Lamfalussy process for securities markets, which now also applies to banking and insurance issues.

Briefly, the Lamfalussy process limits the work in the EU Council of Ministers to adopting framework legislation, while the work on technical implementation measures is delegated to particular committees for banking, insurance, securities and conglomerates. The Commission will continue to be responsible for producing proposals for such regulations. The application of framework legislation and regulations provides the scope for national practices in each country. The objective of the new structure is partly to enhance the ability to adapt the regulations to new conditions relatively quickly. The Council of Ministers has also established a special committee to monitor developments in the financial sector as a whole with a view to giving advice through the Economic and Financial Committee on additional measures.

As discussed above, a common regulatory framework is often a precondition for far-reaching integration of the financial sector, and in this sense the work in the EU is a positive step. At the same time, there is a risk that the framework itself may hamper the financial sector's development. There are tendencies that the Lamfalussy structure of framework legislation, rules and national implementation is not being put into effect as planned. The framework legislation is inclined to be overly detailed and the rules that are supposed to elaborate the framework legislation contribute further to this. Meanwhile, national regulations are not being tidied up as required, which is why there is relatively detailed regulation at three levels at the same time as national practices vary. This in turn will counteract the efficiency that the single market aims to achieve. In the Riksbank's opinion, the development of rules in the EU should comply more closely with the intentions of the Lamfalussy structure and focus on the areas in which the rules can indeed be considered necessary for integration.

DAY-TO-DAY PRUDENTIAL SUPERVISION AND SYSTEM OVERSIGHT

System stability is overseen on a day-to-day basis at both institutional and system level.

Prudential supervision of individual banks is carried out in Sweden by the Swedish Financial Supervisory Authority (Finansinspektionen) and in many other countries by its equivalent. In some other countries, the central bank is responsible for this task. There is no international supervisory authority, for example, at EU level. For this reason, with a view to facilitating prudential supervision of international banks, the supervisory authorities of different countries have drawn up both bilateral and multilateral memoranda of understanding. Furthermore, the supervisory authorities in the EEA cooperate in *Groupe de Contact*, the aim of which includes coordinating and formulating principles for how prudential supervision is conducted. This is done by sharing information and experience, as well as by developing *best practice* solutions in the field of prudential supervision. The group will be given more official status in the future when it is made a working group in the above-mentioned committee structure for banking issues.

For supervisory authorities the principle of home country supervision applies, as described in the introduction. The idea of the home country principle is to facilitate bank expansion in other countries by making them subject to prudential supervision by one country's authorities only. The same principle applies to the deposit guarantee. According to EU regulations, all EU Member States must ensure a certain minimum amount for deposit protection that covers all customers in Member States where the bank has a licence.

Oversight of system stability at national level is carried out in most countries by both the central bank and the supervisory authority, but with a somewhat different focus. In order to manage the international dimension of system stability, the central banks and supervisory authorities of the ESCB cooperate in the Banking Supervision Committee (BSC). The Committee has two principal tasks, namely to monitor and analyse macroeconomic and structural developments from a financial stability perspective[62], and to promote cooperation between supervisory authorities and central banks. This task may be adapted once the new Lamfalussy structure has been established fully.

The current structure for prudential supervision and system oversight is showing signs of certain weaknesses in terms of its ability to manage the integrated financial system that is presently evolving.

Since the responsible authorities are national and accountable to their respective parliaments and taxpayers, their work will primarily be

62 The work on these two tasks is carried out in two different working groups: the Working Group on Macro Prudential Supervision (WGMA) and the Working Group on Banking Development (WGBD).

focused on safeguarding the interests of their own economy. Thus, there is a risk that the home authority will allocate resources in proportion to the bank's significance for the national system and economy, regardless of its significance for the other countries where it operates. This could be a problem in several different situations, but especially in the case of a large branch in the host country. There are currently no clear examples of such a situation, although Nordea is planning to reorganise from a subsidiary to branch structure, after which Finland's biggest bank entity will be a branch of a Swedish bank. When the EU is enlarged with a number of new Member States, it is also conceivable that some of the foreign-owned banks that dominate these countries' banking systems will decide to go from subsidiary to branch structure. In these cases, the home authority may not take account of the host country's system stability in its oversight of the branches. This could prove particularly problematic if the branch is also small in relation to the parent bank or if the parent bank is small in the home country. In such situations, the bank may not even be supervised to the extent that would normally be warranted by its size in the host country. This is unlikely to be accepted by the host authorities, but it is also doubtful that current EU legislation provides grounds for carrying on prudential supervision in any other way.

These arguments also apply in principle to consolidated supervision where a banking group has a subsidiary structure. The host country is indeed capable of supervising the subsidiary, but as a rule a consolidated perspective is required to enable satisfactory prudential supervision. This perspective is important because there are often strong financial connections between different parts of a group and also because exposures and risks can often be redistributed quickly within the group. Estonia's banking system is essentially composed of three foreign banking groups. The failure, for instance, of one of the Swedish parent banks could very well result in the Estonian financial system being unable to fulfil its basic functions. So it would not be surprising if Estonia were not content with supervising the local subsidiaries, but also demanded to participate in the consolidated supervision of the Swedish and Finnish banking groups. Such demands are made today by a country whose system is less dependent on foreign groups than Estonia's.

Even in cases where the parent bank's country would be prepared to take account of other countries' systems when carrying out prudential supervision and oversight, the question is whether they would be able to do so in practice. Taking account of systemic importance in assessments is difficult, even in the home country. To judge the significance of an individual bank for the functioning of another country's financial system without also overseeing the other participants in the system would seem practically impossible. When it comes to prudential supervision, however, systemic importance should not be exaggerated. Effective supervision aims to reduce the probability of bank failure. If this is performed well by the home authority, it will also benefit the host country's authorities. The problem becomes more serious for crisis management, which is discussed in the next section.

Consolidated supervision of international groups entails coordination problems and also risks leading to considerable duplication of effort, as the supervisory authorities in all countries where the group has a large presence will strive to attain a consolidated assessment of the bank's position. Moreover, the sharing of information between countries entails a risk that important information will never be conveyed, as reporting countries have difficulty determining what constitutes relevant information due to their lack of an overall view of the group. For the same reason, and because they do not have a detailed knowledge of the foreign markets in which the bank operates, the authorities in the receiving country find it difficult to specify what information they wish to receive.

In all, there does not appear to be any lack of incentives to carry out prudential supervision of cross-border banks. Rather, the problem is that regulations in some cases prevent the countries that are most eager to do so from carrying it out and that oversight of systemic risk is in danger of falling between two stools. If, on the other hand, all countries in which a bank has substantial operations were to carry out consolidated supervision, the bank would risk being over-supervised, which would obstruct integration of the financial markets and hamper efficiency. There is also a risk of lapses in communication when authorities attempt to coordinate prudential supervision by supervising their respective parts of a group, as no authority would have an overview of the group as a whole.

The finance ministers and central bank governors in the EU have on various occasions discussed whether the current structure for regulation and prudential supervision of financial activities is capable of ensuring financial stability in the Union. In the first Brouwer Report from April 2000, various proposals were put forward for how cooperation between banking supervisors could be made more efficient, particularly in terms of supervision of different areas of the financial system. This issue has been followed up at informal meetings of the ECOFIN Council, where discussions of financial stability in the Union are now a recurring item on the agenda.

CRISIS MANAGEMENT

The need for the third aspect of the authorities' efforts to safeguard the functions of the financial system – crisis management – arises because the government may need to act to prevent a crisis that threatens system stability. The main threat involves one or more banks that are central to the payment system encountering financial difficulties. Thus, crisis management includes assessing the implications of such a bank suspending payments and possibly failing, and even taking measures to mitigate these effects on the functioning of the financial system. Such measures could entail ensuring an orderly liquidation or reconstruction of the bank. In some cases the government may need to provide financial support so as to avoid a crisis in the whole system. One example of this was the general bank guarantee issued by the Swedish government during the banking crisis.

In order to prevent a bank from suspending payments due to a liquidity shortage and thereby stave off a potential systemic crisis, a central bank can as a rule provide emergency liquidity assistance (ELA). However, such assistance should only be given to banks that are capable of surviving in the long run so as to avoid an unsuitable market structure and the problem of moral hazard. If financial support must be given to a bank that lacks long-term solvency, this should be financed through the central government budget and agreed upon through the normal channels, usually in parliament following a government proposal. In addition to providing ELA, the central bank generally also has the task of providing information in a crisis situation, which involves informing the markets of whether or not a particular disturbance constitutes a threat to the stability of the financial system.

Crisis management is closely connected to day-to-day prudential supervision and oversight. Oversight of system stability is a precondition for being able to ascertain whether a financial crisis in one or more banks threatens stability. A continuous analysis of the banks is also essential for being able to assess their financial position in a crisis situation.

The new arrangements that have been established to enhance cooperation between different supervisory authorities have therefore also improved the situation for crisis management, even if there remains a need to refine the European cooperation and the delineation of responsibilities. A first step towards greater cross-border cooperation for crisis management has been taken by the Banking Supervision Committee within the ESCB. This arose through the signing of an agreement regarding cooperation between different authorities in crisis situations. The agreement concerns practical arrangements such as the sharing of information. A working group, which the Riksbank currently chairs, has also been established under the Banking Supervision Committee to deal with crisis management issues. Moreover, the finance ministers and central bank governors in the EU have backed a number of measures recommended in the second Brouwer Report. For example, these call for greater international sharing of information regarding how crises may actually be dealt with by national authorities.

One problem here is that crisis management cannot be formalised in the same way as the regulatory framework or the day-to-day oversight. The need to manage crises seldom arises, which has resulted in a less distinct division of responsibilities and structure for how different public authorities should act and for what options are available.

In addition, crisis management is often perceived as sensitive and difficult to discuss in advance. This is particularly due to the fact that crisis management is partly a question of government willingness to provide financial assistance to the financial sector. Different countries have different experiences. Those that have encountered a crisis consider transparency and definite limits to be a way to lessen expectations of similar rescues being performed in all crisis situations (the problem of moral hazard). Other countries that have not encountered a crisis sometimes believe that the best way to counter moral hazard is to keep the financial sector in a state of uncertainty as to whether financial resources will be used. The government's possibilities for making use of the budget and thereby the right to levy taxes are the ultimate guarantees for crisis management.

Still, given the large amounts of money involved, and the fact that decisions are often made quickly and under great uncertainty, it is important to create means for managing crises when they arise. All financial crisis are different, however, which makes it difficult to have formalised regulations for how authorities should act. Therefore, these means should be flexible enough to be used in different kinds of crisis. One such means could be the possibility for the government to take temporary control of banks in financial difficulty.

All of this makes responsibility for crisis management a difficult issue for banks with extensive operations in a number of countries. If the failure of one such bank risks threatening stability in the financial system of several countries, crisis management will also have to be carried out by several countries. This places great demands on the ability of authorities both within each country and between the countries involved in a crisis to cooperate with each other. For instance, a bank with operations in three countries would require cooperation between six to nine authorities – supervisory authorities, central banks and ministries of finance.

Thus, it is not unlikely that coordination problems would be encountered in crisis management, as would conflicts of interest when spreading the costs. In cases where a bank branch or subsidiary is large in the host country, but the parent bank is small in the home country, it is unlikely that the home country would be willing to bear any costs associated with a rescue. Instead, the host country may be forced to ensure in some way that the foreign group's operations will continue. The host country would have to do this without having been able to influence the situation until the problems materialised and without having satisfactory insight into the group's structure or financial position. One such example is Nordea, which is not in all circumstances systemically important in its home country Sweden[63], but which has a subsidiary bank in Finland that comprises some 40 per cent of the Finnish banking system. So the Finnish authorities would have much greater reason than their Swedish counterparts to act in a crisis situation. It is therefore very difficult to say in advance how a crisis in Nordea would be managed. However, there is no doubt that it would place considerable demands on the countries' authorities to cooperate with one another.

It should be underscored that there is a big difference between the ability of a host country authority to manage a crisis in a branch compared with a subsidiary. A subsidiary is a separate legal entity, which under certain circumstances could continue to exist even if the parent bank were to fail. The risk is great, however, that the problems would spread from the parent, for example in the event of large intra-group credit exposures. A branch, on the other hand, is the same legal entity as the home country bank, which means that it fails if the home bank fails. The only option open to the host authority is to attempt to safeguard the branch's assets and use them to settle claims on the branch held by

63 See Financial Stability 2003:1, "Can a bank failure threaten the payment system?"

creditors in the country. This was done successfully by US authorities when BCCI failed some ten years ago, although it is not likely to be feasible in all situations.

If a cross-border bank were to fail, it is improbable that either the politicians or the authorities in the respective countries would be willing to risk taxpayers' money to guarantee stability in countries other than their own. This could prompt the concerned countries to try to ring-fence the bank's assets in their own country with a view to minimising the costs to the domestic economy, or not to intervene at all in the hope that other countries in which the bank has a bigger presence feel forced to act. The result could be a suboptimal resolution of the crisis that proves costlier or that produces greater adverse effects for all the countries involved.

THE INTEGRATION OF BANKING SYSTEMS HAS IMPLICATIONS FOR PRUDENTIAL SUPERVISION AND CRISIS MANAGEMENT

As an increasing number of EU countries are going to have cross-border banks within their boundaries, either through the presence of a parent bank or foreign bank, the need to change the current system is growing. There are two main courses of action for dealing with cross-border banks and the implications they have for system stability, both of which entail advantages and disadvantages.

The first is the course of action mainly seen so far: cooperation within the scope of agreements, common principles and framework regulations. As discussed previously, there is a risk that this kind of solution may result in insufficient oversight of cross-border systemic risk and inefficient crisis management. Such shortcomings can be reduced through various kinds of bilateral agreements betwen the concerned countries and through ongoing discussion of the aspects of system stability related to cross-border banks. In spite of such efforts, there is a risk that problems will persist, especially with regard to crisis management since crises seldom occur and because it is difficult to make international agreements precise enough to ensure that all crises can be managed speedily enough or that the legislation of each country allows an optimal solution for the countries concerned.

The other course of action is a more supranational form of prudential supervision, system oversight and crisis management. In other words, the responsibility for these three tasks is borne by one or more international authorities. Given the current view that the central bank's role in crisis management is to provide ELA to solvent banks and the ministry of finance's role is to manage other matters when a bank failure could threaten the functioning of the financial system, it is possible to see the ECB as a supranational provider of ELA and the Council of Ministers or the EU Commission as responsible for other crisis management.

Empowering the ECB to provide ELA appears feasible as regards euro area countries. One problem, however, is that cross-border banks do not operate in the euro area only. Consequently, in order to act as lender of last resort for the EU, the ECB would have to be able to provide

ELA in currencies other than the euro. Also, it would be necessary to oversee the systems that this function intends to maintain, like the oversight carried out by national central banks. Thus, the ECB would have to regularly oversee both the different banking systems of the Eurosystem and also be capable of assessing whether the participants that are important in these systems had solvency or liquidity problems.

Neither is the current organisation of the Council of Ministers optimal for crisis management, since the Council's decision-making powers are influenced by national interests. Conflicts of interest regarding the spreading of the costs for a rescue, for example, would therefore remain. It is also difficult to see how the Council of Ministers or EU Commission could be ultimately responsible for system stability in the EU. Effective crisis management requires substantial financial guarantees or capital injections to create credibility for a rescue of an insolvent bank. As the EU does not have the power to levy taxes, the current regulatory framework would require the Council of Ministers or EU Commission to negotiate with individual countries over these capital injections, which would only recreate the current problems.

The supranational solutions also present new problems. Countries will want to continue to ensure the functioning of their national system as long as the principal systemic risks are not at EU level. Consequently, they will want to retain prudential supervision, national system oversight and the power to provide ELA so as to guarantee the functioning of their own system. A supranational supervisory authority therefore risks leading to duplication of effort, a heavier burden for the supervised banks, and new conflicts of interest and coordination requirements between the different countries and the EU and ECB.

At the same time, as pointed out above, it seems that international systemic risk tends to arise at regional rather than European level. Perhaps solutions could therefore be sought through agreements and cooperation on a regional instead of at an EU-wide level. It is likely that a combination of increased cooperation and greater supranationalism will be needed to achieve more effective prudential supervision, system oversight and the ability to carry out crisis management at international level.

One possibility that has been discussed is to create a supervisory coordination authority and make the national authorities accountable to it.[64] The authority would assess prudential supervision and crisis management at national level and intervene when national interests are given priority over international ones. It could also have the right to impose sanctions on the individual countries.

A first step towards such an authority could be a multilateral agreement that lays down principles for how prudential supervision, system oversight and crisis management should be carried out for cross-border banks. The agreement would then be given a more concrete form by the countries in which a specific bank operates, including a clear delineation

64 See Stolz, Stéphanie. (2002), "Banking Supervision in Integrated Financial Markets: Implications for the EU", CESfio Working Paper No. 812.

of responsibilities and distinct routines for prudential supervision, system oversight and crisis management.

Another possibility would be to make a supranational supervisory authority responsible for cross-border banks of a certain size, as well as for oversight of cross-border systemic risk, while smaller banks would remain under national supervision. This is similar to the division that exists between federal and state level in the US regarding banking supervision. Still, this would not resolve the issue of crisis management and national interests.

Crisis management is more difficult to formalise than prudential supervision. Nevertheless, the legislation that governs insolvency and bank failure is the framework within which crisis management is carried out. Greater harmonisation of these rules within the EU would at least lay the foundations for better-coordinated crisis management between different countries. Elaborate rules for the management of bank crises are also largely non-existent at national level in the EU countries. This could perhaps advocate the introduction of a common regulatory framework by the EU. At the same time, such frameworks involve giving some discretionary powers to an authority, such as the power to take control of the operational management of a bank, which means that conflicts of interest between countries could nevertheless remain and prove difficult to manage. An EU body could also take on the role of honest broker between countries so as to enable greater overall benefits than if each country were to act solely in its own interests.

Summary

The financial integration that the harmonisation of the EU countries' financial regulations aims to achieve is beginning to become a reality in several areas of the Union. The integration has resulted in greater interdependence between the banking systems of different countries as well as in higher cross-border systemic risk. Problems in one country's banking system risk spreading to the banking systems of other countries through the cross-border banks. Thus, cross-border systemic risk is mainly found in countries where cross-border banks operate on a large scale. The risk will become even more pronounced in conjunction with the accession of a number of countries to the EU next year, as several of them have banking systems that largely comprise cross-border banks. At EU level, systemic risk is relatively limited and is primarily attributable to banks' activities in the interbank market.

The current approach to dealing with cross-border banks is mainly focused on supervising individual institutions. It is geared only to a small extent to overseeing cross-border systemic threats and to an even lesser extent to managing cross-border systemic crises. Thus, the prudential supervision and oversight of banking systems need to be developed, as does the organisation of crisis management. It is difficult, however, to specify in detail what form such a change should take; both the current approach involving bilateral and multilateral cooperation and a solution based on increased supranationalism entail problems.

Nevertheless, it is likely that a new regulatory framework will need to include elements from both of these approaches, in other words that current rules will have to be supplemented by a certain amount of supranationalism so as to get around the coordination difficulties and potential welfare losses that risk arising due to the retention of a national perspective. However, the main responsibility for prudential supervision, system oversight and crisis management should remain at the level where banks carry on the significant part of their operations and where systemic risk mainly exists.

A cross-border bank crisis that is managed unsatisfactorily or that could have been prevented through better cooperation between the authorities of different countries could jeopardise the incipient integration of the European financial markets. Thus, it is important to identify the problems that are caused by the current developments and to continue the discussion of how they can be resolved.