

# ■ Crisis exercises make for crisis readiness

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*At 9 a.m. on a Monday morning the Governor of the Riksbank gets a call from the managing director of a major Swedish bank and hears that during the weekend a large fraud in the bank was uncovered. The head of the bank cannot be sure that the bank will have sufficient liquidity in the course of the day to meet its commitments, including those in the RIX payment system. The same message has been sent to Finansinspektionen. A scenario such as this is not uncommon in the run-up to a crisis situation.*

## General crisis preparations and their inadequacy

The financial crises<sup>1</sup> in many countries, including Sweden, in recent decades have prompted a rapid development of various instruments, organisations and processes for crisis prevention. So we now have broad and growing experience and theories about optimal ways of managing crises of different kinds and with different courses.

In Sweden, proposals for improving crisis management have been submitted by the Banking Law Committee;<sup>2</sup> they include a legal structure for the temporary protection of banks from creditors' demands for bankruptcy proceedings as well as a crisis management authority that would take over the responsibility for one or more banks in a crisis. The Riksbank in turn works continuously to develop both the system for large-value payments (RIX) and other parts of the financial infrastructure to enhance their resistance to shocks. Another regular concern of the Riksbank is how its function as lender of last resort (the possibility, under certain conditions, of supplying emergency credit to a bank with liquidity problems) should be used in a crisis. The Deposit Guarantee Board has established

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<sup>1</sup> In this article I use the term "crisis" in the wide sense of problems in one or more banks, other major financial institutions or systems for financial infrastructure that, if they are not resolved, constitute a potential threat to the stability of the financial system.

<sup>2</sup> See *Sveriges Riksbank Economic Review*, 2000:3, pages 64–92. The proposals are being considered at present in the Finance Ministry.

procedures whereby deposits can be paid out promptly to account-holders in the event of a crisis. Finansinspektionen (the Swedish Financial Supervisory Authority) has concluded a memorandum of understanding (MoU) with the Riksbank as well as with supervisors in other countries concerning cooperation in crises. Moreover, an MoU on the management of a crisis in a cross-border banking group has been set up between central banks and banking supervisors in the Nordic countries. There is also a similar MoU between the corresponding authorities in EU countries.

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The reinforcement of both national and international crisis management stems from an awareness that a crisis in a bank or a payment system can arise at very short notice.<sup>3</sup> There is then no time to institute laws and regulations, perhaps not even to produce interpretations of existing rules. Moreover, fundamental functions such as the collection and analysis of essential information need to work quickly in a crisis. The ways in which information is handled must also be carefully thought-out – many bank crises have been exacerbated by information that is imperfect or uncoordinated.

Many countries have made general preparations for a crisis. They have constructed the requisite legislative framework. *Crisis management schedules* are available in the filing cabinets of central banks, supervisors and finance ministries.

**The Riksbank has found that general crisis preparations are not enough.**

In the Riksbank's experience, this is not enough. General preparations are of limited use if they have not been tested in the reality of a crisis situation. Laws may turn out to lack provisions for handling a particular situation; it may not be clear which authority, or which person or department in an authority, or even which country is to take the lead in the management of a specific crisis; solutions planned in advance may be hobbled by conflicting political forces. Even such basic matters as a lack of up-to-date information from distressed banks and payment systems may make it more difficult to cope with a crisis. Last but not least, the stress inherent in such situations may mean that key individuals in crisis management perform less well.

Another way of putting this is as follows. There is now an extensive set of rules for the management of financial crises and these rules have been interpreted in the analyses and policy decisions of various authorities and organisations, not least in international fora. But virtually all the established rules and policies are designed for applications under certain given conditions, for instance that distressed banks have adequate high-

<sup>3</sup> Unlike the case in Sweden, where in the early 1990s problems in the bank sector grew gradually and gave the authorities a certain amount of time to construct the laws and regulations that were needed to handle the crisis.

quality collateral at their disposal. In an acute financial crisis these solutions are often inapplicable because the conditions are different. Working against the clock, the decision-makers then have to improvise so as to comply with current rules and procedures while adapting to the situation at hand. Experience of decision-making in an uncertain environment shows that the preferred solutions tend to be those that seem *safe* (for instance in the sense that they minimise the risk of subsequent criticism) but are not necessarily optimal for the particular situation. If the crisis managers do not feel secure in their roles, there is also a greater risk of irrational decisions, influenced for example by current political considerations. A desire to minimise the risk of undue influence can lead in turn to rules and manuals being excessively detailed and constrictive, leaving less scope for adapting decisions to a particular crisis.

## Practical crisis exercises

The Riksbank considers that some of the problems mentioned above can be reduced by devoting a relatively large part of the authorities' crisis preparations to *practical crisis management*. Many very different matters come under this heading, ranging from cooperation agreements between authorities and countries to crisis management routines and practical aids such as *crisis manuals*. They are all important and contribute to sound crisis management. MoUs are needed so that, for example, it is clear when an authority is legally entitled to depart from the standard of confidentiality that normally applies and exchange information in a crisis. Crisis routines are important for a swift initiation of analyses and decisions when signs of a crisis are detected. Crisis manuals are efficient tools for locating key information without delay. All this aims to speed up and facilitate crisis management.

One component of crisis management the Riksbank considers particularly important and has therefore emphasised both nationally and internationally is practical crisis exercises in forms that are simulated but do resemble reality. For some years now the Riksbank has been arranging such exercises regularly.

Here is a summary of the Riksbank's exercises to date and their primary focuses:

1. Such exercises for one or more departments at the Riksbank have been arranged in recent years with the participation of the Bank's *managerial group for crises in the financial system*. A common aim of the exercises has been to test the Riksbank's function as a supplier of emergency liquidity assistance to banks that are illiquid but

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solvent in a situation where the financial system's stability may be threatened. Another purpose has been to exercise the Riksbank's organisation for crisis management. The exercises have also served to test and improve the Riksbank's function of providing information in a crisis. The issue of sharing information in a crisis is in fact a common theme of most crisis exercises (aspects of information are considered in more detail on page 13–16).

2. Two exercises have been held with joint participation by the Riksbank and Finansinspektionen. An important purpose in these cases has been to exercise cooperation between the two authorities in a crisis institution because the former is responsible for the stability of the financial system as a whole and the latter supervises the individual credit institutions. The exchange of information between the Riksbank and Finansinspektionen in a crisis situation is dealt with in general terms in the MoUs mentioned earlier (bilateral between these two authorities in Sweden and multilateral between all the banking supervisors and central banks in the European System of Central Banks). Joint exercises of a practical nature lead to more precise applications.
3. A joint exercise by the central banks and banking supervisors of the Nordic countries was held in summer 2002 against the background of the growing prevalence of cross-border banking establishments in this region and the problems this may entail for handling a crisis in such a bank. The theme of the exercise was therefore a crisis with different effects for a banking group's<sup>4</sup> different subsidiaries located in the Nordic countries. The exercise contributed to the Nordic central banks' discussions of an MoU<sup>5</sup> on cooperation in a crisis situation.
4. A crisis exercise was organised in Stockholm at the Riksbank by an ECB working group<sup>6</sup> in September 2003. The participants represented virtually all the central banks and supervisory authorities in the fifteen EU countries. The theme of the exercise was a crisis in a (fictitious) large European bank with establishments in several countries. One of the purposes was to test the application of the multilateral MoUs between the countries' central banks and bank-

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<sup>4</sup> The scenario featured Nordea, not because this bank was considered to have any current problems but because its structurally complex organisation, with extensive establishments in a number of countries, calls for effective cooperation between the competent authorities under normal circumstances as well as in the event of a crisis.

<sup>5</sup> This MoU was subsequently signed in June 2003.

<sup>6</sup> The Task Force on Crisis Management, chaired by Lars Nyberg, a Deputy Governor of Sveriges Riksbank.

ing supervisors concerning the exchange of information in a crisis situation. Another purpose was to make a larger group of authorities and countries more aware of the benefits of crisis exercises.

As indicated above, crisis exercises are needed at different levels and from different aspects: the choice of participants, what to exercise and the form of the exercise (on the latter, see the Appendix). It is hardly surprising that crisis exercises have been initiated by the central bank, not just in Sweden. It is the central bank that administers the central payment system in many countries, besides being generally responsible for the safety and efficiency of the financial infrastructure. The central bank is also answerable for the supply of emergency credit to banks and other financial institutions with liquidity problems. Early signs of an acute banking crisis are likely to be discernible in the payment system and in the worst case, contagious effects will spread through this system. For a bank in a liquidity crisis, emergency credit may be a first line of defence to keep the bank operational. In both these cases the central bank may be obliged to make a very quick decision on the basis of incomplete information. That it was Sweden's central bank which arranged the first exercises in the management of financial crisis has to do with the country's experience of a bank crisis in the early 1990s.

It is also natural for a central bank and the banking supervisor to have joint exercises because they complement each other in a crisis. The information about the distressed bank and other financial institutions and markets that is available to the supervisor is vital for assessing what measures may be needed. The supervisor is also in a position to obtain up-to-date information by visiting the bank at short notice. Including the finance ministry in crisis exercises, as is now planned, is also meaningful as a way of broadening the context to include overall considerations to do with solutions that involve the financial structure in general. Moreover, in a crisis the finance ministry has the important function of drafting decisions by the government and parliament on solvency support, legislation and other measures. Multinational exercises are increasingly warranted as banks extend their operations and establishments to other countries so that crises are liable to spread across national borders.

The Riksbank has found that practical crisis exercises are a very useful complement to crisis preparations in terms of principles and policies. There have been several instances of exercises revealing shortcomings and obscurities in laws and regulations. Exercises have resulted in policies being made more concrete and thereby more practical in specific crisis situations. The requisite data and other information have been specified. Processes for spreading information have been refined. Basic material for

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resolving crises – lists of people to contact, telephone numbers, telephone filters,<sup>7</sup> check-lists – has been augmented. The arrangements for external cooperation between central banks, supervisors and finance ministries have been reassessed, including the cross-border procedures where applicable. Last and perhaps most important, the individuals who would have to work together in a real-life crisis have been trained in this, leading to greater self-assurance about factual matters and greater safety in crisis resolution under pressing circumstances. The exercises have also generated better personal relationships inside and between the authorities. The exercises have become increasingly worthwhile as scenario-writers and participants have grown accustomed to their design. This has resulted in exercises that are broader and deeper.

## The purposes of practical crisis exercises

As indicated above, a crisis exercise can serve a variety of purposes. A systematic classification yields three categories: facts, cooperation and logistics.

The facts category includes:

- testing how existing laws, rules and processes work,
- discovering and being aware of consequences of *omissions* and shortcomings in laws, rules and processes, so that appropriate action is taken,
- testing existing preparations for crisis management, such as the content of *crisis manuals*, and
- establishing the information that must be available in a crisis.

**The exercises often result in the participants discovering that laws, rules or processes have not been adequately designed to deal with the specific crisis situation.**

As mentioned earlier, the exercises often result in the participants discovering that the general nature of laws, rules or processes makes them inadequate for dealing with a particular crisis situation. A mandate may be lacking for the central bank or supervisor to decide a certain measure or there may not be time in an acute situation for the government or a law court to reach a decision. Such deficiencies can be detected during an exercise, so that steps are taken to rectify them. At the same time, there are numerous situations that neither can nor ought to be regulated in advance. Such *over-regulation* could be counter-productive by reducing the scope for flexibility when resolving a crisis. In certain situations, more-

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<sup>7</sup> Read more about this in the section on information issues.

over, some uncertainty may be desirable for the normal functioning of the financial market.

A clear example of the latter is a phenomenon that can be called *constructive ambiguity* in connection with the utilisation of the function of lender of last resort. It can be difficult to interpret the general principles for emergency liquidity and apply them in an acute situation that requires the central bank to take highly important and potentially costly decisions at very short notice despite imperfect information on the solvency of the bank in question and whether or not the crisis jeopardises the financial system's stability. The decision-makers are often also under external pressure from politicians, owners of the distressed bank and other interested parties. For these reasons, the implementation of the central bank's emergency liquidity function has been a prominent theme in virtually all crisis exercises to date.

It is wrong to suppose that a crisis exercise should be designed so that there is only one *correct solution* and the participants can be expected to reach uniform and *correct* decisions. The Riksbank considers, on the contrary, that the scenario for a good exercise should be compiled so that the participants are uncertain what the optimum decisions would be, as that is usually the case in a real-life crisis. In the Riksbank's opinion, a successful exercise is one where the information provided is interpreted differently or where the various authorities or countries arrive at different decisions on account of conflicting rules and interests. It is just such outcomes that can stimulate continued discussion and lead, if necessary, to changes in laws, rules and processes.

The cooperation category includes:

- joint exercises for individuals, functions and units in an organisation,
- exercising cooperation and information exchange in a country, for example between the central bank, supervisors and the finance ministry,
- exercising cooperation and information exchange between organisations in different countries, and
- developing contacts and confidence between individuals as well as organisations.

Those with experience of a *real-life banking crisis* are aware of the special circumstances that apply when handling an acute crisis. Major decisions – often involving large financial and political risks – have to be made under stress and in the light of imperfect information. Under such conditions,

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people react differently; some perform less well than usual, others grow with the difficulties. Although crisis exercises can never be fully as realistic as a *real-life crisis*, experience has clearly demonstrated that they can be sufficiently real to give the participants insights into how they and their colleagues react to a crisis. Exercising crisis routines enhances the ability to function efficiently in a real-life crisis. Establishing contacts between individuals as well as organisations, even between countries, is important, too. Mutual acquaintanceships and mutual confidence make contacts during a crisis much easier. A good example is the situation during and after 11 September 2001, when informal networks were quickly formed, nationally as well as internationally, between people who already knew each other. That made it easier to work out procedures for exchanging information and taking common steps to support the financial markets.

The logistics category includes:

- testing that the physical conditions for efficient crisis management work, e.g. telephones, telefax, computers, premises and relocations (if called for).

**Earlier crisis preparations have tended to overlook logistics.**

Earlier crisis preparations have tended to overlook logistics, probably because their significance for crisis management was not properly understood. They have therefore been thoroughly tested in a number of the Riksbank's crisis exercises and a number of potential problems have been detected. An example of such problems is that, in the event of a crisis, those ultimately responsible for managing it – the Riksbank's managerial group for crises in the financial system – are liable to have their official telephones jammed by all the calls from journalists, politicians and people in general. In order to safeguard the group's essential lines of communication, internally as well as externally, this calls for separate *crisis telephones* with unlisted numbers and *telephone filters* to distribute incoming calls. Such changes to the crisis preparations have now been made.

In most of the crisis exercises to date, these three aspects – facts, cooperation, logistics – have been tested together. But there have been situations where it proved more appropriate to tailor an exercise for a narrower topic. In 1999, for instance, an exercise was held on the theme: *How to manage a crisis in a bank in the event of IT problems connected with the millennium changeover*. Another, considerably broader theme for tailor-made crisis exercises has been the handling of issues to do with information.



## Information issues in a crisis

Information issues are almost always a central feature of practical crisis exercises because information as such is an important component of crisis management. Insufficient or faulty information hampers the analysis of a crisis. Crises have actually been exacerbated by information that authorities or other parties provided without due consideration. Communication experts therefore need to be attuned to experts in factual matters so that they understand each other's arguments and arrive together at solutions that represent the best combination of knowledge about the facts and knowledge of how information should be provided. Communication functions also need to be tested under severe external pressure in terms of time, the volume of incoming queries and the awareness that even minor mistakes in the supply of information can be major setbacks in crisis management. Crisis exercises are also necessary to identify just what information is required in different crisis situations and where it can be obtained.

### INCOMING INFORMATION

In order to gauge the extent of the crisis and propose countermeasures, the authorities must have quick access to topical information, for instance about the distressed bank, its creditors and other counterparties (e.g. in clearing and payment systems), other financial institutions and the financial markets in general. When international banks are involved, information is also needed about operations in other countries. What matters most for crisis management by the Riksbank is information about the current liquidity and solvency of the distressed bank, together with its positions in different payment and clearing systems.

The Riksbank must know what information it requires, where it can be obtained and how to analyse it. While much of this can be planned under normal conditions, it is the specific nature of a particular crisis that dictates the detailed requirements in terms of information and analysis. Crisis work can be speeded up if check-lists have been prepared for the collection of information. The Riksbank must also make arrangements with other authorities and banks to ensure that the requisite up-to-date information will be available at short notice. As many of the regular reports to Finansinspektionen are produced periodically, in a crisis the existing information will probably have to be updated. The banks' information systems need to be constructed so that crucial information can be generated at short notice, for instance on liquidity positions and counterparty exposures in the next few days. If that is not possible at present, then Finansinspektionen and/or the Riksbank should require the banks to improve their systems.

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**The authorities must have quick access to topical information in order to gauge the extent of the crisis and propose countermeasures.**

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**It is important to ensure in advance that there are no legal obstacles to the collection of information.**

Of course it is also important to ensure in advance that there are no legal obstacles to the collection of information. In a crisis situation, rules of confidentiality concerning *bank-strategic information* must defer to the provision of information to the authorities that are handling the crisis. Undertakings to exchange additional information in a crisis situation are a feature of many national as well as bilateral and multilateral MoUs.

#### OUTGOING INFORMATION

**The causes, development and resolution of financial crises are often a reflection of confidence.**

The causes, development and resolution of financial crises are often a reflection of confidence. A bank that lacks people's confidence can experience a flood of withdrawals. The supply of liquidity may dry up for a bank that is not credible in the eyes of its interbank counterparties. If the authorities do not inspire confidence, the crisis will be more difficult to manage and may even be exacerbated. Confidence can be created/eroded by adequate/inadequate information. Many bank crises have arisen or grown because information was insufficient or faulty in that, for instance, bank managements and authorities issued conflicting statements.

**The Riksbank considers it important to have relatively far-reaching plans for handling information issues in a crisis.**

As a consequence of experience from Sweden's bank crisis, the Riksbank considers it important to have relatively detailed plans for handling information issues in a crisis. These plans have been tested in practical crisis exercises under simulated real-life situations. Some of the aspects have been:

- How will questions from politicians, media, the banks' counterparties and people in general be handled?
- Are the authorities to provide information freely or to a limited extent?
- Which channels are to be used for information?
- How is coordination arranged between authorities, with market players and, if relevant, with other countries and international organisations?

The crisis exercises have demonstrated the importance of ensuring that incoming questions are answered promptly in a way which shows that the competent authorities know about the banking problem in question and are working for a solution. It may also be appropriate to publish the time when more specific information will be provided at, say, a press conference. At the same time, the exercises have shown that until a decision has been made, in many cases it is not advisable to discuss the current situation or conceivable solutions in public because this may create premature and unsubstantiated expectations and reactions. This applies to crisis exercises with a short time horizon. In a more protracted crisis, a public

debate can on the contrary help to build up confidence, though there is a risk of confidence being eroded if the government and authorities fail to handle the debate properly.

In order to minimise the risk of conflicting messages, the right to issue information in a crisis situation should be restricted to a small group at each authority, consisting of the management and those in charge of communication. The Riksbank considers, not least in the light of the crisis exercises, that those in charge of communication should be integrated as far as possible in the group that is dealing with the crisis as such. A concrete result is that the head of the Communications Department is now a member of the crisis management team and those who are responsible for information accordingly have full and up-to-date knowledge of the crisis and how it is being managed. That makes it easier for them, in consultation with the crisis managers, to decide suitable information measures.

It is also important that the authorities' task of providing information does not obstruct their resolution of the ongoing crisis. Those who seek information – internally at an authority as well as from outside – naturally turn to those in a managerial position who are also responsible for handling the crisis. The latter, however, need to devote most of their time to dealing with the crisis without delay. To tackle this problem, the Riksbanken has arranged for a telephone filter to be set up in the event of a crisis. The filter is manned by communication and financial specialists who answer factual questions in accordance with instructions that are updated continuously by the crisis management team. Queries that require an answer from senior officials are passed on to them.

Those responsible for information at the Riksbank have already – under normal conditions – drafted press notices for different situations. The wording needs to be thoroughly perused in an unstrained atmosphere because shades of meaning and phrases are all too easily misunderstood in a crisis. Press notices should also be scrutinised in advance from different angles by people with different knowledge and insights, for example specialists in information and those responsible for financial market issues. It seldom happens that a particular crisis situation exactly matches the situation for which press notices have been prepared, so the drafts will have to be adjusted; but the preparations do save time in a crisis and improve the end result.

It is highly important to coordinate the content and timing of information. During the Swedish banking crisis, approval of the content and wording of press notices was preceded by close consultations between the Finance Ministry, Finansinspektionen, the Riksbank and the relevant banks. The parties also agreed on a time schedule whereby the notices

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**The need of information from authorities must not obstruct the work of resolving the ongoing crisis.**

**Coordinating information – its content as well as its timing – is highly important.**

were published in a predetermined order at intervals of just a few minutes. Without preparations, however, such close coordination is difficult to achieve, so this is something that should be included in crisis exercises.

## Scepticism about crisis exercises

The Riksbank, as indicated above, has found crisis exercises valuable and has accordingly recommended them as a part of the cooperation in international fora. In some quarters, however, the idea has been received with scepticism, for a number of stated reasons:

- Certain policy issues, particularly the function of lender of last resort, are best left without much discussion because their implementation should not be specified.

**The Riksbank considers that its interpretation of the possibility of providing emergency liquidity should be clarified in advance.**

The Riksbank's opinion, partly in the light of experience of and conclusions from the 1990s banking crisis, is that this argument is not relevant, at least in the Swedish environment. The Riksbank considers, on the contrary, that its interpretation of the possibility of providing emergency liquidity should be made clear to other authorities, banks and the general public in advance. This reduces the risk of costly misunderstandings and improper influence. At the same time, the Riksbank subscribes to the prevalent view that certain issues – of which the use of the function as lender of last resort is a typical case – neither can nor should be specified exactly; interpretations must allow some flexibility.

**The Riksbank sees a reluctance to discuss difficult or controversial crisis management issues in advance as being counter-productive.**

The Riksbank sees a reluctance to discuss difficult or controversial crisis management issues in advance as being counter-productive. Successful crisis management is highly dependent on the authorities generating confidence that they control the situation. This in turn presupposes that other parties and people in general are prepared to believe what the authorities are telling them. Such credibility needs to be established when conditions are normal. If the authorities are not prepared to discuss important issues even internally, there is a large risk of their public messages in an acute crisis not being clear enough to inspire trust.

- Exercises with participants from a number of countries may turn into an unconstructive *beauty contest* in the sense that they mainly focus on which are the “best” laws, rules and/or practices.

**Comparisons of laws and practices serve the important purpose of detecting and handling differences that lead to problems for crisis management.**

The joint crisis exercise for Nordic central banks and banking supervisors included comparisons of the countries' laws and practices, which led to the detection of substantial potential obstacles to joint crisis management. However, such discrepancies in laws and practices do not always call for harmonisation, provided the problems can be resolved some other way. The important thing is the first step of identifying the differences. The

same applies at the national level, that is, differences between different authorities' interpretations and practices. Comparisons of laws and practices in connection with a crisis exercise accordingly serve an important purpose. The exercises are seldom intended to reveal what is *best*, whatever that may mean, but to detect and deal with differences that may lead to problems for crisis management.

- Crisis exercises may take too much time and resources both for their preparations and for the participants.
- As the nature of the next bank crisis is not foreseeable, there is little point in exercising certain specific situations.
- Information that a crisis exercise is to be held may be leaked and cause public concern on such grounds as “no smoke without a fire”.

The first two arguments can be met by constructing crisis exercises appropriately. When planning some exercises, the mistake has been made of choosing a scenario that is excessively complex and extensive. As mentioned earlier, it is better if the issues that management wishes to have illuminated are spread over a number of exercises. That also makes smaller demands on the participants' time; a single day may suffice for holding the exercise and assessing it. The argument that the next financial crisis is unforeseeable overlooks that fact that crisis exercises are about so much more than practising *solutions* to financial problems. Moreover, those who write the scenarios have a good idea of the most probable ingredients of a future crisis and adapt the exercises accordingly.

Fears of leaks to the general public can be handled by being open about exercises. The risk of misunderstandings over exercises will be smaller if the central bank has a generally open attitude. The Riksbank does not actually announce a particular crisis exercise but neither does it attempt to conceal either that exercises are arranged from time to time or what their general purposes are. On the other hand, being unduly open about the results of an exercise may be inappropriate, for instance if it has revealed deficiencies in laws or policies. It is better to rectify such deficiencies first.

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## MoUs in crisis management – uses and limitations

An instrument that has become much frequent in recent years, in certain cases with the aim of facilitating crisis management, is MoUs between countries and between authorities. Not least in view of the aforementioned scepticism about crisis exercises, many countries consider instead that MoUs are one of the most important instruments in preparations for future crises. In the Riksbank's opinion, however, MoUs and crisis exercis-

MoUs between authorities and between countries have become much more frequent in recent years.

es are not so much alternatives as complements. One purpose of many crisis exercises has been to test the implementation of existing MoUs. How can an MoU be expected to function in practice? Conversely, weaknesses detected during crisis exercises have led to the modification of MoUs. So there is a clear two-way link between MoUs for crisis management and crisis exercises.

**By itself, the drafting of MoUs has prompted authorities and even legislators to remove unnecessary obstacles to cooperation and information-sharing.**

Numerous bilateral MoUs on cooperation have been concluded, mainly between supervisors in one or more countries. They regulate cooperation and the exchange of information in a crisis situation. The value of these MoUs is indisputable. They make it easier for authorities to comply with legal provisions for sharing confidential information under certain conditions and they exert pressure on authorities and their staff to be more open when the law permits this. The existence of an MoU saves precious time in a crisis. Moreover, just drafting MoUs has prompted authorities and, in certain cases, even legislators to remove unnecessary obstacles to cooperation and information-sharing. Although many MoUs simply reproduce existing rules, this does at least establish a minimum level from which improvements are often made in practice.

**A notable limitation of MoUs is that they can seldom be sufficiently precise and comprehensive.**

A notable limitation of MoUs is, however, that they can seldom be sufficiently precise and comprehensive. This mainly has to do with the difficulties in foreseeing the nature of every situation in which an MoU may need to be invoked but another reason is that, for various reasons, the parties to an MoU do not want their undertakings to be entirely explicit. Many MoUs are best described as undertakings to *demonstrate good intentions* without being legally binding and leaving room for interpretation. But some countries, including Sweden, have gone further than the MoUs expressly prescribe, for instance in sharing information.

**In the case of inter-country MoUs, differences in institutional structures may restrict cooperation and information-sharing.**

In the case of bilateral and multilateral MoUs between countries, an additional restriction on cooperation and information-sharing may come from differences in institutional structures. For a central bank with a supervisory function it may, for example, be easier to obtain information directly from another country's supervisor. For central banks that are not supervisors, however, the MoUs between EU countries' authorities prescribe that such information is normally to travel between two countries' supervisors before being passed on to the central bank. While such a strict arrangement can serve to spell out functions and responsibilities, it can also delay crisis management.<sup>8</sup>

A general limitation of MoUs is that their guidelines tend to be formulated as principles and only occasionally as more precise courses of

<sup>8</sup> For this reason, there is an emergency clause in ECB MoUs that entitles a central bank without a supervisory function to communicate directly with another country's supervisor and vice versa in an acute crisis.

action. This applies to policy commitments, for example, as well as to which of a country's authorities is responsible for coordination when an institution with cross-border establishments is in a crisis.

The Riksbank sees the numerous MoUs that have been concluded to date as a considerable step forward in crisis prevention and management but there is room for improvements in the form of more specific provisions, for instance. Crisis exercises can promote that.

## Results of the Riksbank's work on crisis exercises

As this article indicates, the Riksbank has made considerable efforts to create scenarios for financial crisis exercises, carry them out and discuss the outcomes.<sup>9</sup> What has the Bank gained from this – to what extent is it now better equipped to cope with a crisis?

**An efficient crisis organisation.** The result that is probably most important is that the Riksbank now has a well thought-out and coordinated crisis organisation with participants who know their roles and can perform them without delay in the event of a financial crisis. As a result of lessons from crisis exercises, this organisation and its tasks have been modified by degrees to make it more efficient. One example is the expansion of the communication function and its integration with the organisation's crisis managers. Another example is that people used to be assigned in advance to the tasks of analysing information and preparing material for decisions as instructed by the crisis managers; in the light of the exercises, it is now considered more appropriate to heighten flexibility and enable the managers to have the support of any of those experts at the Riksbank who specialise in the particular form of a crisis.

**Amendments to laws, policies and procedures.** (i) The exercise in which Nordic central banks and supervisors participated revealed potential problems for coordination due to certain discrepancies between the countries' laws and decision-making processes. This applied, for example, to how bank solvency is to be assessed and whether the assets and liabilities of a banking group are to be treated on a consolidated basis or whether a country in which a subsidiary is located is entitled and perhaps obliged to protect its depositors even though this heightens the risk of destabilising the group as a whole. (ii) The joint exercise involving the fifteen EU countries disclosed differences in laws and practices that can impede efficient crisis management. It also pointed to the possibility of further improvements and additions to the current multilateral MoUs on cooperation in

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<sup>9</sup> The Riksbank also arranges similar exercises for so-called conventional crises such as a fire at the Bank's head office.

crisis management. (iii) At the national level it can be mentioned that experience from crisis exercises have led to changes in the procedures in RIX, the Riksbank's system for large-value payments. Another outcome of the exercises is that the interpretation of the Riksbank Act as regards the emergency liquidity function has been reviewed.

**Better handling of information.** (i) The Nordic and European as well as the national crisis exercises have shown that additional information is required for crisis management. (ii) The crisis exercises have given rise to new solutions whereby the outside world's need of continuous information about the Riksbank's analyses, plans and decisions in a crisis can be met in a balanced manner. (iii) The information in the crisis manual has been developed in the light of the crisis exercises, making the manual all the more useful as an aid.

**Better cooperation between countries and authorities.** (i) The joint exercises by the Riksbank and Finansinspektionen, besides developing personal contacts, have led to a better understanding of the other authority's work and needs, for instance of information, under normal conditions as well as during a crisis. This was taken into consideration when drafting the MoU on cooperation between the two authorities. (ii) The conclusions from the joint Nordic exercise have been further discussed in a group for cooperation between the Nordic central banks. A corresponding group for the Nordic banking supervisors has likewise discussed issues to do with the management of problems in banks with a presence in more than one Nordic country.

**Developing individual competence.** The crisis exercises have served as *eye-openers* for the participants. Staff members whose work normally focuses on policy issues and analyses are obliged to make major, concrete decisions on the basis of imperfect information and strong time pressure. Specialists in law, communications and other non-financial matters gain a realistic insight into how, during an ongoing crisis, their general approach would have to be adapted to the particular conditions that apply in the financial sector. In many instances, participants in exercises have had impulses which have benefited their daily work.

In conclusion, the Riksbank considers that crisis exercises are a serviceable method for enhancing readiness for a possible future crisis. National exercises are a good first step but as more and increasingly large financial institutions extend their operations across national borders, the importance of bilateral and multilateral exercises is growing.



## Appendix: A description of different forms of exercise

The following is a brief description of how a crisis exercise is “created” and organised.

### GENERAL POINTS

All experience indicates that the structure of crisis exercises should be fairly straightforward. An exercise lasting a few hours does not give the participants time to penetrate unduly complicated or wide-ranging matters. A better arrangement is to spread the issues over a number of consecutive exercises. Neither should an exercise require the participants to absorb a lot of statistics and other information, such as a bank’s financial statements; they would then have to devote too much time to secondary matters instead of focusing on overriding solutions. Limiting the extent of an exercise is bound up with the desirability of limiting its duration. Many of the participants have crucial posts in the central bank or some other authority and the time they can devote to exercises is restricted. At the same time, it is important that the participants in an exercise include those who would be engaged in a *real-life crisis*. Stand-ins are acceptable, however, in certain exercises, partly so they can practise this role (one cannot count on all the regular officials being available at short notice to handle an acute financial crisis).

The feasibility of a longer exercise during which the participants are continuously exposed to many different physical and mental strains such as a lack of sleep, food and drink (an exercise lasting, say, 48 hours, which is quite probable in connection with a major crisis) is contingent on getting the intended participants to set aside time for this. A major purpose of such an exercise would be to test the participants’ stamina and ability to make decisions under severe conditions. No such exercise has been arranged in the Riksbank.

The result of an exercise depends to a high degree on the ability of the “producer and actors” to create a realistic atmosphere and on whether the participants are willing to *join in* (the construction of exercises is considered below). The Riksbank has found that creating exercises with high verisimilitude is not difficult and that the participants then *live their parts* convincingly (in practice, this amounts to being oneself, albeit in a fictitious situation).

It is often an advantage if the crisis scenario concerns a fictitious bank in a notional country. The discussion can then be freer because the participants will not feel that their analysis is bound by an existing state of

**All experience indicates that the structure of crisis exercises should be fairly straightforward.**

**The result of an exercise depends to a high degree on the realism of its atmosphere.**

affairs. But sometimes it may be appropriate to arrange an exercise around a real-life bank in one or more specified countries to test how the authorities would act in a particular situation. In the joint exercise for Nordic central banks and banking supervisors (see above), the scenario concerned Nordea.

The two most common forms of crisis exercise are described below. The choice of form in a particular case depends on the focus of the exercise as well as on organisational factors such as the size and composition of the group of participants.

#### A PRACTICAL EXERCISE IN REAL TIME

**When the primary purpose is to exercise functions, the nature of the notional crisis can be fairly straightforward.**

A small group of people is appointed to compose a scenario and produce the exercise. As the primary purpose is often to exercise functions, the nature of the notional crisis is usually fairly straightforward. A typical example is unforeseen events – such as a large faulty speculation or fraud in a bank or the failure of a major counterparty – in one or more financial institutions that have repercussions via the payment system or the inter-bank market. The events are of such an order that the overall stability of the financial system may be in danger.

**The participants usually have little or no advance information.**

The participants usually know little or nothing in advance apart from being told to turn up at a given place and time and to set aside time (usually one working day) for an exercise. When they have assembled, the producer informs them about the conditions for the exercise. This can be done both orally and by distributing press notices, financial statements and other documents. An exercise's financial statements may be fictitious but can also be those of real-life financial institutions, modified as required for the scenario. The course of events is then played out gradually over a number of hours, as might happen in real life. This is arranged by feeding the participants with new material, for example about how the fictitious crisis is developing, via telephones, telefax, email, simulated press notices and news bulletins. The inputs are adapted to how the participants have acted in the light of earlier information, for instance whether or not they have made certain decisions.

The producer is located in a different room from the participants and has a number of actors<sup>10</sup> at his disposal to represent public figures – bank directors, representatives of authorities, politicians, journalists and the general public. Contacts with these figures can be initiated both by the actors in accordance with the manuscript and by participants when one of

<sup>10</sup> Normally other staff members of the involved authorities, preferably those having some personal insight into the roles they are given to act.

them wishes to talk to people in the *outside world* to influence events or obtain additional information. Subject to the given framework, the actors are allowed to improvise their contacts with participants, not least in situations that involve negotiations. The participants may be all in the same room or spread over several rooms. Their work is usually directed by a managerial group that assigns tasks to various specialist functions, such as communications and financial or legal analysis.

An important feature of exercises is the strong time pressure associated with the management of many crises. It must be clear from the scenario at an early stage that the participants need to reach some form of consensus or decision by a given time. Time pressure is accentuated by repeatedly feeding in new information or changing the conditions in some other way. A number of the Riksbank's exercises have been rounded off with simulated press conferences at which the participants have had to account for their decisions and motivate them to people with a background in journalism.

Evaluations are an important component. A preliminary evaluation is made immediately after the exercise while impressions are still fresh. Matters considered include issues and deficiencies that have been identified during the exercise and require further investigation. In the following weeks there is a more thorough assessment that results in a written report. The report includes criticism of the exercise as such with a view to improving the construction of future exercises. The evaluations are facilitated by appointing a particular person to keep a *log* of the exercise that records all significant events, deliberations and decisions.

A real-time exercise is a particularly suitable form for practising cooperation, logistics, communications and analytical work under time pressure.

#### AN ANALYTICAL EXERCISE

The analytical form differs from the practical mainly in the actual course of the exercise. During the analytical exercise there are no or just a few inputs; virtually all the information is provided, orally or in writing, on a single or only a few occasions during the day. Moreover, the participants may receive certain basic information, such as a financial statement, before the day of the exercise. The primary purpose of an analytical exercise is to practise the analysis of a crisis problem and reach a decision. Such exercises achieve an important result when they help to identify ambiguities and deficiencies in laws, rules, procedures and/or MoUs. The analytical form of exercise is suitable for more gradual crises, while the

**An important feature of exercises is the strong time pressure associated with the management of many crises.**

**A preliminary evaluation immediately after the exercise is followed by a more thorough assessment in the following weeks.**

**The analytical form of exercise is suitable for more gradual crises, while the practical form in real time is more appropriate for crises that proceed rapidly.**

practical form in real time is more appropriate for crises that proceed rapidly.

In an analytical exercise all the participants are located as a rule in the same room. However, a large group can be broken down into smaller groups that all discuss the same issues and then reconvene once or several times to compare their discussions and conclusions.

**Evaluations are made, just as in a practical real-time exercise, immediately afterwards as well as more thoroughly later.**

Even in an analytical arrangement, the scenario is usually escalated a number of times (in the course of a day there is generally time for three stages), depending on how the group has argued and decided in the light of earlier information. Evaluations are made, just as in a practical real-time exercise, immediately afterwards as well as more thoroughly later.