

■ Liquidity risk in the banking system

During the financial crisis in the autumn and spring, liquidity risks in the financial system have been very apparent. When demand collapsed in a number of securities markets during the autumn of 2007, banks were affected both in the United States and Europe by acute funding problems. The whole of the global bank sector has been affected by the liquidity crisis since then. Several central banks have taken steps during the crisis to attempt to ease the strains. The question is what can central banks and other authorities do to reduce these risks in the future. Is there a need to create a completely new regulatory framework for management of liquidity risk?

Introduction

In its simplest form, liquidity means access to liquid assets to meet commitments. The risk of a company or institution not having sufficient liquid assets to fund its activities is called funding risk. This is closely associated with what is known as market liquidity. In a liquid market, assets can be bought and sold without a major effect on prices. With the definition we use in this article, an illiquid market means that the value of the assets traded in the market has become so uncertain that the market participants hesitate, and, in certain cases, refrain from quoting prices. This may lead to funding problems for companies and institutions which depend on obtaining funding in the market.

Liquidity risk is a natural part of banks' activities since they normally obtain short-term funding and provide long-term loans. This means that liabilities fall due and must be rolled over more often than assets. Banks are accordingly very dependent on the availability of funding. Banks' activities are also based on bearing credit risk which is closely associated with liquidity risk. The greater the uncertainty about creditworthiness of a bank's loan portfolio, the more difficult it will be to obtain funding or to resell loans to a third party. Banks can limit their credit risks by careful selection of borrowers. Liquidity risk is more difficult to manage since it is largely dependent on efficient markets. It is also dependent on the depositors' confidence in the bank.

In recent years, structural changes have made banks increasingly dependent on efficient markets for funding. At the same time, the classic role of banks as bearer of credit risk has partly been shifted from the banking system to other players. While the spreading of risk is fundamentally positive, this particular development has also led to increased vulnerability. This has become evident during the financial crisis when reduced liquidity in certain markets, for instance in the market for structured products and in the interbank market, created funding problems for a number of international banks.

This article is intended to describe how changes in banks' way of handling loans has contributed to the extent of the financial crisis and how liquidity risks have been a driving factor. Furthermore, this

article sheds light on deficiencies in current regulations which have become apparent during the crisis, as well as the challenges that have confronted central banks in the past year. The article also describes how banks have been affected by the crisis and how they are working to manage liquidity risk.

What characterises the current financial crisis?

Bank crises have been relatively common in the world during the past two decades. However, the current crisis is unique in the respect that large parts of the international banking system have been affected by a liquidity shock over a long period. This is because widespread distrust and uncertainty have arisen between banks, partly due to new complicated financial instruments which are difficult to evaluate, reduced transparency and increased dependence on short-term funding.

BANKS HAVE DEVELOPED GREATER DEPENDENCE ON MARKET LIQUIDITY

A structural shift has taken place in the banking system with respect to how banks manage loans. The traditional and most common model is that banks provide loans to companies and households and retain the loan as an asset until it falls due. This is usually referred to as "originate and hold". Recently, an increasing number of international banks have, however, started to apply the business model "originate and distribute". This means that loans are repackaged and sold in the form of securities. This securitisation has taken place to an increasing extent in structured credit instruments, for example CDOs (Collateralised Debt Obligations). A liquid market is a prerequisite for being able to resell the securitised loans.

As part of this development, special legally independent investment vehicles have been created outside the banks' balance sheets. Depending on their construction, they are either called SIVs or conduits. They invest in assets with high yields and long durations, for example, structured credit products and fund these by issuing certificates known as Asset Backed Commercial Papers (ABCP). Since the papers have short maturities, they must be rolled over frequently. This requires that there are always investors willing to buy the papers and thus provide liquidity.

THE TRADITIONAL ROLES OF BANKS HAVE BEEN PARTLY TAKEN OVER BY OTHER PLAYERS

At the same time as new instruments have been introduced, new types of players have appeared and have to some extent taken over the banks' roles. These players include hedge funds and pension

funds as well as SIVs and conduits. It is beneficial that some credit risk has been moved out of the banking system since it can be efficiently distributed among more players. At the same time, this development has entailed considerable risks.

In the first place, the new players are often not subject to supervision by the authorities. In fact, the appearance of these players is to some extent a result of regulatory arbitrage. Under the Basel rules banks must hold capital cover for their assets but these rules do not apply to, for example, SIVs and conduits. By selling assets from their own balance sheet to investment vehicles of this kind, the banks can reduce their total assets and thus release capital. At the same time, the investment vehicles take over parts of the banking system's credit risk. They have also carried out the transformation of short-term liabilities into long-term investments. In this way, the investment vehicles have been able to earn money on the spread between the cost of funding in the ABCP market and the return on investments.

Furthermore, securitisation and the development of new complex credit instruments have contributed to reducing transparency. This has led to difficulties in assessing the credit risk. Reduced transparency increases the risk that information will be lost in the process, which in turn reduces the ability of investors to obtain information about the underlying risks. In addition, a "principal-agent" problem is created since the creditor and the risk-taker are not the same. Creditors who do not retain loans on their balance sheets, and thus do not retain the risk either, have less incentive to carry out credit analysis. The importance of not damaging one's reputation among investors may counteract the risk of inadequate credit analysis but it does not wholly eliminate it.

Unlike banks, these new players cannot obtain new funding from central banks. The financial system has thus created dependence on players which are important for financial stability but which do not have access to the same back-up facilities as the banks. Moreover, they are usually backed up by less capital and are thus less resistant to shocks.

A further role which the new players have partly taken over is the provision of market liquidity. The hedge funds in particular have become more important in this respect. One of the reasons is that they take advantage of incorrect pricing in the market in their trading strategies. By quoting prices for buying and selling assets, they correct imperfections and thus provide the market with liquidity. However, their ability to provide liquidity depends on their ability to use leverage. The crisis was preceded by a long period of low interest rates, stable macroeconomic development and high risk propensity, which entailed a search for yield. In many hedge funds, this took the form of increasingly high leverage.

Chart 1. Spread between corresponding interbank rate and the three-month treasury bill rate
Basis points

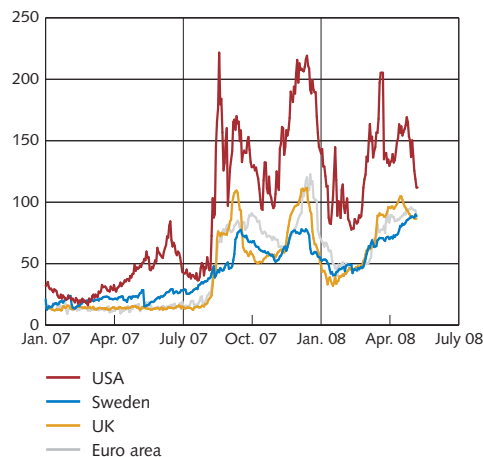
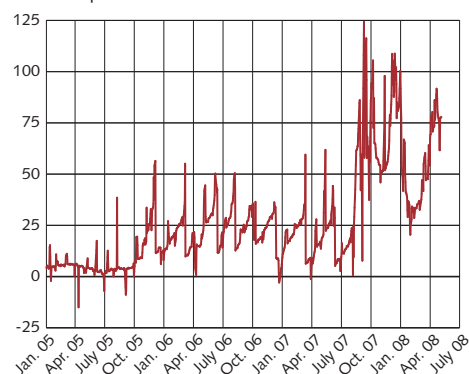


Chart 2. Spread between LIBOR 3 months and overnight, EUR
Basis points



A CRISIS OF CONFIDENCE

Investors who are willing to bear risk are essential for market liquidity. This requires in turn that they are able to value assets. Market liquidity is therefore to a great extent about access to information. Insecurity increased apace with the problems in the subprime market and the credit market growing during the summer of 2007. Questions arose as to which banks had problems with credit losses or liquidity guarantees issued to SIVs and conduits.

Credit risk which had been moved out to investment vehicles of this kind had been regarded as separate from the banking system. However, to be able to issue commercial papers with a high rating, the investment vehicles were backed up to a great extent by guarantees. These guarantees not infrequently originated from the bank that originally sold the credits. When it emerged that subprime loans were included in the assets of many investment vehicles, demand for commercial papers fell and the banks were obliged to meet their liquidity guarantees. The banks thus had to take back the risk to their own balance sheets. Even in cases where the bank had not issued any guarantees itself, many chose none the less to take back the risk to avoid destroying their reputation among investors. This took place at the same time as the banks already had problems in reselling other credits. Altogether, the banks' balance sheets were expanded and liquidity problems arose since the new assets had to be funded.

Many of the structured products which have emerged are moreover designed in such a complicated way that they are difficult to evaluate, which has reduced transparency. This has made it difficult for investors to assess the creditworthiness of their counterparties. Uncertainty about the underlying creditworthiness of a number of financial players then led to a more general uncertainty about availability of funding and the future conduct of investors. During the crisis, it has become apparent that the credit analysis in the securitised subprime loans has been inadequate in many cases. Increasingly poor credit quality in the subprime loans was also a trigger factor in the development of the crisis.

The fact that the banking system underestimated the risk in their commitments to investment vehicles is probably largely due to the complexity of securitisation and reduced transparency.

During the crisis, a number of different assets have been affected by falling prices, including structured products. Falling prices have led to banks increasing collateral requirements, in particular from customers with high leverage. Among other things, this has affected a number of hedge funds, which have been obliged to sell assets to reduce their leverage. This has led to further price reductions and decreased liquidity for a number of types of asset.

All this has contributed to a crisis of confidence in the interbank market, the market where banks trade with one another. Banks have hoarded liquid assets in order to strengthening their own reserves. There has also been uncertainty about the credit risk. This has been

noticeable partly through the TED spread, the difference between interbank rates and T-bills, which have sharply increased (see Chart 1). Lenders have also been reluctant to provide loans with longer maturities, which is reflected in the difference in interest rates between a three-month investment and an overnight investment (see Chart 2).

How the crisis affected the banks

The financial crisis has entailed a number of tangible consequences for the banks. Rising spreads have increased the cost for the banks of obtaining funding via the market, in particular for longer durations. This has applied both to the interbank market and to the securities market. The reluctance to provide long-term funding has meant that many banks have been obliged to fund increasingly large amounts on short durations, often on the overnight market. This has increased the risks for the banks since they have had to roll over their debts more frequently.

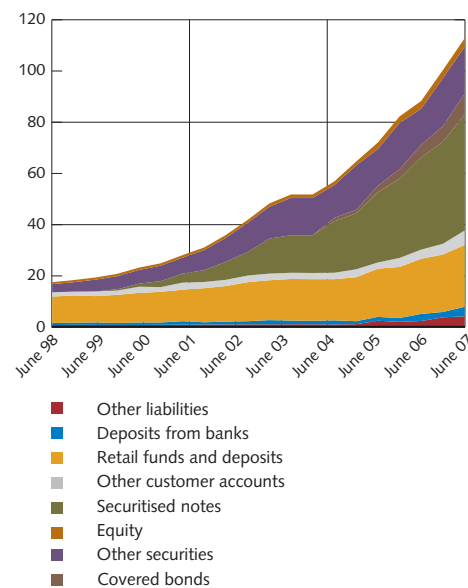
The fact that certain markets for funding have ceased to function has compelled greater use of other sources of funding. For example, there has been a large funding requirement in dollars for many European banks, which have provided liquidity guarantees to US conduits. The deterioration of liquidity in the interbank market for dollars has made it difficult to obtain loans with long durations. This has led many players to use foreign currency swaps instead, which has in turn affected the liquidity of this market as well.¹¹²

A number of international banks have been hard hit. One of the first to experience problems was the German IKB. At the end of June 2007, it was notified that IKB had incurred large losses through an investment company that was highly exposed to the US subprime market. Only a few weeks later, another German bank was affected, Sachsen Landesbank. These were the two banks that had the largest liquidity guarantees in relation to their funding of all European banks.

In September, the British bank Northern Rock announced that it had acute funding problems. Northern Rock was greatly dependent on short-term securitised funding. When liquidity decreased in the market for securitised assets, Northern Rock was unable to refinance. It then had to turn to the Bank of England for emergency liquidity assistance. These problems led to a bank run by depositors.

Another example of a bank which encountered serious liquidity problems is the US investment bank Bear Stearns. In mid-March, the funding problems were so great that the bank had to accept emergency liquidity assistance. The Federal Reserve provided Bear Stearns with emergency credit through JP Morgan Chase (Bear Stearns did not have access to refinancing itself in central banks since it was an investment bank and not a commercial bank). A few

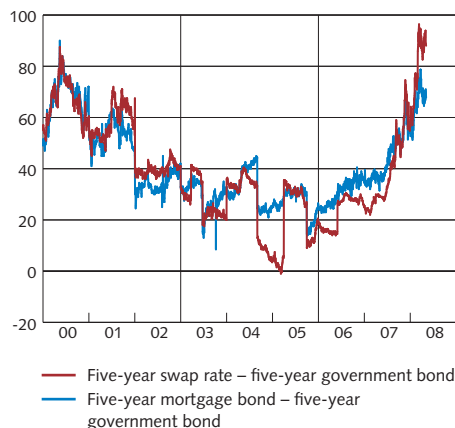
Chart 3. Funding structure, Northern Rock
GBP billion



Source: Bank of England

¹¹² A FX-swap is a commitment to buy a currency at today's rate and later sell the same currency at a given date at a given rate. This way temporary funding needs in different currencies can be met in the FX-swap market

Chart 4. SEK mortgage bond spread och swap spread, 5 year



Source: Reuters EcoWin

days later, JP Morgan Chase announced that it intended to buy Bear Stearns, and at the same time guaranteed its obligations.

EFFECT ON SWEDISH BANKS

The financial crisis has had relatively limited effects on the Swedish banks. Their extremely limited exposures to the type of structured products affected by problems have played a crucial role here. The Swedish banks have mainly been affected by higher cost for funding and some valuation losses in their bond portfolios. The utilization rate of off-balance sheet items has, however, in principle been unchanged throughout the crisis. The Swedish market for covered bonds has been one of the few in Europe which has functioned throughout the entire crisis.

How the banks deal with liquidity risk

The ongoing liquidity crisis has increased the focus on the banks' liquidity risk management and raised the question of whether this is sufficient. The importance of good risk management has increased apace with increasingly sophisticated and complex instruments, and an increased dependence on market funding. The following section describes how banks normally work to manage liquidity risk.

LIQUIDITY FORECASTS

A bank's liquidity management aims at having sufficient means of payment at all times to make its payments. The bank makes forecasts to assess the liquidity requirement. These forecasts are difficult to make since uncertainty increases with time and many unknown cash flows require assumptions. The banks often make their forecasts in the form of GAP analyses. These show the cash flows from maturing assets and liabilities at different time periods.

For short-term liquidity management the banks make forecasts for every single day. These forecasts often cover a couple of days to a couple of months.¹¹³ However, they may be quickly changed, due, for example, to large transactions with the bank's clients. Longer-term forecasts provide an overview of structural imbalances. A structural deficit, which is common in banks, is due to assets with long durations having short-term funding. By making long-term forecasts, the bank can see large net outflows at an early stage and plan for refinancing. This may, for instance, consist of large redemptions of mortgage bonds on IMM days (International Money Market).¹¹⁴

Off-balance sheet items are difficult to forecast. These may, for example, be unutilised credit commitments. Items of this kind are often excluded from liquidity forecasts since, as a rule, there

¹¹³ Institute of International Finance, "Principles of Liquidity Risk Management", March 2007.

¹¹⁴ Standardised contracts are normally settled on IMM days. These occur four times a year (the third Wednesday in March, June, September and December).

is insufficient good historical data. Likewise, credit losses are very seldom taken into account in their liquidity forecasts. They quite simply assume that their counterparties will repay their debts in full. To be able to cope with unexpected outflows, both in the short and long term, banks maintain a buffer of liquid assets, known as a liquidity reserve. Funds in this reserve can be used as collateral in repos or quickly sold in the market, and are therefore included in cash flow forecasts.

LIQUIDITY RESERVE

Banks' liquidity reserves consist mainly of liquid securities that can be used as collateral for loans at central banks, since they can by definition be converted into cash. This means that central bank rules on eligible assets partly control the content of the reserves. To a lesser extent, securities are also held that cannot be used as collateral for loans at the central bank, but which are considered to be liquid.

The return requirement on assets in the liquidity reserve is important for their composition, even if there is not usually any explicit required return stated. To a certain extent, banks maintain reserves in different currencies, although they generally rely on the efficiency of the swap market.

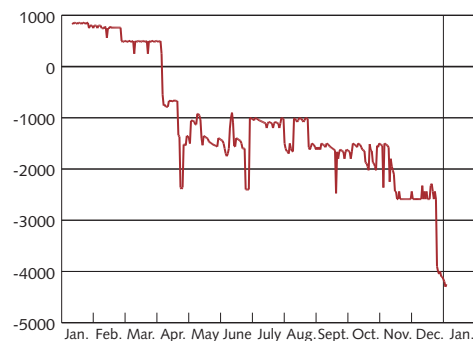
The size of the liquidity reserve varies between banks. The appropriate size of a liquidity reserve depends on a number of different factors. Size must be related to the quality of assets and duration and diversification of the debt portfolio. Furthermore, the duration of funding of the liquidity reserve is important. Altogether, it is therefore difficult to compare banks' liquidity reserves. Many banks endeavour to have a liquidity reserve which can provide for their needs until they have found alternative long-term sources of funding, should a situation arise where the current sources of funding disappear or become more expensive.

LIMITS

The banks have liquidity limits as part of their risk management. These are normally set at group level and apportioned downwards in the organisation (to subsidiaries, divisions, desks, etc.). Limits regulate and control liquidity risk by limiting the outflows of cash. A limit is often set which limits net outflow per day or accumulated during a particular period of time. Major refinancing requirements on particular days or during a long period can lead to increased costs. Through limits, the banks ensure that they do not have larger outflows than can reasonably be funded in the market given their risk tolerance. Limits can also regulate the length of time that banks are to have positive cumulative cash flows without additional access to funding in the capital market. This means that maturing assets and liabilities on contracts already entered into shall create a positive inflow of cash to the bank during a particular period.

Chart 5. GAP analysis

Fictive example of cumulative cash flows from maturing assets and liabilities at different time periods, USD million



Source: The Riksbank

Over a longer period of time, the banks usually use balance sheet relations where maturing assets are placed in relation to liabilities. For instance, measures are used which show how large a part of the bank's illiquid assets are funded by long-term/stable liabilities. Some banks also have a target for how large the liquidity reserve is to be in relation to total assets.

Regulating liquidity

Liquidity shortage at a bank affects not only the bank and its owners but also small depositors, who can hardly be expected to keep a check on a bank's activity. In addition, a liquidity crisis spreads quickly through the financial system and affects other banks. This can either take place through direct exposures, if the affected bank suspends its payments and withdraws lines of credit to other institutions. It can also take place indirectly, if a bank's liquidity shortage arouses suspicions about funding problems in other, similar institutions. As noted above, the financial crisis which began in August 2007 has to a very great extent being characterised by suspicions of this kind. This has raised the question of whether current liquidity regulation is sufficient.

CURRENT REGULATION OF LIQUIDITY

The new capital adequacy rules, Basel II, came into effect in Europe on 1 January 2008. This regulatory framework stipulates that banks must have "risk management systems and sufficient capital to manage and cover all risks that they encounter". However, the rules, which specify the amount of capital banks are to hold to cover different risks, do not cover liquidity risks. This is because a bank's capital adequacy has little bearing on liquidity risk. High capital adequacy should certainly counteract funding problems since investors have less reason to doubt the solvency of the institutions. However, this is far from being a guarantee against liquidity shortage.

Unlike the capital adequacy rules, there is no harmonised regulatory framework for liquidity. On the contrary, there are considerable differences between the regulatory frameworks in different countries. The capital adequacy directive does require institutions to have a documented policy for liquidity management and action plans to deal with liquidity crises. However, according to a questionnaire carried out by the EU Committee CEBS on liquidity regulations in the EU/EEA, only one country required the liquidity policy to be approved by the supervisory authority.¹¹⁵ While all supervisory authorities require institutions to carry out liquidity stress tests, there are seldom any predefined criteria for the design of these tests, or the stress level that is considered acceptable.

¹¹⁵ "First part of CEBS technical advice to the European Commission on liquidity risk management: survey of the current regulatory frameworks adopted by the EEA regulators", CEBS, August 2007.

A traditional component in many regulatory frameworks is liquidity ratios. These are normally designed in such a way that liquid assets is to amount to a particular proportion of liquid liabilities. Another rule is limits for how large the difference may be between the banks' inflows and outflows over different durations. In January 2007, Germany adopted a new liquidity regulation. This differs from the regulation in other countries primarily due to the choice of a standardised and advanced method like the Basel rules. In the advanced method, banks use their own internal quantitative models, provided that approval has been given by the supervisory authority. The Bundesbank considers that the new regulation will modernise liquidity rules by creating a more risk-oriented and principle-based supervisory regime.¹¹⁶

Like many other European countries, Sweden has adopted a more qualitative regulatory framework for liquidity risks. The focus is primarily on the bank's internal processes and systems. In Sweden banks and credit market companies with total assets exceeding SEK 5 billion must submit a quarterly report to the Swedish Financial Supervisory Authority, Finansinspektionen. This report is at a consolidated level and is based on the banks' own assumptions and models. It includes imbalances in cash flows and major liabilities in the interbank and money market. The Riksbank also regularly obtains liquidity data from the major banks.

An important part of the liquidity protection of many banks is the deposit guarantee. In some form, this means that the state guarantees part of the deposits of the public. This guarantee is intended to prevent bank runs. A rumour that a bank cannot meet its payments rapidly becomes self-fulfilling when financiers withdraw. However, if the depositors know that their funds are guaranteed, this reduces the risk for a bank run. The events at Northern Rock showed, however, that the rules relating to the guarantee, for example, the size of the guaranteed amount and how quickly depositors can obtain access to their money, are crucial for the conduct of depositors.

HOW SHOULD A NEW LIQUIDITY REGULATION BE DESIGNED?

Regulation and supervision of liquidity risk is subject to review in many countries and international organisations.¹¹⁷ The financial turbulence has reminded both authorities and the market participants that liquidity risks are a neglected area. How should one go about reforming the regulatory frameworks?

Work is in process in a number of international fora to create internationally harmonised rules and guidelines for supervision of liquidity risks in banks.¹¹⁸ This work is focused on providing guidelines of a principled character to avoid rigid detailed regulation. These

¹¹⁶ Bundesbank.de.

¹¹⁷ Both the Basel Committee and the Committee of European Banking Supervisors (CEBS) are at present in the process of drafting new recommendations and principles for liquidity risk.

¹¹⁸ The Basel Committee for bank supervision in BIS, CEBS in the EU och in Financial Stability Forum (FSF).

organisations will publish their guidelines during the summer of 2008. According to a recent report from Financial Stability Forum (FSF), the guidelines of the supervisory process will, among other things, cover the following areas:¹¹⁹

- Identification and measurement of all types of liquidity risk, including those caused by off-balance sheet exposures
- Liquidity stress tests that capture systemic risk and which are linked to the bank's funding plans
- Management of intra-day liquidity risk that arises due to payment and settlement commitments
- Cross-border flows and management of liquidity risk in foreign currency
- The importance of reporting and market discipline to promote better management of liquidity risk

Internationally harmonised guidelines for liquidity risk management of a principled character do not, however, exclude application differing from country to country. Accordingly, cross-border banks will continue to encounter different rules for management of liquidity risk in different countries. To avoid this, it is important that the supervisory authorities co-operate internationally to harmonise their supervision and regulatory frameworks.

The Riksbank supports a qualitative regulatory framework based on principles. Excessively simple rules and quotas may be misleading and give rise to regulatory arbitrage when applied to banks and financial undertakings with differing business models. Limits of various kinds will not help against serious liquidity shocks, such as bank runs.

However, the supervisory authorities have a natural role in formulating guidelines for how liquidity risk is to be assessed and reported. An example is the design and evaluation of stress tests of liquidity. They also have a duty to intervene if a risk situation is identified. It is also unclear as to the extent to which it is currently possible to punish a bank for insufficient liquidity management by imposing larger capital requirements according to the Second Pillar of the Basel Rules. A continuous dialogue between market participants and supervisory authorities is necessary to achieve a common vision as to how liquidity risks are to be assessed.

The most efficient way to ensure cost-effective liquidity management is probably to require greater transparency from the banks. The financial turbulence has increased the demands on banks and financial institutions to report their commitments on and off-balance sheet. The institutions with inadequacies in transparency will be penalized by rating agencies and investors and will meet higher funding costs. Accordingly, the market participants have themselves an incentive to improve transparency. Through the Third Pillar of the

119 Report of the Financial Stability Forum on Enhancing Market and Institutional Resilience, FSF, 7 April 2008.

Basel Rules, the supervisory authorities can speed up this process and set the standard for the information institutions are to provide to the market. Standardisation of reporting of structured products can be a way of reducing the risk of uncertainty arising.

The role of the central banks

The central banks are always able to provide liquidity to the banks in their own currency. This usually takes place by the central bank purchasing or borrowing (repo) securities from the banks, in exchange for money. Most central banks also have an explicit mandate to provide emergency liquidity assistance. This means that they can provide special liquidity support to banks provided that these are solvent. Furthermore, many central banks have market maintenance tasks.

Several central banks have carried out a number of special measures due to the financial crisis. On a few occasions when the financial turbulence has been particularly intensive, many banks have preferred to invest their surplus liquidity in the central banks instead of in the interbank market. The shortest interbank rates have risen sharply and the central banks have increased their repos to stabilise interest rates around the monetary policy key rate.

A number of central banks have expanded the list of eligible collateral that banks may use when they borrow at central banks. Some central banks have also offered the banks government securities in exchange for less liquid mortgage securities. This was intended to make the securities in the banks' portfolios more liquid. This assists banks which have difficulties in selling or using their securities as collateral for loans in the market. However, this also means that the central banks assume some credit risk. Moreover, the high interbank rates and the difficulty of obtaining long-term funding has led to demands that central banks should provide loans with longer durations. Many central banks have used long repos to try to press interbank rates down on slightly longer maturities.

The risk with this action is that the market for certain securities will remain illiquid. The banks will then become dependent on the central bank as financier. The events at Northern Rock showed that liquidity support from central banks is associated with a great stigma: an institution which turns to the central bank indicates in principle that it cannot secure funding in any other way. This risks frightening off even more investors and – in the worst case – gives rise to a bank run. The need for funding through the central bank then risks becoming permanent.

SWEDISH CONDITIONS

The Swedish interbank market has to date performed well during the turbulence and the Swedish banks have been able to obtain funding in the market, even if at slightly higher cost. The Swedish Riksbank has therefore not had to take action. However, these events have brought to the fore a number of issues for Swedish authorities as well. Analysis and monitoring of liquidity risks is a prioritised issue. An important tool for managing financial crises is an effective regulatory framework to deal with insolvent financial institutions. The events at Northern Rock showed the deficiencies in the UK legislation, deficiencies which also exist in the Swedish legislation to a large extent. The new regulatory framework must provide the state with a strong negotiating position to enable institutions of systemic importance to be quickly taken over or sold, without the flows in the financial system collapsing. A regulatory framework of this kind would provide the market participants with the right incentive to price and manage credit and liquidity risks

Concluding comments

A number of innovations have been created in the financial markets in the past decade. Complex structured instruments have been developed, as well as new players that manage risk. In good times, this leads to a spread of risks and better liquidity than before, but in poorer times (or in the event of a sudden crisis of confidence), the system is more vulnerable than before. This has become evident during the financial crisis when uncertainty, distrust and liquidity shortage have been marked.

The crisis has made clear that liquidity risks are a neglected area. The banks' own measures for securing liquidity have proven insufficient from society's perspective. At the same time, there are considerable deficiencies in the current regulation of liquidity.

Regulation and supervision of liquidity risk are now subject to review in many countries and international organisations. In this work, it is important that supervisory authorities in different countries work together and harmonise their supervision and their regulatory frameworks. The authorities and central banks must give careful consideration to how banks and other institutions and they themselves will deal with these issues in the future.

■ Articles in previous stability reports

■ 2007:2

Financial stability – new challenges

With a separate article the Riksbank marks the 10th anniversary of its reports on financial stability. The Riksbank advocated at an early stage that risks and vulnerabilities in the financial system should be discussed openly. Since the time of the first report a lot has happened in the financial field which has led to a number of positive effects on both the efficiency and the stability of the financial system. But developments also bring authorities with responsibility for stability in the financial system face to face with a number of challenges. The article, describes these challenges and what they may entail for the Riksbank's future activities regarding financial stability.

■ 2007:1

Effects of increased foreign ownership in the bank sector

The Riksbank assesses the consequences for financial stability of a foreign owner buying up a Swedish bank. The conclusion is that increased foreign presence is positive for financial stability. It may also be positive for competition in the bank sector. On the other hand, it puts greater demands on the authorities in the countries concerned to cooperate on issues concerning supervision and crisis management.

■ 2006:2

Can Swedish authorities handle distressed institutions?

Swedish authorities do not have sufficient possibilities of handling distressed institutions. The complications connected with the credit institution Custodia were a clear reminder of this. The problems are by no means confined to the small savers whose assets were locked up for a remarkably long time. By far the most serious aspect is that the current rules and regulations hamper the handling of acute problems, such as a future bank crisis, that threaten the financial system. The Riksbank considers there is a great need of new legislation.

Trading activity in credit derivatives and implications for financial stability

The tremendous increase in credit derivatives trading in recent years has given rise to an intensive debate about possible risks for the financial system. The Riksbank considers that at present the combined risks in this trading are limited. There is, however, some cause for concern about the lack of transparency in the market and the possibility of risks being concentrated. The article presents reasons for the Riksbank's assessment.

Read more about previous articles at www.riksbank.se