Economic Commentaries



During the financial crisis, the funding of the banks, which has been overwhelmingly long-term for a number of years, underwent a shift towards shorter maturities. From the second six months of 2008, when the functioning of the markets for long-term funding started to deteriorate, until the first quarter of this year, shortterm funding was dominant. During this year's second quarter, long-term funding has picked up again, which indicates that funding may be on the way towards returning to

the maturity structure

prevailing prior to the financial crisis.

Funding of the banks during the financial crisis

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The Monetary Financial Institutions (MFIs), or, as they are usually referred to, the banks¹, are dependent upon being able to finance their credit granting in various ways. The most important sources of this financing are issues of securities, both in Sweden and abroad, and deposits. In addition, since the autumn of 2008, the banks have been able to fund the granting of credit by borrowing from the Riksbank. An analysis indicates that, during the financial crisis, the banks have decreased their long-term funding, primarily by reducing issues of bonds, and have started to obtain funding over shorter and shorter maturities.

From the start of 2004 until the end of the first six months of 2008, over half of MFI's funding was long-term, i.e. with a maturity of over one year, which should be considered as reflecting a normal funding situation. However, during the second six months of 2008 and the first quarter of 2009, only an average of 15 per cent of funding was long-term in nature. During the first quarter of 2009, long-term funding even became negative, meaning that the banks amortised their bond loans and long-term loans, in net terms.

The situation has changed during the second quarter of 2009. MFIs have once again started to invest in long-term financing by initiating comprehensive net issues (issues minus redemption) of bonds, both in Sweden and abroad. This suggests that the banks may be on the way to returning to the funding structure prevailing before the outbreak of the financial crisis during the second six months of 2008.

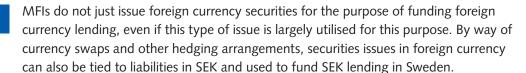
In this Commentary, we present the most important sources of funding for MFIs, as well as the manner in which the maturity structure of the institution's funding has changed during the financial crisis. This account focuses on the period from the start of 2004 until the end of the second quarter of 2009, and is based on information obtained from the Riksbank's balance sheet, as well as balance of payment statistics and financial market statistics.

Securities issues and deposits – the most important sources of funding for Swedish MFIs

At the end of the first six months of 2009, issued securities, i.e. bonds, subordinated loans and certificates, accounted for over half (59 per cent) of MFIs' interest-bearing liabilities. In Figure 1, it can be seen that a larger portion of this liability, 35 per cent, consists of securities denominated in foreign currency, while the remaining portion is denominated in SEK.

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¹ According to the European Central Bank's definition, Monetary Financial Institutions are institutions having deposits or substitutions for deposits among their liabilities. In addition to banks, this includes mortgage institutions, finance companies and monetary securities companies, i.e. securities companies mainly investing in short-term debt securities.



Another important source of funding for MFIs is constituted by deposits and borrowing from Swedish sectors other than MFIs, designated in the following as non-MFIs.² This is equivalent to approximately 29 per cent of the total interest-bearing funding. In addition, the banks borrow the equivalent of approximately 5 per cent of funding from the Riksbank. Their deposits and borrowings from foreign non-MFIs are of approximately the same magnitude.

Figure 1 illustrates the extent of the various types of interest-bearing funding, presented as billions of SEK. The total value of the liabilities included in the Figure amounted to approximately SEK 6 270 at the end of the second quarter of 2009. These liabilities only refer to Swedish MFIs. Consequently, foreign subsidiaries and branches in Sweden are also included. However, borrowings or issue liabilities with Swedish banks' foreign branches or subsidiaries are not included.

Figure 1 illustrates the significance of the various sources of funding for the banks until the end of the second quarter of 2009. However, it does not provide any information regarding the point in time at which the funding was obtained and, thus, neither does it provide information regarding the more recent impact of the financial crisis on the banks' funding.

Consequently, we describe below the net flows taking place for the most important sources of funding up until the second quarter of 2009. We can determine from this description whether the banks have managed to obtain new funding from these sources or whether they have amortised their debts, in net terms. In particular, we examine the development of funding as regards its allocation between long and short maturities.

The repayment of MFIs' foreign currency securities liabilities increased strongly during the financial crisis

For several years, up until the first six months of 2008, MFIs issued foreign currency securities in an extent providing a significant contribution to the funding of these institutions. Net issues increased during the years 2003–2007, from approximately SEK 100 billion to over SEK 300 billion per year (see Figure 2). During the first six months of 2008, the rate of issue increased further, with net issues amounting to approximately SEK 240 billion. The main portion of net issues between 2003 and the first quarter of 2008, approximately 72 per cent, was of a long-term nature – that is, it consisted of bonds.³

Figure 2 illustrates the massive downswing in new issues of foreign currency securities occurring in autumn 2008. Overseas issues stopped and those bonds and certificates that had reached maturity were not traded. As a consequence, outflows arose, amounting to approximately SEK 220 billion during the second six months of 2008. Between August and November alone, net repayments amounted to SEK 375 billion. During December, a small number of Swedish institutions were able to make net issues of foreign currency bonds, partially due to their participation in the government guarantee programme.

 $^{{\}bf 2} \ \ {\bf This} \ {\bf refers} \ {\bf to} \ {\bf deposits} \ {\bf and} \ {\bf borrowing} \ {\bf from} \ {\bf all} \ {\bf Swedish} \ {\bf sectors} \ {\bf except} \ {\bf MFIs} \ {\bf and} \ {\bf the} \ {\bf Riksbank}.$

³ These financial instruments are defined in the statistics according to the maturity of the security in question. This means that bonds are defined as interest-bearing securities with maturities exceeding one year, while money market instruments or certificates are securities with maturities of one year or less.



During 2009, the banks have again started to make net issues of securities. Short-term funding, via the issue of certificates, was dominant in the first quarter, amounting to 61 per cent of the total. A strong increase in net issues subsequently took place, with the proportion of bond issues starting to grow during the second quarter.

The krona market has been unable to compensate for the shortfall of foreign currency issues

During the years 2005–2007, the banks undertook net issues of bonds and certificates denominated in SEK for an average amount equivalent to SEK 150 billion per year (see Figure 3). In 2008, this volume of issues increased to SEK 200 billion. However, the statistics indicate that the net issues of the second six months of 2008, equivalent to approximately SEK 100 billion, do not equal the net repayments of over SEK 200 billion simultaneously taking place in respect of securities denominated in foreign currencies. Consequently, during this period, the MFIs did not cover the shortfall in borrowings via foreign currency securities with borrowings on the krona market.

During the first quarter of 2009, the banks made net repayments of SEK bonds at the same time as they were able to make net issues of smaller amounts of certificates. However, during the second quarter, a sudden change has taken place and the banks have started to make net issues of SEK bonds. At the same time, the banks have reduced their short-term liabilities by making net repayments of SEK certificates.

Deposits only contribute towards short-term funding for the banks

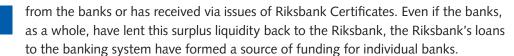
Deposits and borrowings from non-MFIs form another important source of funding for banks. Figure 4 illustrates how deposits from non-MFIs in Sweden increased sharply during the second six months of 2008, before decreasing again slightly during the first quarter of 2009. This inflow to the banks' deposit accounts can most likely be explained by savers' reduction in holdings of shares in the autumn of 2008, partially as the result of the association of investments in shares with increased risk during the financial crisis.

Funding via deposits and borrowing is, by nature, overwhelmingly short-term. Of the banks' total deposit stock of approximately SEK 1 800 billion at the end of 2008, only an amount of approximately SEK 60 billion, equivalent to 3 per cent, was bound for one year or longer. This proportion has also remained relatively unchanged since the start of 2008. The increase in bank deposits in the second quarter of 2009 has thus almost entirely concerned shorter durations (see Figure 4).

The Riksbank has provided short-term loans to the banking system

As can be seen in Figure 1, by the end of the second six months of 2009, MFIs have an aggregate liability to the Riksbank of approximately SEK 304 billion. This liability was built up during the second six months of 2008 and the first quarter of 2009, when the Riksbank lent both SEK and USD to the banking system.

The Riksbank started lending SEK to the banks as the market for long-term credits was experiencing an ongoing decline in functionality and there existed a need to secure the banks' supply of credit. This lending activity has created a surplus of liquidity within the banking system that the Riksbank either has received as overnight deposits



The banks have utilised the Riksbank's USD loans to fund lending in this currency. It has also been possible to further convert this exposure in USD to other currencies via forward cover, making it possible for the banks to lend other currencies than USD.

The Riksbank's net lending to the banking system was implemented during the fourth quarter of 2008, apart from a smaller net lending in USD implemented during the first quarter of this year (see Figure 5). It can be concluded that the Riksbank's USD lending, which at the end of the first quarter amounted to SEK 247 billion, has partially compensated the banks for the shortfall in foreign currency securities funding arising during the second six months of 2008.

However, the Riksbank's loans to the banks have considerably shorter maturities than the market funding lost during the financial crisis. The Riksbank's USD loans have maturities of approximately three months, while its SEK loans generally have maturities of three or six months. During the second quarter of 2009, the Riksbank has issued a minor net loan with a maturity of twelve months.⁴

As Figure 5 illustrates, the banks have reduced their liabilities with the Riksbank this year, particularly during the second quarter. Their net repayments during the quarter amounted to over SEK 100 billion.

Maturity structure of MFIs' total funding

If we consider the total interest-bearing funding for MFIs, that is securities issues in both SEK and foreign currency, plus loans from the Riksbank and deposits and borrowings from non-MFIs, we can see that long-term funding came to a halt during the second six months of 2008, at which point the banks only issued small net amounts, SEK 36 billion, in the form of long-term funding. During the first quarter of 2009, this picture became even clearer as the banks made net repayments of their long-term liabilities (see Figure 6).

The funding that the MFIs are instead relying upon is generally short-term. This primarily refers to loans from the Riksbank with maturities of three or six months, but also to deposits and borrowings from non-MFIs, primarily with durations of less than one year.

During the second quarter of 2009, a clear turnaround has taken place, in which long-term funding has picked up. MFIs have made net issues, primarily of foreign currency bonds, of a value equivalent to SEK 107 billion. At the same time, the banks have reduced their short-term liabilities, both by cutting back on deposits from non-MFIs and by reducing their borrowings with the Riksbank.

Figure 7 illustrates the manner in which the MFIs' interest-bearing funding (i.e. net transactions) has changed across two comparison periods, in terms of the composition of maturities. In the period from the start of 2004 until the end of the first six months of 2008, long-term financing made up 58 per cent of total net funding. During the period of time from the second six months of 2008 until the first quarter of 2009, when the impact of the financial crisis on MFIs' net funding was greatest, this proportion declined to 8 per cent.

⁴ This loan is also considered to be short-term. Long-term loans are those with maturities of over one year.

Conclusions

In this commentary, we have been able to establish that the funding of the banks, which has been overwhelmingly long-term for a number of years, underwent a shift towards shorter maturities during the financial crisis. From the second six months of 2008, when the functioning of the markets for long-term funding started to deteriorate, until the first quarter of this year, short-term funding was dominant. However, during this year's second quarter, long-term funding has picked up again, which indicates that funding may be on the way towards returning to the maturity structure prevailing prior to the financial crisis.

Figures

Figure 1. MFIs' interest-bearing funding at the close of the second quarter of 2009, stock value, SEK billions

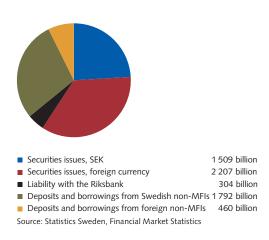
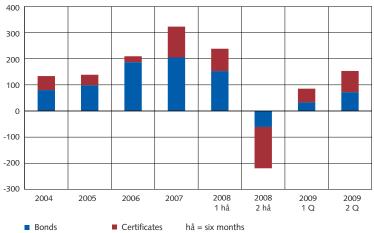
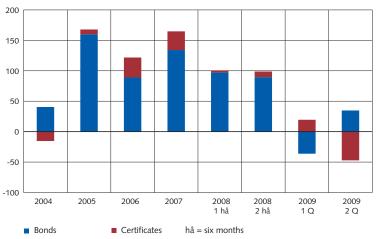


Figure 2. MFIs' foreign currency securities issues, net transactions, SEK billions



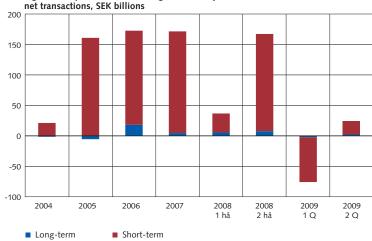
Source: Statistics Sweden, balance of payments statistics

Figure 3. MFIs' SEK securities issues, net transactions, SEK billions



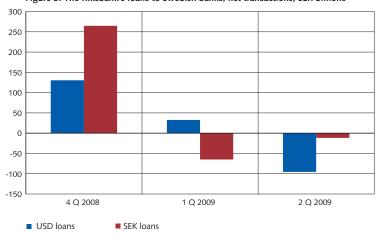
Source: Statistics Sweden, Financial Market Statistics

Figure 4. Deposits and borrowings received by MFIs from Swedish non-MFI, net transactions, SEK billions



Source: Statistics Sweden, Financial Market Statistics

Figure 5. The Riksbank's loans to Swedish banks, net transactions, SEK billions



Source: The Riksbank, weekly reports

Figure 6. Funding of MFIs, net transactions, SEK billions

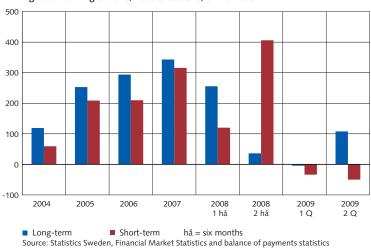


Figure 7. Proportions of long-term and short-term funding in two comparison periods.

