The major Swedish banks' funding in US dollar

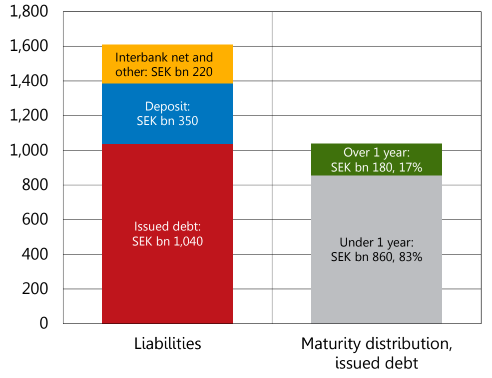
This article describes how funding in foreign currencies is conducted, how it is used and what the associated risks are. Although the banks' funding in foreign currencies gives them access to diversified funding, it also entails liquidity risks. It would also be difficult to issue the same volumes of funding in Swedish krona as at present there is no liquid money market in Sweden. The description only deals with borrowing in US dollar as this is the currency that both Swedish and other European banks found it most difficult to borrow in the period 2008-2009. Therefore, the article does not provide a complete picture of the banks' liquidity risk in foreign currencies. However, the analysis and the conclusions can largely be said to apply to other foreign currencies too, for example the euro.

The major Swedish banks' liabilities[66] in US dollar amounted to just over SEK 1,600 billion at the end of 2012. Approximately 20 per cent of these liabilities consist of deposits, above all from large non-financial and non-bank financial companies. The remainder consists of issued securities and of funding from other banks and financial institutions. Almost 85 per cent of all issued securities have a maturity of less than one year (see Chart B4:1). Put simply, the borrowing in dollar is used in three different areas by the banks: building up liquidity buffers, long-term lending to companies and the funding of assets in other currencies through so-called currency swaps.

The banks invest part of their borrowing in liquidity buffers

At the end of 2012, the banks used just over a third of their liabilities in dollar, a sum equivalent to approximately SEK 600 billion, to build up liquidity buffers (see Chart B4:2). These buffers primarily consist of deposits in the US central bank, the Federal Reserve. This means that the banks quickly can obtain access to liquid funds in dollar should the need arise. However, the buffers are funded by borrowing at relatively short maturities (see Chart B4:3).[67] This in turn means that the banks have access to their liquidity for only a few months at most before they have to use it to repay their investors. The part of the dollar funding which is invested in liquidity buffers can thus be seen as a buffer designed to cover the need for liquidity during relatively brief periods of stress.

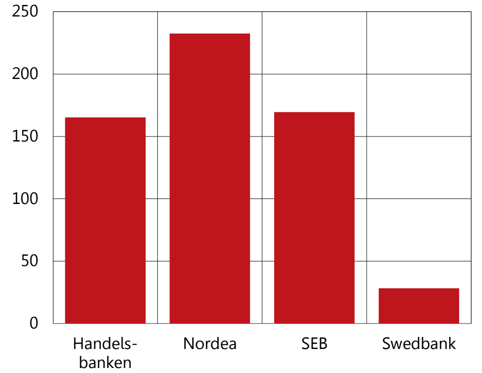
Chart B4:1. The major Swedish banks' liabilities in US dollar
December 2012, SEK billion



Note. Interbank net refers to the banks having more borrowing from other banks than lending.

Sources: Bank reports and the Riksbank

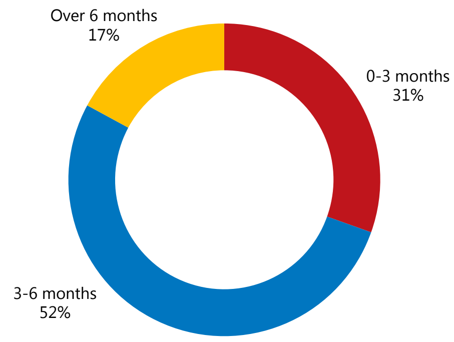
Chart B4:2. The major Swedish banks' liquid assets in US dollar
December 2012, SEK billion



Note. Liquid assets refer to holdings in central banks and interest-bearing securities.

Sources: Bank reports and the Riksbank

Chart B4:3. Maturity for the major Swedish banks' issued bank certificates in US dollar
December 2012, per cent

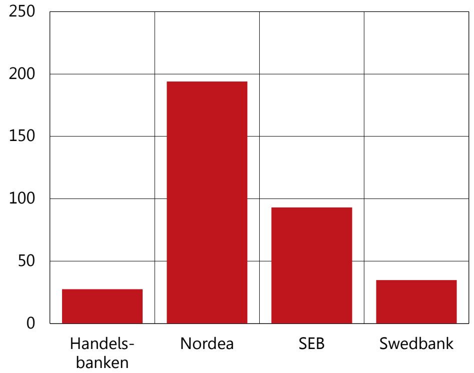


Sources: Bank reports and the Riksbank

---

66 The terms borrowing, funding and liabilities are used synonymously in the Box.
67 Here it is assumed that the short-term funding is primarily used to fund liquid assets.

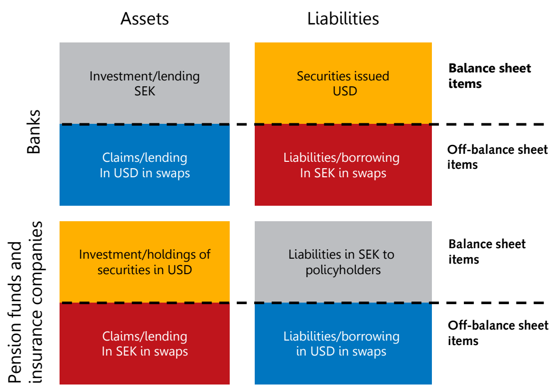
Chart B4:4. The major Swedish banks' illiquid assets in US dollar
December 2012, SEK billion



Note. About 75 per cent of the lending has a remaining maturity of more than one year.

Sources: Bank reports and the Riksbank

Chart B4:5. Hypothetical balance sheets of banks, pension and insurance companies after a currency swap



Source: The Riksbank

The banks lend US dollar to companies at long maturities

At the end of 2012, the banks used approximately SEK 350 billion of their borrowing in dollar to fund lending in dollar to companies (see Chart B4:4). This applies mostly to large companies operating in sectors that traditionally have strong links to the dollar, for example shipping. There are also many multinational companies that require dollar.

It is therefore also important to the companies that the banks have access to dollar, as it is the banks that supply the companies with foreign currencies.

The banks exchange some of their funding in dollar for other currencies

The Swedish banks' dollar assets in the form of liquid funds and lending to companies amounts to SEK 950 billion. [68] At the same time, their liabilities in dollar are equivalent to SEK 1,610 billion. Their remaining liabilities, equivalent to SEK 660 billion, are not invested in dollar assets. The banks instead exchange these dollar for other currencies on the currency swap market.[69]

The counterparties in these transactions may be non-financial companies, banks or other financial companies (usually Swedish pension companies and insurance companies). These companies have liabilities to savers and insurance holders in Swedish krona, but want to hold some of their assets in dollar to spread their risks.[70] To be able to buy dollar assets without taking currency risk, they first need to borrow dollar, which they do by entering into currency swaps with the banks.[71] [72]

In a currency swap, the bank and the pension company or insurance company swap currencies with each other. The pension or insurance company receives dollar from the bank and the bank receives Swedish krona from the pension or insurance company. At the same time, the parties enter into an agreement on a transaction in the future in which the pension or insurance company promises to repay dollar to the bank and the bank promises to pay krona. The currency swap thus enables the pension or insurance company to match its assets and liabilities with the right currency and thereby manage its currency risk (see Chart B4:5).

In order for the Swedish banks to be able to lend dollar through currency swaps, they first have to borrow these dollar on the market, usually by issuing short-term securities in dollar. Consequently, the

[68] SEK 600 billion in liquid assets and SEK 350 billion in illiquid assets.
[69] The major banks exchange dollar in currency swaps, normally for Swedish krona, other Nordic currencies or euro. This article only deals with that part of dollar borrowing that is swapped for krona.
[70] The pension and insurance companies also hold other foreign currencies in addition to dollar.
[71] The pension and insurance companies can exchange krona for dollar on the spot market without entering into a currency swap, but they then expose themselves to currency risks as their assets are in dollar and their liabilities in krona.
[72] For more detailed information on currency swaps see Eklund, Johanna, Milton, Jonas and Rydén, Anders, Swedish banks' use of currency swaps to convert borrowing in foreign currencies to Swedish krona, *Sveriges Riksbank Economic Review 2012:2*, Sveriges Riksbank.

banks' "surplus funding" in dollar serves two purposes: first it gives the pension and insurance companies the dollar they need to be able to buy dollar assets without taking currency risk and, second, it gives the Swedish banks access to krona that they can lend to other borrowers or invest in Swedish assets.

Effective dollar funding is important to banks, pension and insurance companies and other companies

The banks' borrowing in dollar is thus primarily used for three purposes (see Chart B4:6). By investing their borrowing in liquid dollar assets, the major banks build up their resilience to short-term liquidity stress. In addition, the banks borrow money to lend to non-financial companies that wish to borrow dollar. The investment needs of the pension and insurance companies are also one of the driving forces behind the banks' funding in dollar as they seek to acquire dollar through currency swaps. It should also be pointed out, however, that by exchanging dollar for krona in such swaps with the pension and insurance companies, the banks generate funding in Swedish krona which since 2008 has led to lower funding costs than they would have had if they had borrowed krona directly on the Swedish market (see Chart B4:7). All in all, access to effective markets in dollar is thus important to the banks but also to the pension and insurance companies and other companies.

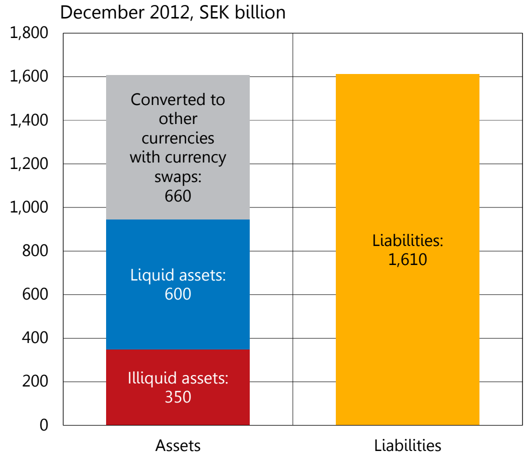
Funding in dollar creates risks

As the Swedish banks are active on international markets it is not particularly surprising that they use funding in foreign currencies to such a large extent. This gives them access to diversified funding. However, funding in foreign currencies also entails risks that it is important to be aware of.

Lending to companies gives rise to liquidity risks in foreign currencies

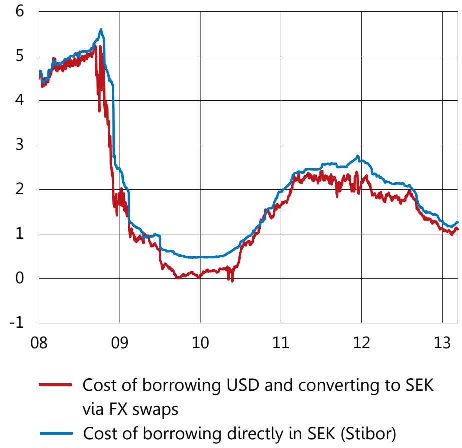
The most obvious risk is that the banks are exposed to liquidity risks in foreign currencies. These risks mainly arise in connection with lending to large companies. In most cases this lending is at long maturities and is thus illiquid for the banks. In order for the banks not to be exposed to liquidity risks, the lending must therefore be funded by stable deposits or long-term market funding. Swedish banks have illiquid assets in dollar to a total value of around SEK 350 billion. Put simply, this is funded through deposits and long-term market funding. The long-term market funding only amounts to around SEK 180 billion, however (see Chart B4:1).[73] This so-called maturity

Chart B4:6. The major Swedish banks' assets and liabilities in US dollar
December 2012, SEK billion



Sources: Bank reports and the Riksbank

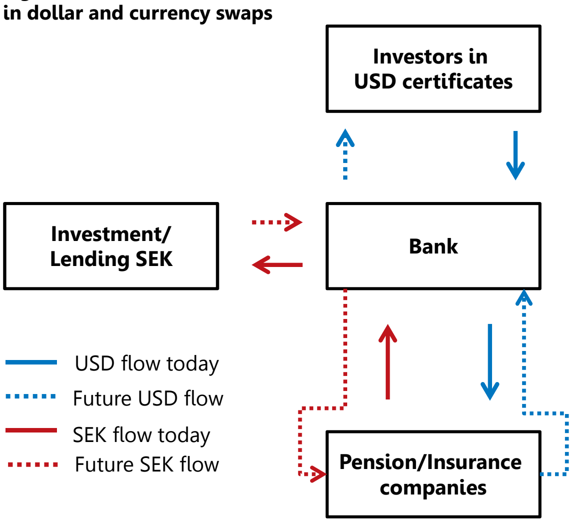
Chart B4:7. Cost for SEK funding
Per cent



Source: Bloomberg and the Riksbank

[73] The long-term foreign market funding in dollar can also be used to fund lending in other currencies through currency swaps.

Figure B4:1. Flows in connection with the issue of securities in dollar and currency swaps



transformation is a natural part of a bank's operations, but entails particular risks when it is conducted in foreign currencies. This is because the Riksbank cannot assist the banks with unlimited liquidity support in US dollar in the event of funding problems. A liquidity crisis in US dollar may therefore quickly develop into a broader financial crisis resulting in major costs to society. One of the reasons the Riksbank maintains a foreign exchange reserve in various currencies is to avoid such a scenario.

The part of funding that is swapped for SEK entails other types of risk

Under normal circumstances, that part of funding in foreign currencies that is used to fund assets in Swedish krona through currency swaps does not give rise to liquidity risks in foreign currencies. This is because when the time comes for the banks to repay dollar to those who have invested in their issued securities the banks get back the same amount of dollar from their counterparty through the currency swap (see Figure B4:1).[74] This is not therefore as problematic from the point of view of the economy as a whole.

However, this does not mean that this part of funding does not entail any problems. First, currency swaps give rise to counterparty risks between the banks and their counterparties, above all the pension and insurance companies. Second, it is not realistic to believe that short-term securities borrowing in foreign currencies that have been swapped for krona can easily be replaced by borrowing directly in krona as at present there is no liquid money market in Sweden.

The banks' liquidity buffers will probably decrease in the longer term

As mentioned above, the Swedish banks have built up large liquidity buffers in recent years. In the short term they have therefore improved their resilience to liquidity risks. However, these large buffers, which amounted to approximately SEK 600 billion at the end of December 2012,[75] are partly a result of the fact that the Swedish banks have had favourable borrowing costs in recent years and have therefore been able to build up buffers at practically no cost. It is not likely, however, that they will be able to maintain such large liquidity buffers when their funding costs return to more normal levels and the Federal Reserve no longer offers such a favourable interest rate for investments. The banks' resilience to short-term stress will thus probably weaken in the period ahead.

[74] However, if the banks want to continue to supply the pension and insurance companies with dollar they will need to be constantly able to borrow dollar.
[75] By comparison, the banks' liquid assets in dollar corresponded to SEK 200 billion in December 2010.