# ARTICLE – Flightiness of deposits varies across Swedish banks

The spring turmoil in the banking market emphasised the risk associated with bank deposits. Although the situation in the foreign banks affected was special, the course of events highlighted the need in general to increase knowledge about depositor behaviour. The Riksbank has therefore conducted an in-depth analysis of deposits in the Swedish banking sector. The results show that some banks have a higher concentration of deposits from individual depositors, but there is no evidence that deposits are particularly concentrated in a single sector. The data also show that banks with a higher share of deposits not covered by deposit insurance hold a larger liquidity buffer. At the same time, the results indicate that deposits may be more flighty in some smaller banks, in particular deposits that are not covered by deposit insurance. This was observed, for example, during the outbreak of the coronavirus pandemic. Several consumer credit banks also have a large share of deposits in Germany, partly through deposit platforms, which are likely to be more flighty. This combined with the fact that new technologies and social media may have made deposits more flighty, make it important to continue monitoring the risks associated with deposits going forward.

## Deposits also entail liquidity risks

Households, companies and financial institutions all need to deposit money in accounts at banks. These deposits are an important part of banks' funding and have traditionally been considered a more stable source of funding than market funding. But deposits can also disappear if confidence in a bank is lost and customers want to withdraw their money. Moreover, the speed of the bank runs at a number of US banks in the spring suggests that deposit flightiness may have increased as a result of technological developments. This is because information spreads very quickly via social media and it is very easy to move money.

Although the Swedish banking sector coped well during the spring turbulence, there are reasons to increase knowledge about deposits in Swedish banks. The Riksbank has good knowledge of the banks' funding structures and the composition of deposits, but more data is needed to make a more detailed analysis of other interesting aspects. The Riksbank has therefore asked for detailed data on deposits in 24 Swedish banks.[71]

[71] The data show, among other things, the distribution of deposits across sectors, currencies, countries, individual depositors, account types, and the level of deposit insurance. The frequency is monthly and with a

## Deposits differ among different types of banks

At the end of the second quarter of 2023, deposits in the Swedish banking sector amounted to just over SEK 10,000 billion,[72] which is about 170 per cent of Sweden's annual GDP. However, in an international perspective, deposits in the Swedish banking sector are small in terms of the size of total liabilities and lending.[73] The amount of deposits in Swedish banks varies depending on the type of bank. The major banks and mortgage banks have a relatively small proportion of deposits in relation to total liabilities, 50 and just under 40 per cent respectively (see Chart 28). This is because they largely finance themselves on the capital markets. For other types of banks, deposits represent at least 75 per cent of total liabilities and are thus the most important source of funding. The chart also shows that private individuals account for a large share of deposits for many banks. This is particularly true for consumer credit banks, where over 95 per cent of deposits come from private individuals. The major banks, savings banks and security trading banks also have a significant share of corporate deposits. Deposits from financial companies also constitute a relatively large share of the deposits of the major banks and security trading banks.

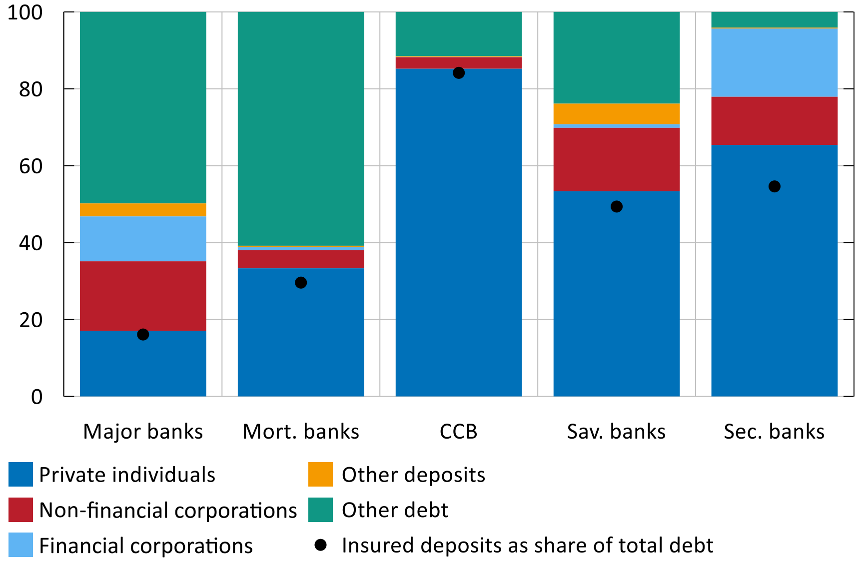
5-year history. The data has been collected from the following banks and banking groups: Major banks: Handelsbanken, Nordea, SEB and Swedbank. Mortgage banks: Bluestep, Landshypotek, Länsförsäkringar Bank, SBAB and Skandiabanken. Consumer credit banks: Hoist Finance, ICA Banken, Ikano, Klarna, Marginalen, Nordax, Norion (formerly Collector), Resurs, Svea Bank and TF Bank. Savings banks: Sparbanken Nord, Sparbanken Sjuhärad and Sparbanken Skåne. Security trading banks: Avanza, Carnegie and Nordnet. The grouping of banks is based on FI's Banking Barometer. The data collected cover 85 per cent of deposits in all Swedish-controlled MFIs. The term "*banks"* in the article refers to entire banking groups.

[72] The figure includes deposits in Swedish MFIs' parent companies and foreign branches as well as foreign banks' branches and subsidiaries in Sweden. Swedish banks' foreign subsidiaries are excluded. The figure may therefore differ from Swedish banks' deposits at group level.

[73] For example, for Sweden and the other Nordic countries, the ratio of loans to deposits is significantly higher than for the US and other EU countries, as Nordic banks finance their lending to a greater extent through the capital markets.

**Chart 28. Deposits by type of depositor**

Per cent




Note. Mort. banks: Mortgage banks. CCB: consumer credit bank, Sav. banks: savings banks, Sec. banks: security trading banks. The chart shows the share of total liabilities.

Source: Banks' data reported to the Riksbank.

## The share of insured deposits differs among banks

The amount of funding consisting of deposits not covered by the state deposit insurance scheme differs between bank types, as the Riksbank has previously highlighted.[74]. One third of the major banks' total liabilities consist of uninsured deposits (see Chart 29). The corresponding figure for security trading banks is 41 per cent, for savings banks 27 per cent, for mortgage banks 9 per cent and for consumer credit banks 4 per cent. The difference in the figures is partly due to the ratio of deposits to total liabilities and partly due to who the depositors are. Those banks that mainly receive deposits from a large number of private individuals have a high share of insured deposits.[75] This applies, for example, to the consumer credit banks for which insured deposits constitute 95 per cent of total deposits. For the major banks, about one third of deposits are insured. One of the reasons why a large share is not insured is that they have a lot of deposits from companies, both non-financial and financial. Around 60 per cent of the security trading banks' deposits are insured as they have deposits from private individuals that exceed the maximum insured amount and a relatively large proportion of deposits from companies.

The analysis shows that banks with a higher share of uninsured deposits, such as the major banks and security trading banks, have a larger buffer of high-quality liquid assets (HQLA) with regard to total liabilities (see Chart 29). The buffer requirement is designed under the Basel framework to cover various outflows from the bank in a

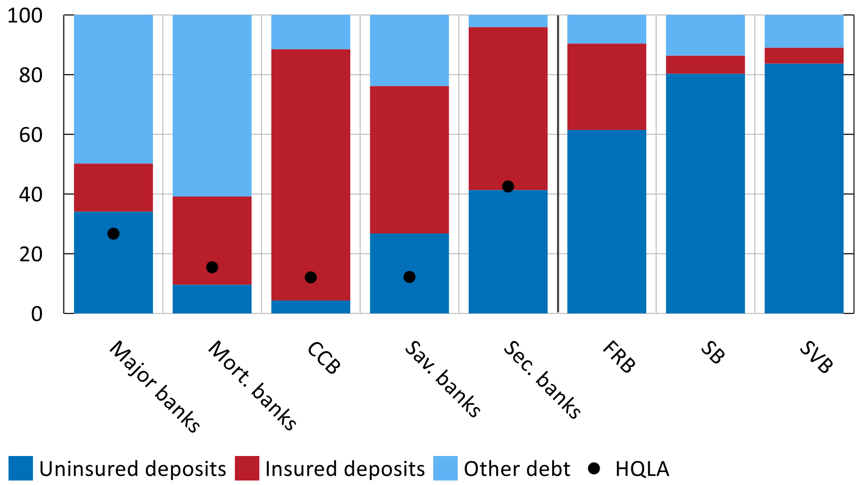
[74] See *Financial Stability*, 2023:1, Sveriges Riksbank.

[75] In Sweden, deposit insurance applies up to SEK 1,050,000 per depositor and institution. It applies to all private individuals, as well as companies and other legal entities. However, it does not cover financial companies.

stress scenario. The required size of a bank's buffer depends on several factors, including the type of funding. Deposits that are categorised as more flighty under the regulations drive up the buffer requirement. Corporate deposits, and especially financial deposits, are considered more flighty than retail deposits. In general, uninsured deposits are also classified as more flighty than insured deposits.

**Chart 29. Liabilities broken down by deposits and other liabilities, in relation to HQLA**

Per cent




Note. Percentage of total liabilities. CCB: Consumer credit bank, Sav. banks: Savings banks, Sec. banks: Security trading banks, FRB: First Republic Bank, SB: Signature Bank and SVB: Silicon Valley Bank. Data on HQLA for US banks are missing as small and medium-sized banks in the US are exempt from the Basel framework and therefore do not report these figures.

Sources: Data reported by banks to the Riksbank, the Federal Deposit Insurance Corporation and the Federal Reserve.

## Some types of banks are more exposed to individual depositors

The Riksbank has also analysed whether Swedish banks' deposits are concentrated in certain sectors or individual depositors, as this may increase the risk in a bank's deposits.[76]. The data collected show the sectoral affiliation of the 50 largest depositors from financial companies and the 50 largest depositors from non-financial companies.[77] The Riksbank finds no indication that any of the Swedish banks' deposits are particularly concentrated in a single sector.

Chart 30 shows the share of bank deposits held by individual depositors. Looking at the black line, which represents the average for all banks combined, the 100 largest depositors account on average for just under 10 per cent of total deposits. In security trading banks and major banks, the 100 largest depositors account for a significantly

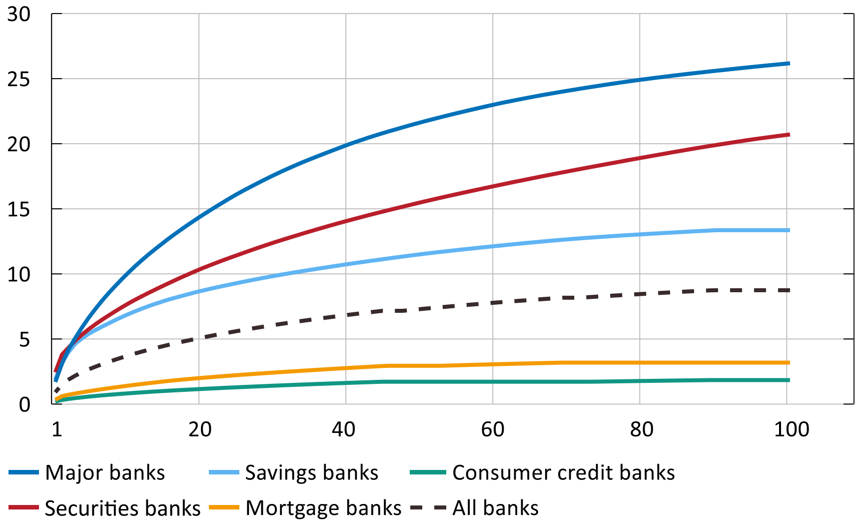
[76] A related example is the US banks that were exposed to risks in the tech industry and ran into problems in the spring. At SVB, these depositors accounted for more than half of their deposits. *Review of the Federal Reserve's Supervision and Regulation of Silicon Valley Bank*, April 2023, Federal Reserve.

[77] The Riksbank has also requested data on the largest deposits from private persons, central banks, and other counterparties.

larger share of total deposits than in other banks, 20 and 25 per cent respectively. The averages of both groups are largely driven up by individual banks included in each group. These banks are higher because they have more deposits from companies, which are fewer in number than private individuals but make larger deposits. However, among the security trading banks, some private individuals are also among the 100 largest depositors.

**Chart 30. Share of the 100 largest depositors in bank deposits**

Per cent




Note. Cumulative share of total deposits, average by bank type. On the horizontal axis, depositors are ranked from 1 to 100, with the largest depositor being ranked 1. Far left: the average share of the largest depositor for a given type of bank. Far right: the average share of the 100 largest depositors for a given type of bank.

Source: Banks' data reported to the Riksbank.

## Consumer credit banks' deposits abroad can be more flighty

Several Swedish banks have subsidiaries and branches outside Sweden, so they may also have deposits from other countries. In terms of concentration in different countries, more than 60 per cent of Swedish banks' deposits are in Sweden. In addition, just over 12 per cent are in the Baltic States, just under 8.5 per cent in one of the other Nordic countries, 8 per cent in the United States and just under 6 per cent in the United Kingdom. The vast majority of the banks included in the dataset only have deposits in Sweden. The significant foreign exposures are with the major banks and consumer credit banks. The major banks have deposits in the US, the UK, the Baltic States and the other Nordic countries.

Deposits in Germany represent 3 per cent of the total for all banks, but in several consumer credit banks, deposits in Germany represent between 20 and 90 per cent of their total deposits. Several of these banks have opted to join major deposit platforms, where savers can easily switch accounts, for example to get a higher savings rate. These deposits may therefore be more flighty than direct deposits. However, the higher flightiness is offset to some extent by the fact that some of the deposit volumes on these platforms are held in fixed-term accounts with limited withdrawals of six months or more.[78].

## Deposit flightiness varies across depositors and bank types

In order to form an opinion on flightiness, the Riksbank has analysed the inflows and outflows in banks' deposits during the period covered by the data material, i.e. January 2018 to June 2023. The largest monthly outflows from each bank's total deposits during the period ranged from 1 to 22 per cent (see Chart 31).[79] It is clear that outflows differ between different types of deposits. For example, insured deposits from private persons had smaller outflows than uninsured deposits. The same applies to deposits from non-financial companies. There is also a clear difference in the size of the outflows between operational[80] and non-operational corporate deposits, where the outflows for non-operational deposits were significantly larger.

The analysis also shows that deposits from financial companies (which are almost exclusively held by the major banks and security trading banks) had the largest outflows. Of these deposits, credit institutions as well as fund managers and alternative investment fund managers accounted for the largest outflows. The large outflows from credit institutions are largely due to year-end effects. The transfer of deposits by credit institutions at the turn of the year is a recurring phenomenon and is due to the fact that banks want to reduce their balance sheets at this time, which they do by, among other things, lowering the interest on this type of deposit.[81] These outflows usually do not pose any liquidity stress as they are expected and banks therefore hold liquid assets to meet the outflows.

The variation in the outflows observed is generally in line with what is expected. For example, the Basel framework assumes that uninsured deposits are more flighty than insured ones, that non-operational deposits are more flighty than operational ones, and that financial deposits are the most flighty category. However, the analysis shows that outflows from private individuals and non-financial companies were roughly equal, which differs from the regulatory framework that generally classifies corporate deposits as more flighty than those from private individuals.[82]

[78] See Svahn (2023), "Buy now pay later - a threat to financial stability?" *Staff memo*, Sveriges Riksbank.

[79] The analysis refers to net outflows and is based on month-end to month-end balances as these data do not cover daily observations.

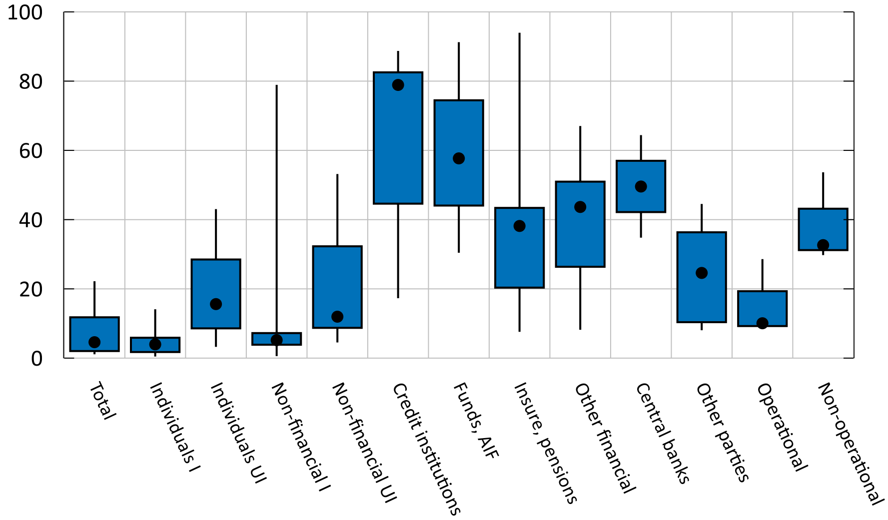
[80] Operational deposits refer to deposits linked to banking services related to a company's operational activities, such as payroll, cash management and clearing. Non-operational refers to other corporate deposits.

[81] Banks do this to reduce their resolution fee, deposit insurance fee and bank tax, which are calculated on the basis of the year-end balance sheet value. While outflows from these groups were very large, it is worth bearing in mind that this type of deposit constitutes a limited share of total deposits.

[82] In the Basel framework, the outflow assumption in a 30-day stress scenario for retail deposits (which refers to private persons and small and medium-sized enterprises) is 3 to 5 per cent for insured deposits and 10 per cent for uninsured deposits. For non-financial companies, these figures are 5 to 20 per cent for insured deposits and 25 to 40 per cent for uninsured deposits. For deposits from financial companies, the figure is 100 per cent. See Basel III: The Liquidity Coverage Ratio and liquidity risk monitoring tools, January 2013, Bank for International Settlements (BIS).

**Chart 31. Largest monthly outflows of deposits**

Per cent



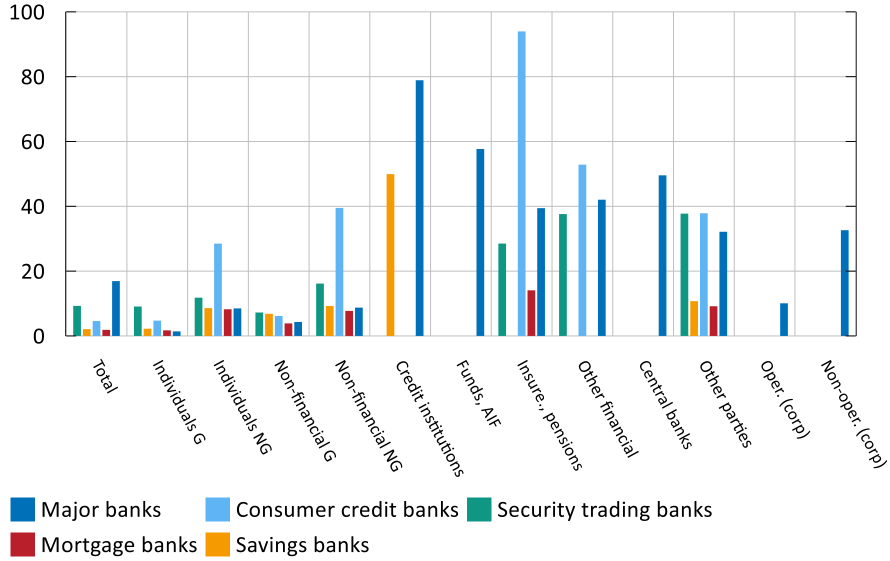

Note. Percentage of total deposits for each deposit category. The data refer to the banks' largest monthly outflows between January 2018 and June 2023 and are illustrated in the chart with the values for max/min, first quartile and third quartile. The points in the chart represent the median for each category. If a bank's deposits from a deposit category are less than one per cent of its total deposits, they are excluded so that very small volumes do not distort the overall picture. "I" and "UI" after a category name stand for "Insured" and "Uninsured" respectively. "Operational" and "non-operational" refer to this type of deposit only from non-financial and financial companies, and data only from major banks. AIF stands for alternative investment fund manager.

Source: Banks' data reported to the Riksbank.

Outflows in total deposits differed by bank type. In terms of the median, the major banks had the largest outflows (17 per cent), followed by security trading banks (9 per cent), consumer credit banks (5 per cent), mortgage banks (2 per cent) and savings banks (2 per cent) (see Chart 32). The differences are partly due to the fact that the major banks and security trading banks account for most of the deposits from financial companies, i.e. the category with the largest outflows. Notably, within the category of uninsured deposits from private persons, consumer credit banks had the largest outflows. The same applied to the uninsured deposits of non-financial companies. However, uninsured deposits represent only a small share of the total deposits of consumer credit banks.

**Chart 32. Largest monthly outflows of deposits**

Per cent




Note. Percentage of total deposits per deposit category. The data refer to banks' largest monthly outflows between January 2018 and June 2023 and are illustrated in the chart with the median per bank type. If a bank's deposits from a deposit category are less than one per cent of its total deposits, they are excluded so that very small volumes do not distort the overall picture. This, and the fact that some banks do not have deposits in certain categories, means that the median is sometimes calculated on the basis of fewer banks than all banks per bank type. "I" and "UI" after a category name stand for "Insured" and "Uninsured" respectively. "Operational" and "non-operational" in the chart refer to this type of deposit only from non-financial and financial companies, and data only from major banks. AIF stands for alternative investment fund manager.

Source: Banks' data reported to the Riksbank.

## Some banks had larger outflows in connection with the coronavirus outbreak

It is important to distinguish between expected outflows, which result from certain deposits being inherently more flighty, and unexpected outflows, which, due to stress and loss of confidence, result in larger than expected outflows. If a bank were to experience large unexpected outflows of this nature, it could lead to liquidity problems. To investigate whether certain deposits showed signs of increased flightiness during more stressed situations, the Riksbank has analysed deposits in connection with the outbreak of the coronavirus pandemic, Russia's invasion of Ukraine and the spring bank turmoil.[83]

The results show that the major banks did not have significantly different outflows during any of these events, while some other banks saw increased outflows, especially during the coronavirus pandemic. This applies in particular to some consumer

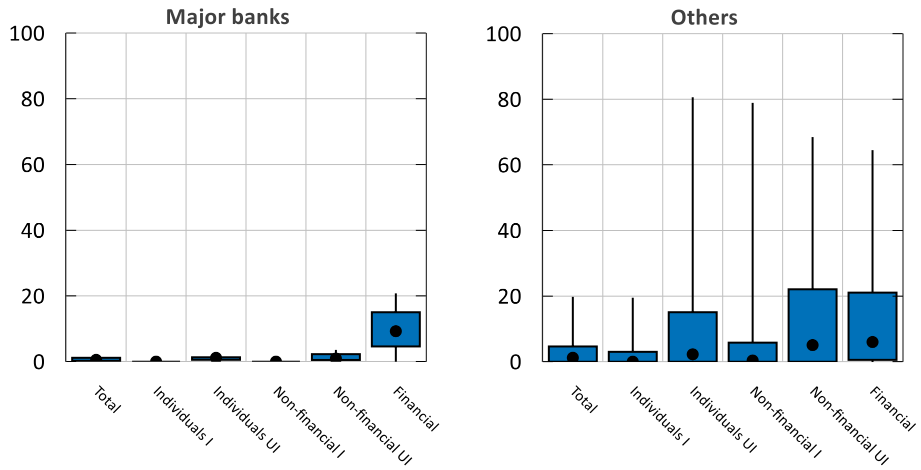
[83] The study examined whether there had been a decline in bank deposits around the different events from one month before the event took place and four months after. *If* a decline occurred, the number of months with a continuous decline was counted, as well as the decline as a percentage of deposits. Note: the method does not adjust for seasonality or other factors that may have affected banks' deposits.

credit and security trading banks, while flows were smaller for mortgage banks and savings banks.

As outflows were mainly related to the outbreak of the pandemic, the results below focus on that period. In that period, the number of consecutive months of outflows was 0 to 2 months for the major banks, and 0 to 10 months for other types of banks. During that period, outflows represented 0 to just under 2 per cent of total deposits for the major banks and between 0 and 20 per cent for other banks (see Chart 33). Over the period, outflows differed somewhat across deposit categories. For example, the major banks had almost no outflows from private individuals, while other banks had larger outflows, especially in uninsured deposits. The same pattern was found in deposits from non-financial companies.[84]

**Chart 33. Outflows of deposits around the coronavirus outbreak**

Per cent




Note. Percentage of total deposits per deposit category. The data refer to observed deposit outflows around the outbreak of the coronavirus pandemic for banks and are illustrated in the chart with the values for max and min, and first quartile and third quartile. The points in the chart represent the median for each category. “I” and “UI” after a category name stand for “Insured” and “Uninsured” respectively.

Source: Banks’ data reported to the Riksbank.

## More households and companies are moving their deposits to restricted withdrawal accounts

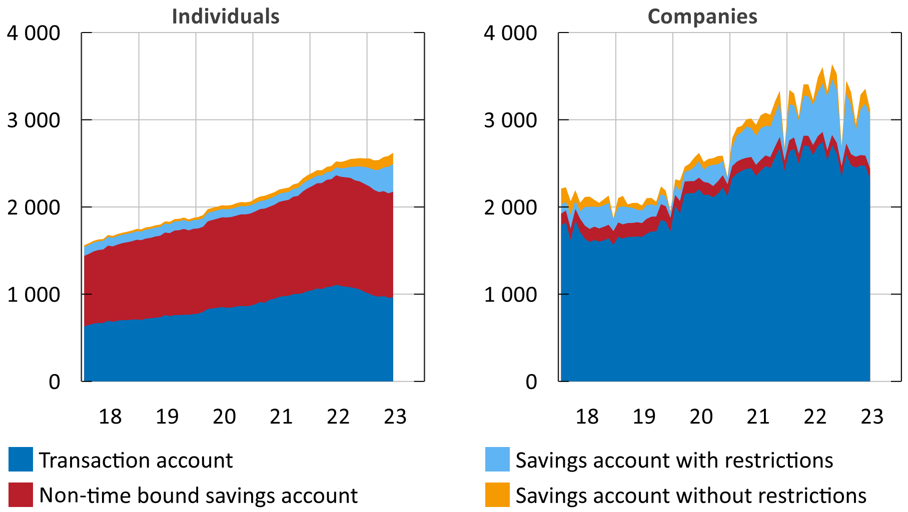
Typically, different account types are associated with different degrees of flightiness. Deposits in savings accounts that offer a higher interest rate in exchange for restrictions on withdrawals over a period of time, known as fixed-term savings accounts, can be considered less flighty than deposits in unrestricted accounts. For companies, the vast majority of deposits are held in transaction accounts, which generally have

[84] Although some smaller banks had large percentage outflows of uninsured deposits from private individuals and non-financial companies, and of financial deposits, the volume was often relatively small as the share of these types of deposits is often small for these banks.

no restrictions on withdrawals.[85] For households, these accounts make up around 40 per cent of deposits, while the remaining funds are held in various types of savings accounts. Between 2018 and 2022, deposits increased sharply, particularly in connection with the pandemic, when many households and companies increased their savings (see Chart 34). Deposits in transaction accounts increased the most, especially for companies. Since the end of 2022, deposits in transaction accounts have decreased slightly, while deposits in fixed-term savings accounts with restrictions on withdrawals have increased.[86]

**Chart 34. Account distribution**

SEK billion




Note. "Savings account without restrictions" and "Savings account with restrictions" refer to fixed-term accounts where the depositor has agreed to restrictions on withdrawals for an agreed period of time, usually in exchange for a higher savings rate. "Transaction account" also covers custody accounts, ISK accounts, etc. Financial companies account for just under 40 per cent of deposits from companies, although they account for around 70 per cent of the deposits in "Savings account with restrictions".

Source: Banks' data reported to the Riksbank.

## Important to continue analysing the risks associated with deposits

The results of the analysis show that some major banks and security trading banks are more exposed to a small number of depositors, which could pose a higher risk. These types of banks also have a higher share of uninsured deposits - deposits that are generally more flighty. However, the data show that these banks compensate for the higher flightiness by holding a larger liquidity buffer. Compared with the US banks

[85] A transaction account is an account used for recurring transactions such as salary, pension or bill payments. This analysis also includes ISKs, custody accounts and other accounts in the group of transaction accounts. In contrast, savings accounts are generally used for less regular deposits and withdrawals and usually have better interest rates to encourage the depositor to keep the funds in the account.

[86] The conditions for making withdrawals vary from bank to bank but usually include some sort of maximum amount for a single withdrawal.

that experienced problems last spring, Swedish banks' share of uninsured deposits is significantly less, in relation to both their total deposits and total liabilities. Nor can the analysis find evidence that Swedish banks' deposits are concentrated in a particular sector, as was the case in some of the US banks that experienced problems.

The analysis also shows that deposits may be more flighty at some smaller banks. During the observed period, consumer credit banks had larger monthly outflows of uninsured deposits from private individuals and companies than the other bank types. Some consumer credit banks and security trading banks also experienced larger deposit outflows during the outbreak of the coronavirus pandemic. In addition, several consumer credit banks have a large share of deposits in Germany, partly through digital deposit platforms. This could contribute to risks as deposits through such platforms are likely to be more flighty. If a larger share of the banking sector's deposits were to be on such platforms, this could lead to increased stability risks.

Despite the interesting lessons learnt from the analysis, we cannot know in advance how depositors would act if the Swedish banking system was hit by a major crisis in the future. If banks were to experience large, unexpected withdrawals of deposits, this could lead to liquidity problems. The fact that depositors can now move money very quickly and that social media can quickly aggravate turmoil may have recently increased the liquidity risk in deposits. This is something that requires increased vigilance and is important to continue to analyse going forward.