REPORT

Stability in the Financial System

30 May 2023

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Content

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Stability assessment

Since the publication of the stability report last autumn, inflation has slowed somewhat in the large economies but is still significantly higher than the central banks' inflation targets. Monetary policy has therefore been tightened further, and interest rates continued to rise. High inflation and rising interest rates mean that the forecast for global economic development continues to be weak.

The prolonged period of very low interest rates resulted in high risk-taking on a global level, which manifested itself in part through rapidly rising debt and high prices for housing, commercial real estate and financial assets. The strong and rapid rise in interest rates has meant that both actors on the financial markets and borrowers have needed to quickly adjust and reduce their risk-taking. Given that interest rates and financing costs can be expected to remain at higher levels for an extended period going forward, continued adjustments in terms of lower indebtedness, and in some cases also lower asset prices, are probable.

High interest rates, lower willingness to take risk, and ongoing adjustments create an environment where stability risks and vulnerabilities can be quickly exposed. For example, at the beginning of 2023, a number of large banks experienced significant problems, which led to defaults and fire sales. Even if Swedish banks have not been directly impacted, the events show that uncertainty is present. Multiple vulnerabilities may be exposed in the near future, in both the global financial system and the Swedish financial system.

In Sweden, it is the commercial real estate firms in particular that are exposed to the adjustments that are currently ongoing. They have high debt, are very sensitive to changes in the interest rate and also have a substantial need to refinance their debt. It is therefore important for highly indebted commercial real estate firms to reduce their debt and strengthen their equity, so the sector is not forced to implement more uncontrolled adjustments in the future. Households have also been impacted, and their economic margins have declined. The probability of higher credit losses in the banking system has increased. However, since Swedish banks have high profitability and satisfactory liquidity and capital buffers, they have good resilience for meeting the challenges that could arise.

Overall, threats to financial stability risks in the immediate future have increased. How inflation and interest rates develop going forward will be very important. If high inflation persists and interest rates remain at high levels for a longer period of time, the burden on both households and firms will be even larger in the short term. Such a scenario would entail a greater risk of problems in the financial sector as well. However, if inflation slows quickly and interest rates stabilise or fall, this, in combination with sustained lower risk-taking and lower debt among households and firms, could lead to reduced vulnerability in the long term.

Risk-taking has decreased from high level

The increase in interest rates and weaker economic forecasts has brought down risk-taking from an elevated level. Lower risk-taking compared to the period with low interest rates is noticeable in part through higher risk premiums, which impacted price-setting on the equity and fixed-income market. Given the prevailing conditions of rapidly rising interest rates, risk premiums have primarily increased for sectors that have business models that are interest rate sensitive or have a high level of assessed risk, such as the commercial real estate sector and growth firms. For these sectors, the result has been substantial drops in share prices and significantly higher interest rate increments on bonds. Despite this, FI still sees a risk of additional price corrections and market turbulence.

The current drop in risk-taking will eventually slow the vulnerabilities that have been building up over a long period of time, but if the willingness to take risk drops too quickly, this can lead to financing problems. Access to financing via the equity and bond markets has already declined in the past year. If risk-taking continues to dip, access to financing could continue to decline.

Risks associated with high debt persist

Households and non-financial corporations have high debt. During the beginning of 2023 have non-financial corporations' debt continued to increase at the same time as households' debt build-up slowed.

High levels of debt make households sensitive to increases in the interest rate. This sensitivity is enhanced by the large share of mortgages that have a variable rate or a short fixed-interest term. In 2023, interest rates continued to rise at the same time as inflation was very high and household margins decreased. Vulnerabilities related to households' cash flows have therefore increased, even if most mortgagors continue to have satisfactory margins. If inflation and interest rates continue to be high for a long period of time, households' margins will be placed under additional pressure. Weak development on the equity and housing markets can also have a negative impact on households' assets. The primary risk associated with high household debt is that households decrease their consumption, which can amplify macroeconomic downturns.

Among non-financial corporations, the debt of commercial real estate firms has been increasing rapidly for a long time, making them very vulnerable to higher interest rates. Rising interest rates decrease commercial real estate firms' profitability and have also resulted in the start of downward adjustments to real estate valuations. Combined with investors becoming less willing to take on risk, this has made it more expensive and more difficult for many commercial real estate firms to refinance their debt. Because of this high debt, problems in the commercial real estate sector can rapidly impact banks and their other financiers in the financial system.

The banks' credit loss provisions and realised credit losses are still low, but the deterioration in the conditions for firms and households means that the banks' provisions and credit losses will probably increase. However, banks also have significant buffers and thus the resilience to take on even a sharp economic downturn. FI therefore makes the assessment that the banks can handle significant credit losses and continue to issue loans even if the market conditions were to decline significantly. To ensure this, it is crucial that the banks also continue to hold large capital buffers. FI has previously decided that the countercyclical buffer rate will be raised to 2 per cent in June 2023 and intends to leave this level unchanged. Even if another increase would increase resilience, FI makes the assessment that the current slow-down in debt build-up and risk-taking in the financial system does not justify another increase in the buffer at this time (see also the in-depth analysis "FI intends to leave the countercyclical buffer rate unchanged in the second quarter").

Maturity imbalances and poorly functioning bond markets can create problems

Liquidity on the government bond and covered bond markets has been low for a long period of time. FI makes the assessment that so far this has not impacted the government or the banks' ability to raise funding, but these central and systemically important markets can be vulnerable to stressed market conditions during the current circumstances. Liquidity has also been weak on the market for corporate bonds. Poor liquidity on the secondary market leads to uncertainty in pricing and can make financing on the primary market more difficult. A lack of market liquidity also increases the liquidity risk in the funds that are investing in corporate bonds. The liquidity risks in the funds are basically just as large as they were before the pandemic, when some corporate bond funds experienced significant problems.

The high debt of the non-financial corporations means that they will need to refinance large amounts of outstanding loans as they fall due. When risk-taking decreases, refinancing becomes more expensive, and it becomes more difficult to find willing investors. This has influenced the corporate bond market, where issued volumes of new financing are limited. It is primarily firms with lower creditworthiness that will experience restricted options for financing. This will affect in particular the commercial real estate firms, which previously used the bond market as a key source of financing. More restricted access to market-based financing simultaneously increases the pressure on the banking sector to provide financing. FI makes the assessment that the commercial real estate firms' refinancing risk is currently very high.

Deposits are a key component for the banks' liquidity. During the pandemic, bank deposits increased sharply, and they are still at a high level. This has reduced banks' dependence on market funding. The economic development may result in both households and firms needing to reduce deposits in banks. Turbulence in the US banking system at the beginning of the year also shows that individual banks can quickly become subject to runs if confidence in the bank decreases. The rapid course of events indicates a need to better understand the volatility associated with deposits. At the same time, Swedish banks have significant liquidity margins and thus are able to handle large withdrawals without the risk of a liquidity shortage. In order to be able to manage different types of events, it is crucial to safeguard these buffers. The Swedish banks do have good access to alternative market funding, but the cost for this funding has increased as interest rates have risen. Overall, FI makes the assessment that the banks' funding situation continues to be good.

Concentration and interconnectivity increase vulnerability in the financial system

The financial system is characterised by not only concentration but also interconnectivity.[1] The banks' large exposures to the commercial real estate sector are one type of such concentration. Other parts of the financial sector also finance the commercial real estate sector through equity shares and corporate bonds. Problems in the real estate sector could therefore impact large parts of the financial system. Since access to market-based financing is now decreasing for commercial real estate firms, it is possible that that banks concentration risks associated with this sector could increase.

Another concentration is large exposures to the stock market. Households have saved a lot in shares, and falling share prices thus can quickly impact households' liquid buffers. Life insurance and occupational pension undertakings have also invested a lot of capital in shares. FI makes the assessment that they have satisfactory buffers to handle even large falls in share prices, particularly since they are benefiting from rising interest rates.

One way to reduce counterparty risks when trading in financial instruments, and thus the interconnectedness of the financial system, is to allow trades to go through a central counterparty. The central counterparties become a very important cog in

[1] Concentration means that systemically important financial services are provided by a few banks, infrastructure companies, life insurance undertakings and occupational pension undertakings and through large exposures to individual sectors and counterparty risks. Financial firms are also interconnected through, for example, financing, investments, and the exchange of systemically important services.

the financial infrastructure, and the risk management becomes more concentrated. High and volatile prices on the contracts that are cleared can lead to rapidly rising margin calls, which in turn can lead to liquidity problems for participants at the central counterparty. If such problems arise and cannot be managed, there is a risk that they will spread within the financial system. Prices on the electricity market in 2022 are an example of a development that led to a sharp increase in margin calls. The situation here has now improved, primarily due to lower electricity prices. Higher margin calls during periods of turbulence can lead to actors instead increasing their bilateral trade outside of the central counterparties. An increase in the share of bilateral clearing can have negative stability effects since central counterparties have risk-mitigating tools and measures that reduce counterparty risks.

The banking sector is also interconnected through the payment system. Since the development of P27 has now tapered off, it marks the end of a key modernisation of the payment system in Sweden. It is therefore important that other initiatives will be taken to modernise the Swedish payment infrastructure.

The financial sector’s interlinkage and increased digitalisation has resulted in greater vulnerabilities of cyber-related problems and attacks. Cyber security matters are thus very important for financial stability and the entire economy. The risks of different types of attacks have increased after Russia’s invasion of Ukraine and the resulting deterioration in the security situation. FI’s overview of cyber security in the Swedish financial sector is that many firms are working actively to build up resistance, but it is clear that some actors have come further in their work than others and that there is a considerable need for cooperation.

The state of the economy

Macroeconomic development has been influenced by high inflation globally and the tightening of monetary policy to slow this inflation. Tighter monetary policy and higher interest rates burden economic activity and reduce risk-taking on the financial markets. The full effects of these events on economic development have probably not been realised yet.

Focus on anti-inflation measures

Global inflation is still visibly higher than the central banks' inflation targets (Diagram 1). At the beginning of 2023, central banks continued the measures to significantly tighten monetary policy that started in 2022. This has resulted primarily in further increases in short-term market rates since the start of the year.

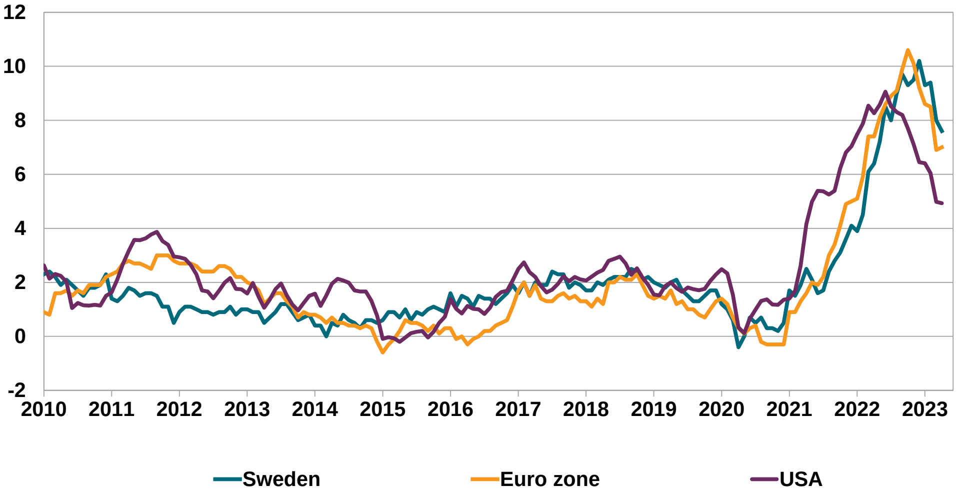
In order to create conditions for stable prices and good economic growth in the longer term, it is necessary to slow inflation. However, the tighter monetary policy puts a strain on economic activity in the short term. Higher interest rates increase the cost of loans, which reduces households' consumption capacity and firms' investments.

The rapidly rising interest rates have resulted in households, firms and market participants needing to hastily adapt after a prolonged period of very low interest rates. As a result, uncertainty on the global financial markets has increased. At the start of the year, it became evident that some banks in the global financial system have been vulnerable to the changed conditions, and several banks were forced into reconstruction. Due to assertive action from primarily the authorities in the USA, the shocks have not had a notable impact on the global financial system or economic development. However, new shocks can arise in the financial system, and if these disruptions cannot be managed, this could quickly have a negative impact on economic development, for example if access to loans and financing is restricted.

Overall, the outlook for global economic development in the near future is dependent on what happens to inflation and the extent to which a tighter monetary policy will be needed. Forecasters' primary scenario is that global inflation will slow considerably in 2023. Thus, central banks should be able to ease their monetary policy. At the same time, however, it is not possible to rule out that high inflation may be more persistent. Interest rates might continue to rise, and a period of higher interest rates could persist for a longer period of time. Given this scenario, the economic downturn could become both deeper and more prolonged.

1. Global inflation continues to be high

Per cent



Source: Refinitiv.

Note: Refers to CPIF (Sweden), HICP (Euro zone) and CPI (USA), annual change.

Swedish economy contracts in 2023

Swedish GDP is expected to decrease in 2023 at the same time as the economy enters into a recession.[2] Households are the primary driver behind the drop in demand in the economy. They are under pressure from reduced buying power since their costs are increasing faster than their income. According to survey data, households consider the economic situation right now to be very weak.[3] Demand for labour has remained at relatively high levels so far, even if unemployment is expected to increase somewhat. If unemployment increases substantially, this could create an additional strain for households.

Households under pressure, higher interest rates and construction costs, and falling housing prices are contributing to a significant decrease in construction investments. The rate of construction of primarily housing is expected to decrease sharply in 2023 and beyond, both for residential units that are sold to households and units managed as rentals. Housing prices fell 11 per cent in the second half of 2022, and the start of 2023 has been cautious with a low number of residential properties sold at the same time as the supply of residential properties for sale has been high. Given that households' housing costs and other subsistence costs have increased significantly, it cannot be ruled out that housing prices will continue to fall.

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[2] According to NIER (March 2023), GDP is expected to fall 0.6 per cent in 2023. The definition of a recession is a negative GDP gap, and this gap is expected to be negative until 2025.

[3] NIER, Economic Tendency Survey.

Demand continues to be good in the export industry, and production in the sector is expected to increase in 2023. The competitive advantage of Swedish firms has been boosted by the depreciation of the Swedish krona against larger currencies. At the same time, a weak and volatile currency can have a negative impact on firms' opportunities to manage risk and attract foreign financing.

The public finances in Sweden continue to be very strong, but fiscal policy is still not expected to support the economy to any significant extent in the near future. Fiscal policy is largely tied to the high inflation, and there is a risk that pursuing a more expansive policy at this time would counteract the aim of the tighter monetary policy to slow inflation.

Households

Many households are highly indebted, and higher interest costs and high inflation are putting pressure on the cash flow of many borrowers. Most households can currently manage the cost increases through lower consumption. However, some households are already experiencing problems, and this number could increase, particularly if unemployment rises. At the same time, rising interest expenses and a weaker economic outlook help slow the increase in household debt, and household debt can be expected to fall in relation to income going forward.

	Vulnerability	Change
Debt		↘
Cash flow		↗
Liquid assets		→

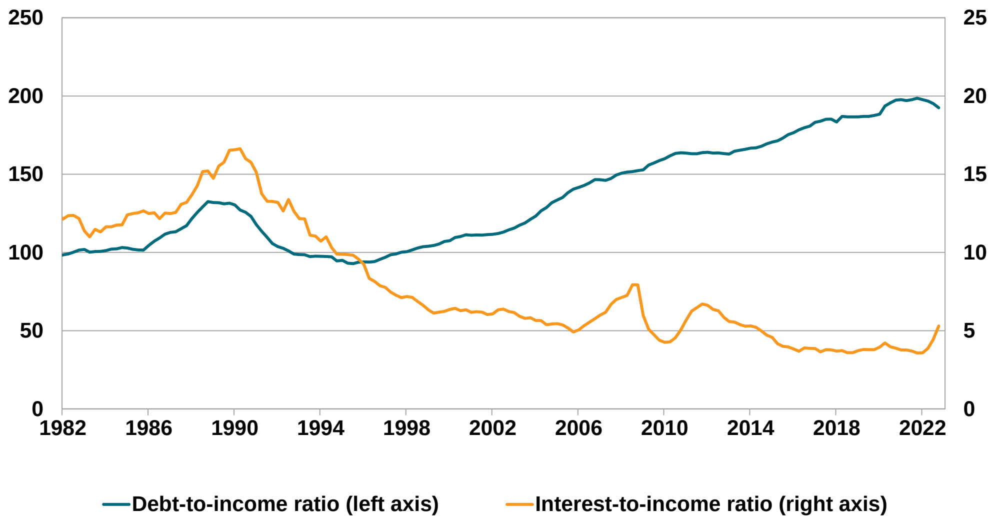
The colors indicate the current level of vulnerability. Green represents low vulnerability. Yellow, orange and red indicate differing degrees of elevated vulnerability. The arrows show the trend for the vulnerability – increasing, decreasing, or unchanged. The level and trend are based on a combination of quantitative measurements and expert assessments

Debt decreasing, but remains high

Households are borrowing less, but they still have large loans. The annual growth rate in bank lending to households fell from 6.8 per cent last spring to 2.3 per cent in March of this year. Debt in relation to disposable income has fallen since Q2 2022 (Diagram 2). However, the debt level is still high from a historical perspective.

Mortgages represent 83 per cent of household debt. Activity on the housing market has been low since last summer, and housing prices are now flattening after having fallen during the second half of last year. Uncertainty about how high interest rates will rise and how long they will remain at high levels is increasing the uncertainty surrounding housing prices, and many households are postponing housing transactions. Given the rising interest rates and falling real incomes, FI estimates that housing prices could continue to fall. This would lead to an even more pessimism among households regarding their financial situation. However, housing prices have risen sharply over a long period of time, which has given most households solid buffers against price drops. The estimated average loan-to-value (LTV) ratio in the mortgage stock is 53 per cent, and most mortgagors therefore are able to handle significant downturns in housing prices. Households that recently purchased a home have larger loans, and in 2022 the average LTV ratio for new borrowers was 67 per cent. FI estimates that the household sector as a whole can handle additional drops in housing prices, even if individual households may be significantly impacted.

2. Debt-to-income ratio falls while interest-to-income ratio increases
Per cent



Source: Statistics Sweden.
Note: Debt-to-income ratio is current debt divided by the past four quarters' aggregate disposable income. Interest-to-income ratio is interest expense (before tax) divided by disposable income. Data until 31 December 2022.

Higher interest rates and inflation put pressure on cash flows

The average mortgage rate has increased by almost three percentage points since 2021. Of households' total loans, 59 per cent have a variable interest rate. An additional 14 per cent have an interest term that expires within one year. The interest-to-income ratio has risen sharply and is expected to continue to rise as more loans transition to the new interest rate levels.

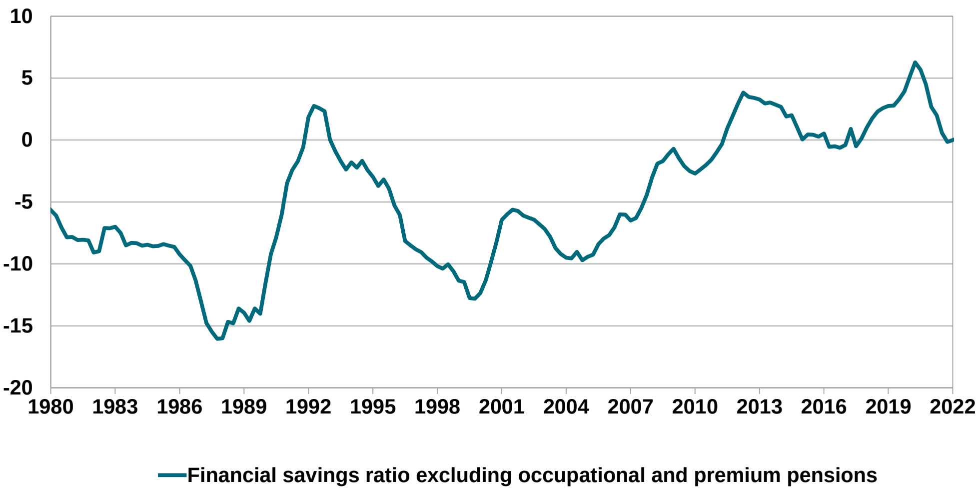
The combination of higher interest rates and price increases, including high electricity prices, are putting pressure on households' cash flows. Households living in tenant-owned units are less impacted by rising energy prices than households living in single-family homes. Households living in tenant-owned units, however, can be subject to higher association fees. This applies in particular to associations with large debt. Associations that must increase their fees substantially could experience a sharp drop in the value of their tenant-owned units.

Households' real disposable income[4] has dropped over the past year, and this development is expected to continue in 2023. It may become more difficult for some borrowers to pay their regular expenses and loans, even if most households in general have good margins. This applies in particular to single-person households that have taken on a new mortgage in the past few years. FI estimates that most households are currently able to make their loan payments, but this could change if the weak economic environment leads to higher unemployment.

Many households have already adjusted to the new economic environment by reducing other expenses. There is evidence that households have spent less on consumption of goods in certain sectors, for example retail and durable goods. Further, in 2022 households' financial savings ratios[5] dropped and then levelled off in the last quarter (Diagram 3). If prices on consumer goods continue to increase, households' savings could be squeezed out and the savings ratio could continue to fall going forward.

3. Households' financial savings ratio falls

Per cent



Source: Statistics Sweden.
Note: The diagram shows the share of disposable income that goes to savings, excluding savings in occupational and premium pensions and including savings in tenant-owner associations. Data until 31 December 2022.

It is possible for mortgage providers to grant temporary exemptions from the amortisation requirement to households with mortgages that have been hit hard by the economic development and are facing significantly altered financial conditions. Mortgage providers can choose to grant such amortisation relief following an

[4] The real disposable income is defined as household income minus taxes and fees adjusted for inflation.
[5] The savings ratio is defined as a flow that shows what percentage of their disposable income households are putting into savings.

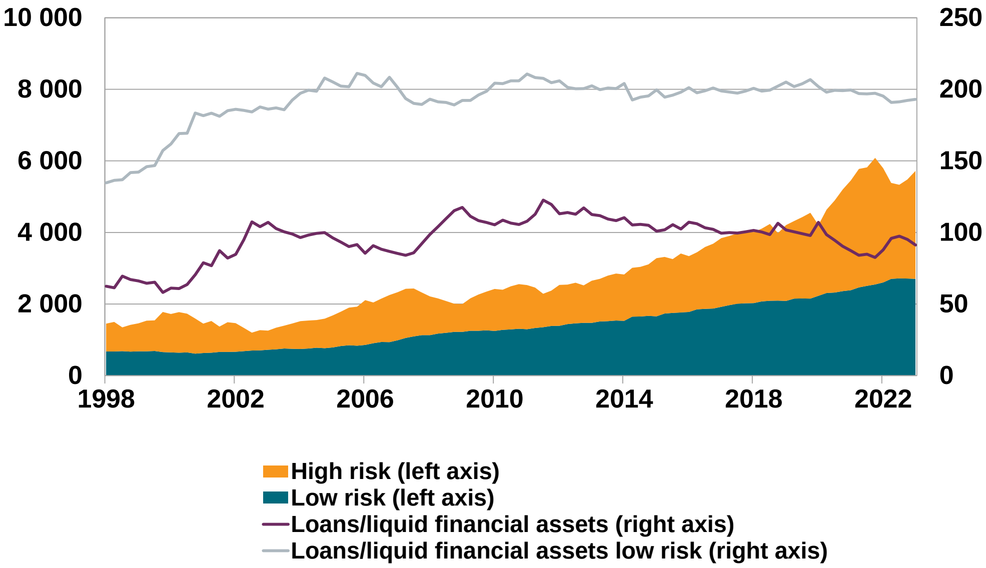
individual assessment of the specific lender's personal finances. In FI's survey of the banks' administration of amortisation requirement exemptions, we see that the number of borrowers being granted an exemption has increased since last summer when inflation picked up speed and energy prices increased sharply.

Households' liquid savings high but sensitive to drop in stock market

Due to strong stock markets, households' liquid wealth increased somewhat at the end of 2022 (Diagram 4). Because households have a large portion of their savings in risky assets, for example shares, this liquid wealth is sensitive to a drop in financial asset prices. We also see that less risky savings, for example bank deposits, are levelling off despite higher deposit rates. This can be a sign of decreases in some households' excess cash flows, which previously went to savings.

4. Liquid wealth increases somewhat

SEK billion (left axis), per cent (right axis)



Sources: NIER and Statistics Sweden.
Note: Data through 31 March 2022.

Both the financial savings ratio and liquid wealth of households are high from a historical perspective. It is good for households to have a buffer, for example to be able to afford higher costs. However, households' liquid assets are unevenly distributed, and indebted households without a buffer are very sensitive to both interest rate increases and a loss of income.

Non-financial corporations

Growth in lending to non-financial corporations is high but declining. However, highly indebted commercial real estate firms continue to take on more debt and will be under pressure from higher interest rates going forward. Property values have begun to fall. The retail sector is strongly impacted by lower household consumption but has limited debt.

	Vulnerability	Change
Debt growth	Yellow	→
Indebtedness	Yellow	↗
Refinancing	Red	→

The colors indicate the current level of vulnerability. Green represents low vulnerability. Yellow, orange and red indicate differing degrees of elevated vulnerability. The arrows show the trend for the vulnerability – increasing, decreasing, or unchanged. The level and trend are based on a combination of quantitative measurements and expert assessments.

Debt growth high but declining

The pending recession is affecting non-financial corporations through, in part, lower household consumption. Consumption has fallen most in retail and durable goods and is expected to continue to fall in these sectors. However, bankruptcies are still at low levels, and these sectors have limited debt. They therefore do not constitute an immediate threat to financial stability (see the chapter "Stability in the banking sector"). It is possible, however, that problems in the retail sector will lead to lay-offs, which will affect some households, and lower demand for retail space, which will affect commercial real estate companies.

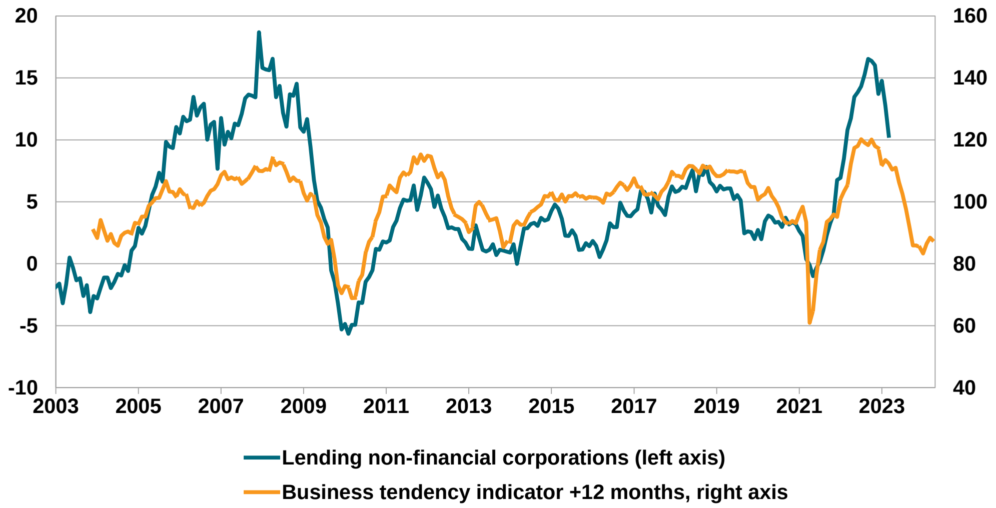
The situation in the construction sector is more worrying, and the number of bankruptcies is now approaching pandemic levels . To date, it is primarily small firms with a low number of employees that are declaring bankruptcy. This means that the impact on unemployment in the sector is still low. These firms' share of aggregate debt is also small. At the same time, construction companies are being cautious, and the activity in the sector is falling as housing construction declines. Going forward, the slow-down in newly started construction could have an impact on the number of unemployed and thus affect households. To the contrary, the export industry is expected to perform strongly, in part due to the weak Swedish krona.

Non-financial corporations' debt continues to be at historically high levels and has increased rapidly in the past year as a share of nominal GDP. At the end of 2022, consolidated debt[6] was 121 per cent of GDP. The higher interest rates and the economic slow-down are now causing debt to grow at a slower pace. Banks' lending increased rapidly after the pandemic, primarily through loans to the commercial real estate, retail and service sectors. Lending has now slowed due to low lower lending to industry, retail and service sectors. Banks' lending to commercial real estate firms continues to be at record-high levels, in part since these firms are switching from bond financing to bank financing.

Historically, there has been a correlation between the state of the economy and lending to non-financial corporations (Diagram 5). If this relationship holds going forward, the growth of debt can be expected to continue to decline.

5. Debt growth affected by the state of the economy

Annual change in per cent (left axis), index average = 100 (right axis)



Sources: FI, NIER, and Statistics Sweden.
Note: In March 2023, lending to non-financial corporations grew by 10.3 per cent on an annual basis. The growth rate in February was 12.8 per cent.

Non-financial corporations will face higher rates going forward. Interest rates have increased sharply during the second half of 2022 and the beginning of this year (Diagram 6). As the corporations' fixed rates reach maturity, the higher rates will become more prevalent in firms' cash flows.

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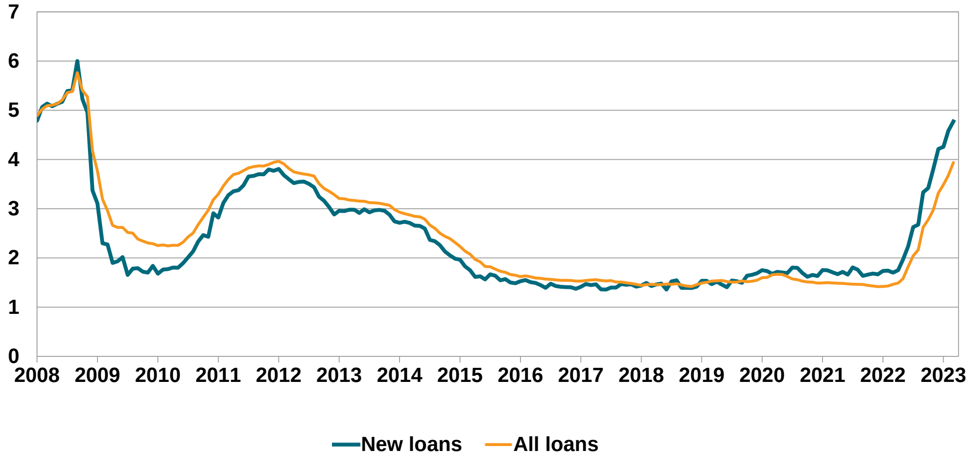
[6] Consolidation is performed by deducting the assets and liabilities that a sector has to itself.

6. Lending rates to non-financial corporations rise

Per cent



Source: Statistics Sweden.

Note: Refers to the average interest rate on new loans and the average rate for all outstanding loans to non-financial corporations. Data until 31 March 2023.

Commercial real estate firms sensitive to higher interest rates

Commercial real estate firms continue to represent approximately 50 per cent of the debt in the Swedish commercial sector[7]. FI has previously highlighted the high indebtedness in this sector. The sector's cash flow is under pressure from rising interest rates, while vacancies are increasing due to the weaker economy. Currently, the stock market is applying a high discount to net asset value in its valuation of basically all commercial real estate firms, which means that the firms' market capitalisation is lower than their net asset value.[8]

The higher interest rates have impacted property values, with downward corrections beginning in Q4 2022 (Diagram 7). The largest corrections are in the housing, retail and industry sectors. So far, the value changes have been limited relative to total property values, but there is a high probability of additional drops.

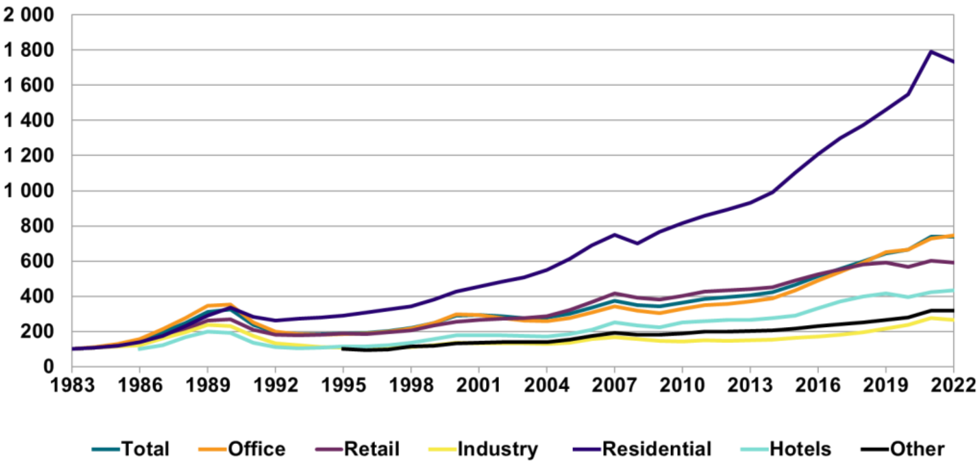
So far, commercial real estate firms have been able to increase their earnings by raising inflation-indexed rents. This has counteracted the rising interest rates' negative impact on property values to some extent. However, the weak business cycle can lead to even higher vacancies and difficulties raising rents in line with inflation. Weak earnings can put additional downward pressure on property values.

[7] Excluding tenant-owner associations.

[8] Net asset value estimates the difference between the assessed market value of a firm's assets and its liabilities.

Higher interest rates and a weaker market sentiment mean that the number of transactions on the commercial real estate market dropped by half in 2022 compared to 2021. However, 2021 was a record-setting year, and the transaction volumes in 2022 marked a return to pre-pandemic volumes. The decline occurred primarily during the second half of 2022. The low number of transactions indicates that the market is cautious due to the considerable uncertainty linked to valuations and the state of the economy. There is a significant probability that prices will continue to increase at a slower rate going forward.

7. Property values adjusting downward
Index, 100 =1997



Source: MSCI.
Note: Data until 31 December 2022.

Commercial real estate firms’ debt continues to rise

Commercial real estate firms’ debt is continuing to rise even if the growth rate slowed somewhat in 2022 (Diagram 8). Market financing has fallen since last autumn while bank lending has increased sharply, approximately 10 per cent annually in Q1 2023. This can be compared to the average growth rate for bank lending of around 6 percent since 2013.

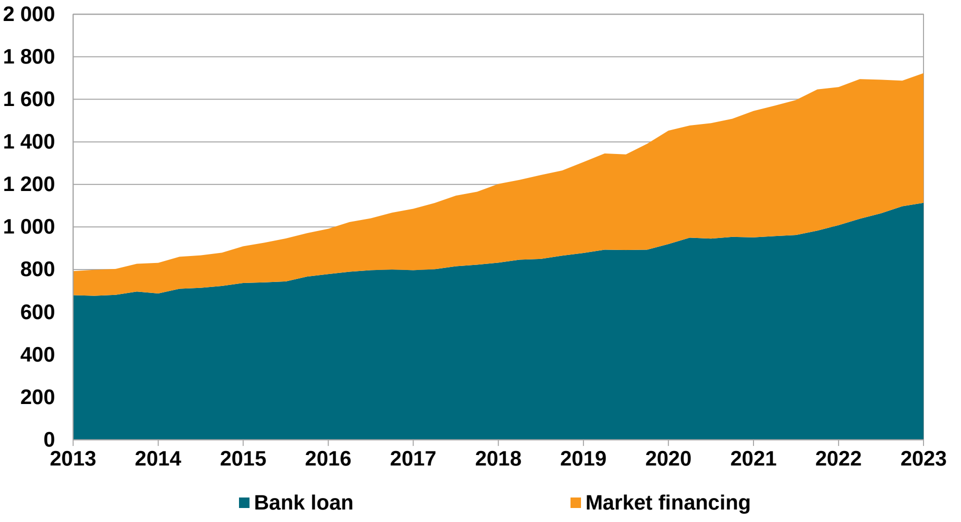
The reason for the transition to bank loans is that it is now expensive for many commercial real estate firms to access financing on the bond market. Over the next four years, around SEK 100 billion in outstanding bonds will mature each year. The majority of maturing bonds belong to firms with a low credit rating.[9] Furthermore, firms will have to pay significantly more for their market financing in the future. The interest rates paid by commercial real estate firms have risen since February 2022, with a particularly rapid increase in the summer and second half of 2022. The higher interest rates are in part due to the general increase in interest

[9] Lower than a credit rating of A.

rates, but they are also the result of a lower willingness among investors to take on risk. Since last autumn, the cost of market financing has fallen slightly for many firms with low credit ratings (Diagram 9). However, these costs are volatile and still at elevated levels. Companies with a credit rating above A are also facing higher financing costs due to the general increase in interest rates.

8. Commercial real estate firms' debt continues to rise

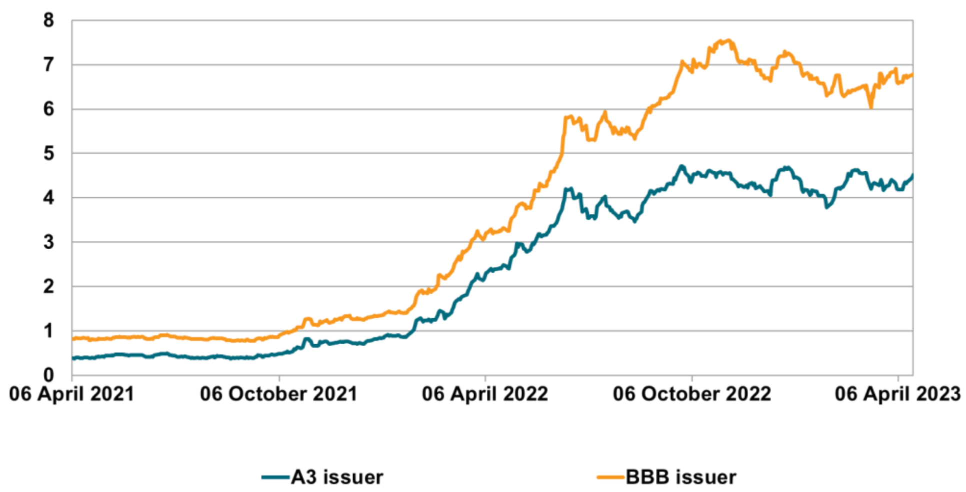
SEK billion



Sources: FI and Statistics Sweden.
Note: Bank loans refer only to loans raised in Sweden. Market financing refers to commercial real estate firms' loans on the bond market. Data until 31 March 2023.

9. Bond interest rates are still high

Per cent



Source: Refinitiv.
Note: Data until 23 May 2023.

Large pending maturities and higher bond rates in general indicate that commercial real estate firms, particularly those with lower credit ratings, are having more difficulty accessing financing on the market at a sustainable cost. The refinancing risk is increasing since some listed commercial real estate firms face credit rating downgrades, of which we have already seen several examples. Some commercial real estate firms risk losing their investment grade credit rating. The largest impact of a credit downgrade from investment grade, also called BBB-, to high-yield bonds is permanently higher financing costs. Many bond buyers only have a mandate to invest in investment grade bonds. A downgrade therefore entails that the company loses a large investor base. This could have a large impact on a firm's access to market financing and, consequently, its value.

At the same time, listed commercial real estate firms with market financing are in general more transparent than non-listed firms since they publish quarterly reports and need to retain their credit ratings. A large portion of bank lending goes to small and mid-size non-listed firms without market financing. Smaller firms are thus highly dependent on banks access financing. According to FI's stress tests, these commercial real estate firms represent the largest credit risk for banks.

FI's overall assessment continues to be that the risks in the commercial real estate sector are high. However, the problems of some individual firms should not be interpreted as acute in the entire Swedish real estate sector. The sector as a whole exhibited good profits in Q1 2023, primarily due to higher rents. So far, it has been possible to maintain earnings since most tenants appear to be able to pay the inflation-indexed rents. One exception is the retail sector, which is exhibiting weak performance due to reduced consumption.

At the same time, the debt in the sector continues to increase on an aggregate level. Commercial real estate firms are already highly indebted and will be under pressure when interest terms expire and they must pay higher interest rates. It is therefore necessary for several firms to reduce their total debt. Going forward, it will be crucial to maintain earnings maintained in the weaker economy, debt can be adjusted to higher interest rates, and that loan-based financing can be secured.

Stability in the financial markets

Risk-taking in the financial markets continues to be elevated, but it is decreasing as a result of higher interest rates and greater uncertainty. The risk of additional episodes of financial distress and sharp corrections in asset prices continues to be elevated. Such events can be amplified by structural vulnerabilities, which, for example, are present on the Swedish bond market.

	Vulnerability	Change
Risk-taking financial markets		↘
Market liquidity		↘
Financial infrastructure		→

The colors indicate the current level of vulnerability. Green represents low vulnerability. Yellow, orange and red indicate differing degrees of elevated vulnerability. The arrows show the trend for the vulnerability – increasing, decreasing, or unchanged. The level and trend are based on a combination of quantitative measurements and expert assessments.

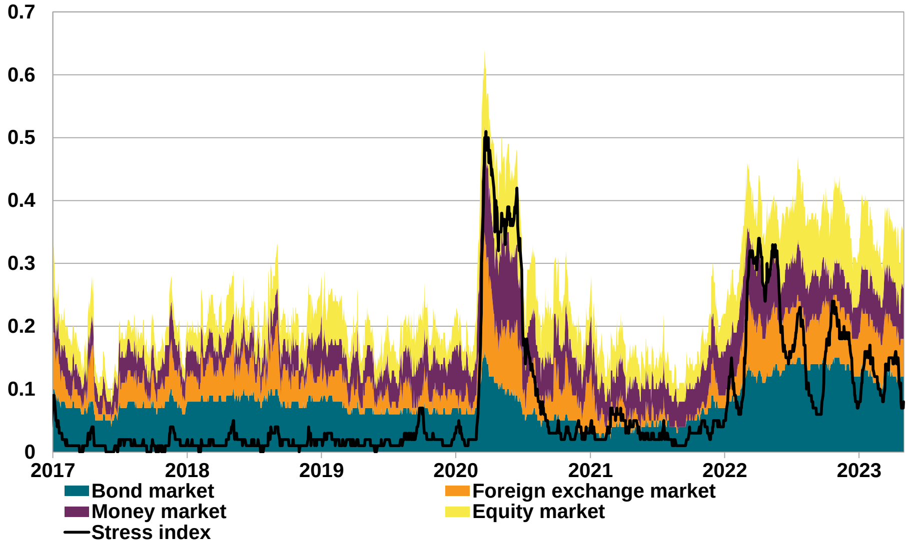
Continued rising financing costs dampening risk-taking

Since inflation began to rise in the autumn of 2021, the risk environment has changed, demonstrating a generally higher level of financial stress (Diagram 10) with higher volatility on the fixed-income market, increased risk premiums, and episodes of financial distress. Since 2022 central banks have been raising the key policy rates, which together with the increased risk premiums has increased financing costs significantly for all actors (Diagram 11).

The risk environment is fuelled by uncertainty. It is unclear how different actors can handle the new higher interest rate environment and the stricter financial conditions. It is also difficult to know how long the new higher levels of interest rates will last and how high interest rates could go, which makes it more difficult to value assets. The uncertainty contributes to increased caution, higher risk premiums, lower risk-taking and at times sharp corrections in asset prices. Specific episodes of financial uncertainty could also become more common as risks that have built up over time during the period of low interest rates materialise. Examples of such episodes include the liquidity crisis in British pension funds in the late autumn of 2022 and the international banking uncertainty this past spring. This uncertainty has contributed to tightening credit conditions at a global level. In the short term, risk-taking is also impacted by the outlooks for inflation, the economic development and monetary policy expectations.

10. Elevated financial stress

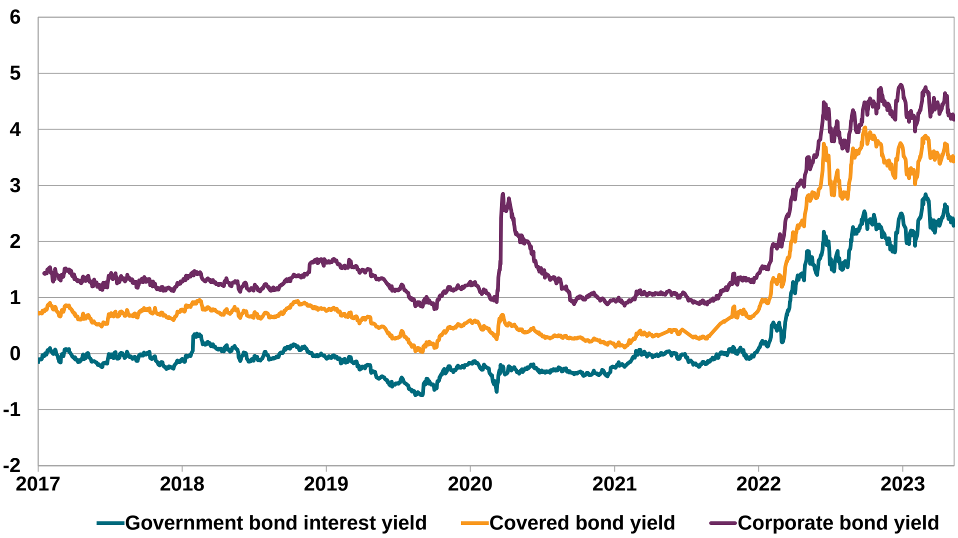
Index



Sources: Bloomberg and Sveriges Riksbank.
Note: Swedish stress index.

11. Financing expenses have increased for the state, banks and firms

Per cent



Source: Refinitiv.
Note: Five-year nominal rates on Swedish bonds. Covered bonds are used by mortgage institutions and banks to fund mortgages and refer to the average for the three major Swedish banks and Nordea. Corporate bond rates refer to interest rates for non-financial corporations with a credit rating of BBB.

FI makes the assessment that risk-taking continues to be elevated. Financial markets have recovered rapidly after episodes of financial distress. Since the last report, risk premiums are also somewhat lower and equity valuations[10] somewhat higher. However, risk-taking will decrease going forward as the prevailing caution spreads. Interest rates are expected to remain at levels higher than in previous years. More and more actors will thus experience higher interest expenses when they refinance.

New episodes of increased market volatility and financial uncertainty can have particularly large consequences for markets with structural vulnerabilities. Examples of such markets include the Swedish bond market, where liquidity has been very poor for a long time, and Nasdaq Clearing’s commodity derivative market, where periods of high price volatility have led to liquidity problems. Longer term, the adjustment to the higher interest rates leads to lower asset prices, lower indebtedness and higher risk premiums, which in turn decreases the risks to financial stability. The fund flows in Sweden give a similar view of continued elevated risk-taking with signs of some cautiousness. During parts of last year, fund savers sold funds with higher risk and bought both short-term and long-term fixed-income funds. At the start of 2023, savers were more optimistic and increased their holdings in equity funds, but cautiousness increased again in March in conjunction with the uncertainty among international banks, which resulted in temporarily elevated inflows into short-term fixed-income funds and outflows from corporate bond funds.

For funds that are traded daily, market turbulence can lead to both more difficult valuations of assets and unpredicted outflows from investors who want to redeem their fund units. It is therefore important for fund managers to have robust valuation methods to ensure a correct valuation even during stressed conditions and adequate matching between fund assets and liabilities.[11] Swing pricing[12] can also be used to manage liquidity risk; this decreases the risk that remaining investors are negatively impacted by large flows.

Liquidity on the Swedish bond market still under pressure

Liquidity on the secondary market for Swedish government bonds and covered bonds has deteriorated over a long period of time. The limited volume of government bonds available for trade has resulted in some market participants stepping away from Swedish government bonds. The number of foreign investors

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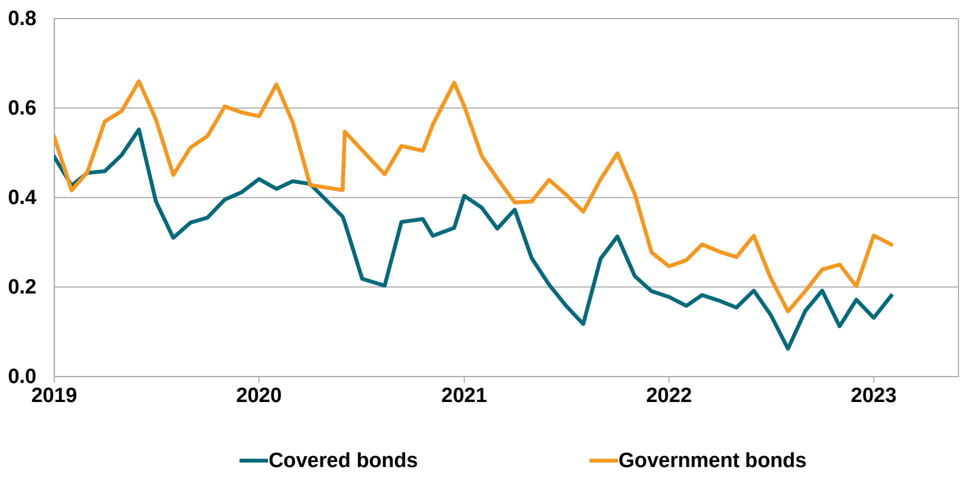
[10] In terms of share price/earnings per share
[11] FI has developed a stress test tool to be able to regularly monitor funds’ liquidity risks. The tool is based on simulations of large outflows and funds’ ability to meet these flows by selling various assets; see Crosta and Sandström (2022), “Stresstester av fonders likviditetsrisker”, FI Analysis 37, FI. An English translation is available at www.fi.se.
[12] Swing pricing is a tool to price fund units by redistributing costs in the fund to those who caused the costs. See Ett likviditetsverktyg för fonder (Bill 2022/23:65) https://www.regeringen.se/rattsliga-dokument/proposition/2023/02/prop.-20222365.

in particular has decreased, from around 45 per cent to 30 per cent between 2015 and 2022. This means there are fewer active market participants, which makes it more difficult and more expensive to trade government bonds.

However, according to FI's liquidity indicators, liquidity may have stabilised in recent months, albeit at a low level (Diagram 12). This low level of liquidity means that episodes of high market volatility and even situations where several investors change their positions at the same time can lead to a visible deterioration in how the market functions. The situation continues to be strained, and since government bonds function as a benchmark for other assets, it is very important that this market function efficiently even under stressed conditions.

12. Liquidity has been decreasing for a long period of time

Normalised scale



Sources: FI's transaction reporting system, Refinitiv, Swedish National Debt Office and Svenska Handelsbanken Bond Indices.
Note: Liquidity measure as an aggregate of various individual indicators for covered bonds and nominal government bonds with benchmark status. Higher values signify higher liquidity. The diagrams show the two months' moving average of the index.

Liquidity on the corporate bond market continues to be low, and transactions are occurring more sporadically since many investors are choosing to keep these bonds until expiry. Elevated market stress has influenced the primary market for corporate bonds, where higher risk premiums have led to some firms finding it difficult at times to raise financing, especially if they have a lower credit rating.

However, there are factors indicating that liquidity in Swedish bonds could improve going forward. As interest rates rise, it becomes more attractive to buy and hold interest-bearing assets. This helps to attract domestic and foreign investors back to the bond markets from other asset classes, which increases turnover and thus liquidity.

Another factor is that the volume of government securities available for trade will increase. The Riksbank has begun to sell its government bond holdings, and the Swedish National Debt Office will issue in coming years more government bonds than previously planned. Given the continued strained situation and the fact that some foreign investors have reduced their holdings of Swedish government bonds, however, it may take time for investors to return to the Swedish government bond market.

Financial infrastructure situation has improved, but structural vulnerabilities remain

The financial infrastructure consists of market participants providing systems for payments, settlement of securities transactions, and management of counterparty risks. Cyber security and preparedness have gained greater importance for the financial sector as the security policy situation has become more uncertain. The financial sector is to a large extent digitalised, which reinforces the interconnection between its participants and the potential risks associated with this. It is therefore important that firms in the financial sector have sufficient systems and procedures for managing cyber risks and continuously analyse and evaluate vulnerabilities and taking measures to counter such risks.

The EU regulation on digital operational resilience (Digital Operational Resilience Act, DORA) entered into force in January 2023, and its follow-up will begin in January 2025.[13] The reason behind the change is that there has been an increased need for regulation and supervision due to growing vulnerabilities to cyber risks and a need for greater regulatory harmonisation. The regulation targets basically all types of firms that today fall under FI's supervision. This also places demands on relationships between financial institutions and IT service providers. These firms must subsequently establish processes and procedures to identify, provide protection from and limit cyber risks, report incidents, and test their operational resilience.

Central counterparties (CCPs) play a key role in the financial infrastructure since they stand as the counterparty, acting as the buyer and seller in a large number of financial transactions. Consequently, CCPs and their members are subject to strict regulatory, financial and operational requirements on their activities. CCPs also use a number of tools and measures, such as netting and margin requirements, to manage risks in the financial system.

[13] Regulation (EU) 2022/2554 of the European Parliament and of the Council of 14 December 2022 on digital operational resilience for the financial sector and amending Regulations (EC) No 1060/2009, (EU) No 648/2012, (EU) No 600/2014, (EU) No 909/2014 and (EU) 2016/1011.

The situation for Nasdaq Clearing's commodity market, which was strained last autumn, has improved following lower electricity prices and reduced volatility on the electricity derivatives market. The government guarantee program that was introduced in the autumn and enables the issuance of credit guarantees for loans to electricity producers clearing transactions on the electricity derivative market at Nasdaq Clearing counteracts liquidity risks in the system. The events that led up to the introduction of the government guarantee program gives cause to reflect on central clearing, the regulatory framework for such activities, and collaboration between authorities in stressed situations.[14] Nasdaq Clearing, in accordance with a regulatory change by the EU, is also planning to introduce the possibility for non-financial members to post unsecured bank guarantees as collateral. This would increase the volume of collateral available during clearing. Bank guarantees can also replace and free up cash and cash equivalents that non-financial members today have pledged as collateral at the clearing house and thus reduce the liquidity risks.

As an alternative to clearing securities via a CCP, the counterparties in a transaction can also clear securities bilaterally. This means that the counterparties handle all aspects and risks related to the financial transaction between themselves. Since last summer, the volumes of electricity derivative contracts (expressed in nominal terms) that are cleared by Nasdaq Clearing have decreased and to some extent shifted back to bilateral trade. In the event that a larger share of derivative transactions shift from being cleared centrally to being cleared bilaterally, the total risk exposures in the financial system will increase. This could also increase vulnerabilities in the system if counterparties use lower capital and security requirements than in central clearing. Finally a reduced turnover in central clearing means lower liquidity, which can weaken the central counterparty's ability to manage risk in a potential default situation. In summary, a shift from central to bilateral clearing is not desirable. This would also go against the international reform agenda for OTC derivatives markets after the global financial crisis, which has had as its goal to improve transparency, mitigate systemic risks, and protect against market abuse.

Earlier in the spring, P27 withdrew the application it submitted to FI for clearing authorisation. P27 was established by the large Nordic banks to create a payment infrastructure that would replace the current payment system, Bankgirot. While P27 was under development, the modernisation of Bankgirot had halted. It is important that the banks now take responsibility for ensuring the stability of the Swedish payment structure going forward and set up a plan for how the Swedish

[14] FI has evaluated the government measures associated with the electricity derivatives market and outlined the lessons learned and its conclusions in the report *Analys av åtgärder på eldrivatmarknaden* (FI Ref. 23–12761).

payment system will be modernised. The infrastructure must meet the requirements and rules that apply, and FI will regularly follow up on this work.

Stability in the insurance sector

Life insurance undertakings and occupational pension undertakings still have a high share of risky investment assets and thus are sensitive to events on the financial markets. However, they have a good financial position and buffers that can manage even large drops in prices.

	Vulnerability	Change
Investment risk		→
Financial position		→
Concentration of assets		→

The colors indicate the current level of vulnerability. Green represents low vulnerability. Yellow, orange and red indicate differing degrees of elevated vulnerability. The arrows show the trend for the vulnerability – increasing, decreasing, or unchanged. The level and trend are based on a combination of quantitative measurements and expert assessments.

Continued high share of risky assets

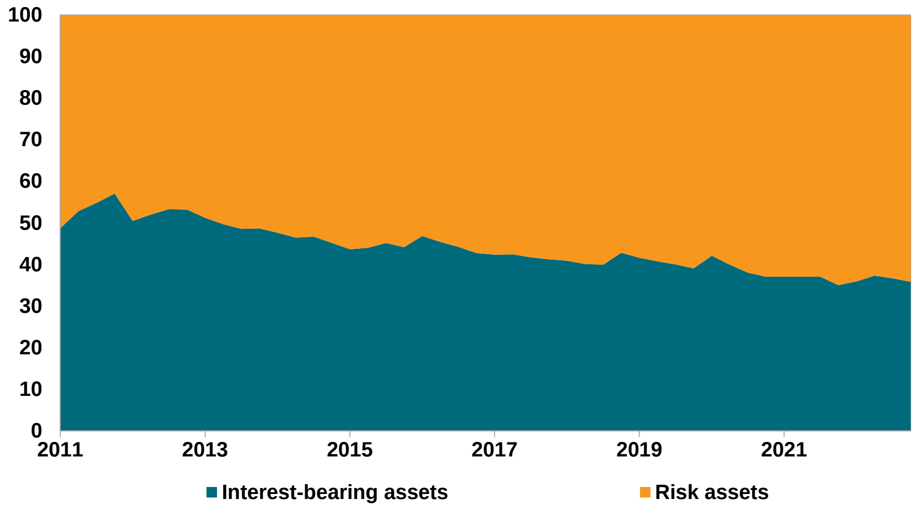
Life insurance undertakings and occupational pension undertakings are large investors in the financial markets During the long period of low interest rates since the financial crisis in 2008, the share of risky assets increased in investment portfolios (Diagram 13). A high share of risky assets makes the firms sensitive to sharp downward price corrections. Firms' possibilities for selling assets can also be limited in a market situation where the general sales pressure is high for certain assets: there may be few buyers, and the price of the asset can be significantly lower than expected. If the firms sell assets in a stressed market situation, they can also contribute to increased market stress and enhanced price fluctuations.

Even if the firms are impacted negatively by a drop in prices on the financial markets, they can benefit at the same time from a period of lower valuations since this can open the door to favourable investment opportunities in the longer term. Swedish life insurance undertakings and occupational pension undertakings generally have large buffers and thus are both resilient to downturns and able to invest when the economy is weak. However, they already have a large share of risk assets, which could limit their willingness to take on additional risk.

In the wake of high market rates, the return on interest-bearing assets is expected to rise in the long run. This makes it possible to reduce the share of risky assets but at the same time requires that customers' return expectations can be met.

13. Share of risky assets continues to increase

Per cent



Source: Statistics Sweden.

Note: The diagram refers to the distribution of life insurance undertakings and occupational pension undertakings between interest-bearing and riskier assets. “Interest-bearing assets” consists of listed interest-bearing assets, subordinated loans, corporate bonds, and cash and cash equivalents. “Risk assets” here refers to shares, real estate, alternative investments, and unlisted direct loans.

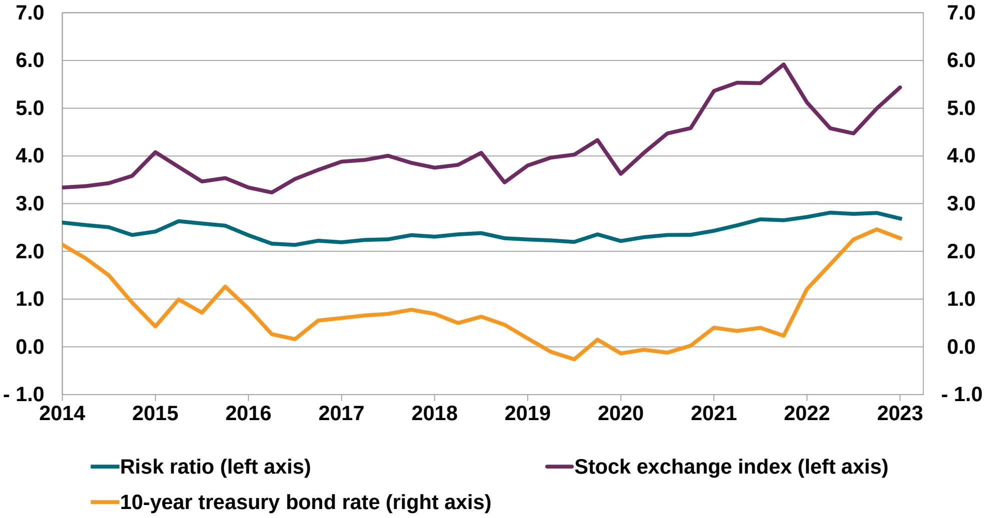
Financial position continues to be stable

Despite the uncertainty on the financial markets, in general the financial position of life insurance undertakings and occupational pension undertakings is stable (Diagram 14). Firms are following risk-based regulations where an aggregate capital requirement is placed in relation to own funds. This capital requirement is calculated for both financial risks and insurance risks. The financial part of the capital requirement is significantly impacted by holdings in riskier assets, for example shares, which are heavily stressed and result in a higher capital requirement. In Q1 2023, share prices increased in particular, which resulted in higher capital requirement and lower solvency ratios.

For firms that primarily offer unit-linked and deposit insurance, revenue is impacted if the development on the financial markets deteriorates and the value of the holdings depreciates. Lower earnings have a negative impact on solvency. However, FI makes the assessment that the effect is not of such a scope that it impacts financial stability.

14. Solvency dips but is still good

Ratio (left axis) and per cent (right axis)



Sources: FI, Nasdaq OMX and the Riksbank.

Note: Up through 31 December 2021, the diagram shows the traffic-light ratio for life insurance undertakings that applied the Solvency I regulations before they were converted to occupational pension undertakings. As of 31 March 2022, solvency is shown in accordance with the new Occupational Pension Undertakings Regulation. The series has been adjusted for this, and the two integrated metrics are called here *the risk ratio*.

Concentrations in firms' investment portfolios

A significant portion of the investment assets of Swedish life insurance undertakings and occupational pension undertakings are in securities linked to the banking sector, and primarily to Swedish banks' shares and covered bonds (Diagram B6). The holdings constitute a concentration risk, but the vulnerability is offset somewhat by the Swedish banks in general having a strong financial position and Swedish covered bonds being considered to have very high creditworthiness. Given the recent events in the US and European banking sectors, the uncertainty regarding the sector has increased in general. If the financial position of the Swedish banks were to be impacted negatively by, for example, large credit losses, this could have a negative impact on the investments of life insurance undertakings and occupational pension undertakings.

Life insurance undertakings and occupational pension undertakings hold around SEK 300 billion in assets linked to the commercial real estate sector. Their holdings consist of direct ownership, indirect ownership via real estate companies and funds, and investments in shares and bonds issued by commercial real estate firms. Since commercial real estate firms are financed in part by banks, life insurance undertakings and pension undertakings are also exposed indirectly to that sector via holdings of bank-issued securities.

Stability in the banking sector

The Swedish banks have improved their profitability in recent quarters. However, there continues to be significant risks in the banks' lending portfolios, for example related to commercial real estate firms. At the same time, the developments primarily in the USA have also been a reminder that banks can experience large deposit outflows under certain conditions. The Swedish banks therefore need to continue to hold large capital and liquidity buffers that can be drawn upon if the economy deteriorates.

	Vulnerability	Change
Concentration and interconnectivity	Orange	→
Solvency and profitability	Yellow	→
Asset quality and credit risk	Orange	↗
Financing and liquidity	Green	↗

The colors indicate the current level of vulnerability. Green represents low vulnerability. Yellow, orange and red indicate differing degrees of elevated vulnerability. The arrows show the trend for the vulnerability – increasing, decreasing, or unchanged. The level and trend are based on a combination of quantitative measurements and expert assessments.

Banking sector concentrated and interconnected

The Swedish banking sector is largely concentrated to five major banks: Svenska Handelsbanken (SHB), SEB and Swedbank, as well as Nordea's and Danske Bank's Swedish branches and mortgage companies.[15] These major banks are closely interconnected, both to one another and to other parts of the finance sector. This creates structural elevated vulnerabilities in the financial system. Problems arising in any of the major banks could potentially spread quickly to other financial firms. In recent years, competition on the banking market has increased, and the major banks have been losing market shares on some submarkets, for example mortgages. The concentration in the banking sector has therefore decreased somewhat over time, but despite this the major banks continue to play a central role in Sweden.

High profitability contributes to good resilience

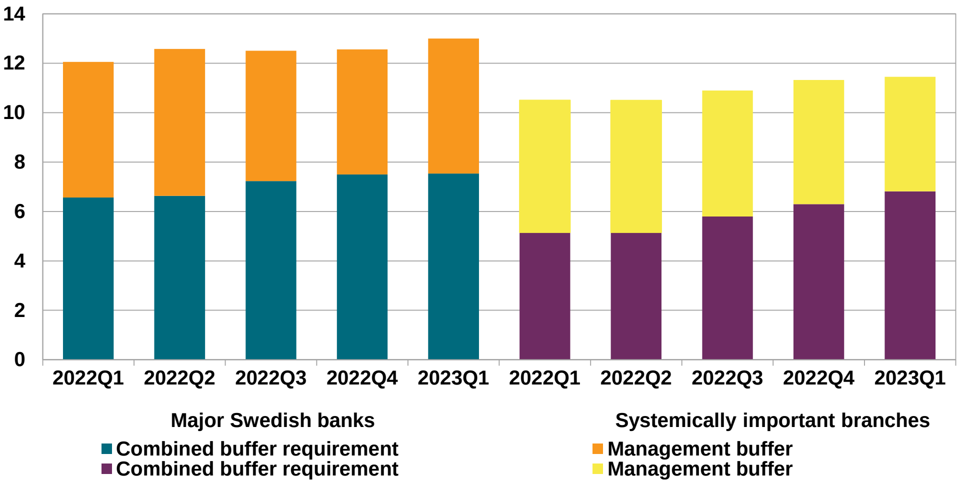
The major banks continue to have significant capital buffers (Diagram 15). The banks' management buffers – the capital they hold in addition to the capital

[15] For these five major banks, the figures refer to the consolidated situation unless otherwise specified. Together they represent around 75 per cent of deposits and lending to Swedish households and corporates and just under 70 per cent of the domestic payments. Danske Bank's and Nordea's Swedish branches are referred to going forward as "systemically important branches".

requirements – has been high since 2020. FI decided in June 2022 to raise the countercyclical buffer rate to its neutral level of 2 per cent, effective from June 2023 (see *Stability in the Financial System*, May 2022). Furthermore, other Nordic supervisory authorities decided to raise their buffer requirements, which increased the combined buffer requirement by one or a few tenths of a percentage point for the major Nordic banks. All of the major Swedish banks also made significant dividend payouts. Thanks to their high profitability, the major Swedish banks have been able to continue to keep their management buffers high despite dividends and higher buffer requirements.

15. Banks continue to have large management buffers

Percentage of risk-weighted assets



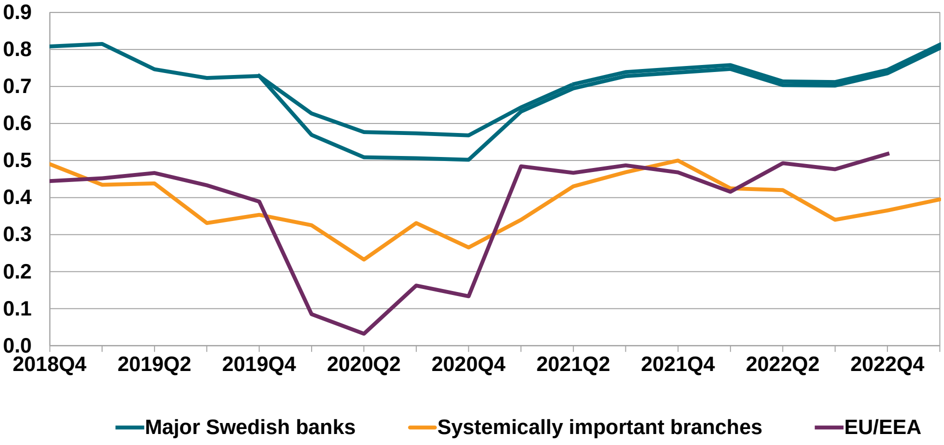
Sources: FI and the banks' reporting.

Note: Capital requirements as a share of risk-weighted assets. The management buffer includes the so-called Pillar 2 guidance, which for the Swedish major banks is 1.5 per cent.

The major banks' profitability is high and has continued to improve during the beginning of 2023 (Diagram 16). This has primarily been due to interest income from the banks' lending having increased more rapidly than financing costs, in particular from deposits. At the same time, the development in the major banks' net commission income and net financial income has been more subdued, primarily due to unfavourable developments on the capital markets. As a whole, earnings of major banks continue to be high, even compared to European banks, and this difference has increased somewhat in recent quarters. High profitability means that it is easier for the banks to absorb any credit losses. The volume growth in the banks' lending slowed in the second half of 2022 and then nearly halted completely in the first half of 2023. The volume growth that is still visible is primarily in lending to corporates.

The rising market rates have been favourable to banks' net interest margins. At the same time, higher interest rates, combined with inflation and high energy prices, have contributed to a deteriorating outlook for the economy. More difficult financial conditions for the banks' customers – households and firms – can lead to higher credit losses (see the next section). Falling asset prices have meant lower management revenues, and lower stock exchange activity can lead to lower revenue from brokerage commissions and corporate finance. Credit card purchases can also fall when households reduce their spending, which leads to lower fee revenue for the banks.

16. Profitability of banks improve
Per cent



Sources: FI and the EBA Risk Dashboard.
Note: Annualised return on total assets, four-quarter rolling mean. Dashed blue line excludes money laundering-related sanction fees in Swedbank and SEB in 2020.

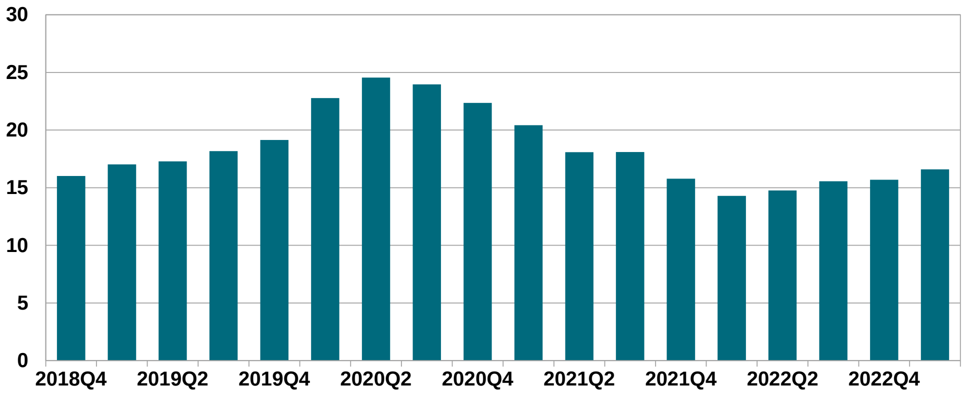
Increased credit risks in corporate lending

Aside from a temporary increase during the pandemic, Swedish banks have had very low credit losses for a long time. The state of the economy turned downward in 2022 as interest rates rose. Many firms and households are sensitive to increases in the interest rate (see "Non-financial corporations" and "Households"). If parts of the household or corporate sector experience problems, this could lead to larger credit losses for banks. Therefore, the banks have slowly increased their provisions for expected credit losses since the second half of 2022. However, these provisions are still lower than the levels prior to the pandemic (Diagram 17). So far, many banking customers have done better than expected, and realised credit losses have been low. Corporate bankruptcies are still at a low level (see the chapter "Non-financial corporations"). The banks' exposures to the industries that are under pressure are also limited: the major banks' exposures to the building industry amounts to 2.8 per cent of their total lending to non-financial corporations. Their exposure to wholesale and retail is 5.4 per cent (Diagram B7).

However, the banks hold large exposures to the commercial real estate sector, which represents between 16 and 36 per cent of each major bank's lending to the general public. The corresponding figure for their corporate lending is between 34 and 76 per cent. FI has already made the assessment that there are elevated risks in the lending to commercial real estate firms since they are sensitive to the interest rate and the state of the economy. FI has therefore decided to apply an additional capital requirement for these exposures. The requirement came into effect at the end of 2020. Since the autumn of 2022, capital market conditions for commercial real estate companies have been unfavourable. These companies have therefore turned to more bank financing instead, which has further increased the banks' exposure to the sector (see the chapter "Non-financial corporations"). Banks have been relatively restrictive in their lending to new customers within commercial real estate, rather prioritising meeting the needs of their existing customers. Access to bank credit is a necessary condition for a well-functioning economy, but it is also important that banks continue to make sound credit assessments in their lending.

17. Credit loss provisions have increased slightly

SEK billion



Sources: FI and the banks' reporting.

Note: Refers to the three Swedish major banks' total credit loss provisions for loans and interest-bearing securities that were reported as accrued cost. Provisions for off-balance sheet items and assets held for sale and discontinued operations are not included.

Banks' funding costs are rising

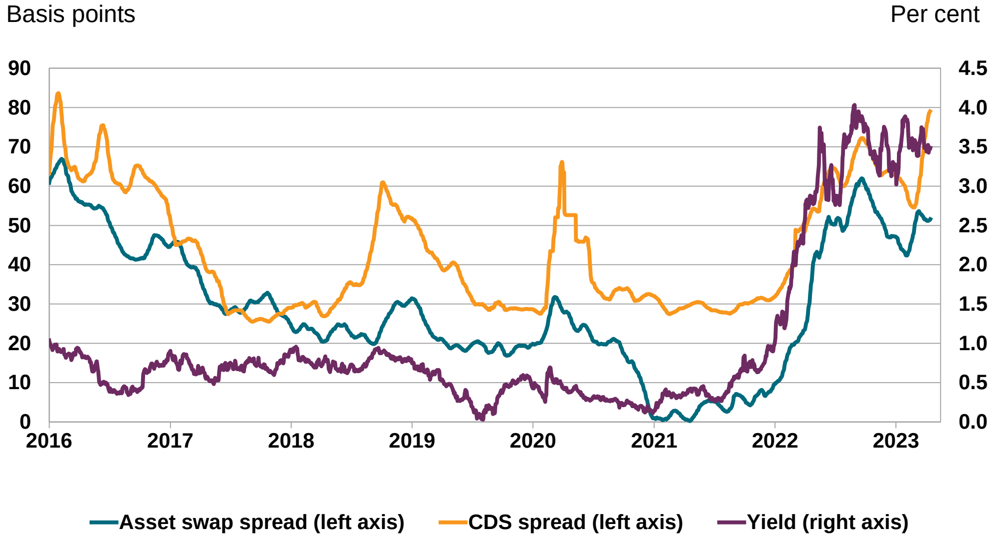
Swedish banks fund themselves to a large extent through market financing via certificates and covered and unsecured bonds. When interest rates rise, banks' funding costs also rise. These costs increased sharply in 2022 and have remained at this high level (Diagram 18). Banks' fundamental business model also makes them dependent on market participants' confidence, the latter being reflected for example in the bank's credit spreads for the banks' borrowing. These have increased somewhat in 2023 in conjunction with the general market uncertainty following problems in a number of US banks and the large Swiss bank Credit Suisse. The probability of a similar course of events in Sweden is low, however, for several reasons (see the in-depth review “Turbulence in the banking sector in the spring of 2023”).

The banks have largely been able to pass on the higher interest rates to their customers through loans at the same time as they have not raised their deposit rates very much. This means that the banks have been able to increase their net interest income and their profitability despite the higher costs for market financing.

Deposit volumes began to decline at the end of 2022, both in absolute terms and as a share of lending, but the decline stopped at the beginning of the 2023. Lower deposits increase the banks’ need for market funding, which is more expensive in the current market conditions, and thus can have a negative impact on profitability.

The banks strengthened their liquidity buffers during the pandemic and have since then maintained them at a high level. They therefore have good margins that can be used if the situation were to deteriorate.

18. Banks’ financing costs have increased sharply



Source: Refinitiv.
Note: Asset swap spread: credit spread for Swedish covered bonds with estimated fixed duration, five-year effective maturity; refers to one-month rolling average for the three major Swedish banks and Nordea. CDS spread: credit spread for senior unsecured bonds; refers to one-month rolling average for the three major Swedish banks, Danske Bank and Nordea. Yield: interpolated market yield for Swedish covered bonds with estimated fixed duration, five-year effective maturity. Refers to the average for the three major Swedish banks and Nordea.

In-depth review – Turbulence in the banking sector in the spring of 2023

At the beginning of 2023, parts of the banking systems in the USA and Europe experienced turbulence and uncertainty, which in some cases resulted in large withdrawals of deposited funds. The epicentre was the niche bank Silicon Valley Bank (SVB), which was exposed to significant interest rate risk through large holdings of government bonds with long maturities. The sharp increase in interest rates in 2022 meant that the value of these bonds fell, and when the bank needed to sell these assets, they did so at a loss. For SVB, the expected losses were so large that the bank's solvency was questioned. This led in turn to a rapid and intense deposit run on the bank that spread to several other niche banks that, like SVB, had a high percentage of deposits that were not covered by the US deposit insurance. The US authorities were forced to intervene by taking over banks, guaranteeing all deposits and establishing a new loan facility for banks.

The uncertainty in the US banking system raises several questions. Firstly, small and mid-sized US banks since 2019 have been subject to lower capital and liquidity requirements than major US or European banks, which has made them more vulnerable. Swedish banks are subject to an additional capital requirement for interest rate risk, which largely limits this type of risk because the banks primarily hold government securities with shorter maturities. Secondly, the rapid and intense run that occurred also indicates that runs can occur faster and at a larger scope than previously thought, in part due to digitalisation. This applies in particular to deposits that are not covered by deposit insurance.

In the event of a run, a bank may need to sell securities from their liquidity reserve to handle the withdrawals. The banks therefore need to maintain significant liquidity buffers to meet potential outflows. It is currently FI's assessment that both the major banks and the mid-sized banks are able to manage even a significant deposit run without experiencing critical liquidity problems. The major banks' liquidity reserves correspond to approximately 40–50 per cent of their total deposits. This corresponds to approximately 50 to 80 per cent of the deposits that are not covered by deposit guarantee schemes. The mid-sized banks as a rule have a higher share of deposits from households and small and mid-sized companies, which are covered by the deposit insurance. Their liquidity reserves cover approximately 25–45 per cent of the total deposits but in most cases cover all non-guaranteed deposits and in the occasional case approximately half.

Overall, the development among the US niche banks shows that the interest-rate environment has exposed vulnerabilities linked to interest rate risk and depositor flight. Robust capital and liquidity requirements decrease the risk for such a development in Swedish banks. At the same time, additional analyses of risks associated with bank runs are needed in light of the transpired events. In the long run, this could lead to a need to review the design of the deposit guarantee scheme, liquidity regulation and design of liquidity support in crisis situations.

In-depth review –FI intends to leave the countercyclical buffer rate unchanged in Q2

In June 2022, FI announced its decision to raise the countercyclical buffer rate to 2 per cent. The new buffer rate enters into force on 22 June 2023. The decision was made based on FI's assessment that the combination of the strength of the economic recovery and the banks' strong financial position and good profitability means that the buffer rate can be raised without having a negative impact on the credit supply. This increase completes the steps FI initiated in September 2021 to gradually bring the buffer rate to its neutral level. Since March 2021, FI has been striving for a positive neutral level of 2 per cent for the countercyclical buffer rate during normal periods, i.e., even when FI makes the assessment that lending is not associated with elevated systemic risks.

The macroeconomic development took a turn in 2022, and this trend has continued in the beginning of 2023. Inflation remains at a high level, and the Riksbank continued to raise the policy rate. The Swedish economy is expected to enter into a recession in 2023. Households' finances are under pressure from higher prices and mortgage rates (see the chapter "Households"). Expectations about personal finances in one year are very low.[16] Overall, the development has led to activity on the housing market that continues to be lower than before, and housing prices have fallen. The rate at which mortgages and consumer credit are growing is increasingly slower. Total lending to households is now growing at a lower rate than it has for more than twenty years.

Lower demand from households is putting pressure on firms. The state of the business sector was reinforced slightly at the beginning of 2023 but is still weak, primarily in retail.[1] A weaker economy and more expensive financing most likely is slowing firms' investments. The non-financial corporations' bank loans have also grown at a slower rate in recent months, even if they are still growing at a high annual rate (Diagram F1). Corporate financing via financial markets is also growing at a slower rate. In Q4, lending to households and corporates grew approximately at the same rate as the GDP. Therefore, the credit-to-GDP gap was unchanged, and the buffer guide remains at 0 per cent (Diagrams F2 and F3).

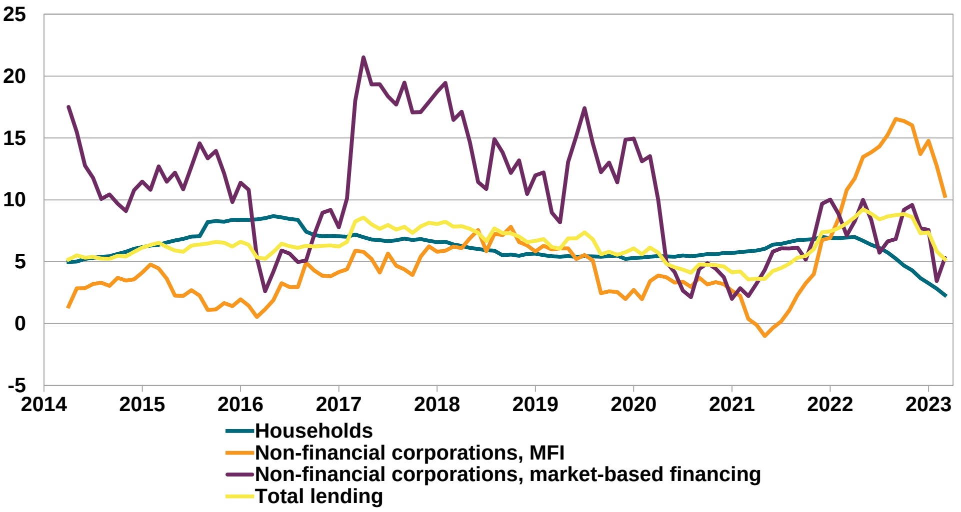
The slower lending to households and corporates means that systemic risks are not increasing. The decrease in the willingness on the financial markets to take risk is also pointing in the same direction. At the same time, the sharp drop in demand may require some firms to turn to the banks going forward. Difficulties in gaining access to market financing can also further increase the demand for bank loans. It is therefore important for the banks to be able to meet demand for loans from going

[16] According to the Economic Tendency Survey, April 2023, NIER.

concerns in the future. If FI makes the assessment that this is not the case, we can lower the buffer rate to free up room for the banks to loan more, but the banks continue to have large management buffers (Diagram 14 in the chapter "Stability in the banking sector"). Their funding costs have also not been significantly impacted by the uncertainty in the banking sector in Europe and the USA in the spring. Therefore, FI makes the assessment that they are still able to maintain the supply of credit. FI also does not see any signs that the banks' credit supply to firms has been weakened. FI thus intends to leave the countercyclical buffer rate unchanged in Q2 2023.

F1. Growth in total lending slows

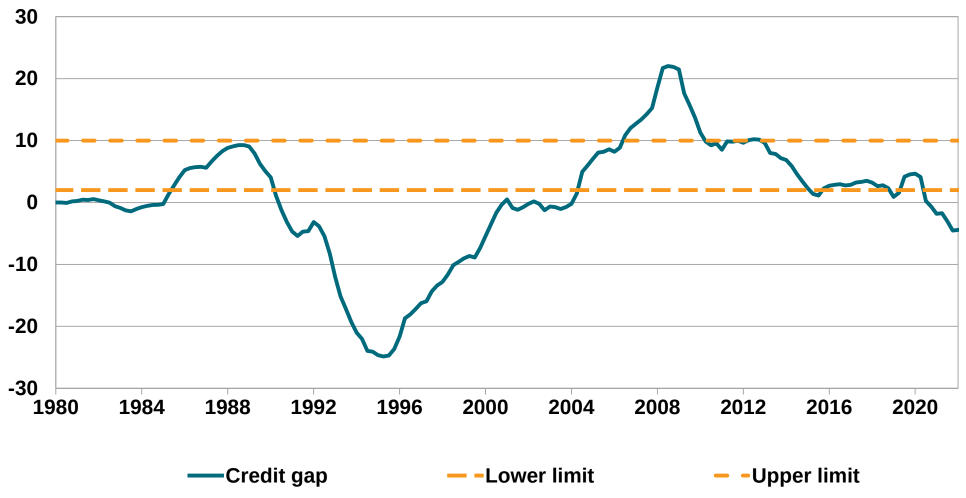
Annual percentage change



Sources: FI and Statistics Sweden.
Note: Monthly data. "MFI" stands for monetary financial institution.

F2. Credit-to-GDP gap remained unchanged in Q4

Deviation from trend, ppts

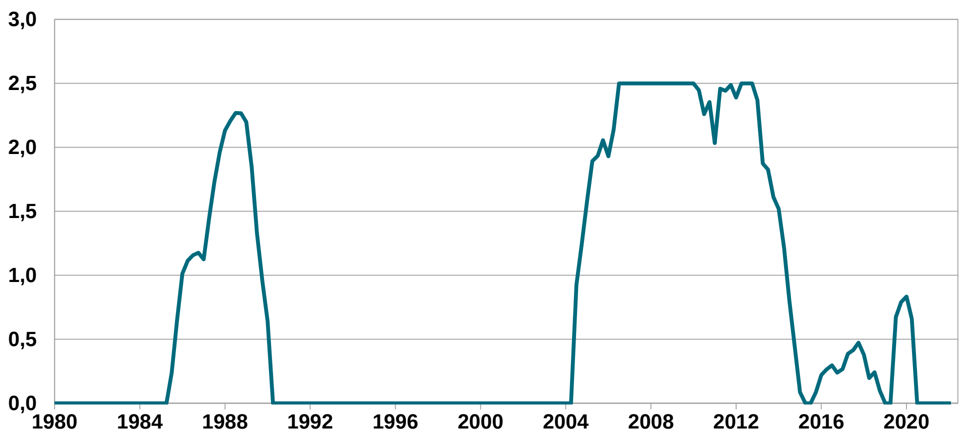


Sources: FI and Statistics Sweden.

Note: Credit-to-GDP gap according to the standardised approach. The dashed lines show the thresholds (2 and 10 per cent, respectively) that according to the standardised approach are to be used to transform the credit-to-GDP gap into a buffer guide.

F3. Buffer guide remains at 0 per cent

Per cent



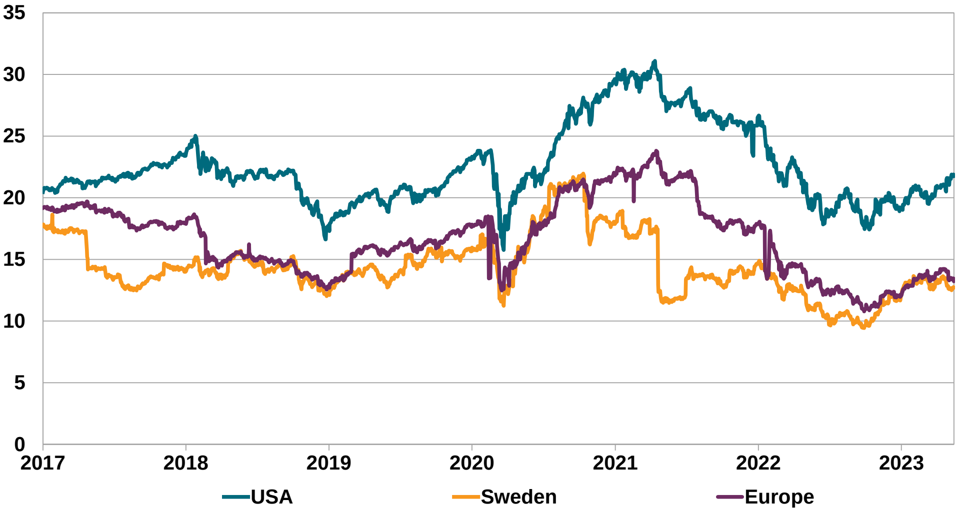
Sources: FI and Statistics Sweden.

Note: Buffer guide according to the standardised approach.

Appendix of diagrams Stability in the financial markets

B1. Share valuations

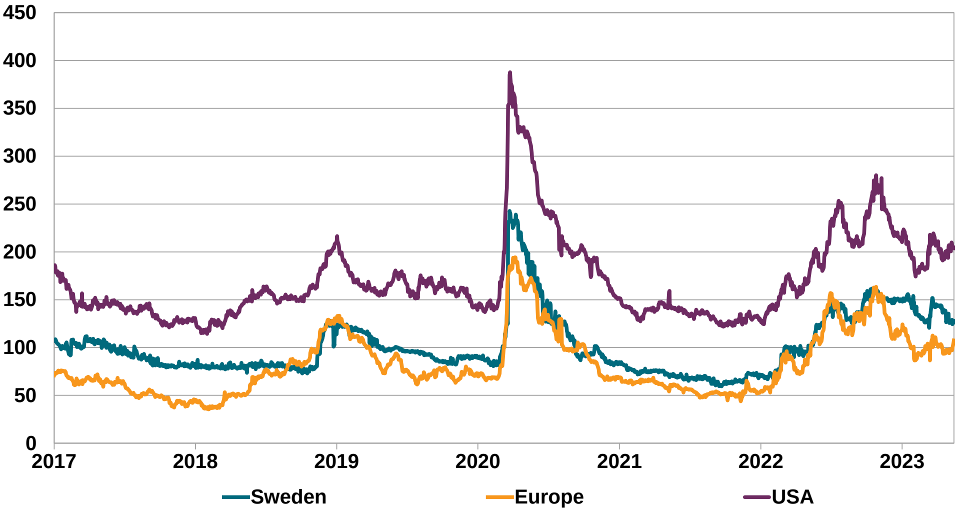
P/E ratio



Source: Refinitiv Eikon.
Note: P/E stands for Price/Earnings. and refers to the price per share in relation to earnings per share for companies on the US, European and Swedish markets.

B2. Risk premiums corporate bonds

Basis points

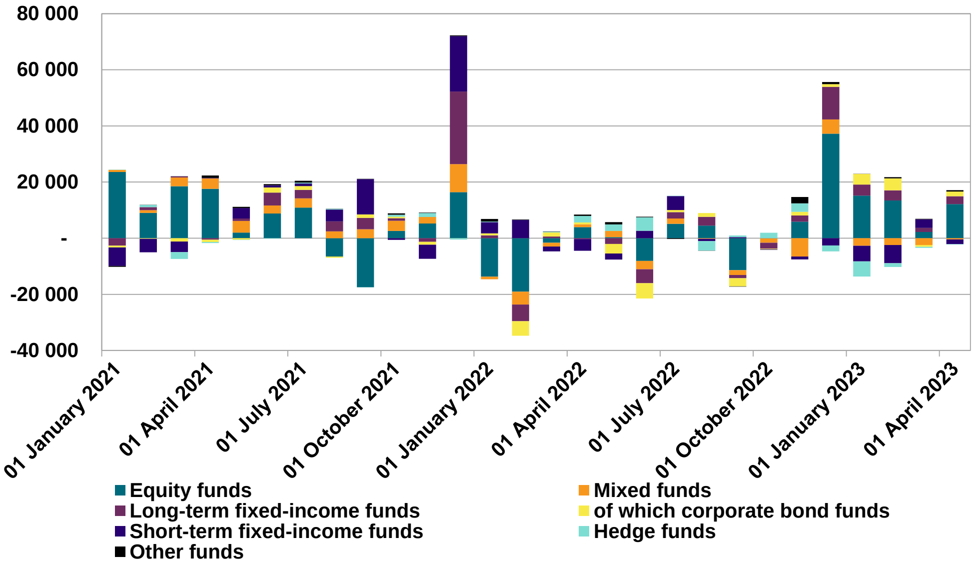


Source: Refinitiv Datastream.
Note: Interest rate differentials for corporate bonds with credit rating BBB in Sweden, the Euro zone and the USA. Calculated as the difference between the Refinitiv corporate

benchmark for Sweden, the euro zone and the USA and Refinitiv's interest rate swaps in each respective currency. All with a maturity of 5 years.

B3. Net fond flows

SEK million

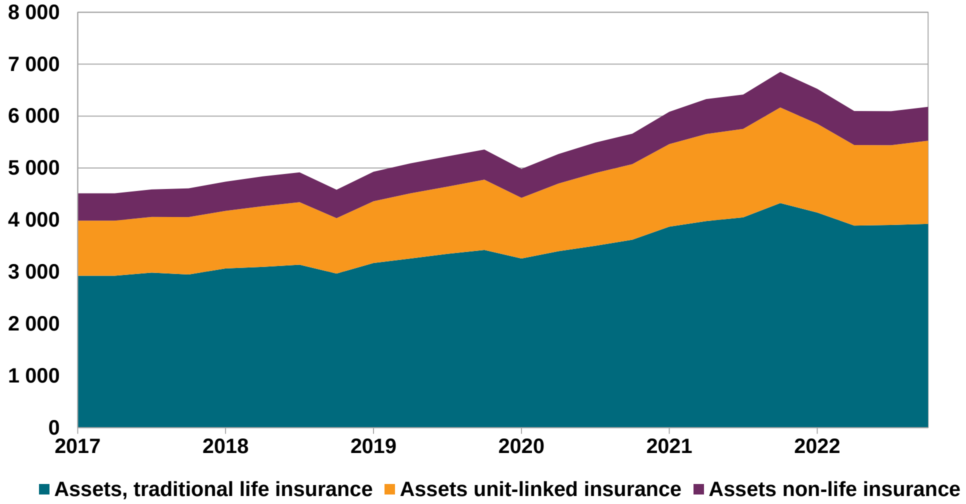


Source: Swedish Investment Fund Association.
Note: Includes net flows from the member companies in the Swedish Investment Fund Association for funds registered in Sweden and funds registered abroad broken down by fund type. Funds distributed in member companies' groups are also included to a large extent. In addition, all funds are included in the premium pension system. Statistics show sales in Sweden. Any sales in other countries are not included. Corporate bond funds are included in the category long-term fixed-income funds.

Appendix of diagrams Stability in the insurance sector

B4. Insurance undertakings manage large amounts

SEK billion

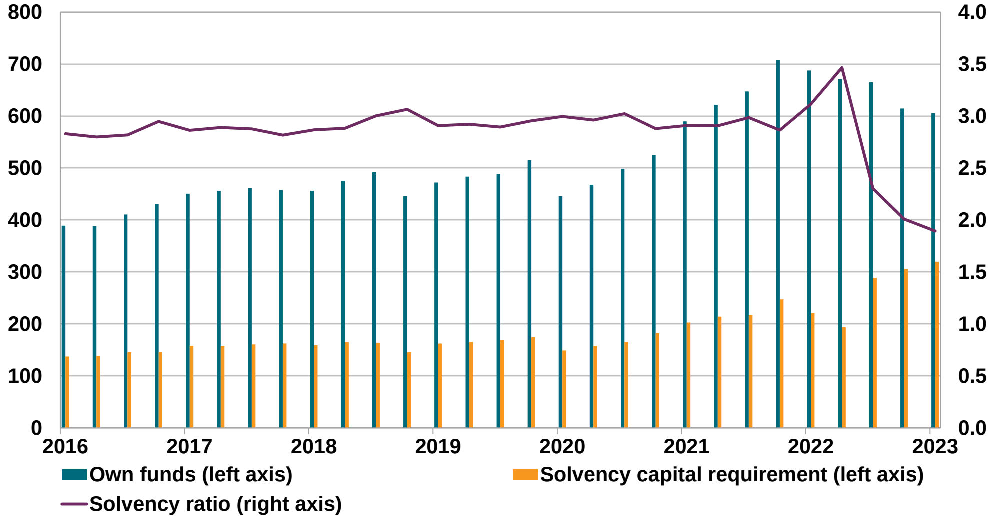


Source: Statistics Sweden.

Note: Insurance undertakings' investment assets broken down into traditional life insurance, unit-linked insurance and non-life insurance. Value as at 31 December 2022.

B5. Solvency ratios fall slightly

SEK billion (left axis) and ratio (right axis)

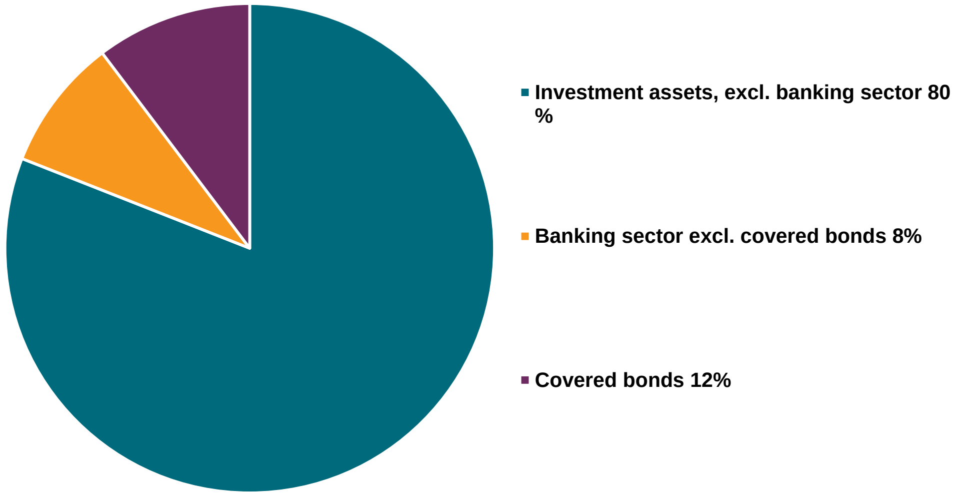


Source: FI.

Note: Life insurance undertakings' own funds, solvency capital requirements, and solvency ratio (own funds divided by solvency capital requirements) according to the Solvency 2 reporting. As of 2022, the outcome of conversions was impacted by the Occupational Pension Undertakings Act (2019:742).

B6. Exposure to the banking sector

Billions



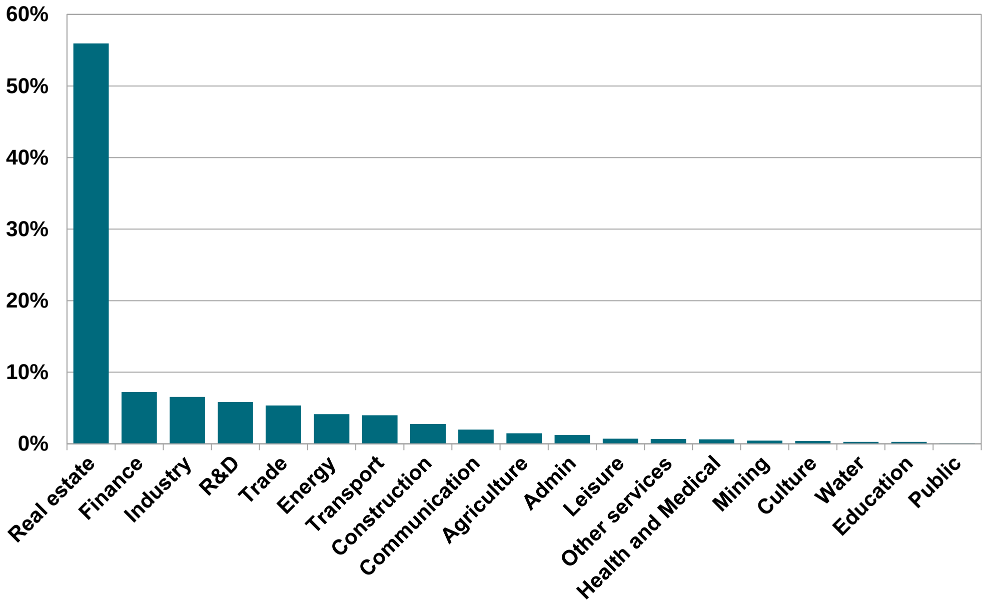
Source: FI.

Note: Exposure to the banking sector. Covered bonds are reported separately since they are subject to their own legislation. The compilation refers to life insurance undertakings and occupational pension undertakings (excluding unit-link) as at 31 March 2023.

Appendix of diagrams Stability in the banking sector

B7. Banks’ exposure to different sectors

Per cent



Source: Reporting from the banks.

Note: Shows the three major Swedish banks’ exposure to different corporate sectors as a share of total lending to non-financial corporations.