SVERIGES
RIKSBANK

Financial Stability Report

2025:2

The Riksbank's Financial Stability Report

According to the Sveriges Riksbank Act (2022:1568), the Riksbank shall contribute to the stability and efficiency of the financial system. As part of this, the Riksbank shall oversee the financial system, assessing how well it is functioning and how resilient it is to potential shocks. The Riksbank shall also report these assessments.

The Riksbank's Financial Stability Report is published twice a year. In the report, the Riksbank presents its overall assessment of the risks and threats to the financial system and evaluates the system's resilience to them. The spring report provides a more detailed description of the assessment, while the autumn report is more concise. The report also contains in-depth analyses of current issues related to financial stability.

By publishing its analysis and assessments, the Riksbank aims to draw attention to, and warn of, risks and events that may pose a threat to the stability of the financial system, and to contribute to the debate on this subject. Its aim is to reduce the risk of shocks.

The Executive Board of the Riksbank has discussed the report on two occasions – on 22 October and on 11 November 2025. The Report takes into account developments up to and including 7 November 2025. The report is available on Sveriges Riksbank's website, www.riksbank.se.

The Riksbank and financial stability

A necessary condition for the economy to function and grow is a well-functioning financial system. To achieve this, the system needs to be able to mediate payments, convert savings into funding and manage risk. In providing these functions, vulnerabilities arise at the same time. For example, banks fund their activities on a short-term basis but lend on a longer-term basis, making them dependent on public and market confidence. If confidence breaks down and the banks' financiers want their money back quickly, there could be serious problems. Moreover, the participants in the financial system are interconnected, for example because they borrow from each other, obtain funding on the same markets, have similar operations or are dependent on the same suppliers. This means that disruptions to a single actor, market or system can spread quickly, both directly and through concerns that others may also be affected. The financial system is also affected by the emergence of new actors and technological innovation. This can increase efficiency, but it adds to the complexity of the system and may introduce new forms of contagion risk.

When shocks occur, the financial system needs to be sufficiently resilient to maintain its key functions. Otherwise, there is a risk of a financial crisis with major economic costs as a result. Banks, non-banks such as insurance companies, funds and other financial institutions, and other market participants generally do not have strong enough incentives to take into account the risks that their behaviour may create for the system as a whole. In light of this, the government has a particular responsibility for safeguarding financial stability. If a crisis were to occur anyway – despite preventive measures – the government may need to intervene. Such interventions should then be carried out at the lowest possible economic cost.

According to the Sveriges Riksbank Act (2022:1568), the Riksbank shall contribute to the stability and efficiency of the financial system. A core task is therefore to oversee the financial system. This includes identifying risks of serious disturbances or significant efficiency losses, assessing whether the financial system is stable and efficient, and reporting its assessments. The Riksbank also has the special task of overseeing the financial infrastructure and other operations that are of particular importance for it. Twice a year, the Riksbank gives an account of its analyses and assessments of the financial system in its Financial Stability Report. The Riksbank also has important tasks related to the provision of liquidity in the event of a financial crisis. To counteract a serious shock to the Swedish financial system, the Riksbank is able to offer liquidity support to one or more financial companies or markets. Oversight of the financial system is also essential for the Riksbank to be able to act quickly and efficiently in the event of a financial crisis.

The Riksbank shares responsibility for the stability and efficiency of the financial system with the Ministry of Finance, Finansinspektionen (the Swedish financial supervisory authority) and the Swedish National Debt Office. Within the framework of shared responsibility, these authorities have different tasks, but the interaction between them is central to both preventive work and any crisis management. Cooperation with authorities in other countries is also important as the operations of financial companies are often cross-border.

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Risks to financial stability remain in an uncertain world. For the moment, the ambiguity surrounding US trade policy has eased somewhat, but it could quickly return, and the security situation remains serious. At the same time, there are underlying vulnerabilities, not least in the form of persistently high and still growing public debt in several major economies. Despite this, the financial markets are characterised by a high appetite for risk, with high asset valuations and low risk premiums. In such an environment, unexpected events can trigger strong market movements, spreading quickly through the global financial system. The effects may also be amplified by the fact that non-banks have grown rapidly and become increasingly important players.

The major banks have a good initial position but are vulnerable to external risks. The major banks are profitable and fulfil their capital and liquidity requirements by a good margin. The international environment underlines the importance of good preparedness against operational risks such as cyber threats and dependencies on third-party suppliers. The major banks rely on global capital markets for funding and need to have good liquidity in relevant currencies. The monetary policy counterparties also need to have more active liquidity management and the operational capacity and willingness to borrow from the Riksbank if necessary.

More generous borrowing regulations may make more households vulnerable. Households are being restrained, and both house prices and debt are growing at a subdued pace. However, indebtedness remains high in an international perspective. There is also a risk that the proposed easing of mortgage regulations will lead to a resumption of debt and house price growth that is not sustainable in the long term. A loan-to-income limit would be an effective brake against such dynamics and should therefore be part of the macroprudential toolkit.

Better financial conditions benefit the property sector, but vacancies are weighing it down. Economic activity remains weak, but financial conditions have improved in the corporate sector. This has particularly benefited highly indebted property companies, but high vacancy rates in some segments and reliance on corporate bond funds mean that many of them remain vulnerable. Longer interest-rate fixation periods and debt maturities would make property companies more resilient.

Investment funds' liquidity risks can be limited by new tools. Investment funds, such as corporate bond funds, play an increasingly important role in the financial system but often offer daily redemptions, even when they hold illiquid assets. It is therefore important that the funds strengthen their liquidity management, including through the proper use of the liquidity management tools planned to be introduced.

Stablecoins are growing rapidly and increase the complexity of the financial system. If their use continues to increase rapidly, risks may arise, for example from redemption runs, increased dependence in Europe on foreign infrastructure, a lack of transparency and the financing of criminal activities. It is therefore important that regulations are aligned and harmonised. It is also important that central bank settlement services are used in the event of a larger market emerging.

1 Stability assessment

1.1 The macrofinancial situation

Increased risk appetite despite major uncertainties in world economy

Uncertainty abroad remains elevated. The geopolitical situation remains serious, not least as a result of Russia's full-scale invasion of Ukraine. The ambiguity over US trade policy has decreased somewhat with the tariff agreements concluded between the United States a number of countries.[1] However, some agreements have proved short-lived, and it is not yet clear how permanent the current trade policy stance will be or what the impact of increased trade barriers will be.

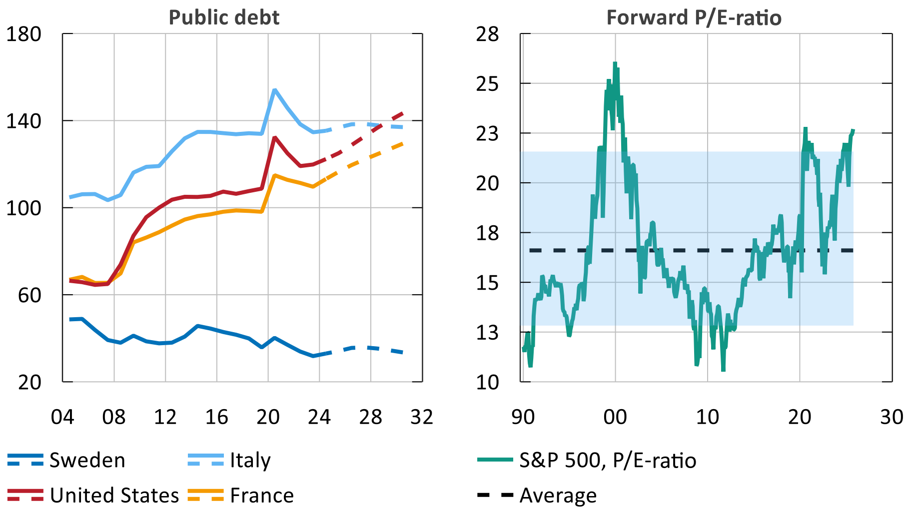
Beyond trade policy, there remains considerable uncertainty about the broader economic and political direction of the United States. This has contributed to the weakening of the US dollar over the year and to investors increasingly hedging their dollar holdings. The United States is facing large budget deficits and growing public debt, as well as rising public interest expenditure – a trend that also characterises a number of major European economies (see chart 1, left). This reduces the possibility of using fiscal policy in the event of an economic shock. Long-term US treasury yields have been relatively stable over the year, but their risk premiums have been increasing for some time. For example, if investors start to question the independence of the Federal Reserve or the safe-haven status of US Treasury securities, both risk premiums and interest rates could increase swiftly and significantly. Such a development could have significant negative consequences for the global economy.

Despite the uncertain global environment, risk appetite is high in the financial markets. This has pushed up asset prices and led to valuations that are well above historical averages in many places, particularly the US equity market (see chart 1, right). At the same time, concentration risks have increased, as development is largely being driven by a few large technology companies. In addition, volatility is low and risk premiums on higher-risk assets have continued to decline from already low levels. In such an environment, unexpected events can rapidly trigger strong market movements that can spread through the global financial system and also affect Swedish participants.

[1] The average effective tariff rate in the United States, calculated as the ratio of tariff revenue to total goods imports, has increased from just over 2 per cent to just over 11 per cent. See *Monetary Policy* Report, September 2025, Sveriges Riksbank.

Chart 1. Public debt in Sweden and the rest of the world and equity valuation in the United States

Per cent, ratio



Note. The left-hand chart refers to public debt as a share of GDP, per cent. The broken lines show forecasts from the IMF. The right-hand chart shows the 12-month forward-looking P/E ratio for the US stock market index S&P 500. P/E-ratios show the price of a share in relation to the company's earnings per share at a given point in time. The average is calculated from 1990 to the latest observation. The shaded area shows the gap between the 10th and 90th percentiles.

Sources: IMF and S&P Global.

The effects of market turbulence may also be increased by the increasingly important role of non-banks in the global financial system. For example, the growing importance of hedge funds in the US government bond market may, through their high leverage, contribute to amplifying market movements in times of stress.[2] Moreover, a growing share of financial activity, including corporate debt financing, now takes place outside the traditional banking system, including through private credit and corporate bond funds. This is partly because non-banks are not subject to the same capital requirements as banks. In addition, in Europe and the United States, banks' exposures to non-banks have increased, strengthening the links between these actors. This allows problems in one part of the system to spread faster, possibly having greater consequences. In the longer term, the emergence of new technologies and payment solutions may also contribute to increasing the complexity of the financial system (see ARTICLE – The growing market for stablecoins poses new questions for central banks).

Despite the uncertain international situation, the global financial system has shown good resilience, and financial markets have generally functioned well. One important explanation for this is the regulatory framework and standards introduced after the global financial crisis – with higher capital and liquidity requirements for banks, a resolution framework and central clearing requirements. The reforms have strengthened the resilience of the banking system, allowing banks to maintain lending to house-

[2] See also the section "The macrofinancial situation" in *Financial Stability Report*, 2025:1, Sveriges Riksbank.

holds and businesses even during turbulent periods such as the coronavirus pandemic. This is in stark contrast to developments during the global financial crisis, when the banking sector stood in the centre of the problems. It is therefore important that the strengthened regulatory frameworks and standards are not watered down, and that the banks' resilience is maintained. However, some simplifications may be justified to avoid unnecessarily complex and confusing rules for banks and other stakeholders (see FACT BOX – Simplified banking regulations discussed in several countries). It is also important to ensure that the regulatory framework is fit for purpose and also covers non-bank actors that are important for financial stability.[3]

FACT BOX – Simplified banking regulations discussed in several countries

The Basel Committee on Banking Supervision is the body that sets global standards for internationally active banks. These standards include minimum requirements for the banks' capital levels and capital buffers and form the basis for national regulation in different countries. This regulation is often complex, as banking involves many different risks, and several different regulatory frameworks have been introduced in various stages over time. This has resulted in an overall regulatory framework that is sometimes complex and difficult to understand. Discussions are therefore under way in several countries on how to simplify banking regulation.

For example, the ECB is reviewing whether European banking regulation can be streamlined and made less complex. Among other things, it is discussing the possibility of only setting requirements for how much Common Equity Tier 1 capital the banks should have, instead of having several different capital requirements that the banks can fulfil with different types of capital, as is the case today. In addition, the possibility of merging different buffer requirements is being discussed, partly to have a standardised buffer that the banks can use in times of financial stress. An important starting point in the European discussion is that simplification must not be allowed to weaken the resilience of the banking system to future crises.

In the United States, the discussion of simplification is focused on creating a more predictable regulatory framework and adapting it to the business models and risk profiles of different banks. Among other things, a review of US banks' capital requirements has been launched, and the Federal Reserve recently published a proposal to reduce US banks' leverage ratio requirements. The US authorities also plan to publish soon how the parts of Basel III that have not yet been implemented in the United States might be organised.

Many countries have already introduced – or are discussing introducing – simpler rules for smaller banks with straightforward business models.[4] This is seen as a way to

[3] See "A system-wide approach to macroprudential policy", November 2024, ESRB.
[4] For example, the UK, US, Switzerland and Germany.

reduce the administrative regulatory burden without increasing risks in the financial system as a whole.

The Basel Committee's agreements have helped to increase the resilience of the global banking system. It is important that the ongoing work to simplify banking regulation takes place within the framework of these agreements and that any simplification proposals are discussed by the Basel Committee. This reduces the risk of national fragmentation of banking regulation that benefits global financial stability.[5]

1.2 Swedish households and companies

Brighter outlook and subdued household debt growth

Household cash flows have been boosted by rising real wages and lower interest rates. However, households have been relatively restrained in their consumption and have increased their financial savings. This may reflect continued high uncertainty in the external environment and the fact that households are still adjusting to generally higher prices and interest rates.

The housing market is still characterised by caution. Compared with the spring, fewer households expect housing prices to rise, and a majority continue to want to sell their home before buying a new one. This has contributed to longer sales times and a large supply. The subdued price growth, combined with higher amortisation payments and low housing construction, means that household mortgages are growing slowly. Although consumer credit is increasing slightly faster than mortgages, total household debt is growing more slowly than income. As a result, the debt-to-income ratio has continued to decline – from around 200 per cent at the end of 2021 to 175 per cent today.

Overall, there are currently few signs of a build-up of cyclical systemic risks linked to household mortgages. However, household indebtedness remains high in an international perspective, while interest fixation periods are generally short. Many households have large loans relative to their income, and there are indications that the most indebted have small savings buffers.[6] These households may therefore be vulnerable to new shocks. However, households with mortgages are generally considered to have a good ability to fulfil their payment obligations but, in the event of new shocks, they may need to reduce their consumption to meet these. This may dampen demand and contribute to deepening an economic downturn, which, in negative scenarios, could ultimately affect financial stability.[7]

[5] See also *Financial Stability Report*, 2025:1, Sveriges Riksbank.

[6] See Finansinspektionen (2025), "*Swedes' savings*", where it is estimated that around five per cent of bank customers own about half of the financial assets. Previous estimates also show that highly indebted households have had relatively small liquid buffers; see M. Andersson and R. Vestman (2021), "Swedish households' liquid assets", *FI Analysis* No. 28, Finansinspektionen.

[7] See, for instance, the article "Macroprudential measures safeguard the resilience of the household sector", in *Financial Stability Report,* 2024:2, Sveriges Riksbank.

The lower interest rates, rising real wages and more expansionary fiscal policies next year are expected to improve household cash flows and contribute to a gradual strengthening of the housing market. One risk is that, combined with the proposed easing of borrower-based macroprudential measures, this may lead to both debt and house prices rising again in an unsustainable way (see ANALYSIS – "More vulnerable households with new mortgage regulations").

ANALYSIS – More vulnerable households with new mortgage regulations

Proposals for changes to borrower-based macroprudential measures were presented last summer, including raising the loan-to-value limit from 85 to 90 per cent and removing the stricter amortisation requirement – which applies to new borrowers with mortgages exceeding 450 per cent of income.[8] These changes mean that new borrowers will be given more leeway in the credit assessment process and that the incentives to take out larger mortgages will increase.

Experiences from other countries show that new home buyers quickly adjust their borrowing behaviour when macroprudential measures are eased.[9] It is likely that this will also apply to a significant proportion of Swedish mortgage borrowers, who often choose to stay close to the applicable regulatory limits (see chart 2). If mortgage regulations become more generous, they would likely take out even larger loans. The proposed changes are therefore expected to increase household indebtedness. Moreover, if borrowers were to buy more expensive homes, there is a risk that the rise in housing prices and indebtedness would be self-reinforcing going forward. This would mean that an increasing number of borrowers would become more vulnerable over time.

To counteract such a development, the Riksbank considers that an income-based tool should be introduced.[10] Such a requirement could usefully be designed as a loan-to-income limit in line with what was proposed in the report *Reglering av hushållens skulder (Regulation of household debts)* (SOU 2024:71). A lower level for the limit than is proposed in the report could also have been considered, so as to have a more preventive effect.

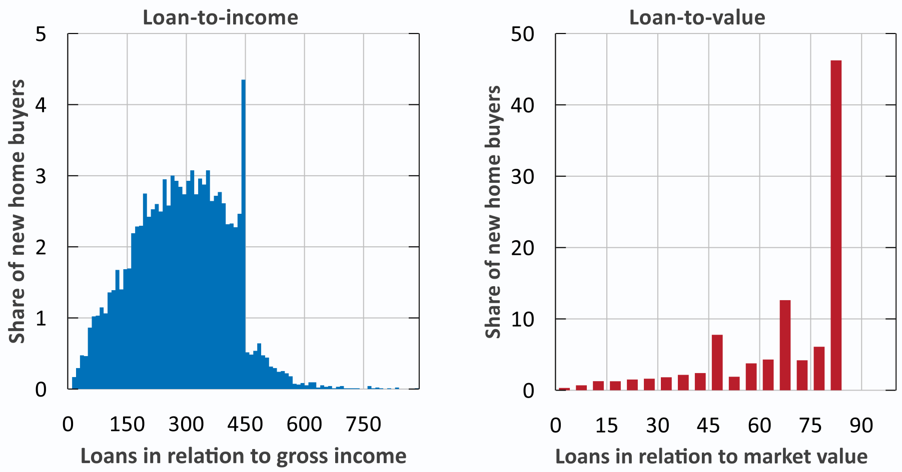
[8] See "Development of macroprudential policy", Ministry of Finance Fi2025/01375.

[9] See, for example, Hodula, M., Pfeifer, L. and Ngo, N. A., (2025), "Easing of borrower-based measures: Evidence from Czech loan-level data", *Journal of Banking and Finance*, vol. 178, September 2025.

[10] See the Riksbank's consultation response to "Development of the macroprudential policy area", Ministry of Finance Fi2025/01375.

Chart 2. The distribution of loan-to-income ratios and loan-to-value ratios for households with mortgages

Per cent



Note. The charts show the distribution of loan-to-income ratios and loan-to-value ratios among new home buyers in Finansinspektionen's sample. The left-hand chart shows the proportion of buyers in different ranges of loan-to-income ratios (0–10 per cent, 11–20 per cent, etc.), and the right-hand chart in different ranges of loan-to-value ratios (0–5 per cent, 6–10 per cent, etc.). For example, just under ten per cent of new home buyers had a loan-to-income ratio between 420 per cent and 450 per cent (the sum of the highest bar and the two bars immediately to its left), and almost 50 per cent had a loan-to-value ratio between 80 per cent and 85 per cent.

Sources: Finansinspektionen (In-depth analysis of mortgages 2024) and the Riksbank.

Favourable financing conditions but vacancies weigh on property sector

The weak economic activity is continuing to dampen business investment, and bankruptcies remain at elevated levels. The recovery is being delayed partly due to trade policy and geopolitical uncertainty.[11] Over the year, however, sentiment has improved, and financing conditions have improved, partly as a result of lower interest rates. Risk premiums in the corporate bond market have also fallen to low levels, which has contributed to companies issuing more bonds. At the same time, corporate borrowing from Swedish banks has increased slightly. However, total corporate debt is growing more slowly than earnings, suggesting that there is currently little evidence of a build-up of cyclical systemic risks associated with corporate debt.

The highly indebted property companies, which finance themselves largely via the bond market, have particularly benefited from the decline in yields and risk premiums on corporate bonds. For some companies, the lower rates have helped to moderate the increase in financing costs, while others have seen their costs decline. This has contributed to the average interest coverage ratio remaining relatively stable, but at a lower level than before the rise in inflation and interest rates.[12] Property companies'

[11] See "*We're waiting for the upturn*", The Riksbank's Business Survey in September 2025, October, Sveriges Riksbank.

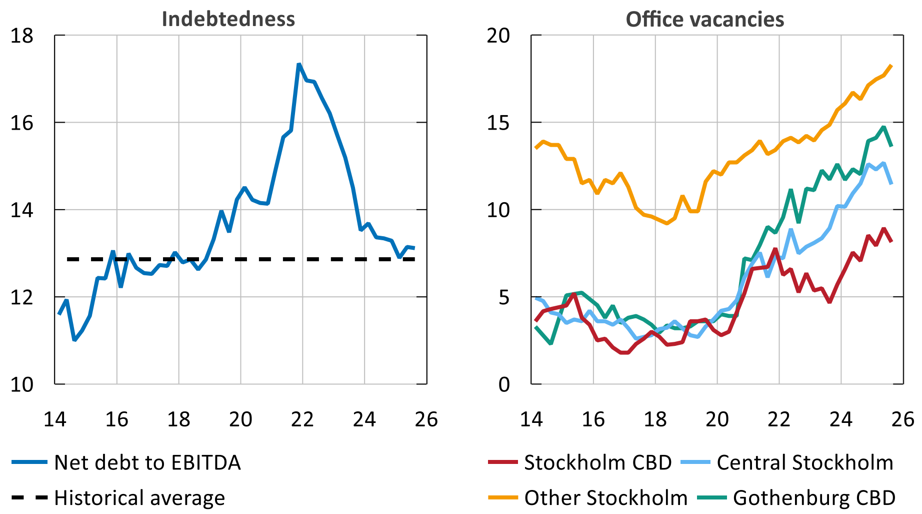
[12] The interest coverage ratio refers to the operating profit of property companies in relation to their interest expenses.

ratio of net interest-bearing debt to operating income has also stabilised around its historical average, suggesting that their cash flows have become somewhat less sensitive to interest rates (see chart 3, left).

However, demand in several rental markets remains weak, reflecting, among other things, subdued economic activity and cost-cutting by tenants. In addition, new construction in some geographical areas has increased above demand. All in all, this has resulted in an increase in vacancies in offices, logistics and rental housing. Vacancies are particularly high in the office market, which is also a result of companies adapting their office spaces to teleworking (see chart 3, right).[13] The economic vacancy rate is now at its highest level since the IT bubble of the early 2000s.[14] In addition, temporary rent discounts in newly signed contracts for offices continue to occur to a greater extent than before. At the same time, property companies cannot expect the same compensation via indexed rent increases on commercial premises in the future, now that inflation is lower.[15] Together, these factors constrain the growth of corporate cash flows and may ultimately have a negative impact on property values if they are based on overly optimistic assumptions about the level of long-term rental income.

Chart 3. Indebtedness and vacancies among property companies

Ratio, per cent



Note. The left-hand chart shows the volume-weighted average for 34 property companies. Companies are added and dropped from the data over time. The broken line represents the mean value over the period 2009–2025. The right-hand chart shows vacancy rates for office properties measured as proportion of vacant floor space of total floor space. Central Business District (CBD) refers to the most centrally located office properties.

Sources: Sedis, the Riksbank and Citymark.

If the economic recovery is delayed, tenants' profitability risks weakening further, which could, in various ways, lead to even more vacancies and lower rent levels. In

[13] For a broader description of office vacancies, see *Financial Stability Report*, 2025:1, Sveriges Riksbank.

[14] Economic vacancy refers to the share of vacant floor space measured by rental value.

[15] Next year's rent indexation for commercial premises is based on the October CPI outcome. According to Statistics Sweden, the preliminary flash estimate for inflation, measured by the CPI, was 0.9 percent in October.

such a situation, the financial results and ability of property companies to meet interest payments could weaken, which could lead to less favourable financing conditions. As many firms still have relatively short interest-rate fixation periods and debt maturities, the negative effects may materialise fairly quickly. Longer interest-rate fixation periods and debt maturities would therefore strengthen firms' resilience to such shocks. Moreover, the conditions for informed risk assessments could be improved by increasing the transparency of external reporting, in particular for valuation assumptions and the terms surrounding the purchase and sale of properties.

1.3 The Swedish financial system

The major banks' buffers create a good starting point

The major Swedish banks have low loan losses and continued good profitability, partly due to high net interest income. However, lower market rates have led to a slight decline in net interest income in recent times. The banks have good margins for capital and liquidity requirements, which overall gives them a good ability to maintain their operations even in the event of unexpected shocks. The fact that the countercyclical capital buffer is at the neutral level of 2 per cent also means that there is room for Finansinspektionen to reduce the buffer if necessary, making it easier for banks to maintain their lending in the event of a major shock.

The consumer credit banks are in a slightly worse position than the major banks. Some of them have relatively small margins down to the capital requirements, partly due to lower profitability and higher loan loss provisions. Market-based measures of systemic risk also indicate that several consumer credit banks may exhibit relatively high sensitivity in the event of a crisis (see ANALYSIS – SRISK in the Swedish banking sector).

ANALYSIS – SRISK in the Swedish banking sector[16]

Various types of measurement can be used to make an assessment of systemic risk in the banking sector. One of these is the market-based systemic risk measure SRISK, which shows a bank's expected capital shortfall in the event of a crisis.[17] The capital shortfall refers to the amount needed for the bank to maintain the confidence of the capital markets in the event of a severe stock market decline. The calculation is based on information about the bank's size, its indebtedness and the sensitivity of its equity price to market movements.[18]

[16] For methodological discussion and more results, see D. Krygier and J. Li (2025), "SRISK in the Swedish banking system", *Staff memo*, Sveriges Riksbank.

[17] The measure is based on market information in the form of equity prices and can be considered to reflect the collective expectations of market participants about risks and can therefore signal changes in the risk outlook earlier than, for example, accounting data. See C. Brownlees and R. F. Engle (2016), "SRISK: A conditional capital shortfall measure of systemic risk", *Review of Financial Studies,* volume 30, issue 1, 48-49.

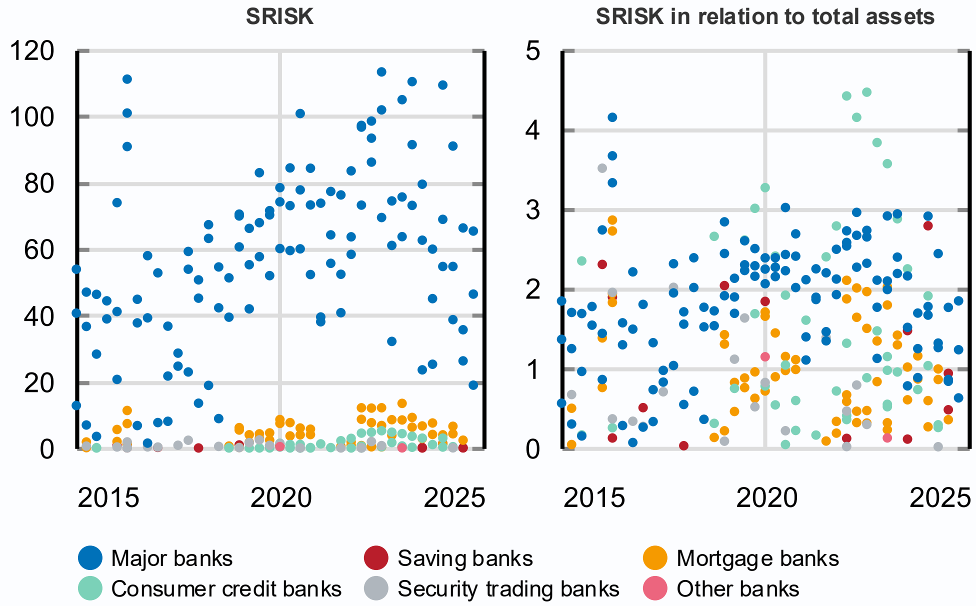
[18] The measure can therefore be helpful in quickly capturing changes in the stock market perceptions of risk in the individual bank. The capital shortfalls (SRISK) are calculated given a stressed scenario involving a 40 per cent fall in the OMXSPI over a 6-month period.

SRISK thus reflects how much equity the bank would need to cope with a crisis compared with how much equity the stock market estimates the bank will have in such a situation. According to this measure, the bank with the largest expected capital shortfall is considered to be the one that contributes the most to the systemic risk. As the measure is based on equity price data, it can normally only be calculated for listed banks. However, new methods also make it possible to estimate the measure for unlisted banks, contributing to a more comprehensive analysis of the Swedish banking sector.

For Swedish banks, the calculations show that the expected capital shortfall is mainly driven by the major banks (see chart 4, left). It also shows that, in recent years, shortfalls have been on higher levels than previously, which may be related to the increased uncertainty abroad and the occasional high volatility of stock markets. As SRISK is also based on how the banks' equity prices covary with the market, the measure is affected by general market volatility. As financial market turmoil increases, the covariation between bank equities and the broader market typically rises, which means that SRISK tends to increase. This is clearly visible in the chart, with estimated shortfalls rising, for example, during the coronavirus pandemic and the US banking turmoil in spring 2023. Smaller banks typically have small or no shortfall according to the measure, indicating that they do not individually contribute to systemic risk in the banking sector.

Chart 4. Estimated capital shortfall (SRISK) for individual banks

SEK billion, per cent



Note. Each dot corresponds to one bank at a given time (quarter) where SRISK is positive. The colour of the dot indicates the type of bank. The left-hand chart shows the estimated capital shortfall (SRISK) in SEK billion over time, while the right-hand chart shows the corresponding share (per cent) of each bank's total assets. The calculations include 69 Swedish banks, of which nine are listed on the stock exchange, and have been categorised according to Finansinspektionen's classification.

Source: The Riksbank.

However, if the banks' capital shortfalls are related to their total assets, some smaller actors – particularly consumer credit banks – show relatively large shortfalls (see chart 4, right). This suggests that these banks may be more vulnerable than larger banks in crises, which is likely explained by the fact that they are often less profitable and take on more risk. If several such banks were to experience problems at the same time, this could eventually contribute to the spread of problems to the rest of the banking system.

Global situation highlights the importance of preparedness and resilience

The major Swedish banks have extensive operations abroad, particularly in Sweden's neighbouring countries. The financial risks associated with these activities are currently considered to be limited for the banking groups as a whole. On the other hand, the banks' operational dependence on foreign operations is significant, which introduces vulnerabilities. Banks have strengthened their preparedness and ability to manage operational risks, such as cyber threats and dependencies on third-party providers. However, in the context of a serious geopolitical situation, it is important that the banks continue to increase their operational resilience and to ensure access to key support functions and other services for the entire banking group and its customers.

The major banks currently have good liquidity with margins well above the liquidity coverage requirements (LCR and NSFR). Moreover, the Riksbank's stress tests show that short-term liquidity preparedness has strengthened over time.[19] This is partly due to the extension of the maturity of banks' market funding. At the same time, deposits in the banking sector have remained relatively unchanged and the supply of US dollars has been favourable.

However, the major banks remain vulnerable to disruptions in the global financial markets, as a significant share of their funding is denominated in foreign currency, often with short maturities. Some of the US dollars borrowed by the banks are placed as a liquidity buffer with the US Federal Reserve, while another part is used for lending via foreign exchange derivatives to insurance companies and pension funds, among others. A deterioration in market liquidity – especially in the US dollar market – could quickly make it more difficult for the banks to borrow. If the banks are unable or unwilling to extend their foreign exchange derivatives, this may reduce the hedging of assets abroad by insurance companies and pension funds.[20] Partly in order to provide their customers with foreign currency, it is important that the banks maintain good liquidity in all relevant currencies.

It is also important that the Riksbank's monetary policy counterparties have the operational capacity and willingness to lend and borrow on the overnight market and, if necessary, use the Riksbank's lending facilities to fulfil their liquidity needs in Swedish

[19] The stress tests are based on assumptions about how banks have historically been affected by liquidity stress, and therefore do not fully reflect the current uncertainty, see M. Danielsson and J. Manfredini (2019) "The Riksbank's method for stress testing banks' liquidity", *Staff memo*, Sveriges Riksbank.

[20] See the article "The interconnectedness of insurance firms, AP Funds and banks via the foreign exchange market", *Financial Stability Report*, 2020:1, Sveriges Riksbank.

kronor.[21] Pricing in the money market, mainly for foreign exchange derivative transactions, has on a number of occasions shown elevated interest rates, which have exceeded the level of loans in the Riksbank's standing facilities. These facilities aim to facilitate access to liquidity in Swedish kronor and should be seen as a natural alternative for the Riksbank's monetary policy counterparties. It is vital to both the functioning of the money market and the Riksbank's interest rate management that the facilities are actually utilised when there is a need. A better ability and a willingness among monetary policy counterparties to use the overnight market and the Riksbank's lending facilities would promote the equalisation of liquidity between banks and reduce volatility in short-term market rates.

Investment funds' liquidity risks can be limited with new tools

Investment funds continue to grow and play an increasingly important role in the financial system, both in Sweden and in Europe. As investors, they influence the functioning of markets and increasingly contribute to the supply of credit, particularly to non-financial corporations. For example, Swedish corporate bond funds own around 40 per cent of corporate bonds outstanding in Swedish kronor, and just under half of the bonds issued by property companies in Swedish kronor.

Many funds offer daily redemptions but have no or only very short notice periods. At the same time, some of their assets, such as corporate bonds, can be difficult to sell in stressed market conditions. This creates significant liquidity risks. The Riksbank has long emphasised the need to reduce these risks, not least in corporate bond funds. In recent years, several initiatives have been taken to reduce liquidity risks, including measures aimed at making the corporate bond market more resilient to market stress.[22]

In May, the Fund Market Inquiry presented a number of proposals to strengthen the competitiveness and resilience of the Swedish fund market.[23] Among other things, it is proposed that funds should have access to a wider range of liquidity management tools. As these tools fulfil different functions, funds should not confine themselves to the minimum requirement of two tools.[24] For example, redemption gates and extended notice periods would be particularly valuable when it is difficult to price the fund's assets. Price-based tools – such as redemption fees, swing pricing and dual pricing – can instead be effective in managing runs on the funds.

The combination of permitting redemption frequencies other than daily and the introduction of notice periods in investment funds, as proposed by the Swedish Fund Mar-

[21] See speech by Erik Thedéen, "The banks need to have more active liquidity management", 11 September 2025, Sveriges Riksbank.

[22] Examples of initiatives include the Swedish Investment Fund Association's requirement to report new risk measures such as spread exposure, the Swedish Securities Market Association's transparency recommendation, and the Association for Generally Accepted Principles in the Securities Market's ongoing self-regulatory work on the corporate bond market.

[23] See "*A stronger fund market*", interim report by the Swedish Fund Market Inquiry, SOU 2025:60, May 2025.

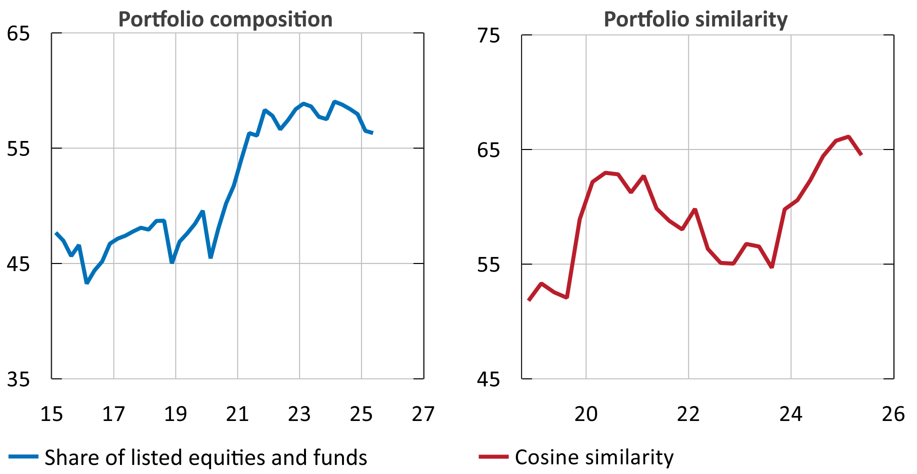
[24] See the Riksbank's consultation response to "A stronger fund market", SOU 2025:60, September 2025.

ket Inquiry, will reduce the funds' liquidity risks. A lower redemption frequency reduces the likelihood of a run on the fund, while longer notice periods give fund managers more time to liquidate assets in an orderly manner to meet redemptions. These two possibilities are particularly valuable for corporate bond funds. For the new rules to have full impact, it is also important that fund distributors, mainly the Swedish Fund Selection Agency and occupational pension companies' selection centres, adapt by permitting the funds that comply with the new rules also to qualify for participation on their platforms.

Pension and insurance companies' equity holdings are large and concentrated

In recent years, insurance and pension companies' equity holdings have increased and now account for almost 60 per cent of their investment assets (see chart 5, left).[25] Moreover, the equity portfolios of the eight largest insurance and pension companies, which together account for almost 90 per cent of the sector's investment assets, have become increasingly similar (see chart 5, right). Even though companies may individually have well-diversified portfolios, this means that their portfolios have become more correlated with each other. More than a third of the equity holdings are denominated in US dollars, and a growing share is concentrated in a few large US technology companies.

Chart 5. Pension and insurance companies' equity holdings and portfolio similarity
Per cent



Note. The left-hand chart shows the share of equities and mutual funds in the total investment assets of insurance and pension companies. The right-hand chart refers to the cosine similarity measure, which shows how similar the composition of equity portfolios is on a scale from 0 (completely different) to 100 (identical), for the eight largest insurance and pension companies.

Sources: Insurance Sweden and The Riksbank.

[25] Refers only to the investment assets of occupational pension and life insurance undertakings with own investment risk.

Increased concentration, high equity valuations – especially among technology companies – and the uncertain global environment have made the investment portfolios of insurance and pension companies riskier. However, the companies have strong solvency positions and significant buffers, allowing them to meet their commitments even in the event of major equity market corrections. On the other hand, they are closely interlinked with the rest of the financial system, including through large holdings of covered bonds, corporate bonds and exposures to banks via foreign exchange and interest rate derivatives. How these companies choose to act in the event of a shock can therefore affect price formation and the functioning of various asset markets.

The financial infrastructure is functioning well, but is vulnerable

The availability of the financial infrastructure has been high during the autumn and there have been only a few incidents. However, disruptions at individual banks have continued to affect their customers' ability to pay by Swish. Cyber attacks on infrastructure have decreased compared to last spring, but threats remain, mainly in the form of distributed denial-of-service attacks (DDoS).[26] At the same time, protection against such attacks has been improved, which has contributed to their effective management. Nevertheless, cyber protection needs to remain a priority for financial infrastructure companies. A strong focus on preventing and managing cyber threats is key to increasing system resilience, especially in the context of the deteriorating geopolitical situation.

The infrastructure companies are closely interconnected, and payment flows have become increasingly complex, with multiple intermediaries involved. This can change the risk outlook and reduce transparency about who is responsible for the risks in a transaction and where these risks might materialise. The Riksbank has therefore examined the infrastructure companies' participation requirements and how they are followed up – which is a central part of their risk management – and found some shortcomings among some of the companies. The quality and extent of follow-up of participants varies. They rely on the governmental supervision of their participants as well as on the requirements and monitoring of other infrastructure companies, as many participants are the same. It is important that companies take more responsibility and gain an independent understanding of the risks among their participants that may also be important for the vulnerability of the infrastructure. Otherwise, shortcomings in the participation requirements may lead to the materialisation of both operational and financial risks. For example, the Riksbank assesses that some infrastructure companies should introduce more appropriate participation requirements, which could make their payment services more accessible and robust.

[26] See G. Ström, (2025), "Distributed denial-of-service attacks in the financial sector", *Economic Commentary* No 10, Sveriges Riksbank.

ARTICLE – The growing market for stablecoins poses new questions for central banks

Although the market for stablecoins is still small relative to the global financial system, it is growing very rapidly, especially in the United States. If their use continues to increase rapidly, risks may arise, for example, from redemption runs, increased dependence in Europe on foreign infrastructure, a lack of transparency and the financing of criminal activities. It is therefore positive that several countries have introduced regulations for stablecoins. However, the pace of change is such that regulations may need to be adapted and harmonised. The cross-border nature of stablecoins is also a strong reason for cooperation and consensus among authorities in different countries. In addition, it is important that the central bank's settlement services are used when money enters and leaves a stablecoin system or if a larger market for tokenised securities were to emerge.

What are stablecoins?

Stablecoins are digital assets in a decentralised system

Stablecoins are a crypto asset issued by private actors in the form of so-called tokens. These can be likened to digital coins that can be programmed to have different specific properties.[27] Unlike other crypto assets, stablecoins are intended to have a stable value over time, usually by being pegged to an official currency.[28]

Holding stablecoins entails a claim on the issuer, in the same way that bank deposits represent a claim on a bank. For it to work as intended, the issuer needs to have sufficient liquid assets to reimburse the holder when it wants to redeem its claim. The fact that banks are subject to specific supervision and regulation, with explicit requirements to hold sufficient capital and liquidity, helps to ensure that bank deposits are a credible claim. The credibility of bank deposits is further strengthened by the existence of a government deposit insurance scheme, should the banks fail. Actors in the stablecoin system, such as issuers, are also subject to supervision, although less extensive than for banks. The issuer is also required to have a reserve of assets at least

[27] See FACT SHEET "Tokenisation: New technologies for more efficient financial infrastructure", *Financial Stability Report*, 2024:2, Sveriges Riksbank.

[28] A more detailed review of stablecoins can be found in Ingram Bogusz, C. et al. (2025), "Stablecoins could lead to better payments, but risks remain", *Staff Memo*¸ Sveriges Riksbank.

equal to the value of the stablecoins it has issued, so that they can always be redeemed at the given exchange rate.

The assets making up the reserve differ between different stablecoins. The most common are highly liquid assets such as bank deposits or short-term government bonds.[29] In the EU, such stablecoins are called e-money tokens (EMT). But reserves can also consist of gold or other crypto assets. Such stablecoins are called asset referenced tokens (ART). In addition, there are stablecoins that have no reserves at all. Instead, the supply is automatically adjusted so that they have a stable value. However, these so-called algorithmic stablecoins are not explicitly covered by the EU regulatory framework, which means that the legal situation regarding them is unclear in the EU (see FACT BOX – Several countries have introduced regulation of stablecoins).

An important difference between stablecoins and traditional money is the degree of centralisation. When a party wants access to stablecoins, it pays the issuer, or a seller of stablecoins on a trading platform, in traditional money and receives stablecoins in exchange. Holdings are stored in a digital wallet and transactions are recorded on a blockchain. Thus, a stablecoin system consists of issuers, trading platforms, wallets and one or more blockchains.[30] Unlike traditional money transactions, there is no central actor involved, such as a central bank or clearing house. Instead, information on the holder and its transactions is spread out. This is particularly true in cases where self-hosting wallets are used.

FACT BOX – Several countries have introduced regulation of stablecoins

The regulation of stablecoins varies by jurisdiction. The Markets in Crypto-Assets Regulation (MiCAR) is the EU's regulatory framework for crypto assets. The framework came into force at the end of 2024 and focuses mainly on consumer protection, market integrity and fundamental stability risks. Issuing stablecoins requires authorisation from national regulators. This is also required for providers of, for example, wallet and trading platform services.[31] In addition to a certain amount of equity, the issuer must have full coverage in reserves, i.e. the value of the assets in the reserve must equal the value of the stablecoins issued. The buyer should be able to redeem the full value of their stablecoins against the currency they are pegged to, without charge and delay. Stablecoins are also not allowed to accumulate interest.

The US regulation, Guiding and Establishing National Innovation for U.S. Stablecoins (GENIUS Act), is expected to enter into force in early 2027. GENIUS includes so-called "payment stablecoins" pegged to the dollar. These are similar to EMTs under MiCAR,

[29] The return on these reserves, for example on government securities, is the main source of income for issuers of stablecoins.

[30] There are wallets that are provided and managed by third parties and those that the holder manages and is responsible for itself. In the first case, the company providing the wallet service may have information about the account holder and the assets. In the second case, the information is limited to the holder of the wallet.

[31] This refers to so-called Crypto Asset Service Providers (CASPs).

but with several types of highly liquid assets allowed in the reserve. The issuer is given the possibility to charge redemption fees, but transparency on these is required.[32] Like MiCAR, GENIUS requires authorisation from regulators, that the value of the underlying assets shall cover the value issued and that the issuer must not pay interest. The design of the US regulatory framework has explicitly aimed at an increased international use of stablecoins issued in dollars, to strengthen the position of the dollar. This would also increase demand for US treasury bonds and thereby facilitate the financing of the US government debt.

Stablecoins have several possible uses

The decentralisation allows for almost instantaneous settlement around the clock, facilitated by the programmability of the tokens. This means that they can contain programme code that enables automated transactions and settlement under certain predefined conditions, allowing for the simultaneous exchange of assets and stablecoins (Delivery-versus-Payments). This basically removes the risk of one party to a transaction not receiving what it has paid for, and vice versa. This makes stablecoins attractive for a variety of uses, such as trading in tokenised traditional financial assets like equities, corporate bonds and government securities. Such trade is often mentioned as an area of use with considerable growth potential.[33]

Cross-border trade can also be facilitated. Many blockchains, such as Ethereum, are global infrastructures and are specifically designed to enable cross-border activity. Stablecoins using such blockchains can help make cross-border payments cheaper and faster.[34] Today, about six per cent of all stablecoin transactions are international payments and transfers.

However, the predominant use of stablecoins is still as a means of payment for trading other crypto assets or speculative assets in DeFi (decentralised finance).[35] This type of trade accounts for an estimated 90 per cent of all stablecoin transactions.

The market for stablecoins is growing rapidly

The total value of stablecoins in the world has grown from USD 4 billion in 2020 to USD 263 billion today (see chart 6). In terms of issued value, the largest stablecoins are USDT (USD 183 billions), USDC (USD 74,9 billions), USD1 (USD 2,9 billions) and PYUSD (USD 2,8 billions) In the last twelve months, transactions totalling USD 9 900

[32] There are also regulations in Switzerland, Singapore, Hong Kong, El Salvador and the United Arab Emirates, among others. Several other jurisdictions are working on developing regulations.

[33] This is cited as one of the motives behind the initiative of a consortium of EU banks, including SEB, to issue a euro stablecoin. See SEB press release, September 2025: SEB joins consortium with major European banks to issue stablecoin | SEB.

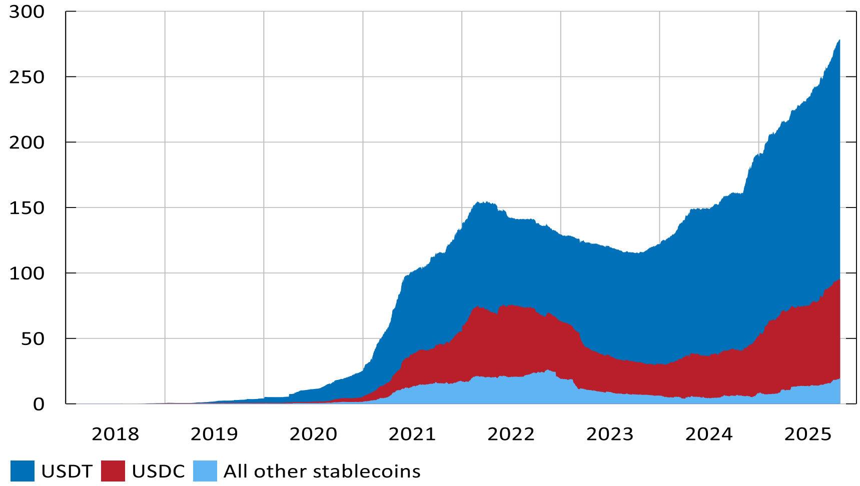
[34] See "The 2024 Geography of Crypto Report", Chainanalysis, and "Remittance Prices Worldwide Quarterly", *Issue 50*, June 2024, The World Bank. The World Bank estimates that this could reduce the cost of an international transfer to sub-Saharan Africa by up to 60 per cent.

[35] DeFi can be described as an ecosystem of centralised and decentralised financial services and applications built on blockchain technology, using smart contracts and self-driving applications to automatically execute and secure transactions.

billion were made[36]. Almost all stablecoins are issued in dollars. There are currently no stablecoins in Swedish kronor and a very limited amount in euros.

Chart 6. Total issued value of the two largest stablecoins in circulation

USD, billions



Note. USDT was issued by Tether, and USDC by Circle. All other stablecoins include, among others, USD1 (issued by World Liberty Financial) and PYUSD (issued by Paxos on behalf of PayPal).

Source: DefiLlama.

The rapid development may pose risks

Although the market for stablecoins is still relatively small, its rapid growth means that risks and challenges can quickly grow and become systemic.

Speed and automation may lead to redemption runs and instability

Banks have always run the risk of depositors starting to doubt the bank's ability to fulfil its commitments, with the result that many depositors will want to withdraw their money at the same time. This is known as a deposit run. Similarly, issuers of stablecoins run the risk that many will want to redeem their holdings at the same time. The risk is amplified by the interconnectedness with DeFi and the automated and rapid events enabled by the programmability of stablecoins. Moreover, the holdings are not protected by any deposit insurance scheme.

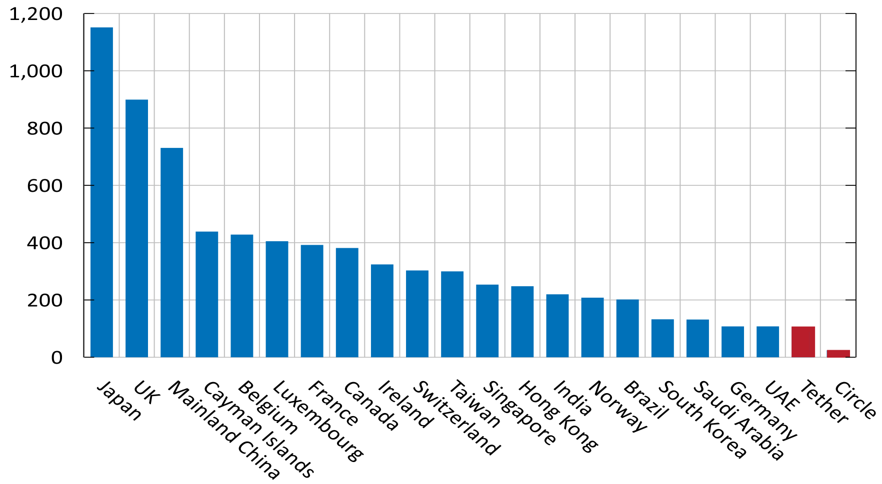
In such a situation, where many people want to redeem their holdings at the same time, the issuer would have to rapidly sell large amounts of underlying assets. This can depress asset prices to the point where the proceeds are insufficient for the issuer to be able to redeem stablecoins at their full value. This would affect issuers and holders of stablecoins, but also actors in the traditional financial system, such as banks, mutual funds and insurance companies, who own the same kind of assets that the issuer has to sell. The risks are still limited, especially in the EU. But if the market for stable-

[36] As reported by the Visa Onchain Analytics Dashboard.

coins continues to grow, and with it the interconnectedness with the traditional financial sector, this could pose risks to financial stability. This is illustrated by, among other things, the fact that issuers of US stablecoins have large holdings of US treasury bonds (see chart 7).

Chart 7. Holders of US treasury bonds

USD, billions



Note. Refers to holders of US Treasuries. Data for stablecoin issuers Tether and Circle (in red) refer to self-declared holdings. Tether's holdings refer to declared holdings for 30 June 2025.

Sources: US Department of the Treasury, Tether and Circle.

Increased external dependence can lead to vulnerabilities

There is an intense discussion in the EU about dependencies on foreign actors, and the need to be able to provide various strategic goods ourselves. This question came into focus during the pandemic and in conjunction with Russia's full-scale invasion of Ukraine. Several vulnerabilities in terms of over-dependence on foreign countries were identified regarding, for example, medicine, energy and IT resources. The issue has become even more relevant as countries have started to use access to key goods and services as leverage for trade policy purposes.

The discussion on foreign dependence also covers the financial sector, not least payment solutions, where the market is currently dominated by US card schemes, such as Visa and Mastercard, and providers of cloud services. There is concern that the same dependence could arise for stablecoins, either through non-European issuers of stablecoins becoming dominant, or if global blockchain infrastructures outside the control of Europe's own authorities are used to conduct transactions. Such dependence would be particularly serious if EU citizens use stablecoins whose issuer is not authorised in the EU. Users would then not be protected by EU law.

Regulatory arbitrage can create risks

The development of regulatory frameworks for stablecoins under way in various jurisdictions aims not only to regulate the market with a clear legal framework, but also to stimulate innovation and economic growth. There is therefore a risk that countries will use regulatory frameworks as a competitive tool, introducing less stringent regulation to attract different activities. This allows for so-called regulatory arbitrage, where actors exploit regulatory differences between countries for their own gain.

An example of a possible regulatory arbitrage is what is called 'multi-issuance'. This is a situation in which an EU issuer and a non-EU issuer, for example in the United States, issue a common stablecoin in the same currency, redeemable in both jurisdictions. Differences in legislation between the EU and the US play an important role here. Indeed, redeeming stablecoins under MiCAR may be more favourable than under GENIUS for the redeemer, among other things because no redemption fees may be charged within the EU. This allows a redemption stream to be directed towards the EU-issuer, which then requires the collateral also to be moved from the US to the EU. The problem is that stablecoins typically move faster across borders than collateral, creating an imbalance between the amount of stablecoins and collateral in the relevant jurisdiction. As the concept of multi-issuance did not exist when MiCAR was adopted, it is not regulated in EU law and the legal situation is therefore unclear.[37]

Stablecoins can be used for criminal purposes

The fact that stablecoins often work in a decentralised way makes it difficult to know who holds stablecoins and what transactions are being made by whom. For example, data on holders of stablecoins are not held by the issuer, but by wallet providers or trading platforms. In addition, sometimes self-hosting wallets are used, which are independent of wallet providers and thus completely non-transparent. The public blockchain provides transparency at the transaction level, but without a direct link to the identity of the entity making the transaction. This makes tracking and intervening in suspected criminal activity more difficult. In addition, many of these actors may operate outside the EU's jurisdiction, further limiting the possibility of effective supervision and intervention. Stablecoins therefore risk being used for criminal purposes, such as money laundering, terrorist financing and drug trafficking.

Concluding reflections and policy messages

The Riksbank is generally in favour of innovation and for example sees a need to make cross-border payments cheaper, faster and more transparent. The technology behind stablecoins, the blockchain, can contribute to this, but it is not the only thing. Here, private banks and central banks have an important role in improving existing systems for such payments.[38] There are also still many outstanding questions about how stablecoins will develop and affect the financial system as a whole. A number of risks and

[37] The ESRB has just published a recommendation on multi-issue stablecoins. It recommends that the European Commission interprets MiCAR as prohibiting the registration of such stablecoins. See also ESRB/2025/9, "Recommendation of the European Systemic Risk Board of 25 September 2025 on third-country multi-issuer stablecoin schemes".

[38] The G20 and CPMI have designed a programme of measures to make cross-border payments faster, cheaper and more transparent. More information is available from the BIS: CPMI Cross-border payments programme.

challenges can already be identified, some of which need to be addressed in the present, while others are linked to the rapid growth.

An important aspect is the future establishment of an international consensus on the regulatory framework for the issuance of stablecoins and financial services based on them. For example, there is a need to agree within the EU on how to address the issue of multi-issuance and the cross-border spillover risks it can give rise to. It is also important to ensure that the requirements for issuers are aligned with the evolution of the systemic risks associated with stablecoins.

The fact that the use of stablecoins is often decentralised and cross-border also requires new forms of cooperation between authorities in different countries to ensure effective monitoring. If issuers and other actors offer services based on stablecoins, it is important that they be subject to, and fulfil, the same anti-money laundering, criminal activity and terrorist financing requirements as traditional operators offering similar services.

The ECB's work on a digital euro over the past year has been partly motivated by the emergence of US stablecoins and the need for a payment infrastructure that is independent of non-European actors. With a digital euro, the ECB would be able to offer functionality that could match stablecoins in many ways, thereby reducing the need for them. Depending on how the market for stablecoins develops, and whether the digital euro is introduced, the question of how Sweden will be affected could emerge and reignite the discussion about an e-krona.[39] It is important that there is preparedness for such a discussion both at the political level as well as among public authorities and within the private sector.

Settlement at a central bank enables the management of credit or settlement risks in that central bank money has no credit risk and there is a clear 'finality', i.e. a point in time when a payment obligation has been fulfilled and cannot be revoked. This reduces the risk of financial stress spreading between financial institutions. If a significant market for stablecoins in Swedish kronor emerges later on, it is therefore important that the money that is moved in and out of a legitimate stablecoin system goes via the Riksbank's settlement services.

The use of new infrastructures creates new operational risks and dependencies. It is therefore important that market participants do not view stablecoins as an alternative to central bank settlement services, for example for large-value payments between financial institutions in securities transactions, or markets that are important for other reasons, as this could lead to excessive exposures to the stablecoin issuer. Legal risks may also emerge, such as unclear finality, if the blockchain used is not a designated settlement system.[40] If a larger market for tokenised assets emerges, a safe way to

[39]More information on the Riksbank's work with the e-krona: E-krona – state money in digital form| Sveriges Riksbank

[40] A settlement system designated in accordance with the Act (1999:1309) on Systems for the Settlement of Obligations on Financial Markets has rules that provide legal protection for finality.

settle these assets will be needed. The ECB is developing such a capability in its payment infrastructure.[41] Sweden is also involved in this modernisation work in the context of its onboarding to T2 and may in the future join the technical solutions resulting from this work.

In the international discussion, concerns have sometimes been raised that stablecoins could affect the capacity to conduct effective and independent monetary policy, as a widespread use of dollar-denominated stablecoins could lead to the so-called dollarisation of the jurisdictions affected.[42] [43] Similarly, there have been warnings that private banks could face funding problems if their deposits are converted to stablecoins. The Riksbank's assessment is that these scenarios do not pose a significant risk in the EU, at least not in the near term.[44]

Finally, there is much to suggest that stablecoins are here to stay. The market is likely to be different in different parts of the world, but use is likely to continue to grow, including in the EU. How this will affect the financial system, and its participants is not possible to say with any great precision at present. This depends partly on the actions of existing actors, such as private banks and central banks. The Riksbank, but also the Government and other Swedish authorities, will therefore have reason to continue to follow this issue closely and be prepared to make the necessary adjustments in the financial system.

[41] See ECB press release, July 2025.

[42] Dollarisation refers to the dollar taking over the role of the domestic currency as a means of payment.

[43] See "Stablecoins and digital euro: friends or foes of European monetary policy", Monetary Dialogue Papers, June 2025, European Parliament.

[44] For further reading see Ingram Bogusz, C. et al. (2025), "Stablecoins could lead to better payments, but risks remain", *Staff memo*¸ Sveriges Riksbank.

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